

## Dakota Electric Association

## Smart Metering Statement

In an August 10, 2007 Order in Docket Number E-999/CI-06-159, the Commission stated its intention to examine individual utility smart metering practices in the context of rate cases.

On November 20, 2017, Dakota Electric Association (Dakota Electric or Cooperative) submitted a Petition (Docket No. E-111/M-17-821) requesting Minnesota Public Utilities Commission (Commission or MPUC) approval to implement tracker recovery for Advanced Grid Infrastructure (AGi) investments. The proposed tracker would provide recovery for distribution grid modernization and load management investments that occur between Cooperative general rate cases. This filing included 1) a detailed review of activities that the Cooperative has undertaken in evaluating AGi and 2) business case analysis supporting the implementation of AGi technologies. The Commission approved the AGi Tracker Recovery in a May 8, 2018 Order.

Advanced Grid Infrastructure (AGi) is the term Dakota Electric is using to refer to new technologies that would enhance the communication and operation of our distribution system that delivers electricity to our members. These technologies will help Dakota Electric monitor our distribution system for better efficiency and operation and allow us to have two-way communication to field equipment, providing numerous benefits to our members and Dakota Electric. The main AGi components include Advanced Metering Infrastructure (AMI), Meter Data Management (MDM), and the Load Management (LM) system.

Advanced Metering Infrastructure is the foundational component of the Advanced Grid functions. AMI is a system wide communication network for meters and other devices. AMI provides a communication path which can be used to read meters, control loads within the Load Management system, and interface with the SCADA (Supervisory Control And Data Acquisition) system for distribution operations and monitoring.

Meter Data Management provides an organized place to store, retrieve, report and analyze the data collected by the AMI and many other systems. The MDM is a data warehouse and hub, with integration to many of the other Advanced Grid technologies including SCADA, Customer Information System (CIS), Outage Management System (OMS), and Geographic Information System (GIS).

Load Management provides control of consumer loads when required through Load Control Receivers (LCR) mounted to each member building participating in a load management rate. The LCR device is the "switch" at members' homes and businesses to directly control the load when required. Air conditioners, water heaters, electric heat etc., are remotely turned off by a signal sent to the load control receiver. The load management system provides this capability/functionality to residential, commercial and agricultural loads.


| Dakota Electric Association |  |  | Billing Units (1) |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Avg. No. of | Energy |  |  |  |  | Demand |  |  |  |
| Line | Rate | Rate | Consumers | Summer | Other |  |  | Total | Summer | Winter | Other | Total |
| No. | Schedule | Class | (2019 Budget) | (kWh) | (kWh) |  |  | (kWh) | (kW) | (kW) | (kW) | (kW) |
|  |  |  |  |  |  |  |  | $=(\mathrm{b}+\mathrm{c}+\mathrm{d})$ |  |  |  | $=(\mathrm{f}+\mathrm{g}+\mathrm{h})$ |
|  |  |  | (a) | (b) | (c) | (d) |  | (e) | (f) | (g) | (h) | (i) |
| 1 | 31 | Residential \& Farm Service | 100,202 | 257,025,312 | 581,064,216 |  |  | 838,089,528 |  |  |  |  |
| 2 | 32 | Residential \& Farm Demand Control | 15 | 378,000 |  |  |  | 378,000 | 182.2 |  | 735.0 | 917.2 |
|  | 33 | Electric Vehicle | 88 | 280,402 | 8,554 | 2,693 | 9,311 | 300,960 |  |  |  |  |
| 3 | 36 | Irrigation Service - Firm Rate | 8 | 162,528 |  |  |  | 162,528 | 902.3 | 2.5 | 962.5 | 1,867.3 |
| 4 | 36 | Irrigation Service - Controlled Rate | 384 | 7,801,344 |  |  |  | 7,801,344 | 74,387.5 |  |  | 74,387.5 |
| 5 | 41 | Small General Service | 4,431 | 10,541,910 | 31,995,690 |  |  | 42,537,600 |  |  |  | - |
| 6 | 44 | Security Lighting Service |  | 405,600 |  |  |  | 405,600 |  |  |  |  |
| 7 |  | 175 W MV | - |  |  |  |  |  |  |  |  | - |
| 8 |  | 100 W HPS | 819 |  |  |  |  |  |  |  |  | - |
| 9 |  | 150 W HPS | 4 |  |  |  |  |  |  |  |  | - |
| 10 |  | 250 W HPS | 8 |  |  |  |  |  |  |  |  | - |
| 11 |  | Sub-Total | 831 | 405,600 | - |  |  | 405,600 |  |  |  | - |
| 12 | 44-2 | Street Lighting Service |  | 2,405,280 |  |  |  | 2,405,280 |  |  |  | - |
| 13 |  | 175 W MV | - |  |  |  |  | - |  |  |  | - |
| 14 |  | 250 W MV | 3 |  |  |  |  | - |  |  |  | - |
| 15 |  | 400 W MV | - |  |  |  |  | - |  |  |  | - |
| 16 |  | 100 W HPS | 38 |  |  |  |  | - |  |  |  | - |
| 17 |  | 150 W HPS | 646 |  |  |  |  | - |  |  |  | - |
| 18 |  | 250 W HPS | 1,597 |  |  |  |  | - |  |  |  | - |
| 19 |  | 400 W HPS | 1 |  |  |  |  | - |  |  |  | - |
| 20 |  | Sub-Total | 2,285 | 2,405,280 | - |  |  | 2,405,280 |  |  |  | - |
| 21 | 44-1 | Street Lighting Service |  | 521,040 |  |  |  | 521,040 |  |  |  | - |
| 22 |  | 175 W MV | - |  |  |  |  | - |  |  |  | - |
| 23 |  | 250 W MV | - |  |  |  |  | - |  |  |  | - |
| 24 |  | 400 W MV | - |  |  |  |  | - |  |  |  | - |
| 25 |  | 100 W HPS | - |  |  |  |  | - |  |  |  | - |
| 26 |  | 150 W HPS | 101 |  |  |  |  | - |  |  |  | - |
| 27 |  | 200 W HPS | 101 |  |  |  |  | - |  |  |  | - |
| 28 |  | 250 W HPS | 272 |  |  |  |  | - |  |  |  | - |
| 29 |  | 400 W HPS | 13 |  |  |  |  | . |  |  |  | - |
| 30 |  | Sub-Total | 487 | 521,040 | - |  |  | 521,040 |  |  |  | - |
| 31 | 44-3 | Custom Residential Street Lighting |  | 6,750,960 |  |  |  | 6,750,960 |  |  |  | - |
| 32 |  | 175 W MV | - |  |  |  |  | - |  |  |  | - |
| 33 |  | 50 W HPS | 81 |  |  |  |  | - |  |  |  | - |
| 34 |  | 100 W HPS | 8,416 |  |  |  |  |  |  |  |  | - |
| 35 |  | 150 W HPS | 3,732 |  |  |  |  |  |  |  |  | - |
| 36 |  | 250 W HPS | 4 |  |  |  |  | - |  |  |  | - |
| 37 |  | Sub-Total | 12,233 | 6,750,960 | - |  |  | 6,750,960 |  |  |  | - |
|  | 44-4 | LED Security Lighting | 338 |  |  |  |  | 64,896 |  |  |  | - |
|  | 44-5 | LED Street Lighting Member Owned |  | 8,712 |  |  |  | 8,712 |  |  |  | - |
|  |  | A | - |  |  |  |  | - |  |  |  | - |
|  |  | B | - |  |  |  |  | - |  |  |  | - |
|  |  | C | 11 |  |  |  |  | - |  |  |  | - |
|  |  | D | - |  |  |  |  | - |  |  |  | - |
|  |  | E | - |  |  |  |  | - |  |  |  | - |
|  |  | Sub-Total | 11 | 8,712 | - |  |  | 8,712 |  |  |  | - |
|  | 44-6 | LED Street Lighting |  | 202,152 |  |  |  | 202,152 |  |  |  | - |
|  |  | Standard Coach Post | 121 |  |  |  |  | - |  |  |  | - |
|  |  | Standard Acorn Post | 48 |  |  |  |  | - |  |  |  | . |
|  |  | Standard Cobra Mast | 91 |  |  |  |  | - |  |  |  | - |
|  |  | Standard Shoebox | 151 |  |  |  |  | - |  |  |  | - |
|  |  | Basic Coach Post | 41 |  |  |  |  | - |  |  |  | - |
|  |  | Basic Acorn Post | - |  |  |  |  | - |  |  |  | - |
|  |  | Basic Cobra Mast | 53 |  |  |  |  | - |  |  |  | - |
|  |  | Basic Shoebox | 16 |  |  |  |  | - |  |  |  | - |
|  |  | Sub-Total |  | 202,152 | - |  |  | 202,152 |  |  |  |  |
| 38 | 45 | Low Wattage Unmetered Service | 71 |  |  |  |  | - |  |  |  | - |
| 39 | 46 | General Service | 2,750 | 264,418,387 | 158,964,779 | 38,616,837 |  | 462,000,003 | 413,627.7 |  | 1,028,872.7 | 1,442,500.4 |
| 40 | 47 | Municipal Civil Defense Sirens | 66 |  |  |  |  | - |  |  |  | - |
| 41 | 49 | Geothermal Heat Pump | 3 | 172,800 |  |  |  | 172,800 |  |  |  |  |
| 42 | 51 | Controlled Off-peak Energy Storage | 1,718 |  |  |  |  |  |  |  |  |  |
| 43 |  | Energy Net Charge--Rate 31 |  | 2,701,434 | 7,509,011 |  |  | 10,210,445 |  |  |  | - |
| 44 |  | Energy Charge--Rate 41 |  | 6,874 | 39,232 |  |  | 46,106 |  |  |  | - |
| 45 |  | Energy Charge--Rate 46 |  | 51,449 |  |  |  | 51,449 |  |  |  | - |
| 46 |  | Sub-Total |  |  |  |  |  | 10,308,000 |  |  |  | - |
| 47 | 52 | Interruptible Heating Service | 6,686 |  |  |  |  |  |  |  |  |  |
| 48 |  | Energy Net Charge--Rate 31 |  | 10,488,495 | 32,538,130 |  |  | 43,026,625 |  |  |  | - |
| 49 |  | Energy Charge--Rate 41 |  | 64,095 | 386,791 |  |  | 450,886 |  |  |  | - |
| 50 |  | Energy Charge--Rate 46 |  | 650,089 |  |  |  | 650,089 |  |  |  | - |
| 51 |  | Sub-Total |  |  |  |  |  | 44,127,600 |  |  |  | - |
| 52 | 53 | Residential \& Farm Time of Use | 18 | 49,271 | 12,117 | 154,828 |  | 216,216 |  |  |  | - |
| 53 | 54 | General Service Time of Use | 6 | 1,059,984 |  |  |  | 1,059,984 | 960.1 | 436.9 | 1,253.2 | 4,152.1 |
| 54 | 60 | Standby Service | 1 |  |  |  |  | - | 1,000 | 1,000 | 1,000 | 12,000 |
| 55 | 70 | Full Interruptible Service | 234 | 379,080,000 |  |  |  | 379,080,000 | 1,042.8 | - | - | 858,880.1 |
| 56 | 71 | Partial Interruptible Service | 28 | 27,720,000 |  |  |  | 27,720,000 | 3,212.2 | 2,980.2 | 5,964.3 | 111,609.5 |


| Dakota Electric Association |  |  | Billing Units (1) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Avg. No. of | Energy |  |  |  | Demand |  |  |  |
| Line | Rate | Rate | Consumers | Summer | Other |  | Total | Summer | Winter | Other | Total |
| No. | Schedule | Class | (2019 Budget) | (kWh) | (kWh) |  | (kWh) | (kW) | (kW) | (kW) | (kW) |
|  |  |  |  |  |  |  | =(b+c+d) |  |  |  | =(f+g+h) |
|  |  |  | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) |
| 57 | 80 | Controlled Air Conditioning Service | 39,480 |  |  |  |  |  |  |  |  |
| 58 |  | Option 1 |  |  |  |  | - |  |  |  |  |
| 59 |  | Option 2 |  |  |  |  |  |  |  |  |  |
| 60 |  | Residential Rate 8131 |  | 4,858,654 |  |  | 4,858,654 |  |  |  |  |
| 61 |  | Rate 8141 |  | 216,346 |  |  | 216,346 |  |  |  |  |
| 62 |  | Rate 8146 |  | - |  |  | - |  |  |  |  |
| 63 |  | Sub-Total |  |  |  |  | 5,075,000 |  |  |  |  |
| 64 |  | Option 3 |  |  |  |  |  |  |  |  |  |
| 65 |  | Residential Rate 8231 | 35,158 |  |  |  |  |  |  | 6,802.30 |  |
| 66 |  | Commercial | - |  |  |  |  |  |  |  |  |
| 67 |  | Sub-Total | 35,158 |  |  |  |  |  |  |  |  |
| 68 |  | Option 4 |  |  |  |  |  |  |  |  |  |
| 69 |  | Rate 8441 | 4,699 |  |  |  |  |  |  |  |  |
| 70 |  | Rate 8446 | - |  |  |  |  |  |  |  |  |
| 71 |  | Sub-Total | 4,699 |  |  |  |  |  |  |  |  |
| 72 |  | Current Cost of Power Adj (Carryover) (9) |  |  |  |  |  |  |  |  |  |
| 73 |  | Current Cost of Power Adj (Other) (10) |  |  |  |  |  |  |  |  |  |
| 74 |  | Wellspring |  |  |  |  |  |  |  |  |  |
| 75 |  | Grand Total | 108,165 |  |  |  | 1,824,313,203 |  |  |  | 2,496,964.3 |
|  |  | Check Total | 108,165 |  |  |  | 1,824,313,200 |  |  |  | 2,496,964.3 |
|  |  | Difference | - |  |  |  | 3 |  |  |  | - |
|  |  |  |  |  | Line Loss |  | 2.500\% |  |  |  |  |
|  |  |  |  |  | Purchases |  | 1,871,090,000 |  |  |  |  |



| Dakota Electric Association |  |  | Present Rates (2) |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Fixed | Energy Charge |  |  | Demand Charge |  |  | RTA Charge / kWh (3) |  |  |  |
| Line | Rate | Rate | Charge | Summer | Winter | Other | Summer | Winter | Other | Power | CIP | Prop | Net |
| No. | Schedule | Class | per Mo. | per kWh | per kWh | per kWh | per kW | per kW | per kW | Cost Adj | Adj | Tax Adj | RTA |
|  |  |  |  |  |  |  |  |  |  |  |  |  | $=(\mathrm{q}+\mathrm{r}+\mathrm{s})$ |
|  |  |  | (j) | (k) | (1) | (m) | ( n | (0) | (p) | (q) | (r) | (s) | (t) |
| 57 | 80 | Controlled Air Conditioning Service |  |  |  |  |  |  |  |  |  |  |  |
| 58 |  | Option 1 |  |  |  |  |  |  |  |  |  |  | \$ |
| 59 |  | Option 2 |  |  |  |  |  |  |  |  |  |  |  |
| 60 |  | Residential Rate 8131 |  | \$ (0.0320) |  |  |  |  |  |  |  |  | \$ |
| 61 |  | Rate 8141 |  | \$ (0.0320) |  |  |  |  |  |  |  |  | \$ |
| 62 |  | Rate 8146 |  | \$ (0.0320) |  |  |  |  |  |  |  |  | \$ |
| 63 |  | Sub-Total |  |  |  |  |  |  |  |  |  |  | \$ - |
| 64 |  | Option 3 |  |  |  |  |  |  |  |  |  |  |  |
| 65 |  | Residential Rate 8231 | \$ (13.00) |  |  |  |  |  |  |  |  |  | \$ |
| 66 |  | Commercial | \$ (13.00) |  |  |  |  |  |  |  |  |  | \$ - |
| 67 |  | Sub-Total |  |  |  |  |  |  |  |  |  |  | \$ - |
| 68 |  | Option 4 |  |  |  |  |  |  |  |  |  |  |  |
| 69 |  | Rate 8441 | \$ (6.50) |  |  |  |  |  |  |  |  |  | \$ |
| 70 |  | Rate 8446 | \$ (6.50) |  |  |  |  |  |  |  |  |  | \$ - |
| 71 |  | Sub-Total |  |  |  |  |  |  |  |  |  |  | \$ - |
| 72 |  | Current Cost of Power Adj (Carryover) (9) |  |  |  |  |  |  |  |  |  |  |  |
| 73 |  | Current Cost of Power Adj (Other) (10) |  |  |  |  |  |  |  |  |  |  |  |
| 74 |  | Wellspring |  |  |  |  |  |  |  |  |  |  |  |
| 75 |  | Grand Total |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Check Total |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Difference |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |



| Dakota Electric Association |  |  | Revenue under Present Rates |  |  |  |  |  | Cost of Power-Present Rates |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | DEA1 p14-20 | Base |  | Net |  |
| Line | Rate | Rate | Fixed | Energy | Demand | RTA (3) | Other (4) | Total | Cost of | PCA in | Cost of |  |
| No. | Schedule | Class | Charge | Charge | Charge | Charge | Chg/Credits | Revenue | Power | RTA | Power | \$ |
|  |  |  | $=\left(a^{*}\right)^{*} \times 12$ | $=\left(b^{*} k+c^{*}+d^{*} m\right)$ | $=\left({ }^{*} n+g^{*} 0+h * p\right)$ | =(e*t) |  | ( $u+v+w+x+y)$ |  |  | =(u+v) | =(e*ac) |
|  |  |  | (u) | (v) | (w) | (x) | (y) | (z) | (a) | (ab) | (ac) | (ad) |
| 57 | 80 | Controlled Air Conditioning Service |  |  |  |  |  |  |  |  |  |  |
| 58 |  | Option 1 | \$ - | \$ - | \$ - | \$ - |  | \$ - | \$ - | \$ - | \$ - | \$ - |
| 59 |  | Option 2 |  |  |  |  |  |  |  |  |  |  |
| 60 |  | Residential Rate 8131 | \$ - | \$ (155,477) | \$ - | \$ - |  | \$ (155,477) | \$ - | \$ - | \$ - | \$ |
| 61 |  | Rate 8141 | \$ - | \$ (6,923) | \$ - | \$ |  | \$ (6,923) | \$ | \$ - | \$ - | \$ - |
| 62 |  | Rate 8146 | \$ | \$ | \$ - | \$ |  | \$ - | \$ - | \$ - | \$ - | \$ - |
| 63 |  | Sub-Total | \$ | \$ $(162,400)$ | \$ - | \$ | - | \$ $(162,400)$ |  |  |  | \$ - |
| 64 |  | Option 3 |  |  |  |  |  |  |  |  |  |  |
| 65 |  | Residential Rate 8231 |  | \$ | \$ - | \$ | \$ (1,371,162) | \$ (1,371,162) |  |  |  |  |
| 66 |  | Commercial |  | \$ | \$ - | \$ - | \$ | \$ |  |  |  | \$ - |
| 67 |  | Sub-Total | \$ | \$ | \$ - | \$ | \$ (1,371,162) | \$ (1,371,162) |  |  |  | \$ - |
| 68 |  | Option 4 |  |  |  |  |  |  |  |  |  |  |
| 69 |  | Rate 8441 |  | \$ | \$ - | \$ | \$ (91,631) | \$ (91,631) |  |  |  |  |
| 70 |  | Rate 8446 |  | \$ | \$ - | \$ - | \$ | \$ |  |  |  | \$ - |
| 71 |  | Sub-Total | \$ | \$ | \$ - | \$ - | \$ (91,631) | \$ (91,631) |  |  |  | \$ - |
| 72 |  | Current Cost of Power Adj (Carryover) (9) |  |  |  |  |  |  |  |  |  | \$ 3,503,288 |
| 73 |  | Current Cost of Power Adj (Other) (10) |  |  |  |  |  |  |  |  |  | \$ (631,855) |
| 74 |  | Wellspring |  |  |  |  |  | \$ 23,370 |  |  |  | \$ 23,370 |
| 75 |  | Grand Total | \$ 15,237,350 | \$ 163,489,070 | \$ 19,868,162 | \$ 3,394,369 | \$(1,532,010) | \$ 200,480,311 |  |  |  | \$ 150,649,466 |
|  |  | Check Total |  |  |  |  |  | \$ 200,480,307 |  |  |  | \$150,649,466 |
|  |  | Difference |  |  |  |  |  | \$ |  |  |  | \$ - |
|  |  |  |  | \$ 0.0903488 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |


| Dakota Electric Association |  |  | Present | Proposed Rates (5) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Distribution | Fixed | Energy Charge |  |  | Demand Charge |  |  |  |
| Line | Rate | Rate | Revenue | Charge | Summer | Winter | Other | Summer | Winter | Other |  |
| No. | Schedule | Class |  | per Mo. | per kWh | per kWh | per kWh | per kW | per kW | per kW | RTA |
|  |  |  | =(z-ad) |  |  |  |  |  |  |  |  |
|  |  |  | (ae) | (af) | (ag) | (ah) | (ai) | (aj) | (ak) | (al) | (am) |
| 1 | 31 | Residential \& Farm Service | \$ 36,641,136 | \$ 10.00 | \$ 0.1379 |  | \$ 0.1239 |  |  |  | \$- |
| 2 | 32 | Residential \& Farm Demand Control | \$ 7,629 | \$ 13.00 | \$ 0.0810 |  | \$ 0.0810 | \$ 15.50 |  | \$11.90 | \$- |
|  | 33 | Electric Vehicle | \$ 18,466 |  | \$ 0.0756 | \$ 0.4421 | \$ 0.1379 | \$ 0.1239 |  |  |  |
| 3 | 36 | Irrigation Service - Firm Rate | \$ 35,077 | \$ 30.00 | \$ 0.0521 |  | \$ 0.0521 | \$ 26.60 | \$ 21.20 | \$15.67 | \$- |
| 4 | 36 | Irrigation Service - Controlled Rate | \$ 479,043 | \$ 30.00 | \$ 0.0521 |  | \$ 0.0521 | \$ 4.55 | \$ 4.55 | \$ 4.55 | \$- |
| 5 | 41 | Small General Service | \$ 1,856,374 | \$ 15.00 | \$ 0.1375 |  | \$ 0.1235 |  |  |  | \$- |
| 6 | 44 | Security Lighting Service | \$ $(36,585)$ |  |  |  |  |  |  |  |  |
| 7 |  | 175 W MV | \$ - | \$ - |  |  |  |  |  |  |  |
| 8 |  | 100 W HPS | \$ 99,263 | \$ 12.01 |  |  |  |  |  |  |  |
| 9 |  | 150 W HPS | \$ 576 | \$ 14.26 |  |  |  |  |  |  |  |
| 10 |  | 250 W HPS | \$ 1,516 | \$ 18.83 |  |  |  |  |  |  |  |
| 11 |  | Sub-Total | \$ 64,770 |  |  |  |  |  |  |  |  |
| 12 | 44-2 | Street Lighting Service | \$ $(216,956)$ |  |  |  |  |  |  |  |  |
| 13 |  | 175 W MV | \$ - | \$ 17.44 |  |  |  |  |  |  |  |
| 14 |  | 250 W MV | \$ 654 | \$ 20.93 |  |  |  |  |  |  |  |
| 15 |  | 400 W MV | \$ | \$ 26.89 |  |  |  |  |  |  |  |
| 16 |  | 100 W HPS | \$ 5,595 | \$ 13.80 |  |  |  |  |  |  |  |
| 17 |  | 150 W HPS | \$ 109,768 | \$ 15.97 |  |  |  |  |  |  |  |
| 18 |  | 250 W HPS | \$ 343,994 | \$ 20.54 |  |  |  |  |  |  |  |
| 19 |  | 400 W HPS | \$ 269 | \$ 25.42 |  |  |  |  |  |  |  |
| 20 |  | Sub-Total | \$ 243,324 |  |  |  |  |  |  |  |  |
| 21 | 44-1 | Street Lighting Service | \$ $(46,997)$ |  |  |  |  |  |  |  |  |
| 22 |  | 175 W MV | \$ | \$ 13.25 |  |  |  |  |  |  |  |
| 23 |  | 250 W MV | \$ | \$ 16.74 |  |  |  |  |  |  |  |
| 24 |  | 400 W MV | \$ | \$ 22.71 |  |  |  |  |  |  |  |
| 25 |  | 100 W HPS | \$ | \$ 9.61 |  |  |  |  |  |  |  |
| 26 |  | 150 W HPS | \$ 11,466 | \$ 11.78 |  |  |  |  |  |  |  |
| 27 |  | 200 W HPS | \$ 13,829 | \$ 14.18 |  |  |  |  |  |  |  |
| 28 |  | 250 W HPS | \$ 43,248 | \$ 16.35 |  |  |  |  |  |  |  |
| 29 |  | 400 W HPS | \$ 2,757 | \$ 21.24 |  |  |  |  |  |  |  |
| 30 |  | Sub-Total | \$ 24,303 |  |  |  |  |  |  |  |  |
| 31 | 44-3 | Custom Residential Street Lighting | \$ $(608,937)$ |  |  |  |  |  |  |  |  |
| 32 |  | 175 W MV | \$ | \$ - |  |  |  |  |  |  |  |
| 33 |  | 50 W HPS | \$ 6,512 | \$ 8.45 |  |  |  |  |  |  |  |
| 34 |  | 100 W HPS | \$ 849,343 | \$ 10.39 |  |  |  |  |  |  |  |
| 35 |  | 150 W HPS | \$ 461,275 | \$ 12.63 |  |  |  |  |  |  |  |
| 36 |  | 250 W HPS | \$ 676 | \$ 17.21 |  |  |  |  |  |  |  |
| 37 |  | Sub-Total | \$ 708,869 |  |  |  |  |  |  |  |  |
|  | 44-4 | LED Security Lighting | \$ 25,093 | \$ 7.75 |  |  |  |  |  |  |  |
|  | 44-5 | LED Street Lighting Member Owned | \$ (786) |  |  |  |  |  |  |  |  |
|  |  | A | \$ | \$ 5.50 |  |  |  |  |  |  |  |
|  |  | B | \$ | \$ 7.75 |  |  |  |  |  |  |  |
|  |  | C | \$ 1,275 | \$ 11.16 |  |  |  |  |  |  |  |
|  |  | D | \$ | \$ 15.04 |  |  |  |  |  |  |  |
|  |  | E | \$ | \$ 19.07 |  |  |  |  |  |  |  |
|  |  | Sub-Total | \$ 489 |  |  |  |  |  |  |  |  |
|  | 44-6 | LED Street Lighting | \$ $(18,234)$ |  |  |  |  |  |  |  |  |
|  |  | Standard Coach Post | \$ 15,391 | \$ 9.30 |  |  |  |  |  |  |  |
|  |  | Standard Acorn Post | \$ 6,474 | \$ 10.85 |  |  |  |  |  |  |  |
|  |  | Standard Cobra Mast | \$ 9,075 | \$ 8.60 |  |  |  |  |  |  |  |
|  |  | Standard Shoebox | \$ 19,407 | \$ 10.70 |  |  |  |  |  |  |  |
|  |  | Basic Coach Post | \$ 3,360 | \$ 6.36 |  |  |  |  |  |  |  |
|  |  | Basic Acorn Post | \$ | \$ 6.12 |  |  |  |  |  |  |  |
|  |  | Basic Cobra Mast | \$ 4,140 | \$ 6.98 |  |  |  |  |  |  |  |
|  |  | Basic Shoebox | \$ 1,532 | \$ 8.68 |  |  |  |  |  |  |  |
|  |  | Sub-Total | 41,145 |  |  |  |  |  |  |  |  |
| 38 | 45 | Low Wattage Unmetered Service | \$ 8,520 | \$ 10.50 |  |  |  |  |  |  |  |
| 39 | 46 | General Service | \$ 7,434,366 | \$ 34.00 | \$ 0.0776 | \$ 0.0676 | \$ 0.0576 | \$ 13.70 |  | \$10.60 | \$- |
| 40 | 47 | Municipal Civil Defense Sirens | \$ 3,960 | \$ 5.00 |  |  |  |  |  |  |  |
| 41 | 49 | Geothermal Heat Pump | \$ 2,868 |  | \$ 0.1030 | \$ 0.1030 | \$ 0.1030 |  |  |  |  |
| 42 | 51 | Controlled Off-peak Energy Storage |  |  |  |  |  |  |  |  |  |
| 43 |  | Energy Net Charge--Rate 31 | \$ 246,072 |  | \$ 0.0487 | \$ 0.0487 | \$ 0.0487 |  |  |  |  |
| 44 |  | Energy Charge--Rate 41 | \$ 1,112 |  | \$ 0.0487 | \$ 0.0487 | \$ 0.0487 |  |  |  |  |
| 45 |  | Energy Charge--Rate 46 | \$ 1,240 |  | \$ 0.0487 | \$ 0.0487 | \$ 0.0487 |  |  |  |  |
| 46 |  | Sub-Total | \$ 248,424 |  |  |  |  |  |  |  |  |
| 47 | 52 | Interruptible Heating Service |  |  |  |  |  |  |  |  |  |
| 48 |  | Energy Net Charge--Rate 31 | \$ 1,058,454 |  | \$ 0.0631 | \$ 0.0631 | \$ 0.0631 |  |  |  |  |
| 49 |  | Energy Charge--Rate 41 | \$ 11,092 |  | \$ 0.0631 | \$ 0.0631 | \$ 0.0631 |  |  |  |  |
| 50 |  | Energy Charge--Rate 46 | \$ 15,992 |  | \$ 0.0631 | \$ 0.0631 | \$ 0.0631 |  |  |  |  |
| 51 |  | Sub-Total | \$ 1,085,538 |  |  |  |  |  |  |  |  |
| 52 | 53 | Residential \& Farm Time of Use | \$ 9,015 | \$ 13.00 | \$ 0.2126 | \$ 0.1986 | \$ 0.0945 |  |  |  | \$- |
| 53 | 54 | General Service Time of Use | \$ 28,026 | \$ 36.00 | \$ 0.0521 |  | \$ 5.25 | \$ 26.14 | \$ 19.91 | \$13.67 | \$- |
| 54 | 60 | Standby Service | \$ 39,360 |  |  |  | \$ 3.89 | \$ 3.21 | \$ 2.47 | \$ 1.74 |  |
| 55 | 70 | Full Interruptible Service | \$ 4,531,639 | \$ 130.00 | \$ 0.0521 |  | \$ 5.25 | \$ 26.14 | \$ 19.91 | \$13.67 | \$- |
| 56 | 71 | Partial Interruptible Service | \$ 790,037 | \$ 130.00 | \$ 0.0521 |  | \$ 5.25 | \$ 26.14 | \$ 19.91 | \$13.67 | \$- |


| Dakota Electric Association |  |  | Present | Proposed Rates (5) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Fixed | Energy Charge |  |  | Demand Charge |  |  |  |
| Line | Rate | Rate |  | Charge | Summer | Winter | Other | Summer | Winter | Other |  |
| No. | Schedule | Class |  | per Mo. | per kWh | per kWh | per kWh | per kW | per kW | per kW | RTA |
|  |  |  | =(z-ad) |  |  |  |  |  |  |  |  |
|  |  |  | (ae) | (af) | (ag) | (ah) | (ai) | (aj) | (ak) | (al) | (am) |
| 57 | 80 | Controlled Air Conditioning Service |  |  |  |  |  |  |  |  |  |
| 58 |  | Option 1 | \$ |  |  |  |  |  |  |  |  |
| 59 |  | Option 2 |  |  |  |  |  |  |  |  |  |
| 60 |  | Residential Rate 8131 | \$ (155,477) |  | \$ (0.0320) |  |  |  |  |  |  |
| 61 |  | Rate 8141 | \$ $(6,923)$ |  | \$ (0.0320) |  |  |  |  |  |  |
| 62 |  | Rate 8146 | \$ |  | \$ (0.0320) |  |  |  |  |  |  |
| 63 |  | Sub-Total | \$ $(162,400)$ |  |  |  |  |  |  |  |  |
| 64 |  | Option 3 |  |  |  |  |  |  |  |  |  |
| 65 |  | Residential Rate 8231 | \$ (1,371,162) | \$ (13.00) |  |  |  |  |  |  |  |
| 66 |  | Commercial | \$ - | \$ (13.00) |  |  |  |  |  |  |  |
| 67 |  | Sub-Total | \$ (1,371,162) |  |  |  |  |  |  |  |  |
| 68 |  | Option 4 |  |  |  |  |  |  |  |  |  |
| 69 |  | Rate 8441 | \$ (91,631) | \$ (6.50) |  |  |  |  |  |  |  |
| 70 |  | Rate 8446 | \$ | \$ (6.50) |  |  |  |  |  |  |  |
| 71 |  | Sub-Total | \$ (91,631) |  |  |  |  |  |  |  |  |
| 72 |  | Current Cost of Power Adj (Carryover) (9) | \$ $(3,503,288)$ |  |  |  |  |  |  |  |  |
| 73 |  | Current Cost of Power Adj (Other) (10) | \$ 631,855 |  |  |  |  |  |  |  |  |
| 74 |  | Wellspring | \$ - |  |  |  |  |  |  |  |  |
| 75 |  | Grand Total | \$ 49,830,845 |  |  |  |  |  |  |  |  |
|  |  | Check Total | \$ 49,830,841 |  |  |  |  |  |  |  |  |
|  |  | Difference | \$ 4 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |



| Dakota Electric Association |  |  | Revenue under Proposed Rates (5) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | Ex DEA-5 p3-9 |
| Line | Rate | Rate | Fixed | Energy | Demand | RTA | Other (4) | Total |
| No. | Schedule | Class | Charge | Charge | Charge | Charge | Chg/Credits | Revenue |
|  |  |  | $=\left(\mathrm{a}^{*} \mathrm{af}\right)^{*} 12$ | ( $\mathrm{b}^{*} \mathrm{ag}+\mathrm{c}^{*} \mathrm{a}$ h $\mathrm{d}^{*} \mathrm{a}$ | (**aj+g*ak+h* | =(e*am) |  | $a \mathrm{n}+\mathrm{ao}+\mathrm{ap}+\mathrm{aq}+\mathrm{a}$ |
|  |  |  | (an) | (a) | (ap) | (aq) | (ar) | (as) |
| 57 | 80 | Controlled Air Conditioning Service |  |  |  |  |  |  |
| 58 |  | Option 1 | \$ - | \$ | \$ - | \$ - | \$ - | \$ |
| 59 |  | Option 2 |  |  |  |  |  |  |
| 60 |  | Residential Rate 8131 | \$ - | \$ (155,477) | \$ - | \$ - | \$ - | \$ (155,477) |
| 61 |  | Rate 8141 | \$ - | \$ (6,923) | \$ - | \$ - | \$ | $(6,923)$ |
| 62 |  | Rate 8146 | \$ - | \$ - | \$ - | \$ | \$ - | \$ - |
| 63 |  | Sub-Total | \$ - | \$ $(162,400)$ | \$ - | \$ - | \$ - | \$ (162,400) |
| 64 |  | Option 3 |  |  |  |  |  |  |
| 65 |  | Residential Rate 8231 | \$ - | \$ - | \$ - | \$ - | \$ (1,371,162) | \$ (1,371,162) |
| 66 |  | Commercial | \$ - | \$ - | \$ - | \$ - | \$ | \$ |
| 67 |  | Sub-Total | \$ - | \$ - | \$ - | \$ - | \$ (1,371,162) | \$ (1,371,162) |
| 68 |  | Option 4 |  |  |  |  |  |  |
| 69 |  | Rate 8441 | \$ | \$ - | \$ | \$ - | \$ (91,631) | \$ (91,631) |
| 70 |  | Rate 8446 | \$ - | \$ - | \$ | \$ - | \$ | \$ - |
| 71 |  | Sub-Total | \$ - | \$ | \$ - | \$ - | \$ (91,631) | \$ (91,631) |
| 72 |  | Current Cost of Power Adj (Carryover) (9) |  |  |  |  |  |  |
| 73 |  | Current Cost of Power Adj (Other) (10) |  |  |  |  |  |  |
| 74 |  | Wellspring |  |  |  |  |  | \$ 23,370 |
| 75 |  | Grand Total | \$16,962,396 | \$171,218,754 | \$22,455,970 | \$ | \$ (1,532,010) | \$209,128,481 |
|  |  | Check Total |  |  |  |  |  | \$209,128,484 |
|  |  | Difference |  |  |  |  |  | \$ (3) |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |






| Security and Street Lighting Cost Analysis <br> Summary of Monthly Costs by Component |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Light Size \& Type | Power Supply Costs |  | Allocated Distribution |  | Maintenance |  |  |  | Capital Cost |  |  |  |
|  | PS Energy | PS Demand | Consumer | Capacity | 44 | 44-1 | 44-2 | 44-3 | 44 | 44-1 | 44-2 | 44-3 |
|  | (\$/mo.) | (\$/mo.) | $\underset{(\$ 2}{ }(\mathrm{mo} .)$ | $\underset{(\$ 2}{(\$ / \mathrm{mo}})$ | (\$/mo.) | (\$/mo.) | (\$/mo.) | (\$/mo.) | (\$/mo.) | (\$/mo.) | $(\underset{4}{(\$ / \mathrm{mo}})$ | (\$/mo.) |
| 175 W MV | \$3.35 | \$1.72 | \$3.09 | \$3.30 | \$2.54 | \$1.76 | \$2.58 | \$2.58 | \$1.68 |  | \$3.36 |  |
| 250 W MV | \$4.76 | \$2.46 | \$3.09 | \$4.69 | \$2.54 | \$1.76 | \$2.58 | \$2.58 | \$1.68 |  | \$3.36 |  |
| 400 W MV | \$7.14 | \$3.69 | \$3.09 | \$7.03 | \$2.54 | \$1.76 | \$2.58 | \$2.58 | \$1.68 |  | \$3.36 |  |
| 50 W HPS | \$1.12 | \$0.57 | \$3.09 | \$1.10 | \$2.54 | \$1.76 | \$2.58 | \$2.58 | \$1.68 |  | \$3.36 |  |
| 100 W HPS | \$2.14 | \$1.11 | \$3.09 | \$1.48 | \$2.54 | \$1.76 | \$2.58 | \$2.58 | \$1.68 |  | \$3.36 |  |
| 150 W HPS | \$3.21 | \$1.64 | \$3.09 | \$2.10 | \$2.54 | \$1.76 | \$2.58 | \$2.58 | \$1.68 |  | \$3.36 |  |
| 200 W HPS | \$4.08 | \$2.09 | \$3.09 | \$3.16 | \$2.54 | \$1.76 | \$2.58 | \$2.58 | \$1.68 |  | \$3.36 |  |
| 250 W HPS | \$4.95 | \$2.54 | \$3.09 | \$4.02 | \$2.54 | \$1.76 | \$2.58 | \$2.58 | \$1.68 |  | \$3.36 |  |
| 400 W HPS | \$7.58 | \$3.89 | \$3.09 | \$4.88 | \$2.54 | \$1.76 | \$2.58 | \$2.58 | \$1.68 |  | \$3.36 |  |

[^0]$6.23 \%$ On Peak at $5.948 \not \subset$ per kWh plus $93.77 \%$ Off Peak at $4.655 \notin$ per kWh.

| Security and Street Lighting Cost Analysis <br> Determination of Lighting Power Supply Demand Costs |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Summer |  | Winter |  | Other |  | Summer <br> Demand Cost ${ }^{1}$ | Winter Demand Cost ${ }^{1}$ | OtherDemandCost $^{1}$ | Weighted <br> Demand <br> Cost |
| Security Lights | $\begin{array}{\|c} \hline \text { Non-Coinc. } \\ \text { Demand } \end{array}$ | $\begin{array}{\|c\|} \hline \text { Coincident } \\ \text { Demand } \end{array}$ | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { Non-Coinc. } \\ \text { Demand } \end{array} \\ \hline \end{array}$ | $\begin{gathered} \text { Coincident } \\ \text { Demand } \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { Non-Coinc. } \\ \text { Demand } \end{array} \\ \hline \end{array}$ | $\begin{array}{\|c} \hline \text { Coincident } \\ \text { Demand } \\ \hline \end{array}$ |  |  |  |  |
|  | (kW-mo.) | (kW-mo.) | (kW-mo.) | (kW-mo.) | (kW-mo.) | (kW-mo.) | (\$/mo.) | (\$/mo.) | (\$/mo.) | (\$/mo.) |
| Mercury Vapor |  |  |  |  |  |  |  |  |  |  |
| 175 W MV | 0.210 | - | 0.21 | 0.21 | 0.21 | 0.11 | - | 4.08 | 1.40 | 1.72 |
| 250 W MV | 0.300 | - | 0.30 | 0.30 | 0.30 | 0.15 | - | 5.83 | 2.00 | 2.46 |
| 400 W MV | 0.450 | - | 0.45 | 0.45 | 0.45 | 0.23 | - | 8.74 | 3.00 | 3.69 |
| High Pressure Sodium |  |  |  |  |  |  |  |  |  |  |
| 50 W HPS | 0.070 | - | 0.07 | 0.07 | 0.07 | 0.04 | - | 1.36 | 0.47 | 0.57 |
| 70 W HPS | 0.095 | - | 0.10 | 0.10 | 0.10 | 0.05 | - | 1.84 | 0.63 | 0.78 |
| 100 W HPS | 0.135 | - | 0.14 | 0.14 | 0.14 | 0.07 | - | 2.62 | 0.90 | 1.11 |
| 150 W HPS | 0.200 | - | 0.20 | 0.20 | 0.20 | 0.10 | - | 3.88 | 1.33 | 1.64 |
| 200 W HPS | 0.255 | - | 0.26 | 0.26 | 0.26 | 0.13 | - | 4.95 | 1.70 | 2.09 |
| 250 W HPS | 0.310 | - | 0.31 | 0.31 | 0.31 | 0.16 | - | 6.02 | 2.07 | 2.54 |
| 400 W HPS | 0.475 | - | 0.48 | 0.48 | 0.48 | 0.24 | - | 9.22 | 3.17 | 3.89 |
|  |  | Coinc. Factor |  | Coinc. Factor |  | Coinc. Factor | \$/kW | \$/kW | \$/kW |  |
|  |  | 0\% |  | 100\% |  | 50\% | \$25.50 | \$19.42 | \$13.34 |  |

${ }^{1}$ Reflects blended cost per kW purchased based on Exhibit (DEA - 8). See calculation below:

$\overline{\text { ロәШ! }}$


Summer


2019 Lighting Analysis.xls

| Security and Street Lighting Cost Analysis <br> Determination of Allocated |  |  |  |  |
| :---: | :---: | :---: | ---: | ---: |
| Distribution Costs |  |  |  |  |

[^1]${ }^{2}$ Reflects the percentage of distribution-related costs that have been classified as consumer related.

| Security and Street Lighting Cost Analysis <br> Determination of Monthly |  |
| :--- | ---: | ---: | ---: |
| Maintenance Costs |  |

${ }^{1}$ Based on hours of lighting per year divided by rated hours of life.
${ }^{2}$ Rate 44 security lights average 1.5 hours due to rural location of security lights.

${ }^{1}$ Based on DEA rate schedules.
${ }^{2}$ From DEA Depreciation Study, reflects a 20 -year useful life and $10 \%$ salvage value.
${ }^{3}$ Reference DEA Exhibit_(DEA-2), Page 8.
${ }^{4}$ See the following formula:
ROR \% * ((1 + ROR \%)^Life)
( $1+$ ROR \% $)^{\wedge}$ Life - 1

| LED Lighting Cost Analysis (DEA-Owned) Summary of Monthly Costs by Component |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Light Type | Power Supply Costs |  | Allocated Distribution |  | Capital | Maintenance | Total |
|  | PS Energy | PS Demand | Consumer | Capacity | Recovery |  |  |
| Security Light | $\begin{gathered} \left(\begin{array}{c} \$ / \mathrm{mo} .) \\ 1 \\ \$ 0.78 \end{array}\right. \\ \hline \end{gathered}$ | (\$/mo.) | $\begin{gathered} (\$ / \mathrm{mog} .) \\ 2 \\ \$ 3.09 \end{gathered}$ | (\$/mo.) <br> \$0.77 | $\begin{gathered} \left(\begin{array}{c} (\mathrm{mo} .) \\ 3 \end{array}\right. \\ \$ 1.82 \end{gathered}$ | $\begin{gathered} (\$ / \mathrm{mo} .) \\ 4 \\ \$ 0.89 \end{gathered}$ | (\$/mo.) <br> \$7.75 |
|  |  | \$0.40 |  |  |  |  |  |
| Street Light |  |  |  |  |  |  |  |
| Cobra <br> Shoebox <br> Coach Light <br> Acorn Light | $\begin{aligned} & \$ 0.97 \\ & \$ 1.65 \\ & \$ 0.73 \\ & \$ 0.63 \end{aligned}$ | \$0.50 | \$3.09 | \$0.96 | \$2.46 | \$0.60 | \$8.58 |
|  |  | \$0.88 | \$3.09 | \$1.63 | \$2.84 | \$0.60 | \$10.69 |
|  |  | \$0.39 | \$3.09 | \$0.72 | \$3.77 | \$0.60 | \$9.29 |
|  |  | \$0.33 | \$3.09 | \$0.62 | \$5.58 | \$0.60 | \$10.85 |
| ${ }^{1}$ See pages 2 and 3 for the determination of wholesale power supply energy and demand costs per unit. <br> ${ }^{2}$ See page 4 for the determination of allocated distribution costs per unit. <br> ${ }^{3}$ See page 5 for the determination of monthly capital recovery costs per unit. <br> ${ }^{4}$ See page 6 for the determination of monthly maintenance costs per unit. |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| LED Lighting Cost Analysis (DEA-Owned) Determination of Lighting Power Supply Energy Costs |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Light Type | Energy (est.) |  |  |  | Energy Cost |  |
|  | $\begin{gathered} \hline \text { Monthly } \\ \text { Usage }^{1} \\ \hline \end{gathered}$ | Monthly <br> Purchased | Annual Used | Annual Purchased |  |  |
|  |  |  |  |  | Monthly | Annual |
|  | (kWh) | (kWh) | (kWh) | (kWh) | (\$/mo.) | (\$/yr.) |
| Security Light | 16 | 16 | 192 | 197 | 0.78 | 9.33 |
| Street Light |  |  |  |  |  |  |
| Cobra | 20 | 21 | 240 | 246 | 0.97 | 11.66 |
| Shoebox | 34 | 35 | 408 | 418 | 1.65 | 19.82 |
| Coach Light | 15 | 15 | 180 | 185 | 0.73 | 8.74 |
| Acorn Light | 13 | 13 | 156 | 160 | 0.63 | 7.58 |
|  |  | Line Loss ${ }^{2}$ |  |  | \$/kWh ${ }^{3}$ |  |
| Assumptions/Notes: |  | 2.5\% |  |  | 0.04736 |  |

[^2]| LED Lighting Cost Analysis (DEA-Owned) Determination of Lighting Power Supply Demand Costs |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Summer |  | Winter |  | Other |  | SummerDemandCost $^{1}$ | Winter <br> Demand Cost ${ }^{1}$ | $\begin{gathered} \text { Other } \\ \text { Demand } \\ \text { Cost }^{1} \end{gathered}$ | $\begin{gathered} \hline \text { Weighted } \\ \text { Demand } \\ \text { Cost } \\ \hline \end{gathered}$ |
| Light Type | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { Non-Coinc. } \\ \text { Demand } \end{array} \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline \text { Coincident } \\ \text { Demand } \end{array}$ | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { Non-Coinc. } \\ \text { Demand } \end{array} \\ \hline \end{array}$ | $\begin{array}{\|c} \hline \text { Coincident } \\ \text { Demand } \\ \hline \end{array}$ | Non-Coinc. Demand | Coincident Demand |  |  |  |  |
|  | (kW-mo.) | (kW-mo.) | (kW-mo.) | (kW-mo.) | (kW-mo.) | (kW-mo.) | (\$/mo.) | (\$/mo.) | (\$/mo.) | (\$/mo.) |
| Security Light | 0.048 | - | 0.048 | 0.048 | 0.048 | 0.024 | - | 0.955 | 0.328 | 0.40 |
| $\underline{\text { Street Light }}$ |  |  |  |  |  |  |  |  |  |  |
| Cobra | 0.060 | - | 0.060 | 0.060 | 0.060 | 0.030 | - | 1.194 | 0.410 | 0.50 |
| Shoebox | 0.105 | - | 0.105 | 0.105 | 0.105 | 0.053 | - | 2.090 | 0.718 | 0.88 |
| Coach Light | 0.046 | - | 0.046 | 0.046 | 0.046 | 0.023 | - | 0.916 | 0.314 | 0.39 |
| Acorn Light | 0.039 | - | 0.039 | 0.039 | 0.039 | 0.020 | - | 0.776 | 0.267 | 0.33 |
|  |  | $\frac{\text { Coinc. Factor }}{0 \%}$ |  | $\frac{\text { Coinc. Factor }}{100 \%}$ |  | $\frac{\text { Coinc. Factor }}{50 \%}$ | $\frac{\$ / k W}{\$ 26.14}$ | $\frac{\$ / \mathrm{kW}}{\$ 19.91}$ | $\frac{\$ / k W}{\$ 13.67}$ |  |



| LED Lighting Cost Analysis (DEA-Owned) Determination of Allocated Distribution Costs |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Description | COS <br> Results ${ }^{1}$ | $\begin{array}{r} \hline \text { Consumer } \\ \text { For Sy } \end{array}$ | -Related stem $^{2}$ | Capacity |
|  | (\$) | (\%) | (\$) | (\$) |
| Allocated Distribution |  |  |  |  |
| Direct (Except Account \#586) |  |  |  |  |
| Administrative \& General | 279,634 | 55.7\% | 155,756 | 123,878 |
| Miscellaneous Expense | 12,343 | 55.7\% | 6,875 | 5,468 |
| Depreciation | 359,153 | 55.7\% | 200,048 | 159,105 |
| Interest-LT | 122,518 | 55.7\% | 68,243 | 54,275 |
| Property Taxes | 120,397 | 55.7\% | 67,061 | 53,336 |
| Required Margin | 224,114 | 55.7\% | 124,831 | 99,283 |
|  | 1,118,159 |  | 622,815 | 495,344 |
| Billing Units (Cons/MWh) |  |  | 16,771 | 10,359 |
| Per Unit Cost (\$/light/mo. and \$/kWh) |  |  | \$ 3.09 | \$ 0.0478 |
| Other Distribution - Per Unit Cost |  |  | \$ - | \$ |
| Total Allocated Distribution |  |  | \$ 3.09 | \$ 0.0478 |

[^3]| LED Lighting Cost Analysis (DEA-Owned) <br> Determination of Capital Recovery Factor and Cost |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Description | Light Type |  |  |  |  |  |  |  |  |  |  |
|  |  |  | Security |  | Coach |  | Acorn |  | Cobra |  | Shoebox |
| Installed Capital Cost | 1 | \$ | 249.55 | \$ | 517.70 | \$ | 765.50 | \$ | 337.70 | \$ | 389.70 |
| Salvage Value | 2 | \$ | 24.96 | \$ | 51.77 | \$ | 76.55 | \$ | 33.77 | \$ | 38.97 |
| Capital Cost Recovered in Rate |  |  | 224.60 | \$ | 465.93 | \$ | 688.95 | \$ | 303.93 | \$ | 350.73 |
| Depreciable Life (Years) | 3 |  | 16.0 |  | 16.0 |  | 16.0 |  | 16.0 |  | 16.0 |
| DEA Required Rate of Return | 4 |  | 5.73\% |  | 5.73\% |  | 5.73\% |  | 5.73\% |  | 5.73\% |
| Annual Capital Recovery Factor | 5 |  | 9.7\% |  | 9.7\% |  | 9.7\% |  | 9.7\% |  | 9.7\% |
| Annual Cost |  | \$ | 21.81 | \$ | 45.25 | \$ | 66.91 | \$ | 29.52 | \$ | 34.06 |
| Monthly Cost |  | \$ | 1.82 | \$ | 3.77 | \$ | 5.58 | \$ | 2.46 | \$ | 2.84 |

${ }^{1}$ Based on LED rate schedules. Reflects installed capital cost.
Acorn equipment assumed at $80 \%$ retrofit kits and $20 \%$ new fixtures.
${ }^{2}$ Estimated $10 \%$ salvage value.
${ }^{3}$ Reflects a 16 -year useful life.
${ }^{4}$ Reference DEA Exhibit__(DEA-2), page 8.
${ }^{5}$ See the following formula:

$$
\frac{\text { ROR } \% *\left((1+\mathrm{ROR} \%)^{\wedge} \text { Life }\right)}{(1+\text { ROR } \%)^{\wedge} \text { Life }-1}
$$

| LED Lighting Cost Analysis (DEA-Owned) Determination of Monthly Maintenance Costs |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Description | Light Type |  |  |  |  |  |  |  |  |  |
|  |  | Security |  | Coach |  | Acorn |  | Cobra |  | Shoebox |
| Hours of Lighting/Year |  | 3,930 |  | 3,930 |  | 3,930 |  | 3,930 |  | 3,930 |
| Hours of Lighting/Month |  | 327.5 |  | 327.5 |  | 327.5 |  | 327.5 |  | 327.5 |
| Materials |  |  |  |  |  |  |  |  |  |  |
| NA |  |  |  |  |  |  |  |  |  |  |
| Annual Cost | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| Monthly Cost | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| Labor |  |  |  |  |  |  |  |  |  |  |
| Crew Size |  | 1 |  | 1 |  | 1 |  | 1 |  | 1 |
| Hours |  | 1.5 |  | 1.0 |  | 1.0 |  | 1.0 |  | 1.0 |
| Rate per hour | \$ | 75.10 | \$ | 75.10 | \$ | 75.10 | \$ | 75.10 | \$ | 75.10 |
| Truck Rate per hour | \$ | 39.20 | \$ | 39.20 | \$ | 39.20 | \$ | 39.20 | \$ | 39.20 |
| Subtotal | \$ | 171.45 | \$ | 114.30 | \$ | 114.30 | \$ | 114.30 | \$ | 114.30 |
| Trips/Light/Year ${ }^{1}$ |  | 0.063 |  | 0.063 |  | 0.063 |  | 0.063 |  | 0.063 |
| Annual Cost | \$ | 10.72 | \$ | 7.14 | \$ | 7.14 | \$ | 7.14 | \$ | 7.14 |
| Monthly Cost | \$ | 0.89 | \$ | 0.60 | \$ | 0.60 | \$ | 0.60 | \$ | 0.60 |
| 1 Labor for all lights includes maintenance check at 8 years and replacement at 16 years. |  |  |  |  |  |  |  |  |  |  |

## Dakota Electric Association <br> LED Street Lighting (Schedule 44-6) <br> "Basic" Option Rate Calculations

| Description | Coach |  | Acorn |  | Cobra |  | Shoebox |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Proposed "Standard" LED Rate ${ }^{1}$ | \$ | 9.29 | \$ | 10.85 | \$ | 8.58 | \$ | 10.69 |
| - Fixture Replacement Component ${ }^{2}$ | \$ | 3.77 | \$ | 5.58 | \$ | 2.46 | \$ | 2.84 |
| + "Knock-Down" Replacement ${ }^{3}$ | \$ | 0.84 | \$ | 0.84 | \$ | 0.84 | \$ | 0.84 |
| Proposed "Basic" Option LED Ra | \$ | 6.37 | \$ | 6.12 | \$ | 6.97 | \$ | 8.69 |

## Notes:

${ }^{1}$ See Exhibit DEA__(DEA-6), Page 3.
${ }^{2}$ See "Capital Recovery" costs in cost summary.
${ }^{3}$ Equals 5 year average annual knock-down replacement costs divided by number of DEA-owned street lights divided by 12 months.

| LED Lighting Cost Analysis (Member-Owned) <br> Summary of Monthly Costs by Component |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Light Type | Power Supply Costs |  | Allocated Distribution |  | Capital | Maintenance | Total |
|  | PS Energy | PS Demand | Consumer | Capacity |  |  |  |
|  | (\$/mo.) | $\underset{1}{(\$ / \mathrm{mo}}$. ${ }^{\text {a }}$ | (\$/mo.) | (\$/mo.) | $(\$ / \mathrm{mo} .)$ | (\$/mo.) | (\$/mo.) |
| Consumption Group |  |  |  |  |  |  |  |
| A (40 to 80 watts) | \$0.97 | \$0.50 | \$3.09 | \$0.96 | \$0.00 | \$0.00 | \$5.53 |
| B (81 to 150 watts) | \$1.85 | \$0.97 | \$3.09 | \$1.82 | \$0.00 | \$0.00 | \$7.72 |
| C (151 to 250 watts) | \$3.21 | \$1.68 | \$3.09 | \$3.16 | \$0.00 | \$0.00 | \$11.14 |
| D (251 to 350 watts) | \$4.76 | \$2.52 | \$3.09 | \$4.69 | \$0.00 | \$0.00 | \$15.06 |
| E (351 to 450 watts) | \$6.36 | \$3.36 | \$3.09 | \$6.26 | \$0.00 | \$0.00 | \$19.08 |
| ${ }^{1}$ See pages 2 and 3 for the determination of wholesale power supply energy and demand costs per unit. <br> ${ }^{2}$ See page 4 for the determination of allocated distribution costs per unit. <br> ${ }^{3}$ No Dakota Electric capital recovery costs for member-owned lights. <br> ${ }^{4}$ No Dakota Electric maintenance costs for member-owned lights. |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |


| LED Lighting Cost Analysis (Member-Owned) Determination of Lighting Power Supply Energy Costs |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Light Type | Energy (est.) |  |  |  | Energy Cost |  |
|  | Monthly Usage ${ }^{1}$ | Monthly Purchased | Annual <br> Used | Annual Purchased |  |  |
|  |  |  |  |  | Monthly | Annual |
|  | (kWh) | (kWh) | (kWh) | (kWh) | (\$/mo.) | (\$/yr.) |
| Consumption Group |  |  |  |  |  |  |
| A (40 to 80 watts) | 20 | 21 | 240 | 246 | 0.97 | 11.66 |
| B (81 to 150 watts) | 38 | 39 | 456 | 468 | 1.85 | 22.15 |
| C (151 to 250 watts) | 66 | 68 | 792 | 812 | 3.21 | 38.47 |
| D (251 to 350 watts) | 98 | 101 | 1,176 | 1,206 | 4.76 | 57.12 |
| E (351 to 450 watts) | 131 | 134 | 1,572 | 1,612 | 6.36 | 76.35 |
|  |  | Line Loss ${ }^{2}$ |  |  | \$/kWh ${ }^{3}$ |  |
| Assumptions/Notes: |  | 2.5\% |  |  | 0.04736 |  |

[^4]

| LED Lighting Cost Analysis (Member-Owned) Determination of Allocated Distribution Costs |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Description | COS <br> Results ${ }^{1}$ | $\begin{array}{r} \hline \text { Consumer } \\ \text { For Sy } \end{array}$ | -Related stem ${ }^{2}$ | Capacity |
|  | (\$) | (\%) | (\$) | (\$) |
| Allocated Distribution |  |  |  |  |
| Direct (Except Account \#586) |  |  |  |  |
| Administrative \& General | 279,634 | 55.7\% | 155,756 | 123,878 |
| Miscellaneous Expense | 12,343 | 55.7\% | 6,875 | 5,468 |
| Depreciation | 359,153 | 55.7\% | 200,048 | 159,105 |
| Interest-LT | 122,518 | 55.7\% | 68,243 | 54,275 |
| Property Taxes | 120,397 | 55.7\% | 67,061 | 53,336 |
| Required Margin | 224,114 | 55.7\% | 124,831 | 99,283 |
|  | 1,118,159 |  | 622,815 | 495,344 |
| Billing Units (Cons/MWh) |  |  | 16,771 | 10,359 |
| Per Unit Cost (\$/light/mo. and \$/kWh) |  |  | \$ 3.09 | \$ 0.0478 |
| Other Distribution - Per Unit Cost |  |  | \$ - | \$ |
| Total Allocated Distribution |  |  | \$ 3.09 | \$ 0.0478 |

[^5]


GUIDE
TO THE
Cost of Service Study

## Dakota Electric Association

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## 1. Introduction

This guide to Dakota Electric's cost of service study includes the following information:

- Overview of the COS and analysis,
- Description of Uniform System of Accounts included in the COS,
- Identification of account classifications,
- Review of account allocations,
- Summary of COS results, and
- List of related references.


## 2. COS Overview

The basic objective of Dakota Electric's cost of service study (COS) analysis is to identify the cost of providing service to each rate class as a function of load and service characteristics. The methodology employed is often referred to as the "fully allocated average embedded" COS approach meaning that 1) costs are allocated on an average system-wide basis, and 2) embedded or accounting costs as recorded on the Cooperative's books are used in the analysis. We believe that this is generally the most appropriate technique to use in allocating cost responsibility to the various classes and developing rate design data and this has been confirmed by the Commission's approval of our cost of service study and methods in past rate cases.

## A. COS Content

The content of Dakota Electric's COS is as follows:

| Page | Description |
| :--- | :--- |
| $1-3$ | Cost of Service Summary |
| $4-5$ | Classification of Plant in Service |
| $6-7$ | Adjusted Statement of Operations |
| $8-13$ | Classification of Revenue Requirements |
| $14-17$ | Summary of Classification Factors |
| 18 | Summary of Allocation of Revenue Requirements to Rate Classes |
| 19 | Allocation of Plant in Service to Rate Classes |
| $20-22$ | Allocation of Revenue Requirements to Rate Classes |
| 23 | Rate Class Weighting Factors |
| 24 | Analysis of Class Load Characteristics |
| $25-40$ | Analysis of Class Demand Characteristics |
| $41-42$ | Development of Allocation Factors |

Analysis used to produce inputs to the COS include:

- Rate Class Weighting Factors
- Analysis of Class Load Characteristics
- Analysis of Class Demand Characteristics
- Minimum-Size System Analysis


## Rate Class Weighting Factors - Page 23 of COS

The analysis of rate class weighting factors establishes a relative cost comparison (or weighting factor) between providing service to single phase versus three phase service consumers. These relative weighting factors are developed for plant including meters, service drops, transformers, and primary line.

## Analysis of Class Load Characteristics - Page 24 of COS

The analysis of class load characteristics summarizes class billing determinants information including number of consumers in each class, energy sales, and billing demand. This analysis also summarizes demand estimates that are developed in the Analysis of Class Demand Characteristics shown on pages 25 through 40 of the COS.

## Analysis of Class Demand Characteristics - Pages 25-40 of COS

The analysis of class demand characteristics estimates class seasonal coincident and non-coincident demands based on relative energy and demand billing determinant data as applicable. The overall estimates are adjusted to correspond to the Cooperative's total system coincident and non-coincident demands.

## Minimum-Size System Analysis - Workpaper 21

The minimum-size system is one of two common methods used to classify certain distribution plant accounts between "consumer" and "demand." Dakota Electric was ordered to use the minimum-size method in future rate cases, or provide a justification as to why the Cooperative should continue to use the zero-intercept method. The analysis of the minimum-size method (with a demand adjustment) is contained in Workpaper 21.

## B. Use of COS Results

It is important to recognize some of the inherent limitations of a COS. First, a COS analysis, while basically an engineering evaluation, is not an exact science. There are many different methodologies, techniques and assumptions that have been and will continue to be advocated by rate analysts. Because the various philosophies and assumptions can affect the results of the analysis, the results should be treated as providing an indication of the general range of class cost responsibility; and not as precise values.

Second, a COS analysis is directed at determining the cost imposed by a rate class on the system rather than at determining the cost imposed by individual customers within each classification.

Third, accurate demand characteristics and load factor data for individual customer classes are often unavailable. Capacity allocations must therefore be made on the basis
of estimates or "typical" data. These assumptions or estimates can have an effect on the end results.

Fourth, a COS analysis does not address itself to many of the other legitimate objectives of rate design such as member acceptance or the avoidance of excessively abrupt changes from the historical rate policies of the cooperative. In addition, it does not recognize the need to keep the rate structure simple so that it is easily administered and understood by members.

With the above limitations in mind, a COS study can provide a useful guideline for assigning cost responsibility (i.e., revenue requirements) to each of the customer classifications in a manner which avoids unjustifiable price discrimination. The study also provides information useful in designing the individual rate schedules and provides support for justifying rate differentials to retail members.

## C. General Procedure for Conducting a COS

The basic procedure used to determine the cost responsibility of each consumer classification is as follows:

Step 1 Classify the plant account records into basic cost causative categories.
Step 2 Classify the Test Year expenses and margin requirement into the same cost causative categories.
Step 3 Develop allocation factors for each rate class.
Step 4 Allocate costs to the various rate classes using the class allocation factors developed for each cost causative category.

In this regard, it is important to note that Dakota Electric has used the same COS model that was approved in previous general rate cases, with minor refinements as ordered by the Commission.

## D. Cost Causative Categories

Plant investments, Test Year expenses and margin requirement are classified into the following cost causative categories:

Direct - Costs which are directly attributable to one specific customer classification. Expense associated with security and street lighting is an example of a Direct Expense.

Consumer - Costs that are the result of the number and location of each member and which do not vary significantly with the demand imposed on the system or the amount of energy consumed. Metering and customer accounting expenses perhaps best illustrate this type of expense. In addition, a portion of distribution expenses is categorized using the results of the minimum size analysis.

Capacity - Costs which result from providing and maintaining in readiness for operation facilities required to meet the peak demand whether it be the system peak, circuit peak or individual member service peak. Much of the expense of operating and maintaining a three phase backbone feeder would generally fall within this category as would the Demand Charge in the purchased power rate.

Energy - Costs which are related to the amount of energy used. The major item in this category is the Energy Charge in the purchased power rate.

## E. Classification

The cost causative classification of the various electric plant accounts is presented in pages 4 and 5 of the COS. The classified accounts reflect the net plant balance for the Test Year. The methodology used in assigning the plant accounts to the cost causative categories is as follows:

Land, Structures, Station and Battery (Accts. 360 to 363) - The Land and Land Rights, Structures and Improvements, Station Equipment, and Battery accounts were classified as capacity related since the facilities represented by the investment are generally dictated by capacity considerations.

Primary Line and Devices (Accts. 364, 365, 366, 367) - Assignment of the Primary Line and Device accounts was based on results of the "Minimum Size Method" to determine the consumer component share. A narrative and calculation of the minimum size method is provided in Workpaper 21. The remaining amount was then assigned to the capacity component.

Line Transformers (Acct. 368) - Classification of the Line Transformer account was approached in similar fashion using the "Minimum Size Method." (See Workpaper 21.) Again, it was reasoned that there exists a certain minimum transformer investment required to provide basic service to each consumer independent of energy usage or capacity requirements. This cost is assigned to the consumer component, while the remaining investment is considered capacity related.

Services and Meters (Accts. 369 and 370) - Because the investment in Services and Meters is basically independent of usage level, it was assigned entirely to the customer component.

Consumer Premise (Acct. 371) - The Consumer's Premises account is associated to lighting plant and was directly assigned to the Light Class.

Street Lighting (Acct. 373) - The street or security lighting account was assigned directly to the Lighting Class.

General Plant Accounts (Accts. 389 to 399) - The General Plant accounts were assigned to the cost causative categories in the same relationship as the total distribution plant allocations. Because the assignment of the general plant has minimal effect on the classification of Test Year expenses, which ultimately is used to determine class COS responsibility, a more detailed analysis of general plant was not warranted.

The factors used in the expense classification are summarized in pages 14 through 17 of the COS. The methodology and rationale for that methodology is discussed below:

Purchased Power (Acct. 555) - The Demand and Energy Charge portions of the cost of Purchased Power were assigned to the capacity and energy components, respectively. This includes Transmission Charges which were assigned to the capacity component.

Distribution Operation and Maintenance (Accts. 580-598) - Distribution expense accounts that are related to specific plant accounts (Accts. 582, 583, 584, 585, 586, $591,592,593,594,595,596$ and 597) were classified in proportion to the corresponding plant accounts. These expenses result from operating and maintaining the distribution plant and thus may be considered plant related. The remaining distribution expense accounts (Accts. 580, 581, 587, 588, 589, 590 and 598) were prorated on the basis of the sum of the previously assigned distribution expense accounts. These accounts basically represent overhead or general distribution expenses.

Consumer Accounting (Accts. 901-905) - Consumer Accounting expenses were assigned in total to the consumer component since this expense is basically independent of energy usage or capacity requirements. Instead, these accounts are related to the number of consumers.

Consumer Service and Information and Sales (Accts. 907-916) - Consumer Service and Information and Sales expenses are also considered consumer related expenses.

Administrative and General (Accts. 920-932) - Administrative and General (A\&G) expenses are common costs for which there exists no obvious relationship to the functional categories. Thus, we have assigned 10 percent of these expenses to the power supply function and the remainder in proportion to the total of all other expenses without power supply.

Depreciation and Amortization (Accts. 403-407) - Depreciation and Amortization expense was allocated in proportion to the net plant account assignments.

Property Taxes (Acct. 408) - Property Taxes were assigned in proportion to the net plant account assignments.

Other Taxes, Other Interest, and Other Deductions - Other Taxes, Other Interest, and Other Deductions were assigned in a manner similar to the A\&G Accounts.

Net Operating Income (Margin Requirement) - Since margin is comprised of interest expense and return on equity, both related to plant investment, it is reasonable to classify this cost in proportion to the net plant assignments. This approach most nearly parallels the method used to determine target margin requirements (i.e., rate base - ROR method).

## F. Allocation

The allocation of the revenue requirement to each consumer classification is presented in pages 20 to 22 of the COS. The allocations are based on various allocation factors that reflect certain cost causative drivers as discussed below:

1. Direct Cost Allocation

Costs specifically associated with street or security lighting facilities (investment and O\&M) directly assigned to the Lighting Class are an example of a possible direct cost allocation.

## 2. Consumer Costs Allocations

Generally speaking, consumer related costs were allocated to the various classes on the basis of the total number of consumers in each class. However, several adjustments were made in the general allocation procedure to reflect differences in the cost of providing basic service. Weighting factors were developed on page 23 of the COS to recognize the higher cost of three phase service versus standard single phase service for each subcategory of consumer related cost. A "weighting factor" of 0.02 was used to allocate the consumer expense related to providing basic service to an individual security or street light. Because these lights make use of facilities and services which have been primarily provided for under other rate schedules, it may be argued that it costs no more to prepare a bill for a consumer with a security light than for one without. However, it seems only fair that the lighting classes should be required to pay at least a token portion of the consumer related expense, hence the 0.02 weighting factor.

## 3. Capacity Cost Allocations

Three different allocation factors were developed for the capacity component. (See pages 24 to 40 of the COS for the development of class demands):
a. Line transformer capacity related costs were allocated in accordance with the estimated, undiversified non-coincidental annual peak demand of each consumer in each class as this definition of demand most closely approximates transformer capacity requirements.
b. Distribution Substation and Primary line capacity costs were allocated using the Average and Excess Demand Method based on the average monthly coincidental demand for each class (not necessarily coincidental with the system). Distribution system capacity related costs are a function not only of the system peak, but also the individual circuit and even consumer peak demand. The Average and Excess Demand Method gives recognition to the average demand imposed on the system by each class as well as the average monthly peak demand of the class (noncoincidental) and prevents any class from getting a "free ride" from a capacity standpoint.
c. Purchased Power Demand Charges were allocated in accordance with the average monthly coincidental class demands established by season. d. Purchased Power Transmission Charges were allocated in accordance with the average monthly coincidental class demands.

## 4. Energy Cost Allocations

Energy related costs were allocated on the basis of total energy sales in each rate class and further segmented into on-peak and off-peak energy.

Allocation factors for each category are developed in pages 41 to 42 of the COS.

## 3. Account Descriptions

Dakota Electric's distribution plant and expense amounts presented in the COS are organized according to the Uniform System of Accounts (USA). Following is a description of each account that is included in the COS.

## A. Distribution Plant

Following is a description of the distribution plant accounts in the Uniform System of Accounts 360 to 373 for which Dakota Electric has plant recorded.

## 360 Land and Land Rights.

This account includes the cost of land and land rights used in connection with distribution operations.
361 Structures and Improvements.
This account includes the cost, in place, of structures and improvements used in connection with distribution operations.

## 362 Station Equipment.

This account includes the cost installed of station equipment, including transformer banks, which are used for the purpose of changing the characteristics of electricity in connection with its distribution.

## 364 Poles, Towers and Fixtures.

This account includes the cost installed of poles, towers, and appurtenant fixtures used for supporting overhead distribution conductors and service wires.

## 365 Overhead Conductors and Devices.

This account includes the cost installed of overhead conductors and devices used for distribution purposes.
367 Underground Conductors and Devices.
This account includes the cost installed of underground conductors and devices used for distribution purposes.

## 368 Line Transformers.

This account includes the cost installed of overhead and underground distribution line transformers and pole-type and underground voltage regulators owned by the utility, for use in transforming electricity to the voltage at which it is to be used by the customer, whether actually in service or held in reserve.

## 369 Services.

This account includes the cost installed of overhead and underground conductors leading from a point where wires leave the last pole of the overhead system or the distribution box or manhole, or the top of the pole of the distribution line, to the point of connection with the customer's outlet or wiring. Conduit used for underground service conductors shall be included herein.

## 370 Meters.

This account includes the cost installed of meters or devices and appurtenances thereto, for use in measuring the electricity delivered to its users, whether actually in service or held in reserve.

## 373 Street Lighting and Signal Systems.

This account includes the cost installed of equipment used wholly for public street and highway lighting or traffic, fire alarm, police, and other signal systems.

## B. General Plant

Following is a description of the general plant accounts in the Uniform System of Accounts 389 to 399 for which Dakota Electric has plant recorded.

## 389 Land and Land Rights.

This account includes the cost of land and land rights used for utility purposes, the cost of which is not properly includible in other land and land rights accounts.
390 Structures and Improvements.
This account includes the cost, in place, of structures and improvements used for utility purposes, the cost of which is not properly includible in other structures and improvements accounts.
391 Office Furniture and Equipment.
This account includes the cost of office furniture and equipment owned by the utility and devoted to utility service, and not permanently attached to buildings, except the cost of such furniture and equipment which the utility elects to assign to other plant accounts on a functional basis.
392 Transportation Equipment.
This account includes the cost of transportation vehicles used for utility purposes.

## 393 Stores Equipment.

This account includes the cost of equipment used for the receiving, shipping, handling, and storage of materials and supplies.

## 394 Tools, Shop and Garage Equipment.

This account includes the cost of tools, implements, and equipment used in construction, repair work, general shops and garages and not specifically provided for or includible in other accounts.
395 Laboratory Equipment.
This account includes the cost installed of laboratory equipment used for general laboratory purposes and not specifically provided for or includible in other departmental or functional plant accounts.

## 396 Power Operated Equipment.

This account includes the cost of power operated equipment used in construction or repair work exclusive of equipment includible in other accounts. Include, also, the tools and accessories acquired for use with such equipment and the vehicle on which such equipment is mounted.

## 397 Communication Equipment.

This account includes the cost installed of telephone and wireless equipment for general use in connection with utility operations.
398 Miscellaneous Equipment.
This account includes the cost of equipment, and apparatus used in the utility operations, which is not includible in other accounts.
399 Other Tangible Property.
This account includes the cost of tangible utility plant not provided for elsewhere.

## C. Power Supply

Following is a description of the power supply account in the Uniform System of Accounts 555 for which Dakota Electric has expenses recorded.

## 555 Purchased Power.

This account includes the cost at point of receipt by the utility of electricity purchased for resale.

## D. Transmission

Following is a description of the power supply account in the Uniform System of Accounts 555 for which Dakota Electric has transmission expense recorded.

## 555 Purchased Power.

This account includes the cost at point of receipt by the utility of electricity purchased for resale.

## E. Distribution Expenses

Following is a description of the distribution accounts in the Uniform System of Accounts 580 to 598 for which Dakota Electric has expenses recorded.

## 581 Load Dispatching.

This account includes the cost of labor, employee pensions and benefits, social security and other payroll taxes, injuries and damages, property insurance, property taxes, materials used, and expenses incurred in load dispatching operations pertaining to the distribution of electricity.

## 582 Station Expenses.

This account includes the cost of labor, employee pensions and benefits, social security and other payroll taxes, injuries and damages, property insurance, property taxes, materials used, and expenses incurred in the operation of distribution substations.

## 583 Overhead Line Expenses.

584 Underground Line Expenses.
These accounts includes, respectively, the cost of labor, employee pensions and benefits, social security and other payroll taxes, injuries and damages, property insurance, property taxes, materials used, and expenses incurred in the operation of overhead and underground distribution lines.

## 586 Meter Expenses.

This account includes the cost of labor, employee pensions and benefits, social security and other payroll taxes, injuries and damages, property insurance, property taxes, materials used, and expenses incurred in the operation of customer meters and associated equipment.
587 Customer Installations Expenses.
This account includes the cost of labor, employee pensions and benefits, social security and other payroll taxes, injuries and damages, property insurance, property taxes, materials used, and expenses incurred in work on customer installations in inspecting premises and in rendering services to customers of the nature of those indicated by the list of items hereunder.
588 Miscellaneous Distribution Expenses.
This account includes the cost of labor, employee pensions and benefits, social security and other payroll taxes, injuries and damages, materials used, and expenses incurred in distribution system operation not provided for elsewhere.
590 Maintenance Supervision and Engineering.
This account includes the cost of labor, employee pensions and benefits, social security and other payroll taxes, injuries and damages, and expenses incurred in the general supervision and direction of maintenance of the distribution system. Direct field supervision of specific jobs shall be charged to the appropriate maintenance account.
592 Maintenance of Station Equipment.
This account includes the cost of labor, employee pensions and benefits, social security and other payroll taxes, injuries and damages, materials used, and expenses
incurred in maintenance of plant, the book cost of which is includible in Account 362, Station Equipment, and Account 363, Storage Battery Equipment.

## 593 Maintenance of Overhead Lines.

This account includes the cost of labor, employee pensions and benefits, social security and other payroll taxes, injuries and damages, materials used, and expenses incurred in the maintenance of overhead distribution line facilities, the book cost of which is includible in Account 364, Poles, Towers and Fixtures; Account 365, Overhead Conductors and Devices; and Account 369, Services.

## 595 Maintenance of Line Transformers.

This account includes the cost of labor, employee pensions and benefits, social security and other payroll taxes, injuries and damages, materials used, and expenses incurred in maintenance of distribution line transformers, the book cost of which is includible in Account 368, Line Transformers.
596 Maintenance of Street Lighting and Signal Systems.
This account includes the cost of labor, employee pensions and benefits, social security and other payroll taxes, injuries and damages, materials used, and expenses incurred in maintenance of plant, the book cost of which is includible in Account 373, Street Lighting and Signal Systems.

## F. Consumer Accounting \& Service

Following is a description of the consumer accounting accounts in the Uniform System of Accounts 901 to 905 for which Dakota Electric has expenses recorded.

## 902 Meter Reading Expenses.

This account includes the cost of labor, employee pensions and benefits, social security and other payroll taxes, injuries and damages, materials used, and expenses incurred in reading customer meters, and determining consumption when performed by employees engaged in reading meters.
903 Customer Records and Collection Expenses.
This account includes the cost of labor, employee pensions and benefits, social security and other payroll taxes, injuries and damages, materials used, and expenses incurred in work on customer applications, contracts, orders, credit investigations, billing and accounting, collections and complaints.

## 904 Uncollectible Accounts.

This account is charged with amounts sufficient to provide for losses from uncollectible utility revenues. Concurrent credits shall be made to Account 144, Accumulated Provision for Uncollectible Accounts - Credit. Losses from uncollectible accounts shall be charged to
Account 144.
Following is a description of the consumer service and information accounts in the Uniform System of Accounts 907 to 910 for which Dakota Electric has expenses recorded.

## 908 Customer Assistance Expenses.

This account includes the cost of labor, employee pensions and benefits, social security and other payroll taxes, injuries and damages, materials used, and expenses incurred in providing instructions or assistance to customers, the object of which is to encourage safe, efficient, and economical use of the utility's service.
909 Informational and Instructional Advertising Expenses.
This account includes the cost of labor, employee pensions and benefits, social security and other payroll taxes, injuries and damages, materials used, and expenses incurred in activities which primarily convey information as to what the utility urges or suggests customers should do in utilizing electric service to protect health and safety, to encourage environmental protection, to utilize their electric equipment safely and economically, or to conserve electric energy.

## 910 Miscellaneous Customer Service and Informational Expenses

This account includes the cost of labor, employee pensions and benefits, social security and other payroll taxes, injuries and damages, property insurance, property taxes, materials used, and expenses incurred in connection with customer service and informational activities which are not includible in other customer information expense accounts.

## G. Other

Following is a description of the administrative and general accounts in the Uniform System of Accounts 920 to 935 for which Dakota Electric has expenses recorded.

## 920 Administrative and General Salaries

This account includes the compensation (salaries, bonuses, employee pensions and benefits, social security and other payroll taxes, injuries and damages, and other consideration for services, but not including directors' fees) of officers, executives, and other employees of the utility properly chargeable to utility operations and not chargeable directly to a particular operating function.

## 921 Office Supplies and Expenses

This account includes office supplies and expenses incurred in connection with the general administration of the utility's operations which are assignable to specific
administrative or general departments and are not specifically provided for in other accounts.

## 924 Property Insurance

This account includes the cost of insurance or reserve accruals to protect the utility against losses and damages to owned or leased property used in its utility operations.

## 925 Injuries and Damages

This account includes the cost of insurance or reserve accruals to protect the utility against injuries and damages claims of employees or others, losses of such
character not covered by insurance, and expenses incurred in settlement of injuries and damages claims.

## 926 Employee Pensions and Benefits

This account includes pensions paid to or on behalf of retired employees, or accruals to provide for pensions, or payments for the purchase of annuities for this
purpose, when the utility has definitely, by contract, committed itself to a pension plan under which the pension funds are irrevocably devoted to pension purposes, and payments for employee accident, sickness, hospital, and death benefits, or insurance. Also included are expenses incurred in medical, educational or recreational activities for the benefit of employees, and administrative expenses in connection with employee pensions and benefits.

## 927 Franchise Requirements

This account includes payments to municipal or other governmental authorities, and the cost of materials, supplies and services furnished such authorities without reimbursement in compliance with franchise, ordinance, or similar requirements.

## 928 Regulatory Commission Expense

This account includes all expenses (except pay of regular employees only incidentally engaged in such work) properly includible in utility operating expenses, incurred by the utility in connection with formal cases before regulatory commissions, or other regulatory bodies, or cases in which such a body is a party, including payments made to a regulatory commission for fees assessed against the utility for pay and expenses of such commission, its officers, agents, and employees.
930 Miscellaneous General Expenses
This account includes the cost of labor, materials used, and expenses incurred in advertising and related activities, the cost of which by their content and purpose are not provided for elsewhere.

## 935 Maintenance of General Plant

This account includes the cost assignable to customer accounts, sales and administrative and general functions of labor, materials used and expenses incurred in the maintenance of property, the book cost of which is includible in account 390, Structures and Improvements, account 391, Office Furniture and Equipment, account 397, Communication Equipment, and account 398 Miscellaneous Equipment.

Following is a description of the miscellaneous expense accounts in the Uniform System of Accounts 426 to 431 for which Dakota Electric has expenses recorded.

### 426.1 Donations

This account includes all payments or donations for charitable, social or community welfare purposes.

## 428 Amortization of Debt Discount and Expense

This account includes the amortization of unamortized debt discount and expense on outstanding long-term debt. Amounts charged to this account shall be credited concurrently to accounts 181, Unamortized Debt Expense, and 226, Unamortized Discount on Long-Term Debt-Debit.

## 429 Amortization of Premium on Debt

This account includes the amortization of unamortized net premium on outstanding long-term debt. Amounts credited to this account shall be charged concurrently to account 225, Unamortized Premium on Long-Term Debt.

## 431 Other Interest Expense

This account includes all interest charges not provided for elsewhere.
Following is a description of the depreciation expense accounts in the Uniform System of Accounts 403 to 407 for which Dakota Electric has expenses recorded.

## 403 Depreciation Expense

This account includes the amount of depreciation expense for all classes of depreciable electric plant in service except such depreciation expense as is chargeable to clearing accounts or to account 416, Costs and Expenses of Merchandising, Jobbing and Contract Work.

Following is a description of the property expense account in the Uniform System of Accounts 408 for which Dakota Electric has expenses recorded.

## 408 Property \& Other Taxes

These accounts includes the amounts of ad valorem, gross revenue or gross receipts taxes, state unemployment insurance, franchise taxes, Federal excise taxes, social security taxes, and all other taxes assessed by Federal, state, county, municipal, or other local governmental authorities, except income taxes.

Following is a description of the interest-long term account in the Uniform System of Accounts 427 for which Dakota Electric has expenses recorded.

## 427 Interest on Long-Term Debt

This account includes the amount of interest on outstanding long-term debt issued or assumed by the utility, the liability for which is included in account 221, Bonds, or account 224, Other Long-Term Debt

## 4. Classification

## A. Distribution Plant

The classification of net distribution plant in service is shown on pages 4 and 5 of the COS. The classification of these plant accounts as capacity, consumer, or direct are as follows:

360 - Land - Classified as substation capacity related.
361 - Structures - Classified as substation capacity related.
362 - Station - Classified as substation capacity related.
364 - Poles - Classified as primary line capacity \& consumer related.
365 - OH Conductor - Classified as primary line capacity \& consumer related.
367 - UG Conductor - Classified as primary line capacity \& consumer related.
368 - Transformers - Classified as line transformer capacity \& consumer related.

369 - Services -- Classified as Secondary and Service consumer related.
370 - Meters - Classified as Meter consumer related.
371 - Cons Premise - Directly assigned to lighting.
373 - Street Light - Directly assigned to lighting.
Accounts 360, 361, and 362 are classified as capacity since they relate to substations. Substations are planned and built to meet the system demand requirements of the Cooperative.

Accounts $364,365,367$, and 368 are each the subject of the minimum-size analysis and are classified as capacity and consumer related according to this analysis.

Accounts 369 and 370 are for distribution plant located at individual consumer sites and are classified as consumer related.

Accounts 371 and 373 are used for street lighting which is directly classified as lighting.

Each of these classifications are consistent with the classification of distribution plant as described on page 87 of the NARUC "Electric Utility Cost Allocation Manual" published in January 1992.

## B. General Plant

The classification of net general plant in service is shown on pages 4 and 5 of the COS. The classification of general plant accounts as capacity, consumer, or direct follows the proportional classification of all distribution plant.

The classification of net general plant using the proportional classification of all other plant is based on the assumption that general plant supports the other plant functions. This approach to general plant classifications is consistent with the high level approach to classification of distribution plant as described on page 105 of the NARUC "Electric Utility Cost Allocation Manual" published in January 1992.

## C. Power Supply

The classification of power supply expenses is shown on pages 8 through 13 of the COS. The classification of the above power supply expenses as energy or capacity follows the billing basis from our wholesale power supplier, Great River Energy (GRE).

$$
\begin{array}{ll}
\text { Demand Charges - Summer } & \text { capacity } \\
\text { Demand Charges - Winter } & \text { capacity } \\
\text { Demand Charges - Other } & \text { capacity }
\end{array}
$$

| Energy Charges - On-Peak | energy |
| :--- | :--- |
| Energy Charges - Off-Peak | energy |

The classification of wholesale power supply costs follows the billing basis of our wholesale power supplier. Demand based charges are classified as capacity and energy based charges are classified as energy.

## D. Transmission

The classification of transmission expense is shown on pages 8 through 13 of the COS. The classification of the transmission expenses as capacity follows the billing basis from our wholesale power supplier.
Transmission - G\&T Charges capacity

The classification of transmission costs follows the billing basis of our wholesale power supplier. The transmission demand based charge is classified as capacity.

## E. Distribution Expenses

The classification of distribution expenses is shown on pages 8 through 13 of the COS. Distribution operation and maintenance expense into one or more of the following cost causative categories:

Substation - Capacity
Primary Line - Capacity
Primary Line - Consumer
Line Transformer - Capacity
Line Transformer - Consumer
Secondary \& Service -- Consumer
Meter -- Consumer
Customer Accounting \& Service - Consumer
Direct Assigned
The classification of the referenced accounts into the above categories is explained below.

581 - Load Dispatch - Classified based on classification of distribution operations accounts 582-587.
582 - Oper. Station -Classified to substation capacity-related.
583 - Oper. OH Line - Classified to primary line capacity \& consumer related.
584 - Oper. UG Line - Classified to primary line capacity \& consumer related.
586 - Oper. Meters - Classified to Meter - consumer related.
587 - Oper. Cons. Install - Classified to primary line capacity \& consumer
related.
588 - Oper. Misc. Oper. Classified based on classification of distribution operations accounts 582-587.
590 - Main. Super. \& Eng. - Classified based on classification of distribution maintenance accounts 591-596.
592 - Main. Station - Classified to substation capacity related.
593 - Main. OH Line - Classified as primary line capacity \& consumer related.
595 - Main. Line Transf. - Classified as line transformer capacity \& consumer related.
596 - Main. St. Lighting - Directly assigned to the lighting class.
Load dispatch expense in account 581 is classified into three categories of distribution substations, primary line, and meters and further into capacity and consumer related based upon the classification of other distribution operation expense accounts. These expenses are not directly related to one particular distribution category and so classifying based upon other assigned distribution operation expenses best reflects the nature of these expenses and the plant being operated/dispatched.

Operation expense associated with substations in account 582 is classified as substation capacity. This classification follows the classification of the plant being operated and for which these costs are incurred.

Operation expense associated with overhead and underground lines in accounts 583 and 584 is classified as capacity and consumer according to the minimum-size system classification approach applied to the plant accounts being operated and for which these costs are incurred.

Operation expense associated with meters in account 586 is classified as meter, consumer related. This classification follows the classification of the plant being operated and for which these costs are incurred.

Operation expense associated with consumer installations in account 587 is classified as capacity and consumer. This classification follows the classification of the primary line plant and for which these costs are incurred.

Miscellaneous operation expense in account 588 is classified into three categories of distribution substations, primary line, and meters and further into capacity and consumer related based upon the classification of other distribution operation expense accounts. These expenses are not directly related to one particular distribution plant category and so classifying based upon other assigned distribution operation expenses best reflects the nature of these expenses and the plant being operated.

Maintenance supervision and engineering expense in account 590 is classified into three categories of distribution substations, primary line, and line transformers and further into capacity and consumer related based upon the classification of other distribution maintenance expense accounts. These expenses are not directly related to
one particular distribution plant category and so classifying based upon other assigned distribution maintenance expenses best reflects the nature of these supervision and engineering expenses.

Maintenance expense associated with substations in account 592 is classified as substation capacity related. This classification follows the classification of the plant being maintained and for which these costs are incurred.

Maintenance expense associated with overhead lines in account 593 is classified as primary line capacity and consumer related according to the minimum-size system classification approach applied to the plant accounts being maintained and for which these costs are incurred.

Maintenance expense associated with transformers in account 595 is classified as line transformer capacity and consumer related according to the minimum-size system classification approach applied to the plant accounts being maintained and for which these costs are incurred.

Maintenance expense associated with street lighting in account 596 is for street lighting which is directly classified as lighting.

Each of these classifications are consistent with the classification of distribution plant as described on page 87 of the NARUC "Electric Utility Cost Allocation Manual" published in January 1992.

## F. Consumer Accounting \& Service

The classification of distribution expenses is shown on pages 8 through 13 of the COS. Distribution expense accounts 902-904 are classified as Customer \& Accounting and Service consumer related.

Meter reading expense in account 902 relates to the need to read individual consumer meters regardless of monthly energy or demand consumption. As such it has been classified as consumer related.

Records and collections expense in account 903 is classified as consumer. This classification relates to the need to maintain individual consumer records and bill consumers regardless of monthly energy or demand consumption.

Uncollectible accounts expense in account 904 is classified as consumer. This classification attributes uncollectible amounts as a general cost of doing business.

Each of these classifications are consistent with the classification of distribution plant as described on page 103 of the NARUC "Electric Utility Cost Allocation Manual" published in January 1992.

The classification of distribution expenses is shown on pages 8 through 13 of the COS. Distribution expense accounts 908-910 are classified as Customer \& Accounting and Service consumer related.

Customer assistance expense in account 908 is classified as consumer. This classification relates to the need to provide information to individual consumers.

Information and instructional advertising expense in account 909 is classified as consumer. This classification relates to the need to provide information to consumers.

Miscellaneous customer service and informational expense in account 910 is classified as consumer. This classification relates to the need to provide information to consumers.

Each of these classifications are consistent with the classification of customer service and informational expenses as described on page 103 of the NARUC "Electric Utility Cost Allocation Manual" published in January 1992.

## G. Other

The classification of distribution expenses is shown on pages 8 through 13 of the COS. The classification of the above distribution expenses as capacity, consumer, or direct are as follows:

$$
\begin{array}{ll}
920 \text { to } 932 \text { - A\&G Power Supply } & \text { energy \& capacity } \\
920 \text { to } 932 \text { - A\&G Distribution } & \text { capacity, consumer \& direct } \\
426 \text { to } 431 \text { - Misc. Expenses Power Supply } & \text { energy \& capacity } \\
426 \text { to } 431 \text { - Misc. Expenses Distribution } & \text { capacity, consumer \& direct } \\
403 \text { - Depreciation Expense } & \text { capacity \& consumer } \\
408 \text { - Property Taxes } & \text { capacity \& consumer } \\
427 \text { - Interest on Long-Term Debt } & \text { capacity \& consumer }
\end{array}
$$

Administrative and General (A\&G) expenses are common costs for which there exists no obvious relationship to the functional categories. Rather these expenses relate to supporting the overall operations of Dakota Electric. Therefore, A\&G for power supply and distribution, along with miscellaneous expenses for power supply and distribution, are therefore classified in the same manner as other power supply and distribution expense classifications.

The depreciation, property taxes and interest on long-term debt expenses are classified in the same manner as distribution plant to which they are directly related.

## 5. Allocation

## A. Distribution Plant

For convenience the responses to numbers $4 \& 5$ above are consolidated in the following. The cost causative categories along with their basis and reasoning for allocation are listed below.

Substation - Capacity related costs are allocated by each rate class' average and excess demand based upon the average monthly coincidental demand for each class (not necessarily coincident with the system). The average and excess demand allocator gives recognition to the average demand imposed on the system as well as the average monthly peak demand of the class (noncoincidental class demand).

Primary Line - Capacity related costs are allocated by each rate class' average and excess demand based upon the average monthly coincidental demand for each class (not necessarily coincident with the system). Distribution primary line capacity related costs are a function not only of the system peak but also the individual circuit and even consumer peak demand. The average and excess demand allocator gives recognition to the average demand imposed on the system as well as the average monthly peak demand of the class (noncoincidental class demand).

Primary Line - Consumer related costs are allocated based upon the weighted number of consumers in each rate class. The weighting factor assigned to each rate class can be seen in the COS, Page 41, Line 36. The weighting factors are developed on Page 23 of the COS and reflect the relative cost difference between the replacement costs for single vs. three phase primary line. Developing a weighting factor between single phase and three phase reflects cost causation because it takes into account the fact that the minimum-system three phase primary line costs more to install than the minimum-system single phase primary line.

Line Transformer - Capacity related costs are allocated based upon the sum of the individual customer annual peaks for each rate class. Line transformers are sized to meet the load requirements of each consumer in each class versus the system load. Allocating based upon the sum of each consumer's annual peak demand by class therefore best reflects cost causation.

Line Transformer - Consumer related costs are allocated based upon the weighted number of consumers in each rate class. The weighting factor assigned to each rate class can be seen on Page 41, Line 38 of the COS. The weighting factors are developed on Page 23 of the COS and reflect the relative cost difference between the replacement costs for a single phase versus three phase line transformer.

Secondary \& Services - Consumer related costs are allocated based upon the weighted number of consumers in each rate class. The weighting factor assigned to each rate class can be seen on the COS, Page 41, Line 40. The weighting factors are develop on the COS, Page 23 and reflect the relative cost difference between the replacement costs for single phase versus three phase secondary and service facilities.

Meter - Consumer related costs are allocated based upon the weighted number of consumers in each rate class. The weighting factor assigned to each rate class can be seen on the COS, Page 41, Line 42. The weighting factors are developed on page 23 and reflect the relative cost difference between the replacement costs for single phase versus three phase and between kWh vs. kW meters as appropriate.

Accounting \& Service - Consumer related costs are allocated based upon the weighted number of consumers in each rate class. The weighting factor assigned to each rate class is the same as the meter weighting factor. Direct - Investment in lighting systems which are recorded to plant account no. 373 have been direct assigned/allocated to the lighting rate class.

For details on the consumer weighting and allocation factors please reference the COS, Pages 23 and 41-42 respectively. For details on the capacity allocation factors please reference the COS, Pages 24 to 42 .

## B. General Plant

The allocation of plant in service is shown on page 19 of the COS. The allocation of general plant accounts follows the proportional allocation of all distribution plant.

The allocation of general plant using the proportional classification of all other plant is based on the assumption that general plant supports the other plant functions. This approach to general plant allocations is consistent with the high level approach to allocation of distribution plant as described on page 105 of the NARUC "Electric Utility Cost Allocation Manual" published in January 1992.

## C. Power Supply

The allocation of power supply expenses is shown on pages 20 through 22 of the COS. The allocation of these power supply accounts is as follows:

Demand Charges - Summer - Summer capacity costs are allocated based upon each rate classification's estimated contribution to the Cooperative's purchased power summer billing demand (average summer month). Dakota Electric is billed for summer capacity from GRE based upon its contribution to the GRE coincident peaks for the months of June, July and August.

Allocating purchased power summer demand charges based upon each rate classification's contribution to the summer demand billing peaks therefore reflects the principle of cost causation.

Demand Charges - Winter - See response above for the winter months of December, January and February.

Demand Charges - Other - See response above for the spring and fall months of March-May and September-November.

Energy Charges - On-Peak - On-peak energy costs are allocated to each rate classification based upon the estimated on-peak energy purchases made to serve the rate class. Allocating these costs on the basis of each rate classification's on-peak energy requirements therefore reflects the principle of cost causation.

Energy Charges - Off-Peak - Off-peak energy costs are allocated to each rate classification based upon the estimated off-peak energy purchases made to serve the rate class. Allocating these costs on the basis of each rate classification's off-peak energy requirements therefore reflects the principle of cost causation.

## D. Transmission

The allocation of transmission expense is shown on pages 20 through 22 of the COS. The allocation of the transmission account is as follows:

Transmission - G\&T Charges - Allocated based upon each rate classification's contribution to the transmission billing peaks as defined as the GRE monthly coincident peaks.

Dakota's transmission costs are based upon the GRE transmission rate which is the same throughout the year and is based upon the contributions to each months' coincident peak demand. The average monthly CP demand by rate class is therefore used to allocate these wholesale power costs which is consistent with cost causation.

## E. Distribution Expenses

Please reference the response to Information Request No. 705, part 4 which identifies and describes the allocation factors used for each cost causative category. As identified in the above number 2, the following cost causative categories are used for the classification of distribution operation and maintenance expenses.

```
Substation - Capacity
Primary Line - Capacity
```

Primary Line - Consumer<br>Line Transformer - Capacity<br>Line Transformer - Consumer<br>Secondary \& Service -- Consumer<br>Meter -- Consumer<br>Customer Accounting \& Service - Consumer<br>Direct Assigned

## F. Consumer Accounting \& Service

The allocation of distribution expenses is shown on pages 20 through 22 of the COS. The allocation of Customer Accounting and Service consumer related costs is based on the weighted number of customers for each rate class. The weighting factor assigned to each rate class can be seen on the COS, Page 41, Line 42. The weighting factors are develop on page 23 and reflect the relative cost difference between the replacement costs for single phase versus three phase and between kWh vs. kW meters as appropriate.

Because these expenses are related to the number of consumers rather than capacity or energy requirements, these costs have been allocated based upon the number of consumers. To account for complexity and additional data requirements, different weighting factors have been applied based upon different meter types.

The allocation of distribution expenses is shown on pages 20 through 22 of the COS. The allocation of Customer Accounting and Service consumer related costs is based on the weighted number of customers for each rate class. The weighting factor assigned to each rate class can be seen on the COS, Page 41, Line 42. The weighting factors are develop on page 23 and reflect the relative cost difference between the replacement costs for single phase versus three phase and between kWh vs. kW meters as appropriate to represent complexity.

Because these expenses are related to the number of consumers rather than capacity or energy requirements, these costs have been allocated based upon the number of consumers. These costs however are not evenly distributed between all consumers or between all rate classes. To reflect this reality, the number of consumers has been weighted as described in number 4 above so that more complex rates, meters and consumers receive a greater weight of these costs on a per consumer basis.

## G. Other

For the allocation method for each cost causative category please reference:
Power Supply - Part 4 of Information Request No. 707. Distribution - Part 4 of Information Request No. 705.

For the reasoning behind the allocation methods used for each cost causative category please reference:

Power Supply - Part 4 of Information Request No. 707.
Distribution - Part 4 of Information Request No. 705.

## 6. Summary of COS Results

The results of the COS are summarized on pages 1 to 3 of the study. The first page shows the revenue requirement for each class, the revenue from present rates, and the required increase or decrease in revenue on a dollar and percentage basis for revenue to equal the COS results. The second page shows the costs allocated to major components including power supply, transmission, and distribution. Finally, the third page presents the information from page 2 on a cents per kWh or $\$$ per month per consumer basis.

## 7. References

Relevant reference material includes:
The National Association of Regulatory Utility Commissioners (NARUC) "Electric Utility Cost Allocation Manual", January 1992.

Rural Utilities Service (RUS) "Uniform System of Accounts", Bulletin 1767B-1.


Dakota Electric Association<br>General Rate Case<br>E-111/GR-19-478<br>Minimum-Size Method w/ Demand Adjustment Workpaper \#21

Customer and Demand Classification
of
Distribution Plant Accounts

## Introduction

In the Commission's final Order in Dakota Electric's 2009 General Rate Case in Docket No. E-111/GR-09-175, Ordering Paragraph \#6 requires that:

Dakota Electric shall, in its next rate case, either use the minimum-size method to classify Distribution accounts, or provide such an analysis to support the outcome of the zero-intercept method.

This narrative will 1) provide an overview of this issue as described in the NARUC Manual, 2) describe the analysis and results to identify the demand adjustment to the Minimum-Size analysis, 3) review Dakota Electric's Minimum-Size analysis with the demand adjustment and results, and 4) compare the Minimum-Size analysis results with the Zero-Intercept classification method.

## NARUC Overview of Distribution Plant Classification

The National Association of Regulatory Utility Commissioners (NARUC) publication "Electric Utility Cost Allocation Manual" (NARUC Manual) provides a comprehensive overview of issues and methods used in cost of service studies for electric utilities. Regarding the classification of distribution plant, two methods in common use for classifying distribution plant as "customer" and "demand" are the Minimum-Size Method and the Minimum-Intercept (or Zero-Intercept) Method. Since being rate-regulated by the Minnesota Public Utilities Commission (MPUC or Commission) in 1981, every general rate case filed by Dakota Electric Association (Dakota Electric or Cooperative) has used the Zero-Intercept Method to classify distribution plant into customer and demand components. Once classified, the associated distribution plant costs are then allocated to various rate classes based on accepted allocation factors.

Following are relevant excerpts taken from portions of pages 90 through 95 of the January 1992 NARUC publication "Electric Utility Cost Allocation Manual" regarding the classification of distribution plant:

When the utility installs distribution plant to provide service to a customer and to meet the individual customer's peak demand requirements, the utility must classify distribution plant data separately into demand-and customer-related costs.

Classifying distribution plant as a demand cost assigns investment of that plant to a customer or group of customers based upon its contribution to some total peak load. The reason is that costs are incurred to serve area load, rather than a specific number of customers.

Distribution plant Accounts 364 through 370 involve demand and customer costs. The customer component of distribution facilities is that portion of costs which varies with the number of customers. Thus, the number of poles, conductors, transformers, services, and meters are directly related to the number of customers on the utility's system. As shown in Table 6-1, each primary plant account can be separately classified into a demand and customer component. Two methods are used to determine the demand and customer components of distribution facilities. They are, the minimum-size-offacilities method, and the minimum-intercept cost (zero-intercept or positive-intercept cost, as applicable) of facilities.

When selecting a method to classify distribution costs into demand and customer costs, the analyst must consider several factors. The minimum-intercept method can sometimes produce statistically unreliable results. The extension of the regression equation beyond the boundaries of the data normally will intercept the $Y$ axis at a positive value. In some cases, because of incorrect accounting data or some other abnormality in the data, the regression equation will intercept the $Y$ axis at a negative value. When this happens, a review of the accounting data must be made, and suspect data deleted.

The results of the minimum-size method can be influenced by several factors. The analyst must determine the minimum size for each piece of equipment: "Should the minimum size be based upon the minimum size equipment currently installed, historically installed, or the minimum size necessary to meet safety requirements?" The manner in which the minimum size equipment is selected will directly affect the percentage of costs that are classified as demand and customer costs.

Cost analysts disagree on how much of the demand costs should be allocated to customers when the minimum-size distribution method is used to classify distribution plant. When using this distribution method, the analyst must be aware that the minimumsize distribution equipment has a certain load-carrying capability, which can be viewed as a demand-related cost.

When allocating distribution costs determined by the minimum-size method, some cost analysts will argue that some customer classes can receive a disproportionate share of demand costs. Their rationale is that customers are allocated a share of distribution costs classified as demand-related. Then those customers receive a second layer of
demand costs that have been mislabeled customer costs because the minimum-size method was used to classify those costs.

Advocates of the minimum-intercept method contend that this problem does not exist when using their method. The reason is that the customer cost derived from the minimum-intercept method is based upon the zero-load intercept of the cost curve. Thus, the customer cost of a particular piece of equipment has no demand cost in it whatsoever.

## Demand Adjustment

## Introduction

In the Commission's final Order in Dakota Electric's 2014 General Rate Case in Docket No. E-111/GR-14-482, the Commission made the following observation on Page 16 regarding the minimum system analysis used in the class cost of service study:

The Commission concurs with the Department that a demand adjustment would be a reasonable refinement to the minimum system analysis in the Cooperative's next rate case and will require that it include one. As the Department's witness noted, the minimum-size method can intrinsically include some demand-related costs associated with the load carrying capability of the equipment included in the study, and it is important to isolate demand costs as accurately as possible.

To this end, the Commission's Ordering Paragraph \#8 requires that:
Dakota Electric Association shall include a demand adjustment in the Class Cost of Service Study submitted in its next rate case.

This narrative describes the process used to study the amount of demand that a Dakota Electric "Minimum System" could support. A Minimum System is one that assumes that a minimum size distribution system can be built to serve the minimum loading requirements of the consumer. The question is what load could this Minimum System supply? This study has been developed to provide an answer to that question.

## System Modelling

The Cooperative's planning and operational model of the existing distribution system was used as a starting point for this study. The existing distribution system model includes all the lines and equipment that are installed to supply power to Dakota Electric members. The base model is a representation of the electrical system configuration which is used to supply the members. This same base model is used to study the electrical system's ability to support member electrical demands.

To create a Minimum System model from the base model, we converted the model from the existing distribution system lines and equipment to a Minimum System. A Minimum System uses the smallest underground wire which is a single-phase \#2 conductor and the smallest overhead wire which is a single-phase \#4 ACSR overhead wire. Also, all of the transformers in a Minimum System model are single-phase 10kVA units. The base model for the existing
system includes conductors and transformers that are larger than the Minimum System. To create the Minimum System model, all of the three phase lines were converted to single phase and the conductor sizes were changed to minimum conductor sizes. The transformers were also changed to be single-phase 10 kVA units. All of the member loads were also converted to single phase loads to match up with the single-phase model.

The following scenarios have been developed to model member loads on each of the feeders and evaluate the amount of load that can be supplied with a Minimum System:

1. 1 kW per feeder with load growth percentages applied;
2. 100 kW and 500 kW per feeder options;
3. 200 kW per feeder; and
4. 200 kW per feeder and then increasing load on individual substations.

These scenarios were developed in a stepwise fashion to hone in on a solution/answer to the question of how much load can be served by the Minimum System.

## Scenario \#1

The first scenario set 1 kVA at the feeder source and this value was then allocated to all of the services connected to the feeder downstream of the source. The initial model did not include the 10 kVA distribution transformers in an attempt to simplify the solution, so each of the services was directly connected to the primary circuits. The allocation was based upon the historical kWh usage of each of the services. Using the allocated load, the total load on each of the substations was then increased until the voltage drop on the substation was above a normal design level at several locations. For operational and planning studies on the Dakota Electric system, the voltage at the source of the substation and feeder is set at 124 volts and if any portion of the feeder is below 118 volts then that solution exceeds the tolerance for a normal system configuration. This first scenario resulted in a solution that had very high var ${ }^{1}$ flow and thus impacted the voltage drop on many of the feeders and resulted in a low amount of load which could be supported by the system. The following picture (Figure 1) shows the Dakota Electric system. The areas in red are where the voltage was calculated to be below operational and planning levels.

For this version of the model, the total system load was $12,881 \mathrm{~kW}$ which was reached by increasing the load from the initial 1 kW per feeder by a load growth percentage. In many cases this load growth percentage was 1,000 or more. Simply multiplying the loads, resulted in very large var demands from some of the loads and appears to result in a more significant voltage drop on the system. Thus, limiting the amount of power which could be supported by the Minimum System. This version of the model has $12,881 \mathrm{~kW}$ supplied by the feeders, with 8,532 kW of system losses. So, the total load actually being supplied by this version of the model is $4,349 \mathrm{~kW}$. The solution is supported by $116,164 \mathrm{kVARs}$ coming from the transmission system.

[^6]Figure 1.


## Scenario \#2

To improve the solution, the model was rebuilt and the 10 kVA distribution transformers were included and each of the services were connected to the secondary of the transformers. The load allocation followed the same allocation methods and was redone in Scenario \#2 using 100 and 500 kW values, instead of the 1 kW per feeder value. The 100 kW per feeder resulted in very few voltage violations, but the 500 kW allocation resulted in many voltage violations throughout the system as shown by the red areas in the following picture (Figure 2).

Figure 2.


## Scenario \#3

Given the Scenario \#2 results from the 100 kW and 500 kW allocation solutions, 200 kW was next selected to be applied to each of the feeders in Scenario \#3 and then allocating that over the existing services. This allocation resulted in a base minimum system model which had a good balance between few if any voltage violations and too many voltage violations. The voltage results for Scenario \#3, as shown in the following picture (Figure 3) show the voltage violations in red and appeared to be a reasonable basis for continued analysis. At this point the model has $33,998 \mathrm{~kW}$ being supplied by the feeders, with 904 kW in loses. So, the total load on this model is $33,095 \mathrm{~kW}$. This version of the model required $6,819 \mathrm{kVAR}$ support from the transmission system.

One could consider this the total load for this model that the Minimum System could support. For some of the substations, this is actually above the load which the Minimum System could support, but for other substations this is below the level that the substation could support.

Figure 3.


## Scenario \#4

Using the Scenario \#3 version of the model, shown in Figure 3, we looked at how best to add more load to the model. To accomplish this, the load on each of the substations was individually raised in Scenario \#4 to identify the load level where that substation reached a point where the voltage to the services could not be maintained at the operational and planning levels. This version of the model, Figure 4, reflects $63,788 \mathrm{~kW}$ on the feeders which includes 3,303 in system kW loss. So, the resulting load supported by this system is $60,485 \mathrm{~kW}$. It is important to note that, for this version of the model to solve, the solution required 21,502 in kVAR support from the transmission system.

Figure 4.


The resulting value of load supported by the model in this study is variable as one can see from the red areas in Figure 4. The load levels are above what can be supported by the Minimum System in some of the areas. Even with the version of the model in Figure 3 some of the areas are overloaded, but many areas are not. More importantly, the Figure 4 solution has significant voltage support from the transmission system in the form of over 21 MVARs.

## Vars and Power Factor

The two primary factors affecting the voltage drop from the source to the load are the impedance between the source and the load, and the power factor of the load. The different versions of the models used for this study reflect the impedance between the source and load and that is a fixed value for all of the solutions. The power factor for each of the loads was also fixed in the models used for Scenarios 2, 3 and 4. The residential loads were fixed at $98 \%$ and the commercial loads were fixed at $92 \%$ lagging for the power factor, which are typical observed values for these classes. The lower the power factor the greater the voltage drop between the source and load.

To support the additional vars required by the load as it was grown and to support the additional vars consumed by the distribution system from transporting the additional power, additional var support was required to be supplied by the source, which represents the distribution substation and transmission system. Without the significant var support from the sources the model would not mathematically converge.

The voltage support in the Dakota Electric distribution system is supplied by voltage regulation and capacitors. Voltage regulation is provided at each of the substations and in a few areas at places along the feeders. Capacitors are installed along the feeders to provide var support for the loads.

## Demand Adjustment Summary

Based on the results from this study, the maximum system load that the Minimum System can support is likely more than 33 MWs (Figure 3) and less than 60 MWs (Figure 4). At these system loading levels, a significant number of feeders have exceeded the voltage tolerance for a normal system configuration and rely heavily on var support from the transmission system. Dakota Electric has applied the higher end of this system loading range ( $60,485 \mathrm{~kW}$ ) in the Minimum-Size Method by calculating the installed cost of the capacity that is provided for each account where applicable (there is no capacity component for poles) and subtracting this capacity value from the consumer component. The result is a demand adjusted consumer component (dollars and percentage) for each account that was applied in the cost of service study.

## Minimum-Size Method

The NARUC manual describes the approach to the Minimum-Size Method as follows:
Classifying distribution plant with the minimum-size method assumes that a minimum size distribution system can be built to serve the minimum loading requirements of the customer. The minimum-size method involves determining the minimum size pole, conductor, cable, transformer, and service that is currently installed by the utility. Normally, the average book cost for each piece of equipment determines the price of all installed units. Once determined for each primary plant account, the minimum size distribution system is classified as customer-related costs. The demand-related costs for each account are the difference between the total investment in the account and customer-related costs. Comparative studies between the minimum-size and other

## methods show that it generally produces a larger customer component than the zerointercept method ...

Dakota Electric's calculation of the demand adjusted Minimum-Size Method is shown on page 12 of this workpaper. As described above from the NARUC Manual, Dakota Electric's calculations are made using the average book cost for the minimum size of each piece of equipment presently being installed. We have also incorporated a demand adjustment to the Minimum-Size method as determined above and described below. Following is a summary of the demand-adjusted calculations for Account 364 (Poles, Towers, and Fixtures), Account 365 (Overhead Conductors and Devices), Account 367 (Underground Conductors and Devices), and Account 368 (Line Transformers).

Account 364 (Poles, Towers, and Fixtures):

- The minimum size pole installed on Dakota Electric's system is a 35 foot Class 5 pole.
- The average book cost for the minimum size pole is $\$ 189.87$.
- There are 28,600 total poles on the Dakota Electric system.
- Multiplying the average book cost for the minimum size pole times the total number of poles results in a minimum cost of $\$ 5,430,365$.
- The installed book cost of all poles is $\$ 12,343,021$.
- There is no demand component for a pole.
- Dividing the minimum cost by the installed book cost results in a $44.00 \%$ consumer classification of the installed book cost of poles.

Account 365 (Overhead Conductors and Devices):

- The minimum size overhead conductor installed on Dakota Electric's system is \#4 ACSR.
- The average book cost for the minimum size overhead conductor is $\$ 0.14438$ per foot.
- There are $17,745,702$ total feet of overhead conductors on the Dakota Electric system.
- Multiplying the average book cost for the minimum size overhead conductor times the total number of feet results in a minimum cost of $\$ 2,562,054$.
- The demand adjustment to the minimum cost of overhead conductors is $\$ 1,090,347$.
- The demand adjusted minimum cost of overhead conductors is $\$ 1,471,707$.
- The installed book cost of all overhead conductors is $\$ 8,908,099$.
- Dividing the demand adjusted minimum cost by the installed book cost results in a $16.52 \%$ adjusted consumer classification of the installed book cost of overhead conductors.

Account 367 (Underground Conductors and Devices):

- The minimum size underground conductor installed on Dakota Electric's system is \#2 URD.
- The average book cost for the minimum size underground conductor is $\$ 2.7457$ per foot.
- There are $25,478,084$ total feet of underground conductors on the Dakota Electric system.
- Multiplying the average book cost for the minimum size underground conductor times the total number of feet results in a minimum cost of $\$ 69,956,247$.
- The demand adjustment to the minimum cost of underground conductors is $\$ 3,266,556$.
- The demand adjusted minimum cost of overhead conductors is $\$ 66,689,691$.
- The installed book cost of all underground conductors is $\$ 88,968,269$.
- Dividing the demand adjusted minimum cost by the installed book cost results in a $74.96 \%$ adjusted consumer classification of the installed book cost of underground conductors.

Account 368 (Line Transformers):

- The minimum size transformer installed on Dakota Electric's system is 10 kVA single phase overhead.
- The average book cost for the minimum size transformer is $\$ 441.21$.
- There are 22,940 total transformers on the Dakota Electric system.
- Multiplying the average book cost for the minimum size transformer times the total number of transformers results in a minimum cost of $\$ 10,121,249$.
- The demand adjustment to the minimum cost of transformers is $\$ 3,944,399$.
- The demand adjusted minimum cost of transformers is $\$ 6,176,851$.
- The installed book cost of all transformers is $\$ 33,078,453$.
- Dividing the demand adjusted minimum cost by the installed book cost results in a $18.67 \%$ adjusted consumer classification of the installed book cost of transformers.


## Comparison of Results

Following is a comparison of the cost of service (COS) study results using the demand-adjusted minimum-size method as ordered by the Commission compared to using the zero-intercept method:

|  |  | Small |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Resid. | General |  | General | C\&I |  |
| Method | \& Farm | Service | Irrigation | Service | Interruptible | Lighting |
| Minimum-Size | $5.29 \%$ | $8.94 \%$ | $-2.72 \%$ | $-0.26 \%$ | $7.98 \%$ | $18.79 \%$ |
| Zero-Intercept | $4.72 \%$ | $8.18 \%$ | $-1.46 \%$ | $0.45 \%$ | $9.21 \%$ | $18.98 \%$ |

## Dakota Electric Association

Minimum-Size Method (CPR Records) Docket No. E-111/GR-19-478

```
1. Account 364-Poles,Towers, and Fixtures
    35 foot Class 5 Pole
        19.87 Average Unit Cost of Minimum Pole
    28,600 Total Poles
= $ 5,430,365 Subtotal
% 12,343,021 Installed Book Cost - Pole
            44.00% Consumer Component
```


## 2. Account 365 -Overhead Conductors and Devices

 \#4 ACSR\$ 0.14438 Average Unit Cost of Minimum OH Conductor x $\quad 17,745,702$ Total Feet OH Conductor
$=\$ 2,562,054$ Subtotal
$\div$ - $8,908,099$ Installed Book Cost - OH Conductor
28.76\% Consumer Component

## 3. Account 367 - Underground Conductors and Devices

 \#2 URD\$ 2.7457 Average Unit Cost of Minimum URD Conductor $\mathrm{x} \quad 25,478,084$ Total Feet URD Conductor

$\div \$ 88,968,269$ Installed Book Cost - URD Conductor
$=\quad 78.63 \%$ Consumer Component

## 4. Account 368 - Line Transformer

10 kVA Single Phase Overhead
\$ 441.21 Average Unit Cost of Minimum Transformer $\mathrm{x} \begin{aligned} & \\ & 22,940\end{aligned}$ Total Transformers
$=\$ \quad 10,121,249$ Subtotal
$\div$ \$ 33,078,453 Installed Book Cost - Transformers
$=30.60 \%$ Consumer Component

## ARUC - Electric Utility Cost Allocation Manual (January 1992

 Minimum Size Methodology for Determining Consumer Cost1. Determine the average installed book cost of the
minimum height pole currently being installed.
2. Multiply the average book cost by the number
of poles to find the customer component.
3. Determine the minimum size conductor currently being installed
4. Multiply the average installed book cost per mile of minimum size conductor by the number of circuit miles to determine the ustomer component.
Note: DEA cost and analysis is on a per foot basis.
5. Determine the minimum size cable currently being installed.
6. Multiply the average installed book cost per mile of minimum size cable by the number of circuit miles to determine the customer component.
(Note: DEA cost and analysis is on a per foot basis.)
7. Determine the minimum size transformer currently being installed.
8. Multiply the average installed book cost of minimum size ransformer by the number of transformers in plant account to determine the customer component

## Demand Adjustment

| $\$$ | 189.87 |
| :--- | ---: |
|  | 28,600 |
|  | No demand adjustment applied |
| $\$$ | $5,430,365$ |
| $\$$ | $12,343,021$ |
|  | $44.00 \%$ |


| $\$$ | $6,346,044$ | Unadjusted installed cost - capacity |
| :--- | ---: | :--- |
|  | 352,035 | kW system peak load less minimum system load |
| $\$$ | 18.03 | Adjusted installed cost per kW |
|  | 60,485 | kW minimum system load |
| $\$$ | $1,090,347$ | Installed cost to be removed from minimum system cost |
| $\$$ | $1,471,707$ | Adjusted minimum system cost |
|  | $16.52 \%$ | Adjusted Consumer Component |


| $\$$ | $19,012,022$ | Unadjusted installed cost - capacity |
| :--- | ---: | :--- |
|  | 352,035 | kW system peak load less minimum system load |
| $\$$ | 54.01 | Adjusted installed cost per kW |
|  | 60,485 | kW minimum system load |
| $\$$ | $3,266,556$ | Installed cost to be removed from minimum system cost |
| $\$$ | $66,689,691$ | Adjusted minimum system cost |
|  | $74.96 \%$ | Adjusted Consumer Component |

\$ 22,957,203 Unadjusted installed cost - capacity $352,035 \mathrm{~kW}$ system peak load less minimum system load
\$ $\quad 65.21$ Adjusted installed cost per kW
$60,485 \mathrm{~kW}$ minimum system load
\$ 3,944,399 Installed cost to be removed from minimum system cost
$\$ \quad 6,176,851$ Adjusted minimum system cost
$18.67 \%$ Adjusted Consumer Component
$\mathbf{5 5 . 7 \%}$ Capacity Adjusted Wgtd Minimum Size

Dakota Electric Association
Minimum-Size Method (CPR Records)
Docket No. E-111/GR-19-478

Poles - Acct 364

| Description | Units |  | Cost | Avg Unit Cost |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| $\mathbf{3 5}$ and under | 13,439 | $\$$ | $2,551,701.75$ | $\$$ | $\mathbf{1 8 9 . 8 7}$ |
| 40 and 45 | 14,687 | $\$$ | $9,323,737.94$ | $\$$ | 634.83 |
| 50 and over | 474 | $\$$ | $467,581.79$ | $\$$ | 986.46 |
|  | 28,600 | $\$$ | $12,343,021$ |  |  |

Dakota Electric Association
Minimum-Size Method (CPR Records)
Docket No. E-111/GR-19-478
Overhead Conductors - Acct 365

| Description | Units |  | Cost | Avg Unit Cost |  |
| :--- | ---: | :--- | ---: | :--- | :--- |
| 477 MCM ACSR | $1,878,162$ | $\$$ | $2,995,222.95$ | $\$$ | 1.59476 |
| 336 MCM ACSR | 448,062 | $\$$ | $345,431.74$ | $\$$ | 0.77095 |
| 1/0 ACSR | $2,035,195$ | $\$$ | $869,664.40$ | $\$$ | 0.42731 |
| 4/0 ACSR | $2,919,516$ | $\$$ | $1,847,878$ | $\$$ | 0.63294 |
| 2 ACSR | 626,574 | $\$$ | $75,572.99$ | $\$$ | 0.12061 |
| 4 ACSR | $8,339,814$ | $\$$ | $1,204,069.46$ | $\$$ | $\mathbf{0 . 1 4 4 3 8}$ |
| 1/0 OR 2/0 OH Secondary | 728,790 | $\$$ | $819,198.00$ | $\$$ | 1.12405 |
| 3/0, 4/0 or Larger OH Secondary | 53,715 | $\$$ | $148,062.62$ | $\$$ | 2.75645 |
| \#2 \#4 \#6 \& Smaller OH Secondary | 715,874 | $\$$ | $602,998.87$ | $\$$ | 0.84233 |

Dakota Electric Association
Minimum-Size Method (CPR Records)
Docket No. E-111/GR-19-478

Underground Conductors - Acct 367

| Description | Units |  | Cost | Avg Unit Cost |  |
| :--- | ---: | :--- | ---: | :--- | :--- |
| 6 Secondary URD | $2,205,804$ | $\$$ | $2,132,806.11$ | $\$$ | 0.96691 |
| 1/0 Secondary URD | $1,245,809$ | $\$$ | $1,734,714.87$ | $\$$ | 1.39244 |
| 4/0 Secondary URD | $1,661,581$ | $\$$ | $3,251,570.11$ | $\$$ | 1.95691 |
| 2 Primary URD | $9,053,704$ | $\$ 24,859,135.99$ | $\$$ | $\mathbf{2 . 7 4 5 7 4}$ |  |
| 1/0 Primary URD | $6,004,252$ | $\$ 20,744,486.57$ | $\$$ | 3.45497 |  |
| 4/0 Primary URD | 539,303 | $\$$ | $2,000,175.68$ | $\$$ | 3.70882 |
| 500 Primary URD | $3,681,738$ | $\$ 25,298,701.41$ | $\$$ | 6.87140 |  |
| 350 secondary URD | 84,933 | $\$$ | $337,170.36$ | $\$$ | 3.96984 |
| 3/0 Secondary URD | 2,041 | $\$$ | $2,965.15$ | $\$$ | 1.45279 |
| 750 Primary URD | 998,919 | $\$$ | $8,606,542.80$ | $\$$ | 8.61586 |
|  | $25,478,084$ | $\$$ | $88,968,269$ |  |  |

## Dakota Electric Association <br> Minimum-Size Method (CPR Records) <br> Docket No. E-111/GR-19-478

## Line Transformers - Acct 368

| Description | Units |  | Cost | Avg Unit Cost |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| 1 KVA 1PH OH | 99 | $\$$ | $51,845.42$ | $\$$ | 523.69 |
| 3 KVA 1PH OH | - | $\$$ | - | $\$$ | - |
| 5 KVA 1PH OH | 90 | $\$$ | $11,763.83$ | $\$$ | 130.71 |
| 7.5 KVA 1PH OH | 172 | $\$$ | $27,424.54$ | $\$$ | 159.45 |
| 10 KVA 1PH OH | 2,888 | $\$$ | $1,274,200.88$ | $\$$ | 441.21 |
| 10 KVA 1PH PADMT | 929 | $\$$ | $629,943.27$ | $\$$ | 678.09 |
| 15 KVA 1PH OH | 1,370 | $\$$ | $757,281.60$ | $\$$ | 552.76 |
| 15 KVA 1PH PADMT | 2,602 | $\$$ | $2,981,820.01$ | $\$$ | $1,145.97$ |
| 1.5 KVA 1PH OH | 154 | $\$$ | $235,156.84$ | $\$$ | $1,526.99$ |
| 25 KVA 1PH OH | 1,264 | $\$$ | $864,439.47$ | $\$$ | 683.89 |
| 25 KVA 1PH PADMT | 3,640 | $\$$ | $3,525,152.81$ | $\$$ | 968.45 |
| 37.5 KVA 1PH OH | 405 | $\$$ | $347,741.60$ | $\$$ | 858.62 |
| 37.5 KVA 1PH PADMT | 4,062 | $\$$ | $4,592,076.15$ | $\$$ | $1,130.50$ |
| 45 KVA 3PH PADMT | 32 | $\$$ | $154,010.66$ | $\$$ | $4,812.83$ |
| 50 KVA 1PH OH | 144 | $\$$ | $185,130.62$ | $\$$ | $1,285.63$ |
| 50 KVA 1PH PADMT | 2,851 | $\$$ | $3,598,389.95$ | $\$$ | $1,262.15$ |
| 75 KVA 1PH OH | 30 | $\$$ | $77,010.79$ | $\$$ | $2,567.03$ |
| 75 KVA 1PH PADMT | 228 | $\$$ | $497,679.04$ | $\$$ | $2,182.80$ |
| 100 KVA 1PH OH | 17 | $\$$ | 19,236 | $\$$ | $1,131.51$ |
| 100 KVA 1PH PADMT | 16 | $\$$ | $33,152.95$ | $\$$ | $2,072.06$ |
| 112.5 KVA 3PH PADMT | 478 | $\$$ | $2,121,184.05$ | $\$$ | $4,437.62$ |
| 150 KVA 3PH PADMT | 283 | $\$$ | $1,505,784.58$ | $\$$ | $5,320.79$ |
| 167 KVA 1PH OH | 6 | $\$$ | $10,123.37$ | $\$$ | $1,687.23$ |
| 167 KVA 1PH PADMT | 20 | $\$$ | $43,592.37$ | $\$$ | $2,179.62$ |
| 225 KVA 3PH PADMT | 178 | $\$$ | $1,214,119.37$ | $\$$ | $6,820.90$ |
| 300 KVA 3PH PADMT | 185 | $\$$ | $1,422,502$ | $\$$ | $7,689.20$ |
| 500 KVA 3PH PADMT | 134 | $\$$ | $1,616,327.81$ | $\$$ | $12,062.15$ |
| 750 KVA 3PH PADMT | 44 | $\$$ | $625,071.33$ | $\$$ | $14,206.17$ |
| 1000 KVA 3PH PADMT | 41 | $\$$ | $770,806.26$ | $\$$ | $18,800.15$ |
| 1500 KVA 3PH PADMT | 59 | $\$$ | $1,420,691.59$ | $\$$ | $24,079.52$ |
| 2000 KVA 3PH PADMT | 4 | $\$$ | $269,116.31$ | $\$$ | $67,279.08$ |
| DUPLEX 250/37.5 KVA PADMT | - | $\$$ | - | $\$$ | - |
| DUPLEX 333/25 KVA PADMT | - | $\$$ | - | $\$$ | - |
| DUPLEX 75/25 KVA PADMT | - | $\$$ | - | $\$$ | - |
| DUPLEX 167/25 KVA PADMT | - | $\$$ | - | $\$$ | - |
| 75 KVA 3PH PADMT | 515 | $\$$ | $2,195,677$ | $\$$ | $4,263.45$ |
|  | 22,940 | $\$$ | $33,078,453$ |  |  |
|  | 20,702 | $\$$ | $19,236,378$ |  |  |




ORGANIZATION
ORGANIZATION
MINNESOTA SAFETY COUNCIL
MINNESOTA SHERIFFS' ASSN
MN ASSN OF CHURCH FACILITY MGR
MN DEPT OF PUBLIC SAFETY
MN GEOTHERMAL HEAT PUMP ASSN MN POLLUTION CONTROL AGENCY MN RURAL ELECTRIC ASSOCIATION MN RURAL ELECTRIC ASSOCIATION MN SOCIETY OF CPAS
MN STATE BOARD OF ACCOUNTANCY MRA-THE MANAGEMENT ASSOCIATION NATIONAL FIRE PROTECTION ASN
NATIONAL RURAL ECONOMIC DEVELOPERS ASSOCIATION (NREDA) NATIONAL RURAL ECONOMIC DEVELOPERS ASSOCIATION (NREDA) NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION (NRECA) NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION (NRECA) NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION (NRECA) NATIONAL SOCIETY OF ACCOUNTANTS FOR COOPERATIVES (NSAC) PUBLIC RELATIONS SOCIETY OF AMERICA (PRSA) RECYCLING ASSOCIATION OF MN RIVER HEIGHTS CHA ROTARY CLUB OF APPLE VALLEY ROTARY CLUB OF APPLE VALLEY ROTARY CLUB OF APPLE VALLEY rotary club of apple valley ROTARY CLUB OF FARMINGTON ROTARY CLUB OF FARMINGTON ROTARY CLUB OF FARMINGTON ROTARY CLUB OF FARMINGTON ROTARY CLUB OF FARMINGTON RURAL ELECTRIC MANAGERS ASSOCIATION (REMA) SAM'S CLUB
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US BANK-DAKOTA COUNTY
ORGANIZATION

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CC Recap-Patrick M Hughes CC Recap-Patrick M Hughes
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COMMREL

## PROJECT



## COMMREL



Dakota Electric Association
Summary of Donations/Charitable Contributions
2018

| COMMUNITY DONATIONS | AMOUNT |  | DATE |
| :---: | :---: | :---: | :---: |
| 360 COMMUNITIES | \$ | 300 | 5/31/2018 |
| ALL SAINTS MUSIC FESTIVAL |  | 250 | 1/31/2018 |
| AMERICAN CANCER SOCIETY |  | 250 | 5/30/2018 |
| AMERICAN LEGION POST 594 |  | 200 | 1/31/2018 |
| APPLE VALLEY FREEDOM DAYS |  | 500 | 5/31/2018 |
| APPLE VALLEY HIGH SCHOOL |  | 200 | 1/31/2018 |
| ARBORS AT RIDGES |  | 200 | 3/31/2018 |
| BURNSVILLE COMMUNITY FOUNDATN |  | 200 | 3/31/2018 |
| BURNSVILLE COMMUNITY FOUNDATN |  | 500 | 9/30/2018 |
| BURNSVILLE COMMUNITY FOUNDATN |  | 250 | 12/31/2018 |
| BURNSVILLE VISUAL ARTS SOCIETY |  | 25 | 3/31/2018 |
| CANNON ARTS BOARD |  | 250 | 5/30/2018 |
| CANNON FALLS AREA C OF C |  | 150 | 4/30/2018 |
| CANNON FALLS, CITY |  | 200 | 11/30/2018 |
| CHRISTUS VICTOR LUTHERAN CHRCH |  | 200 | 11/30/2018 |
| CITY OF APPLE VALLEY |  | 500 | 1/31/2018 |
| CITY OF ELKO NEW MARKET |  | 300 | 5/31/2018 |
| CITY OF FARMINGTON |  | 100 | 3/31/2018 |
| CITY OF INVER GROVE HEIGHTS |  | 200 | 10/31/2018 |
| COMMUNITY ACTION CTR OF NFLD |  | 200 | 12/31/2018 |
| DAKOTA CITY HERITAGE VILLAGE |  | 500 | 4/30/2018 |
| DAKOTA COUNTY 4-H FEDERATION |  | 250 | 10/31/2018 |
| DAKOTA COUNTY HISTORICAL SOC |  | 200 | 5/31/2018 |
| DAKOTA COUNTY HISTORICAL SOC |  | 100 | 11/30/2018 |
| DARTS |  | 200 | 4/30/2018 |
| DARTS |  | 1,000 | 7/31/2018 |
| DEFEAT OF JESSE JAMES DAY |  | 200 | 3/31/2018 |
| EAGAN CITIZENS CRIME PREV ASSN |  | 150 | 4/30/2018 |
| EAGAN KICK-START ROTARY FNDTN |  | 200 | 10/31/2018 |
| EAGAN MEN'S CHORUS |  | 200 | 10/30/2018 |
| EAGAN'S JULY 4TH FUNFEST |  | 500 | 3/31/2018 |
| ELKO NEW MARKET FIRE RELIEF |  | 200 | 2/28/2018 |
| FARMINGTON BUSINESS ASSN |  | 150 | 11/30/2018 |
| FRIENDS OF THE CANNON VLY FAIR |  | 200 | 1/31/2018 |
| FRIENDS OF THE FARMINGTON LIBR |  | 200 | 11/30/2018 |
| FRIENDS OF THE HERITAGE LIB |  | 200 | 2/28/2018 |
| GOBBLE GAIT LLC |  | 250 | 9/30/2018 |
| HASTINGS AREA CHAMBER OF COMM |  | 500 | 3/31/2018 |
| HASTINGS PUBLIC SCHOOLS FNDTN |  | 200 | 11/30/2018 |
| HOLIDAY CLASSIC TOURNAMENT |  | 100 | 11/30/2018 |
| INDEPENDENT SCHOOL DIST 192 |  | 250 | 9/30/2018 |
| INTERNATIONAL FESTIVAL OF BVL |  | 500 | 4/30/2018 |
| LAKEVILLE AREA ARTS CENTER |  | 400 | 8/31/2018 |
| LAKEVILLE PUBLIC SAFETY FDTN |  | 200 | 4/30/2018 |
| LKV FRIENDS OF THE ENVIRONMENT |  | 250 | 4/30/2018 |


| COMMUNITY DONATIONS (CONTINUED) |  | OUNT | DATE |
| :---: | :---: | :---: | :---: |
| MN WOMEN OF TODAY FOUNDATION |  | 200 | 5/30/2018 |
| NATIONAL EAGLE CENTER |  | 1,000 | 8/31/2018 |
| PAN-O-PROG |  | 500 | 3/31/2018 |
| PARKRUN USA |  | 200 | 6/30/2018 |
| RANDOLPH ROCKETS BOOSTER CLUB |  | 100 | 5/31/2018 |
| ROSEMOUNT AREA ARTS COUNCIL |  | 250 | 5/30/2018 |
| ROSEMOUNT AREA ARTS COUNCIL |  | 200 | 9/30/2018 |
| ROSEMOUNT LEPRECHAUN DAYS |  | 500 | 4/30/2018 |
| ROTARY CLUB OF FARMINGTON |  | 500 | 1/31/2018 |
| ROTARY CLUB OF LAKEVILLE FDTN |  | 500 | 5/31/2018 |
| ROTARY CLUB OF ROSEMOUNT |  | 500 | 2/28/2018 |
| SOUTHERN CRUZERS CAR CLUB |  | 200 | 3/31/2018 |
| TRINITY CAMPUS |  | 200 | 3/31/2018 |
| UNITED WAY OF HASTINGS |  | 200 | 5/31/2018 |
| VELVET TONES |  | 200 | 8/31/2018 |
| SUBTOTAL COMMUNITY DONATIONS | \$ | 17,325 |  |
| HUMAN SERVICES DONATIONS |  | OUNT | DATE |
| AMERICAN HEART ASSOCIATION | \$ | 200 | 4/30/2018 |
| AMERICAN HEART ASSOCIATION |  | 200 | 4/30/2018 |
| AMERICAN HEART ASSOCIATION |  | 300 | 4/30/2018 |
| AUGUSTANA REGENT AT BURNSVILLE |  | 200 | 8/31/2018 |
| AV ROTARY SCHOLARSHIP FOUNDATN |  | 500 | 4/30/2018 |
| BRETT HACK VASCULITIS CHARITIE |  | 200 | 7/31/2018 |
| BUNDLES OF LOVE CHARITY |  | 500 | 11/30/2018 |
| BURNSVILLE BREAKFAST ROTARY |  | 300 | 4/30/2018 |
| BURNSVILLE ROTARY FOUNDATION |  | 500 | 1/31/2018 |
| CANNON COMM INTERACTION COUNCL |  | 200 | 9/30/2018 |
| CANNON FALLS AMER LEGION \#142 |  | 200 | 1/31/2018 |
| COMMUNITY HEALTH CHARITIES MN |  | 1,667 | 11/30/2018 |
| DAKOTA COUNTY ATTORNEY |  | 200 | 7/31/2018 |
| DAKOTA WOODLANDS |  | 250 | 8/31/2018 |
| EASTER LUTHERAN CHURCH |  | 200 | 8/31/2018 |
| FAIRVIEW FOUNDATION |  | 1,000 | 5/31/2018 |
| FARMINGTON AMERICAN LEGION AUX |  | 200 | 6/30/2018 |
| GREATER TWIN CITIES UNITED WAY |  | 1,667 | 11/30/2018 |
| HASTINGS FIRE DEPARTMENT |  | 200 | 8/31/2018 |
| LIFEWORKS SERVICES |  | 200 | 11/30/2018 |
| MAJESTIC HILLS RANCH FOUNDATN |  | 500 | 11/30/2018 |
| MENTAL HEALTH RESOURCES INC |  | 200 | 8/31/2018 |
| MN RURAL ELECTRIC ASSOCIATION |  | 275 | 4/30/2018 |
| NATIONAL MS SOCIETY |  | 100 | 3/31/2018 |
| NATIONAL MS SOCIETY |  | 100 | 6/30/2018 |
| PANCREATIC CANCER ACTION NETWK |  | 150 | 5/31/2018 |
| PAWPADS |  | 500 | 11/30/2018 |
| PELLICCI ACE FARMINGTON |  | 200 | 10/31/2018 |
| PROACT INC |  | 120 | 5/30/2018 |
| SUPPORT OUR TROOPS |  | 200 | 10/31/2018 |


| HUMAN SERVICES DONATIONS (CONTINUED) | AMOUNT | DATE |
| :---: | :---: | :---: |
| THE FALLEN LINEMEN ORG | 1,667 | 11/30/2018 |
| THE OPEN DOOR | 250 | 6/30/2018 |
| US BANK | 100 | 3/31/2018 |
| US BANK | 100 | 6/30/2018 |
| USAFA PARENTS' CLUB OF MN | 200 | 10/31/2018 |
| VFW POST 7662 | 200 | 5/31/2018 |
| SUBTOTAL HUMAN SERVICES DONATIONS | \$ 13,745 |  |
| SPECIAL DONATIONS | AMOUNT | DATE |
| 360 COMMUNITIES | 5,000 | 7/31/2018 |
| DAKOTA COUNTY FAIR | 1,000 | 6/30/2018 |
| FAIRVIEW FOUNDATION | 10,000 | 5/31/2018 |
| ROTARY CLUB OF FARMINGTON | 500 | 8/30/2018 |
| YMCA OF THE GREATER TWN CITIES | 2,500 | 3/31/2018 |
| SUBTOTAL SPECIAL DONATIONS | 19,000 |  |
| YOUTH DONATIONS | AMOUNT | DATE |
| APPLE VALLEY HIGH SCHOOL | 200 | 1/31/2018 |
| APPLE VALLEY HIGH SCHOOL | 200 | 7/31/2018 |
| APPLE VALLEY HIGH SCHOOL | 300 | 7/31/2018 |
| APPLE VALLEY HIGH SCHOOL | 500 | 9/30/2018 |
| APPLE VALLEY HS SENIOR PARTY | 250 | 1/31/2018 |
| AUTISM SPEAKS | 100 | 9/30/2018 |
| AV BOYS BASKETBALL BOOSTERS | 200 | 9/30/2018 |
| AV GIRLS BASKETBALL BOOSTERS | 200 | 9/30/2018 |
| AVR ALPINE SKI TEAM BOOSTERS | 200 | 10/31/2018 |
| BURNSVILLE HIGH SCHOOL | 200 | 5/30/2018 |
| BURNSVILLE SENIOR CLASS PARTY | 250 | 1/31/2018 |
| CANNON FALLS SENIOR PARTY | 250 | 3/31/2018 |
| CAPONI ART PARK | 500 | 6/30/2018 |
| CHURCH OF ST PATRICK | 100 | 7/31/2018 |
| CITY OF HASTINGS | 200 | 2/28/2018 |
| CITY OF HASTINGS | 100 | 9/30/2018 |
| DAKOTA COUNTY 4-H FEDERATION | 200 | 4/30/2018 |
| DAKOTA COUNTY 4-H FEDERATION | 120 | 4/30/2018 |
| DAKOTA COUNTY 4-H FEDERATION | 200 | 7/31/2018 |
| DAKOTA COUNTY 4-H FEDERATION | 450 | 8/31/2018 |
| DAKOTA COUNTY 4-H FEDERATION | 660 | 8/31/2018 |
| DAKOTA COUNTY ATTORNEY | 250 | 2/28/2018 |
| DAKOTA COUNTY LIBRARY | 500 | 3/31/2018 |
| DCTC FOUNDATION | 1,000 | 2/28/2018 |
| DESTINATION IMAGINATION INC | 200 | 5/31/2018 |
| DISTRICT 196 FOUNDATION INC | 200 | 1/31/2018 |
| EAGAN ATHLETIC ASSOCIATON | 200 | 3/31/2018 |
| EAGAN FOUNDATION | 500 | 2/28/2018 |
| EASTVIEW HIGH SCHOOL | 200 | 3/31/2018 |
| EASTVIEW HIGH SCHOOL SR PARTY | 250 | 2/28/2018 |
| FARMINGTON GIRLS FASTPITCH ASN | 200 | 6/30/2018 |
| FARMINGTON GIRLS FASTPITCH ASN | 200 | 6/30/2018 |


| YOUTH DONATIONS (CONTINUED) | AMOUNT | DATE |
| :---: | :---: | :---: |
| FARMINGTON GIRLS FASTPITCH ASN | 200 | 6/30/2018 |
| FARMINGTON GIRLS FASTPITCH ASN | 200 | 6/30/2018 |
| FARMINGTON GIRLS FASTPITCH ASN | 200 | 6/30/2018 |
| FARMINGTON GIRLS FASTPITCH ASN | 200 | 6/30/2018 |
| FARMINGTON GIRLS FASTPITCH ASN | 200 | 7/31/2018 |
| FARMINGTON GIRLS FASTPITCH ASN | 200 | 7/31/2018 |
| FARMINGTON HIGH SCHOOL | 200 | 10/31/2018 |
| FARMINGTON SENIOR CLASS PARTY | 250 | 1/31/2018 |
| FARMINGTON TIGER BAND BOOSTERS | 100 | 7/31/2018 |
| FARMINGTON WRESTLING CLUB | 150 | 9/30/2018 |
| FHS HOMECOMING | 150 | 9/30/2018 |
| FIT ACADEMY CHARTER SCHOOL | 200 | 7/31/2018 |
| FTDT BOOSTER CLUB | 200 | 7/31/2018 |
| GIRL SCOUT TROOP 54072 | 200 | 3/31/2018 |
| HANSON SCHOLARSHIP FUND | 175 | 8/31/2018 |
| HASTINGS ALL NIGHT GRAD PARTY | 250 | 1/31/2018 |
| HASTINGS AREA SWIM TEAM | 200 | 1/31/2018 |
| HASTINGS FOOTBALL CONNECTIONS | 200 | 5/31/2018 |
| HASTINGS HIGH SCHOOL | 100 | 4/30/2018 |
| HASTINGS HIGH SCHOOL | 200 | 7/31/2018 |
| HASTINGS SOFTBALL BOOSTER CLUB | 200 | 4/30/2018 |
| HEART OF THE CITY RACE | 200 | 8/31/2018 |
| HOPE FOR TOMORROW-RSMT CHAPTER | 250 | 2/28/2018 |
| INDEPENDENT SCHOOL DIST 192 | 200 | 10/31/2018 |
| INDEPENDENT SCHOOL DIST 195 | 200 | 7/31/2018 |
| INDEPENDENT SCHOOL DIST 195 | 200 | 8/31/2018 |
| INDEPENDENT SCHOOL DIST 196 | 200 | 1/31/2018 |
| INDEPENDENT SCHOOL DIST 196 | 200 | 1/31/2018 |
| INDEPENDENT SCHOOL DIST 196 | 200 | 3/31/2018 |
| IRISH BASEBALL BOOSTER CLUB | 200 | 3/31/2018 |
| JOHN BRAUN | 560 | 8/31/2018 |
| KIDS 'N KINSHIP | 200 | 3/31/2018 |
| KIDS 'N KINSHIP | 250 | 7/31/2018 |
| LAKEVILLE NORTH HIGH SCHOOL | 500 | 1/31/2018 |
| LAKEVILLE NORTH HIGH SCHOOL | 200 | 3/31/2018 |
| LAKEVILLE ROBOTICS | 500 | 9/30/2018 |
| LAKEVILLE SOUTH BOYS LACROSSE | 200 | 3/31/2018 |
| LIFEWORKS SERVICES | 200 | 1/31/2018 |
| LKV SR CLASS PARTIES/NO EIN | 500 | 3/31/2018 |
| LOGAN LITSCHKE | 480 | 8/31/2018 |
| LOUIS SCHMITZ FOUNDATION | 100 | 5/31/2018 |
| MEADOWVIEW ELEMENTARY SCHOOL | 200 | 1/31/2018 |
| MINNESOTA DARE INC | 200 | 9/30/2018 |
| MINNESOTA FFA FOUNDATION | 170 | 9/30/2018 |
| MISS IGH SCHOLARSHIP PROGRAM | 100 | 3/31/2018 |
| NATIONAL CHILD SAFETY COUNCIL | 200 | 1/31/2018 |
| NORTHERN STAR COUNCIL | 250 | 3/31/2018 |
| OAK RIDGE PTO | 200 | 8/31/2018 |
| PADRAIG'S PLACE | 200 | 1/31/2018 |


| YOUTH DONATIONS (CONTINUED) | AMOUNT | DATE |
| :---: | :---: | :---: |
| PAIGE PEINE | 520 | 8/31/2018 |
| PATRICK SCHOONOVER HEART FDTN | 200 | 11/30/2018 |
| RAIDERS SWIM \& DIVE BOOSTERS | 200 | 8/31/2018 |
| RANDOLPH COMMUNITY EDUCATION | 200 | 7/31/2018 |
| RHS GIRLS GOLF BOOSTER CLUB | 200 | 2/28/2018 |
| RHS SOFTBALL BOOSTER CLUB | 200 | 1/31/2018 |
| ROSEMOUNT AREA ATHLETIC ASSN | 200 | 11/30/2018 |
| ROSEMOUNT AREA ATHLETIC ASSN | 200 | 11/30/2018 |
| ROSEMOUNT AREA HOCKEY ASSN | 200 | 9/30/2018 |
| ROSEMOUNT HALLOWEEN COMMITTEE | 200 | 8/31/2018 |
| ROSEMOUNT HIGH SCHOOL | 200 | 3/31/2018 |
| ROSEMOUNT YOUTH LACROSSE | 200 | 3/31/2018 |
| SADIE WAGNER | 440 | 8/31/2018 |
| SES SENIOR BLAST | 250 | 1/31/2018 |
| SESEF FOUNDATION | 200 | 3/31/2018 |
| SIMLEY ALL NIGHT PARTY | 250 | 1/31/2018 |
| SIMON SAYS GIVE | 200 | 8/31/2018 |
| SOUTH ST PAUL EDU FOUNDATION | 200 | 5/31/2018 |
| SOUTH ST PAUL HIGH SCHOOL | 150 | 2/28/2018 |
| SSP YOUTH BASEBALL ASSOC | 200 | 5/31/2018 |
| ST JOSEPH SCHOOL | 200 | 12/31/2018 |
| TAYLOR JERDE | 640 | 8/31/2018 |
| THE GARAGE | 200 | 1/31/2018 |
| THE LINK | 250 | 8/31/2018 |
| TRINITY LONE OAK LUTHERAN SCHL | 200 | 12/31/2018 |
| TRINITY SCHOOL AT RIVER RIDGE | 200 | 2/28/2018 |
| YMCA OF THE GREATER TWN CITIES | 500 | 2/28/2018 |
| YMCA OF THE GREATER TWN CITIES | 500 | 2/28/2018 |
| YMCA OF THE GREATER TWN CITIES | 500 | 2/28/2018 |
| SUBTOTAL YOUTH DONATIONS | \$ 27,915 |  |
| OTHER DONATIONS | AMOUNT | DATE |
| OPERATION WARM INC | \$ 500 | 7/31/2018 |
| SUBTOTAL OTHER DONATIONS | \$ 500 |  |
| TOTAL DONATIONS/CHARITABLE CONTRIBUTIONS | \$ 78,485 |  |



## 2018 Advertising

## Advertising Included in Test Year -

These ads reference Dakota Electric's energy conservation programs, how to use energy wisely, ways to lower utility bills, and energy efficiency.
A. Newspaper advertising

1. "Smart Home Solutions" and "Smart Home Technologies"

- Spent from MKT/83025/CIPNEWS = \$10,009
- Run dates January - December, 2018
- Newspapers: Sun Thisweek, Cannon Falls Beacon, Farmington Rosemount Independent Town Pages, Hastings Star Gazette
B. Television advertising

1. "Stephanie"

- Spent from MKT/83015/CIPTV = \$63,625
- Run dates January - December, 2018
- Media: Spectrum Reach (cable TV), Comcast Zone 4 (cable TV), Over the Top (online streaming video) - Dakota Electric zip code zones
C. Digital advertising

2. Air conditioning, air-source heat pumps, LED bulbs, electric thermal storage (ETS) water heating rebates \& programs

- Spent from MKT/83020/CIPDIGITAL $=\$ 35,842$
- Run dates January - December, 2018
- Media: paid Search, Facebook and Instagram ads - Dakota Electric zip code zones


## Advertising Excluded from Test Year -

## These ads primarily promote Dakota Electric's public image.

A. Bill inserts and other ads

1. Various bill inserts and ads

- Spent from MKT/83040/BRANDING $=\$ 4,371$
- Spent from MKT/83040/MKT = \$7,667
- Run dates Jan., Feb., March, Oct. and Dec. 2018
B. Television advertising

1. "Josh - Touchstone Energy"

- Spent from MKT/83015/BRANDING $=\$ 44,979$
- Run dates: Intermittently throughout 2018
- Media: Charter/Spectrum Communications and Comcast - Dakota County Zones
C. Radio advertising

1. Various sponsorship ads and safety ads

- Spent from MKT/83010/BRANDING $=\$ 6,848$
- Intermittently throughout 2018
- KDHL, KYMN, KDWA
"Smart Home Solutions" and "Smart Home Technologies" newspaper ads


Ask about rebates and low, off-peak rates. Being an electric co-op member pays off.
Contact the Energy Experts ${ }^{\circ}$ wuwdakotaelectric. com f) ©oukotaElec $\frac{\text { EDAKOTAR }}{\text { EDE }}$



See? Being an electric co-op member pays off
Contact the Energy Experts ${ }^{\text {* }}$
$651.453-6243+500374346$
Whwakuallectico
$\mathrm{D}_{\mathrm{j}}$ Pakionas
ENERGY WISE 4. MN
cilicipic

Digital ads


# Public Document Trade Secret Data Has Been Excised 




September 4, 2019

Burl W. Haar, Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, Minnesota 55101

Re: In the Matter of the Application of Dakota Electric Association for Authority to Increase Rates for Electric Service in Minnesota
Docket No. E-111/GR-14-482

PUBLIC DOCUMENT - TRADE SECRET INFORMATION REMOVED

Dear Dr. Haar:

Dakota Electric Association (Dakota Electric or Cooperative) is submitting the attached Workpaper 17 as part of our general rate case in the above-reference docket. This workpaper describes trade secret information related to our lenders. We are submitting both a public and non-public (trade secret) version of this workpaper. This document is a public document - trade secret information has been removed.

If you or your staff has any questions regarding this workpaper, please contact me any time at (651) 463-6258.

$$
\begin{aligned}
& \text { Sincerely, } \\
& / \mathrm{s} / \\
& \text { By: } \\
& \text { Douglas R. Larson } \\
& \text { Vice President of Regulatory Services } \\
& \text { Dakota Electric Association } \\
& 4300220^{\text {th }} \text { Street West } \\
& \text { Farmington, MN } 55024 \\
& 651-463-6258
\end{aligned}
$$

Dakota Electric Association<br>Long Term Interest Expense<br>Prudently Incurred

In Dakota Electric's general rate case, Docket No. E-111/GR-09-175, the May 24, 2010, Order Item No. 6 stated that "Dakota Electric shall, in its next rate case, demonstrate that its long-term interest expense is prudently incurred. Such demonstration shall include data of rates offered by other lenders."

In December, 2014, Dakota Electric received a third advance against the CoBank facility of $\$ 4$ million at an interest rate of [TRADE SECRET DATA EXCISED]. At the time of this advance, the comparable net interest rate available from CFC was [TRADE SECRET DATA EXCISED].

In December, 2015, Dakota Electric executed a new single advance long term debt agreement with CoBank, ACB, and received an advance of $\$ 4$ million at an interest rate of [TRADE SECRET DATA EXCISED]. At the time of this advance, the comparable net interest rate available from CFC was [TRADE SECRET DATA EXCISED].

In May, 2016, Dakota Electric received a fifth advance against the CFC facility of $\$ 5$ million at an interest rate of [TRADE SECRET DATA EXCISED]. At the time of this advance, the comparable net interest rate available from CoBank, ACB was [TRADE SECRET DATA EXCISED].

In September, 2017, Dakota Electric executed a new long term debt agreement with CFC, and received an advance of $\$ 10$ million at an interest rate of [TRADE SECRET DATA EXCISED]. At the time of this advance, the comparable net interest rate available from CoBank, ACB was [TRADE SECRET DATA EXCISED].

In June, 2018, Dakota Electric received a second advance against the CFC facility of $\$ 10$ million at an interest rate of [TRADE SECRET DATA EXCISED]. At the time of this advance, the comparable net interest rate available from CoBank, ACB was [TRADE SECRET DATA EXCISED].

Dakota Electric Association
Summary of Test Year Operating Expense Adjustments

|  | General <br> Payroll <br> Increase | Expens <br> Change for <br> Normalized <br> Construction |  | Staffing <br> Changes |  | Payroll <br> Benefits |  | Total Payroll \& Benefit Adjustments |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ | 77,906 | \$ | $(33,389)$ | \$ | $(34,438)$ | \$ | $(68,218)$ | \$ | $(58,139)$ |
|  | 74,151 |  | $(31,779)$ |  | 156,816 |  | 24,066 |  | 223,254 |
|  | 55,142 |  | - |  | 111,823 |  | 26,741 |  | 193,706 |
|  | 26,133 |  | - |  | 7,671 |  | $(8,602)$ |  | 25,202 |
|  | 185,707 |  | - |  | 18,507 |  | $(78,031)$ |  | 126,183 |
|  | - |  | - |  | - |  | - |  | - |
|  | - |  |  |  | - |  | - |  | - |
|  | 1,009 |  | - |  | - |  | (470) |  | 539 |
| \$ | 420,048 | \$ | $(65,168)$ | \$ | 260,379 | \$ | $(104,514)$ | \$ | 510,745 |
|  | Page 3 |  | Page 4 |  | Page 5 |  | Page 6\&7 |  |  |




## Workpaper 15

Minn. Statute 216B.16, subd. 17
Travel, entertainment, and related employee expenses
Index

Workpaper - 15A Travel Expenses
Workpaper - 15B Meal Expenses
Workpaper - 15C Dues \& Membership Expenses
Workpaper - 15D Community Events Expenses
Workpaper - 15E Board of Directors Compensation and Expenses
Workpaper - 15F Top Ten Compensation
Workpaper - 15G Top Ten Expenses



\$ 21,463.01






| 324 | 3226 | US BANK | Lodging | 1,230.64 | 1/31/2018 | 2009471 | CC Recap-Greg C. Miller | 1/2018-GCM | 1/30/2018 | AMS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 325 | 3226 | US BANK | Lodging | 99.11 | 1/31/2018 | 2009471 | CC Recap-Michael D. Plutowski | 1/2018-MDP | 1/30/2018 | DSM |
| 326 | 3226 | US BANK | Lodging | 108.66 | 1/31/2018 | 2009471 | CC Recap-Daniel P. Ross | 1/2018-DPR | 1/30/2018 | VISITS |
| 327 | 3226 | US BANK | Lodging | 198.22 | 1/31/2018 | 2009471 | CC Recap-Tanya S. Wolfs | 1/2018-TSW | 1/30/2018 | EDU |
| 328 | 4042 | CRAIG TURNER | Lodging | 1,342.88 | 1/31/2018 | 356007 | EXPENSE REPORT | JAN/2018 | 2/8/2018 | EDU |
| 329 | 2625 | JANET L LEKSON | Lodging | 902.16 | 2/28/2018 | 2952 | EXPENSE REPORT | FEB/2018 | 2/28/2018 | LEKSON |
| 330 | 3226 | US BANK | Lodging | 742.41 | 2/28/2018 | 2009471 | CC Recap-Timothy J. Doherty | 1/2018-TJD | 1/30/2018 | NETTECH |
| 331 | 3226 | US BANK | Lodging | 195.96 | 2/28/2018 | 2009476 | CC Recap-Glenda Hewitt | 2/2018-GLH | 3/1/2018 | USO |
| 332 | 3226 | US BANK | Lodging | 195.96 | 2/28/2018 | 2009476 | CC Recap-Glenda Hewitt | 2/2018-GLH | 3/1/2018 | USO |
| 333 | 3226 | US BANK | Lodging | 195.96 | 2/28/2018 | 2009476 | CC Recap-Glenda Hewitt | 2/2018-GLH | 3/1/2018 | USO |
| 334 | 3226 | US BANK | Lodging | 195.96 | 2/28/2018 | 2009476 | CC Recap-Glenda Hewitt | 2/2018-GLH | 3/1/2018 | USO |
| 335 | 3226 | US BANK | Lodging | 832.40 | 2/28/2018 | 2009476 | CC Recap-Shannon M. Olson | 2/2018-SMO | 3/1/2018 | CISIMP |
| 336 | 3226 | US BANK | Lodging | 213.88 | 2/28/2018 | 2009476 | CC Recap-Richard M. Siebenaler | 2/2018-RMS | 3/1/2018 | EDU |
| 337 | 3226 | US BANK | Lodging | 213.88 | 2/28/2018 | 2009476 | CC Recap-Richard M. Siebenaler | 2/2018-RMS | 3/1/2018 | EDU |
| 338 | 3226 | US BANK | Lodging | 251.85 | 2/28/2018 | 2009476 | CC Recap-Mark W. Lofthus | 2/2018-MWL | 3/1/2018 | ECO |
| 339 | 3226 | US BANK | Lodging | 832.40 | 2/28/2018 | 2009476 | CC Recap-Sheryl K. Wutschke | 2/2018-SKW | 3/1/2018 | CISIMP |
| 340 | 3226 | US BANK | Lodging | 832.40 | 2/28/2018 | 2009476 | CC Recap-Sheryl K. Wutschke | 2/2018-SKW | 3/1/2018 | CISIMP |
| 341 | 3226 | US BANK | Lodging | 94.82 | 2/28/2018 | 2009476 | CC Recap-Randy D. Ratzlaff | 2/2018-RDR | 3/1/2018 | EDU |
| 342 | 3226 | US BANK | Lodging | 94.82 | 2/28/2018 | 2009476 | CC Recap-Randy D. Ratzlaff | 2/2018-RDR | 3/1/2018 | EDU |
| 343 | 3226 | US BANK | Lodging | 94.82 | 2/28/2018 | 2009476 | CC Recap-Randy D. Ratzlaff | 2/2018-RDR | 3/1/2018 | EDU |
| 344 | 3226 | US BANK | Lodging | 410.02 | 2/28/2018 | 2009476 | CC Recap-Davin H. Peterson | 2/2018-DHP | 3/1/2018 | ETS |
| 345 | 3226 | US BANK | Lodging | 153.63 | 2/28/2018 | 2009476 | CC Recap-Greg C. Miller | 2/2018-GCM | 3/1/2018 | AMS |
| 346 | 3226 | US BANK | Lodging | 99.50 | 2/28/2018 | 2009476 | CC Recap-Greg C. Miller | 2/2018-GCM | 3/1/2018 | AMS |
| 347 | 8207 | JOHN D DEYOE | Lodging | 1,148.83 | 2/28/2018 | 2945 | EXPENSE REPORT | FEB/2018 | 2/28/2018 | DEYOE |
| 348 | 3226 | US BANK | Lodging | 290.88 | 3/31/2018 | 2009481 | CC Recap-David J. Benkufsky | 3/2018-DJB | 3/29/2018 | EDU |
| 349 | 3226 | US BANK | Lodging | 638.88 | 3/31/2018 | 2009481 | CC Recap-Michael G. Fosse | 3/2018-MGF | 3/29/2018 | ACS |
| 350 | 3226 | US BANK | Lodging | 315.54 | 3/31/2018 | 2009481 | CC Recap-Danielle J. Johnson | 3/2018-DJJ | 3/29/2018 | EDU |
| 351 | 3226 | US BANK | Lodging | 607.44 | 3/31/2018 | 2009481 | CC Recap-Anthony J. Nobach | 3/2018-AJN | 3/29/2018 | EDU |
| 352 | 3226 | US BANK | Lodging | 115.31 | 3/31/2018 | 2009481 | CC Recap-Greg C. Miller | 3/2018-GCM | 3/29/2018 | AMS |
| 353 | 3226 | US BANK | Lodging | 607.44 | 3/31/2018 | 2009481 | CC Recap-Thomas E. Schmitz | 3/2018-TES | 3/29/2018 | EDU |
| 354 | 3226 | US BANK | Lodging | 607.44 | 3/31/2018 | 2009481 | CC Recap-Jeffrey D Schultz | 3/2018-JDS | 3/29/2018 | EDU |
| 355 | 3226 | US BANK | Lodging | 330.09 | 3/31/2018 | 2009481 | CC Recap-Tyler W. Kashdan | 3/2018-TWK | 3/29/2018 | E3TRAIN |
| 356 | 3226 | US BANK | Lodging | 213.18 | 3/31/2018 | 2009481 | CC Recap-Craig C. Turner | 3/2018-CCT | 3/29/2018 | EDU |
| 357 | 3226 | US BANK | Lodging | 213.18 | 3/31/2018 | 2009481 | CC Recap-Craig C. Turner | 3/2018-CCT | 3/29/2018 | EDU |
| 358 | 3226 | US BANK | Lodging | 213.18 | 3/31/2018 | 2009481 | CC Recap-Craig C. Turner | 3/2018-CCT | 3/29/2018 | EDU |
| 359 | 4573 | RICHARD W TEEGARDEN | Lodging | 1,157.88 | 3/31/2018 | 356583 | EXPENSE REPORT | MAR/2018 | 3/8/2018 | EDU |
| 360 | 5426 | PAUL A TRAPP | Lodging | 1,598.52 | 3/31/2018 | 2996 | EXPENSE REPORT | MAR/2018 | 3/28/2018 | PTRAPP |
| 361 | 5886 | KENNETH H DANNER | Lodging | 115.31 | 3/31/2018 | 2982 | EXPENSE REPORT | MAR/2018 | 3/28/2018 | DANNER |
| 362 | 8207 | JOHN D DEYOE | Lodging | 86.80 | 3/31/2018 | 2983 | EXPENSE REPORT | MAR/2018 | 3/28/2018 | DEYOE |
| 363 | 2625 | JANET L LEKSON | Lodging | 1,259.17 | 4/30/2018 | 3034 | EXPENSE REPORT | APR/2018 | 5/1/2018 | LEKSON |
| 364 | 3226 | US BANK | Lodging | 905.37 | 4/30/2018 | 2009486 | CC Recap-Sheryl K. Wutschke | 4/2018-SKW | 4/30/2018 | MET |
| 365 | 3226 | US BANK | Lodging | 184.14 | 4/30/2018 | 2009486 | CC Recap-Gregory D. Weber | 4/2018-GDW | 4/30/2018 | EDU |
| 366 | 3226 | US BANK | Lodging | 184.14 | 4/30/2018 | 2009486 | CC Recap-Gregory D. Weber | 4/2018-GDW | 4/30/2018 | EDU |
| 367 | 3226 | US BANK | Lodging | 623.92 | 5/31/2018 | 2009486 | CC Recap-Grant S. Baumberger | 4/2018-GSB | 4/30/2018 | AGI2018 |
| 368 | 3226 | US BANK | Lodging | 775.77 | 5/31/2018 | 2009490 | CC Recap-Tanya S. Wolfs | 5/2018-TSW | 5/31/2018 | EDU |
| 369 | 3226 | US BANK | Lodging | 712.90 | 5/31/2018 | 2009490 | CC Recap-Jane E. Siebenaler | 5/2018-JES | 5/31/2018 | EDU |
| 370 | 3226 | US BANK | Lodging | 725.76 | 5/31/2018 | 2009490 | CC Recap-Jeffrey L. Schoenecke | 5/2018-JLS | 5/31/2018 | EDU |
| 371 | 3226 | US BANK | Lodging | 438.40 | 6/30/2018 | 2009486 | CC Recap-Tanya S. Wolfs | 4/2018-TSW | 4/30/2018 | EDU |



Total Company - Lodging







[^7]



[^8]







[^9]








Meal Expenses

$\$ 22,620.00$
$\$ ~ 91,145.52$
$\$ 1,539.93$
Total Company - Meal Allowances
Total Company Meal Expenses
Total AGI2018 Meal Expenses
Total Company Meal Expense w/o AGI


| Line | Vendor \# | Vendor | Amount | Dist Date | Check/EFT | Description | Invoice | Check Date | Project |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 875 | APPLE VALLEY CHAMBER OF COMM | 952.00 | 1/31/2018 | 353634 | 2018 DUES-P JOHNSON | 21230 | 11/14/2017 | COMMREL |
| 2 | 689 | BURNSVILLE CHAMBER OF COMMERCE | 1,345.00 | 1/31/2018 | 354854 | 2018-MEMBERSHIP | 42768 | 12/28/2017 | COMMREL |
| 3 | 5411 | BURNSVILLE ROTARY FOUNDATION | 400.00 | 1/31/2018 | 355488 | J SHELDON 1/1-6/30/18 | 1111801 | 1/18/2018 | SHELDON |
| 4 | 3984 | CANNON FALLS AREA C OF C | 450.00 | 1/31/2018 | 355805 | MEMBERSHIP 2018 | 895 | 2/1/2018 | COMMREL |
| 5 | 918 | DAKOTA CTY REGIONAL C OF C | 1,700.00 | 1/31/2018 | 354861 | 2018 DUES | 67742 | 12/28/2017 | COMMREL |
| 6 | 3201 | EDAM | 495.00 | 1/31/2018 | 354954 | M LOFTHUS/P JOHNSON | 2018-MEMBERSHIP | 1/4/2018 | ECO |
| 7 | 3239 | ENVIRONMENTAL INITIATIVE | 600.00 | 1/31/2018 | 354004 | 2018 CORP MEMBERSHIP | 2018-MEMBERSHIP | 11/28/2017 | ENVIRON |
| 8 | 8303 | GREATER MSP | 10,000.00 | 1/31/2018 | 356058 | 2018 ANNUAL INVESTMENT | 2016 | 2/13/2018 | ECO |
| 9 | 2938 | HENKE, CARLA S (NSAC) | 200.00 | 1/31/2018 | 2897 | EXPENSE REPORT | JAN/2018-EX | 1/19/2018 | FIN |
| 10 | 3105 | IRWA | 271.00 | 1/31/2018 | 354013 | T SCHMITZ 2018 DUES | 438147 | 11/28/2017 | EDU |
| 11 | 3105 | IRWA | 286.00 | 1/31/2018 | 354013 | C KNUDSEN 2018 DUES | 430398 | 11/28/2017 | EDU |
| 12 | 2767 | JANE E SIEBENALER (Assn of Energy Engineers) | 215.00 | 1/31/2018 | 354341 | EXPENSE REPORT | DEC-5-17 | 12/7/2017 | ACS |
| 13 | 7871 | LAKE BYLLESBY IMPROVEMENT ASSN | 50.00 | 1/31/2018 | 355104 | DUES 2018 | 2018-MEMBERSHIP | 1/9/2018 | ECO |
| 14 | 5196 | LAKEVILLE AREA ARTS CENTER | 100.00 | 1/31/2018 | 355320 | MEMBERSHIP DUES | 2018-MEMBERSHIP | 1/16/2018 | ACS |
| 15 | 653 | LAKEVILLE AREA CHAMBER OF COMM | 855.00 | 1/31/2018 | 354887 | 2018 MEMBERSHIP | 29158 | 12/28/2017 | COMMREL |
| 16 | 5120 | LAKEVILLE AREA HISTORICAL SOC | 50.00 | 1/31/2018 | 354138 | 2018 CORP MEMBERSHIP | 2018-MEMBERSHIP | 11/30/2017 | ACS |
| 17 | 4002 | MAEDC | 125.00 | 1/31/2018 | 353886 | M LOFTHUS 2018 MEMBERSHIP | 01305 | 11/21/2017 | ECO |
| 18 | 8333 | METROPOLITAN UTILITY COORD COM | 1,000.00 | 1/31/2018 | 356227 | 2018 MEMBERHSIP DUES | 2018DEA | 2/20/2018 | SAF |
| 19 | 4272 | MIDWEST LAWSON USER GROUP | 250.00 | 1/31/2018 | 354889 | C HENKE MEMBERSHIP | 2018-DUES | 12/28/2017 | LAWSON |
| 20 | 695 | MINNESOTA SAFETY COUNCIL | 545.00 | 1/31/2018 | 354438 | 2018 MEMBERSHIP | 0012892018 | 12/12/2017 | SAF |
| 21 | 4005 | MINNESOTA SHERIFFS' ASSN | 25.00 | 1/31/2018 | 355671 | MEMBERSHIP DUES | 2018-19822 | 1/25/2018 | ACS |
| 22 | 7273 | MN ASSN OF CHURCH FACILITY MGR | 300.00 | 1/31/2018 | 354686 | 2018 DUES | 1733 | 12/21/2017 | DSM |
| 23 | 7157 | MN DEED | 625.00 | 1/31/2018 | 354025 | M LOFTHUS 2018 MBRSHP | 105134929 | 11/28/2017 | ECO |
| 24 | 337 | MN RURAL ELECTRIC ASSOCIATION | 13,699.88 | 1/31/2018 | 355670 | TOUCHSTONE DUES 2018 | INV00012953 | 1/25/2018 | BRANDING |
| 25 | 337 | MN RURAL ELECTRIC ASSOCIATION | 76,004.99 | 1/31/2018 | 355670 | 1 ST HALF GENL \& EDU DUES | INV00012986 | 1/25/2018 | AMS |
| 26 | 275 | NRECA NATIONAL | 110.00 | 1/31/2018 | 355928 | LOSS CTRL PROF FEES 2018 | 2007321 | 2/6/2018 | SAF |
| 27 | 275 | NRECA NATIONAL | 175.00 | 1/31/2018 | 355928 | CCC PROF FEES 2018/J MILLER | 2016165 | 2/6/2018 | PUBREL |
| 28 | 4049 | NREDA | 275.00 | 1/31/2018 | 354143 | P JOHNSON 2018 MEMBERSHIP | 2018-10245 | 11/30/2017 | ECO |
| 29 | 4049 | NREDA | 275.00 | 1/31/2018 | 354143 | M LOFTHUS 2018 MEMBERSHIP | 2018-13976 | 11/30/2017 | ECO |
| 30 | 3100 | REMA | 1,800.00 | 1/31/2018 | 355118 | 2018 DUES | REMA INV02940 | 1/9/2018 | AMS |
| 31 | 3888 | RIVER HEIGHTS CHAMBER | 1,233.75 | 1/31/2018 | 354147 | 2018 MEMBERSHIP/P JOHNSON | 8357 | 11/30/2017 | COMMREL |
| 32 | 4282 | ROTARY CLUB OF FARMINGTON | 175.00 | 1/31/2018 | 355783 | JAN-MAR 2018 DUES/L LANDWEHR | 1/2018-DUES | 1/30/2018 | MKT |
| 33 | 6718 | TIM DOHERTY (Assn of Energy Engineers) | 215.00 | 1/31/2018 | 354417 | EXPENSE REPORT | DEC-5-17 | 12/12/2017 | KEY |
| 34 | 3226 | US BANK (IEEE) | 201.00 | 1/31/2018 | 2009451 | CC Recap-Glenda L. Hewitt | 9/2017-GLH | 9/29/2017 | EDU |
| 35 | 3226 | US BANK (IEEE) | 236.00 | 1/31/2018 | 2009457 | CC Recap-Betty Jo Kiesow | 10/2017-BJK | 10/31/2017 | NCD |
| 36 | 3226 | US BANK (IEEE) | 291.00 | 1/31/2018 | 2009461 | CC Recap-Jeffrey L Schoenecker | 11/2017-JLS | 11/29/2017 | ETS |
| 37 | 3226 | US BANK (IEEE) | 291.00 | 1/31/2018 | 2009461 | CC Recap-Craig C Turner | 11/2017-CCT | 11/29/2017 | EDU |
| 38 | 3226 | US BANK (Assn of Energy Engineers) | 300.00 | 1/31/2018 | 2009471 | CC Recap-Timothy J. Doherty | 1/2018-TJD | 1/30/2018 | KEY |
| 39 | 8668 | ELKO NEW MARKET CHAMBER | 200.00 | 2/28/2018 | 356657 | DUES 5/31/17-6/1/18 | 2017-DUES | 3/13/2018 | ACS |
| 40 | 3207 | MN DEPT OF PUBLIC SAFETY | 25.00 | 2/28/2018 | 356514 | HAZ CHEM INVENTORY FEE | 1904000182017 M-9371 | 3/6/2018 | HAZARD |
| 41 | 6302 | PRSA | 330.00 | 2/28/2018 | 354984 | J MILLER 2/1/18-1/31/19 | 2/2018-1366787 | 1/4/2018 | PUBREL |
| 42 | 4219 | RECYCLING ASSOCIATION OF MN | 200.00 | 2/28/2018 | 356396 | 12 MO BUS MBRSHIP | 4606 | 2/27/2018 | ENVIRON |
| 43 | 4546 | ROTARY CLUB OF APPLE VALLEY | 62.50 | 2/28/2018 | 356300 | G MILLER 1/1-3/31/18 | 1546 | 2/22/2018 | AMS |
| 44 | 5474 | TOUCHSTONE ENERGY COOPERATIVES | 35,000.00 | 2/28/2018 | 356308 | 2018 DUES | 2032473 | 2/22/2018 | BRANDING |
| 45 | 4261 | US CHAMBER OF COMMERCE | 500.00 | 2/28/2018 | 354995 | P JOHNSON 2/1/18-1/31/19 | 2/2018-727482 | 1/4/2018 | COMMREL |
| 46 | 2938 | HENKE, CARLA S (MN Soc of CPAs) | 300.00 | 3/31/2018 | 2975 | EXPENSE REPORT | MAR/2018 | 3/21/2018 | FIN |
| 47 | 3168 | MN POLLUTION CONTROL AGENCY | 330.48 | 3/31/2018 | 357201 | HAZARDOUS WASTE FEES | 10000046708 | 4/12/2018 | HAZARD |
| 48 | 2564 | SAM'S CLUB | 41.25 | 3/31/2018 | 357253 | MEMBERSHIP | 3/2018-4731 | 4/17/2018 | HRP |
| 49 | 2564 | SAM'S CLUB | 41.25 | 3/31/2018 | 357253 | MEMBERSHIP | 3/2018-4731 | 4/17/2018 | AEN |
| 50 | 2564 | SAM'S CLUB | 41.25 | 3/31/2018 | 357253 | MEMBERSHIP | 3/2018-4731 | 4/17/2018 | ACS |
| 51 | 2564 | SAM'S CLUB | 41.25 | 3/31/2018 | 357253 | MEMBERSHIP | 3/2018-4731 | 4/17/2018 | HRP |
| 52 | 3226 | US BANK (Assn of Energy Engineers) | 195.00 | 3/31/2018 | 2009481 | CC Recap-Tyler W. Kashdan | 3/2018-TWK | 3/29/2018 | DSM |
| 53 | 676 | HASTINGS AREA CHAMBER OF COMM | 825.00 | 4/30/2018 | 357297 | PJOHNSON MBRSHP 4/1/18-3/31/1 | 5840 | 4/19/2018 | COMMREL |
| 54 | 4139 | NATIONAL FIRE PROTECTION ASN | 175.00 | 4/30/2018 | 357161 | V FRANDRUP 4/01/18-3/31/19 | 7154096X | 4/10/2018 | BLD |

Account 83610 - Dues \& Memberships

| Line | Vendor \# | Vendor | Amount | Dist Date | Check/EFT | Description | Invoice | Check Date | Project |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 55 | 4282 | ROTARY CLUB OF FARMINGTON | 175.00 | 4/30/2018 | 357371 | 4TH QTR/APR-JUN18-LLANDWEHR | 1129 | 4/24/2018 | MKT |
| 56 | 3226 | US BANK (Dakota County) | 579.10 | 4/30/2018 | 2009486 | CC Recap-Bernard M. Kolnberger | 4/2018-BMK | 4/30/2018 | HAZARD |
| 57 | 2908 | DAVID S REINKE (Assn of Energy Engineers) | 215.00 | 5/31/2018 | 358191 | EXPENSE REPORT | MAY/2018 | 5/22/2018 | DSM |
| 58 | 3226 | US BANK (MSPE) | 384.00 | 5/31/2018 | 2009490 | CC Recap-Craig C. Turner | 5/2018-CCT | 5/31/2018 | ETS |
| 59 | 3199 | AMERICAN PAYROLL ASSOCIATION | 219.00 | 6/30/2018 | 357627 | 2018 APA RENEW/160557 | 6/2018-160557 | 5/1/2018 | PAY |
| 60 | 4060 | MINNESOTA CHAMBER OF COMMERCE | 2,455.00 | 6/30/2018 | 358304 | MEMBERSHIP 6/1/18-5/31/19 | 000005760 | 5/24/2018 | COMMREL |
| 61 | 8358 | AFCOM | 299.00 | 7/31/2018 | 358106 | 7/2018-2019 MEMBR-M LOFTHUS | 5560 | 5/17/2018 | ECO |
| 62 | 5411 | BURNSVILLE ROTARY FOUNDATION | 350.00 | 7/31/2018 | 360423 | J SHELDON 7/1-12/31/18 | 180730 | 8/14/2018 | SHELDON |
| 63 | 5615 | IEDC | 185.00 | 7/31/2018 | 358126 | P JOHNSON 7/1/18-6/30/19 | 7/2018-212618 | 5/17/2018 | COMMREL |
| 64 | 7599 | MN GEOTHERMAL HEAT PUMP ASSN | 250.00 | 7/31/2018 | 359302 | D REINKE 7/1/18-6/30/19 | 2018/2019-DR | 7/5/2018 | DSM |
| 65 | 337 | MN RURAL ELECTRIC ASSOCIATION | 76,004.99 | 7/31/2018 | 360103 | 2ND HALF GENL \& EDU DUES | INV00013474 | 8/2/2018 | AMS |
| 66 | 4282 | ROTARY CLUB OF FARMINGTON | 175.00 | 7/31/2018 | 359635 | L LANDWEHR JUL-SEP DUES | 1155 | 7/17/2018 | MKT |
| 67 | 2564 | SAM'S CLUB | (30.00) | 7/31/2018 | 360527 | MEMBERSHIP | 7/2018-4731 | 8/16/2018 | HRP |
| 68 | 2564 | SAM'S CLUB | (20.25) | 7/31/2018 | 360527 | MEMBERSHIP | 7/2018-4731 | 8/16/2018 | ACS |
| 69 | 2564 | SAM'S CLUB | (20.24) | 7/31/2018 | 360527 | MEMBERSHIP | 7/2018-4731 | 8/16/2018 | HRP |
| 70 | 2564 | SAM'S CLUB | (20.24) | 7/31/2018 | 360527 | MEMBERSHIP | 7/2018-4731 | 8/16/2018 | AEN |
| 71 | 2564 | SAM'S CLUB | 9.75 | 7/31/2018 | 360527 | MEMBERSHIP | 7/2018-4731 | 8/16/2018 | PUR |
| 72 | 3341 | SHRM | 209.00 | 7/31/2018 | 358548 | M MEHRHOFF 7/1/18-6/30/19 | 9007469909 | 6/5/2018 | HRP |
| 73 | 3226 | US BANK (AELSLAGID) | 122.50 | 7/31/2018 | 2009496 | CC Recap-Craig C. Turner | 6/2018-CCT | 7/2/2018 | ETS |
| 74 | 3226 | US BANK (AELSLAGID) | 122.50 | 7/31/2018 | 2009496 | CC Recap-Jeffrey L. Schoenecker | 6/2018-JLS | 7/2/2018 | ETS |
| 75 | 5615 | IEDC | 420.00 | 8/30/2018 | 358167 | M LOFTHUS 8/1/18-7/31/19 | 8/2018-144104 | 5/22/2018 | ECO |
| 76 | 275 | NRECA NATIONAL | 80,579.00 | 8/31/2018 | 360212 | 2018 MEMBERSHIP DUES | 2145462 | 8/7/2018 | AMS |
| 77 | 3226 | US BANK (SHRM) | 209.00 | 8/31/2018 | 2009507 | CC Recap-Christene D. Dodge-Ra | 8/2018-CDD | 8/30/2018 | HRP |
| 78 | 4827 | DANIEL P ROSS (Assn of Energy Engineers) | 195.00 | 9/30/2018 | 361459 | EXPENSE REPORT | SEP/2018 | 9/20/2018 | KEY |
| 79 | 8855 | GREAT PLAINS INSTATUTE | 2,500.00 | 9/30/2018 | 361046 | DUES 9/2018-8/2019 | 2018-MEMBERSHIP | 9/6/2018 | ELECCAR |
| 80 | 3226 | US BANK (IEEE) | 235.00 | 9/30/2018 | 2009512 | CC Recap-Patrick M Hughes | 9/2018-PMH | 10/1/2018 | ETS |
| 81 | 2938 | HENKE, CARLA S (MN State Bd pf Acctncy) | 26.50 | 10/31/2018 | 3250 | EXPENSE REPORT | OCT/2018 | 11/2/2018 | FIN |
| 82 | 8203 | MRA-THE MANAGEMENT ASSOCIATION | 1,500.00 | 10/31/2018 | 361061 | M MEHRHOFF 10/1/18-10/1/19 | 9109023 | 9/6/2018 | HRP |
| 83 | 3226 | US BANK (NFPA) | 175.00 | 10/31/2018 | 2009520 | CC Recap-Patrick M Hughes | 10/2018-PMH | 10/31/2018 | ETS |
| 84 | 3226 | US BANK (NSPE) | 299.00 | 10/31/2018 | 2009520 | CC Recap-Jeffrey L Schoenecker | 10/2018-JLS | 10/31/2018 | AUO |
| 85 | 4042 | CRAIG TURNER IEEE) | 294.00 | 11/30/2018 | 363477 | EXPENSE REPORT | NOV/2018 | 11/27/2018 | AMS |
| 86 | 3239 | ENVIRONMENTAL INITIATIVE | 600.00 | 11/30/2018 | 363558 | MEMBERSHIP 11/1/18-10/31/19 | 17235 | 11/29/2018 | ENVIRON |
| 87 | 4160 | REPAC | 25.00 | 11/30/2018 | 355119 | MEMBERSHIP RENEWALS | 2018-MEMBERSHIP | 1/9/2018 | BOD |
| 88 | 4546 | ROTARY CLUB OF APPLE VALLEY | 62.50 | 11/30/2018 | 363681 | G MILLER 4/1/18-6/30/18 | 1601 | 12/4/2018 | AMS |
| 89 | 4546 | ROTARY CLUB OF APPLE VALLEY | 62.50 | 11/30/2018 | 363681 | G MILLER 7/1/18-9/30/18 | 1671 | 12/4/2018 | AMS |
| 90 | 4546 | ROTARY CLUB OF APPLE VALLEY | 62.50 | 11/30/2018 | 363681 | G MILLER 10/1/18-12/31/18 | 1716 | 12/4/2018 | AMS |
| 91 | 4282 | ROTARY CLUB OF FARMINGTON | 175.00 | 11/30/2018 | 363184 | L LANDWEHR 2ND QTR 2018-2019 | 1196 | 11/13/2018 | MKT |
| 92 | 3226 | US BANK (Survey Monkey) | 360.00 | 11/30/2018 | 2009526 | CC Recap-Christene D. Dodge-Ra | 11/2018-CDD | 11/30/2018 | HRP |
| 93 | 7341 | CANNON FALLS AREA HISTORICAL | 100.00 | 12/31/2018 | 364278 | MEMBERSHIP 12/2018-11/2019 | 12/2018-MEMBERSHIP | 12/20/2018 | ACS |
| 94 | 2767 | JANE E SIEBENALER (Assn of Energy Engineers) | 215.00 | 12/31/2018 | 364187 | EXPENSE REPORT | DEC/2018 | 12/18/2018 | ACS |
| 95 | 2767 | JANE E SIEBENALER (Certified Energy Mgr.) | 300.00 | 12/31/2018 | 364408 | EXPENSE REPORT | DEC/2018.2 | 12/27/2018 | ACS |
| 96 | 653 | LAKEVILLE AREA CHAMBER OF COMM | 855.00 | 12/31/2018 | 364598 | 2019 MEMEBERSHIP | 30735 | 1/8/2019 | COMMREL |
| 97 | 4282 | ROTARY CLUB OF FARMINGTON | 175.00 | 12/31/2018 | 364609 | L LANDWEHR 3RD QTR 2018-2019 | 1222 | 1/8/2019 | MKT |
| 98 | 3226 | US BANK (Dept of Agriculture) | 25.56 | 12/31/2018 | 2009534 | CC Recap-Bernard M. Kolnberger | 12/2018-BMK | 12/31/2018 | USO |

Account 84560-Community Events

| Line | Vendor \# | Vendor | Pmt Amount | Dist Date | Check/EFT \# | Description | Invoice | Project |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 653 | LAKEVILLE AREA CHAMBER OF COMM | 400.00 | 1/31/2018 | 354673 | CURLING TRNMNT-P JOHNSON | 29349 | COMMREL |
| 2 | 676 | HASTINGS AREA CHAMBER OF COMM | 75.00 | 1/31/2018 | 355173 | AWARDS DINNER/KIMMES 1/25 | 5701 | COMMREL |
| 3 | 653 | LAKEVILLE AREA CHAMBER OF COMM | 52.50 | 1/31/2018 | 355321 | 2018 ANNUAL MTG | 29483 | COMMREL |
| 4 | 653 | LAKEVILLE AREA CHAMBER OF COMM | 105.00 | 1/31/2018 | 355321 | 2018 ANNUAL MTG | 29483 | DEYOE |
| 5 | 653 | LAKEVILLE AREA CHAMBER OF COMM | 52.50 | 1/31/2018 | 355321 | 2018 ANNUAL MTG | 29483 | LEKSON |
| 6 | 653 | LAKEVILLE AREA CHAMBER OF COMM | 105.00 | 1/31/2018 | 355321 | 2018 ANNUAL MTG | 29483 | PITTMAN |
| 7 | 653 | LAKEVILLE AREA CHAMBER OF COMM | 105.00 | 1/31/2018 | 355321 | 2018 ANNUAL MTG | 29483 | SCHREINER |
| 8 | 689 | BURNSVILLE CHAMBER OF COMMERCE | 15.00 | 1/31/2018 | 355451 | 1/16/18 NETWORK/P JOHNSON | 42882 | COMMREL |
| 9 | 3226 | US BANK-DAKOTA CO. REG. CHAMBER | 25.00 | 1/31/2018 | 2009471 | CC Recap-Julie A. Simonsen | 1/2018-JAS | COMMREL |
| 10 | 3226 | US BANK-DAKOTA CO. REG. CHAMBER | 25.00 | 1/31/2018 | 2009471 | CC Recap-Margaret (Peggy) P. J | 1/2018-PPJ | COMMREL |
| 11 | 3226 | US BANK-FRESH ENERGY | 35.00 | 1/31/2018 | 2009471 | CC Recap-Cherry A. Jordan | 1/2018-CAJ | DEYOE |
| 12 | 676 | HASTINGS AREA CHAMBER OF COMM | 15.00 | 2/28/2018 | 355569 | STATE OF THE CITY $2 / 1 / 18$ | 5741 | COMMREL |
| 13 | 676 | HASTINGS AREA CHAMBER OF COMM | 15.00 | 2/28/2018 | 355569 | STATE OF THE CITY $2 / 1 / 18$ | 5741 | COMMREL |
| 14 | 676 | HASTINGS AREA CHAMBER OF COMM | 15.00 | 2/28/2018 | 355569 | STATE OF THE CITY 2/1/18 | 5741 | ECO |
| 15 | 676 | HASTINGS AREA CHAMBER OF COMM | 15.00 | 2/28/2018 | 355569 | STATE OF THE CITY 2/1/18 | 5741 | KIMMES |
| 16 | 4060 | MINNESOTA CHAMBER OF COMMERCE | 150.00 | 2/28/2018 | 355774 | SESSION PRIORITIES 2/20/18 | SP18-012018-0040 | COMMREL |
| 17 | 4060 | MINNESOTA CHAMBER OF COMMERCE | 150.00 | 2/28/2018 | 355774 | SESSION PRIORITIES 2/20/18 | SP18-012018-0040 | LEKSON |
| 18 | 653 | LAKEVILLE AREA CHAMBER OF COMM | 25.00 | 2/28/2018 | 356065 | P JOHNSON/SUDS $2 / 8$ | 29604 | COMMREL |
| 19 | 918 | DAKOTA CTY REGIONAL C OF C | 150.00 | 2/28/2018 | 356092 | M LOFTHUS/SNS PRIOR 2/20 | 68102 | COMMREL |
| 20 | 918 | DAKOTA CTY REGIONAL C OF C | 150.00 | 2/28/2018 | 356092 | M LOFTHUS/SNS PRIOR $2 / 20$ | 68102 | ECO |
| 21 | 689 | BURNSVILLE CHAMBER OF COMMERCE | 130.00 | 2/28/2018 | 356210 | G MILLER/SESSN PRIORITIES 2/20 | 43007 | COMMREL |
| 22 | 689 | BURNSVILLE CHAMBER OF COMMERCE | 15.00 | 2/28/2018 | 356360 | P JOHNSON/BRKFST 2/16 | 43050 | COMMREL |
| 23 | 3888 | RIVER HEIGHTS CHAMBER | 300.00 | 2/28/2018 | 356457 | SESSN PR/J GULACK, D MOE | 8655 | COMMREL |
| 24 | 689 | BURNSVILLE CHAMBER OF COMMERCE | 15.00 | 2/28/2018 | 356650 | P JOHNSON BREAKFAST 3/14 | 43063 | COMMREL |
| 25 | 3226 | US BANK-DAKOTA CO. REG. CHAMBER | 25.00 | 2/28/2018 | 2009471 | CC Recap-Julie A. Simonsen | 1/2018-JAS | ECO |
| 26 | 3226 | US BANK-DAKOTA CO. REG. CHAMBER | 25.00 | 2/28/2018 | 2009476 | CC Recap-Cherry A. Jordan | 2/2018-CAJ | AMS |
| 27 | 3226 | US BANK-DAKOTA CO. REG. CHAMBER | 25.00 | 2/28/2018 | 2009476 | CC Recap-Julie A. Simonsen | 2/2018-JAS | COMMREL |
| 28 | 3226 | US BANK-RIVER HEIGHTS | 50.00 | 2/28/2018 | 2009476 | CC Recap-Julie A. Simonsen | 2/2018-JAS | COMMREL |
| 29 | 3226 | US BANK-BURNSVILLE CHAMBER | 25.00 | 2/28/2018 | 2009476 | CC Recap-Julie A. Simonsen | 2/2018-JAS | COMMREL |
| 30 | 3226 | US BANK-BURNSVILLE CHAMBER | 25.00 | 2/28/2018 | 2009476 | CC Recap-Cherry A. Jordan | 2/2018-CAJ | DEYOE |
| 31 | 3226 | US BANK-BURNSVILLE CHAMBER | 25.00 | 2/28/2018 | 2009476 | CC Recap-Cherry A. Jordan | 2/2018-CAJ | ECO |
| 32 | 3226 | US BANK-BURNSVILLE CHAMBER | 25.00 | 2/28/2018 | 2009476 | CC Recap-Cherry A. Jordan | 2/2018-CAJ | PITTMAN |
| 33 | 3226 | US BANK-RIVER HEIGHTS | 50.00 | 2/28/2018 | 2009476 | CC Recap-Julie A. Simonsen | 2/2018-JAS | SCHREINER |
| 34 | 653 | LAKEVILLE AREA CHAMBER OF COMM | 25.00 | 3/31/2018 | 356225 | P JOHNSON/LUNCHEON 3/15 | 29710 | COMMREL |
| 35 | 689 | BURNSVILLE CHAMBER OF COMMERCE | 100.00 | 3/31/2018 | 356259 | BITE OF BURNSVILLE | 43016 | COMMREL |
| 36 | 689 | BURNSVILLE CHAMBER OF COMMERCE | 15.00 | 3/31/2018 | 356829 | M LOFTHUS/BRKFST 3/14 | 43187 | ECO |
| 37 | 875 | APPLE VALLEY CHAMBER OF COMM | 20.00 | 3/31/2018 | 356931 | MBR LUNCH 3/21/18 | 21706 | AEN |
| 38 | 875 | APPLE VALLEY CHAMBER OF COMM | 20.00 | 3/31/2018 | 356931 | MBR LUNCH 3/21/18 | 21706 | COMMREL |
| 39 | 875 | APPLE VALLEY CHAMBER OF COMM | 20.00 | 3/31/2018 | 356931 | MBR LUNCH 3/21/18 | 21706 | ECO |
| 40 | 3226 | US BANK-DAKOTA CO. REG. CHAMBER | 25.00 | 3/31/2018 | 2009481 | CC Recap-Julie A. Simonsen | 3/2018-JAS | COMMREL |
| 41 | 3226 | US BANK-DAKOTA CO. REG. CHAMBER | 25.00 | 3/31/2018 | 2009481 | CC Recap-Cherry A. Jordan | 3/2018-CAJ | DANNER |
| 42 | 3226 | US BANK-ROSEMOUNT-IRISH FOR A DAY | 99.12 | 3/31/2018 | 2009481 | CC Recap-Julie A. Simonsen | 3/2018-JAS | DEYOE |
| 43 | 3226 | US BANK-DAKOTA CO. REG. CHAMBER | 25.00 | 3/31/2018 | 2009481 | CC Recap-Cherry A. Jordan | 3/2018-CAJ | SCHREINER |
| 44 | 3226 | US BANK-DAKOTA CO. REG. CHAMBER | 25.00 | 3/31/2018 | 2009481 | CC Recap-Cherry A. Jordan | 3/2018-CAJ | VAN |
| 45 | 653 | LAKEVILLE AREA CHAMBER OF COMM | 100.00 | 4/30/2018 | 357688 | 2/20 EVENT-DEYOE/PITTMAN | 30124 | DEYOE |
| 46 | 653 | LAKEVILLE AREA CHAMBER OF COMM | 100.00 | 4/30/2018 | 357688 | 2/20 EVENT-DEYOE/PITTMAN | 30124 | PITTMAN |
| 47 | 875 | APPLE VALLEY CHAMBER OF COMM | 100.00 | 4/30/2018 | 357860 | GALA TABLE SPONSOR/TKT | 21798 | AEN |
| 48 | 875 | APPLE VALLEY CHAMBER OF COMM | 100.00 | 4/30/2018 | 357860 | GALA TABLE SPONSOR/TKT | 21798 | COMMREL |
| 49 | 875 | APPLE VALLEY CHAMBER OF COMM | 600.00 | 4/30/2018 | 357860 | GALA TABLE SPONSOR/TKT | 21798 | COMMREL |
| 50 | 875 | APPLE VALLEY CHAMBER OF COMM | 200.00 | 4/30/2018 | 357860 | GALA TABLE SPONSOR/TKT | 21798 | DEYOE |
| 51 | 875 | APPLE VALLEY CHAMBER OF COMM | 200.00 | 4/30/2018 | 357860 | GALA TABLE SPONSOR/TKT | 21798 | PITTMAN |
| 52 | 875 | APPLE VALLEY CHAMBER OF COMM | 200.00 | 4/30/2018 | 357860 | GALA TABLE SPONSOR/TKT | 21798 | PTRAPP |
| 53 | 875 | APPLE VALLEY CHAMBER OF COMM | 200.00 | 4/30/2018 | 357860 | GALA TABLE SPONSOR/TKT | 21798 | SCHREINER |

Account 84560-Community Events

| Line | Vendor \# | Vendor | Pmt Amount | Dist Date | Check/EFT \# | Description | Invoice | Project |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 54 | 875 | APPLE VALLEY CHAMBER OF COMM | 200.00 | 4/30/2018 | 357860 | GALA TABLE SPONSOR/TKT | 21798 | VAN |
| 55 | 689 | BURNSVILLE CHAMBER OF COMMERCE | 10.00 | 4/30/2018 | 357913 | P JOHNSON/WOM EMP LUNCH | 43198 | COMMREL |
| 56 | 337 | MN RURAL ELECTRIC ASSOCIATION | 1,000.00 | 4/30/2018 | 358182 | SPONSOR\& 2 GOLF TEAMS | INV00013339 | COMMREL |
| 57 | 3226 | US BANK-BVL ROTARY-UNDER THE STREETLAMP | 118.71 | 4/30/2018 | 2009476 | CC Recap-Julie A. Simonsen | 2/2018-JAS | DEYOE |
| 58 | 3226 | US BANK-BVL ROTARY-UNDER THE STREETLAMP | 118.72 | 4/30/2018 | 2009476 | CC Recap-Julie A. Simonsen | 2/2018-JAS | LEKSON |
| 59 | 3226 | US BANK-BVL ROTARY-UNDER THE STREETLAMP | 118.71 | 4/30/2018 | 2009476 | CC Recap-Julie A. Simonsen | 2/2018-JAS | PITTMAN |
| 60 | 3226 | US BANK-BVL ROTARY-UNDER THE STREETLAMP | 118.71 | 4/30/2018 | 2009476 | CC Recap-Julie A. Simonsen | 2/2018-JAS | SCHREINER |
| 61 | 3226 | US BANK-BVL ROTARY-UNDER THE STREETLAMP | 118.72 | 4/30/2018 | 2009476 | CC Recap-Julie A. Simonsen | 2/2018-JAS | SHELDON |
| 62 | 3226 | US BANK-DAKOTA CO. REG. CHAMBER | 25.00 | 4/30/2018 | 2009486 | CC Recap-Julie A. Simonsen | 4/2018-JAS | COMMREL |
| 63 | 3226 | US BANK-DAKOTA CO. REG. CHAMBER | 25.00 | 4/30/2018 | 2009486 | CC Recap-Julie A. Simonsen | 4/2018-JAS | ECO |
| 64 | 3226 | US BANK-DAKOTA CO. REG. CHAMBER | 25.00 | 4/30/2018 | 2009486 | CC Recap-Julie A. Simonsen | 4/2018-JAS | ECO |
| 65 | 918 | DAKOTA CTY REGIONAL C OF C | 25.00 | 5/31/2018 | 358274 | M LOFTHUS/GOOD DAY 3/12/18 | 68305 | ECO |
| 66 | 875 | APPLE VALLEY CHAMBER OF COMM | 20.00 | 5/31/2018 | 358564 | STATE OF THE CITY 5/23/18 | 21861 | COMMREL |
| 67 | 875 | APPLE VALLEY CHAMBER OF COMM | 20.00 | 5/31/2018 | 358564 | STATE OF THE CITY 5/23/18 | 21861 | COMMREL |
| 68 | 875 | APPLE VALLEY CHAMBER OF COMM | 20.00 | 5/31/2018 | 358564 | STATE OF THE CITY 5/23/18 | 21861 | ECO |
| 69 | 875 | APPLE VALLEY CHAMBER OF COMM | 20.00 | 5/31/2018 | 358564 | STATE OF THE CITY 5/23/18 | 21861 | PITTMAN |
| 70 | 3226 | US BANK-HARRYS CAFÉ | 50.00 | 5/31/2018 | 2009490 | CC Recap-Laverne G. Frandrup | 5/2018-VGF | BLD |
| 71 | 3226 | US BANK-DAKOTA CO. REG. CHAMBER | 25.00 | 5/31/2018 | 2009490 | CC Recap-Margaret (Peggy) P Jo | 5/2018-PPJ | COMMREL |
| 72 | 3226 | US BANK-TASTE OF LAKEVILLE | 80.00 | 5/31/2018 | 2009490 | CC Recap -Julie A. Simonsen | 5/2018-JAS | DEYOE |
| 73 | 3226 | US BANK-TASTE OF LAKEVILLE | 40.00 | 5/31/2018 | 2009490 | CC Recap -Julie A. Simonsen | 5/2018-JAS | LEKSON |
| 74 | 3226 | US BANK-TASTE OF LAKEVILLE | 80.00 | 5/31/2018 | 2009490 | CC Recap -Julie A. Simonsen | 5/2018-JAS | PITTMAN |
| 75 | 3226 | US BANK-TASTE OF LAKEVILLE | 80.00 | 5/31/2018 | 2009490 | CC Recap -Julie A. Simonsen | 5/2018-JAS | SCHREINER |
| 76 | 3226 | US BANK-LAKEVILLE CHAMBER | 165.00 | 5/31/2018 | 2009490 | CC Recap-Cherry A. Jordan | 5/2018-CAJ | VAN |
| 77 | 3226 | US BANK-LAKEVILLE CHAMBER | 25.00 | 5/31/2018 | 2009490 | CC Recap-Cherry A. Jordan | 5/2018-CAJ | VAN |
| 78 | 918 | DAKOTA CTY REGIONAL C OF C | 650.00 | 6/30/2018 | 356837 | FOURSOME 6/18/18 | 2018-GOLFERS | ECO |
| 79 | 689 | BURNSVILLE CHAMBER OF COMMERCE | 20.00 | 6/30/2018 | 358763 | WOMEN EMPOWERED 5/15/18 | 43343 | COMMREL |
| 80 | 875 | APPLE VALLEY CHAMBER OF COMM | 160.00 | 6/30/2018 | 358811 | GOLF SCRAMBLE | 2018-GOLF | COMMREL |
| 81 | 875 | APPLE VALLEY CHAMBER OF COMM | 160.00 | 6/30/2018 | 358811 | GOLF SCRAMBLE | 2018-GOLF | COMMREL |
| 82 | 3984 | CANNON FALLS AREA C OF C | 9.00 | 6/30/2018 | 359111 | P JOHNSON/BRKFST 6/21 | 1033 | COMMREL |
| 83 | 3226 | US BANK-DAKOTA CO. REG. CHAMBER | 25.00 | 6/30/2018 | 2009490 | CC Recap -Julie A. Simonsen | 5/2018-JAS | COMMREL |
| 84 | 3226 | US BANK-ECONOMIC DEV ASSOC | 125.00 | 6/30/2018 | 2009490 | CC Recap-Mark W. Lofthus | 5/2018-MWL | ECO |
| 85 | 3226 | US BANK-DAKOTA CO. REG. CHAMBER | 25.00 | 6/30/2018 | 2009496 | CC Recap-Cherry A. Jordan | 6/2018-CAJ | AMS |
| 86 | 3226 | US BANK-DAKOTA CO. REG. CHAMBER | 25.00 | 6/30/2018 | 2009496 | CC Recap-Julie A. Simonsen | 6/2018-JAS | COMMREL |
| 87 | 3226 | US BANK-DAKOTA CO. REG. CHAMBER | 25.00 | 6/30/2018 | 2009496 | CC Recap-Julie A. Simonsen | 6/2018-JAS | COMMREL |
| 88 | 3226 | US BANK-MINNESOTA RURAL ELECTRIC | 166.67 | 7/31/2018 | 2009486 | CC Recap-Cherry A. Jordan | 4/2018-CAJ | DEYOE |
| 89 | 3226 | US BANK-MINNESOTA RURAL ELECTRIC | 166.66 | 7/31/2018 | 2009486 | CC Recap-Cherry A. Jordan | 4/2018-CAJ | HOLTON |
| 90 | 3226 | US BANK-MINNESOTA RURAL ELECTRIC | 166.67 | 7/31/2018 | 2009486 | CC Recap-Cherry A. Jordan | 4/2018-CAJ | JONES |
| 91 | 3886 | FAIRVIEW FOUNDATION | 100.00 | 8/31/2018 | 358457 | SPONSORSHIP/CROQUET PLYR | 18-03 | COMMREL |
| 92 | 8523 | WINGS FINANCIAL FOUNDATION | 600.00 | 8/31/2018 | 359913 | SPONSORSHIP/GOLF | 2018-GOLF | COMMREL |
| 93 | 3886 | FAIRVIEW FOUNDATION | 800.00 | 8/31/2018 | 360187 | 4 GOLFERS 8/13/201 | 18-04 | COMMREL |
| 94 | 3226 | US BANK-360 COMMUNITIES | 125.00 | 8/31/2018 | 2009501 | CC Recap-Brenda K. Kadlec | 7/2018-BKK | COMMREL |
| 95 | 3226 | US BANK-DAKOTA CO. REG. CHAMBER | 25.00 | 8/31/2018 | 2009507 | CC Recap-Julie A. Simonsen | 8/2018-JAS | COMMREL |
| 96 | 3226 | US BANK-VOIGHTS BUS SERVICE-MN ECON DEV ACADEMY | 150.00 | 8/31/2018 | 2009507 | CC Recap-Mark W. Lofthus | 8/2018-MWL | ECO |
| 97 | 918 | DAKOTA CTY REGIONAL C OF C | 25.00 | 9/30/2018 | 361537 | P JOHNSON 9/10/18 | 69062 | COMMREL |
| 98 | 875 | APPLE VALLEY CHAMBER OF COMM | 20.00 | 9/30/2018 | 361577 | P JOHNSON CYBERCRIME LNCH 9/12 | 22118 | COMMREL |
| 99 | 689 | BURNSVILLE CHAMBER OF COMMERCE | 10.00 | 9/30/2018 | 361949 | P JOHNSON 9/18/18 SOCIAL | 43619 | COMMREL |
| 100 | 3226 | US BANK-THE EAGAN FOUNDATION | 110.00 | 9/30/2018 | 2009512 | CC Recap-Cherry A. Jordan | 9/2018-CAJ | BAKKEN |
| 101 | 3226 | US BANK-THE EAGAN FOUNDATION | 110.00 | 9/30/2018 | 2009512 | CC Recap-Cherry A. Jordan | 9/2018-CAJ | BAKKEN |
| 102 | 3226 | US BANK-DAKOTA CO. REG. CHAMBER | 25.00 | 9/30/2018 | 2009512 | CC Recap-Julie A Simonsen | 9/2018-JAS | COMMREL |
| 103 | 3226 | US BANK-KIDS N KINSHIP | 107.48 | 9/30/2018 | 2009512 | CC Recap-Cherry A. Jordan | 9/2018-CAJ | DEYOE |
| 104 | 3226 | US BANK-KIDS N KINSHIP | 53.74 | 9/30/2018 | 2009512 | CC Recap-Cherry A. Jordan | 9/2018-CAJ | ECO |
| 105 | 3226 | US BANK-THE EAGAN FOUNDATION | 55.00 | 9/30/2018 | 2009512 | CC Recap-Cherry A. Jordan | 9/2018-CAJ | ECO |
| 106 | 3226 | US BANK-DAKOTA CO. REG. CHAMBER | 25.00 | 9/30/2018 | 2009512 | CC Recap-Julie A Simonsen | 9/2018-JAS | ECO |

Account 84560 - Community Events

| Line | Vendor \# | Vendor | Pmt Amount | Dist Date | Check/EFT\# | Description | Invoice | Project |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 107 | 3226 | US BANK-KIDS N KINSHIP | 53.74 | 9/30/2018 | 2009512 | CC Recap-Cherry A. Jordan | 9/2018-CAJ | LEKSON |
| 108 | 3226 | US BANK-KIDS N KINSHIP | 53.74 | 9/30/2018 | 2009512 | CC Recap-Cherry A. Jordan | 9/2018-CAJ | LEKSON |
| 109 | 3226 | US BANK-KIDS N KINSHIP | 107.48 | 9/30/2018 | 2009512 | CC Recap-Cherry A. Jordan | 9/2018-CAJ | SCHREINER |
| 110 | 337 | MN RURAL ELECTRIC ASSOCIATION | 1,000.00 | 10/31/2018 | 358182 | SPONSOR\& 2 GOLF TEAMS | INV00013339 | ACS |
| 111 | 337 | MN RURAL ELECTRIC ASSOCIATION | (1,000.00) | 10/31/2018 | 358182 | SPONSOR\& 2 GOLF TEAMS | INV00013339 | COMMREL |
| 112 | 3226 | US BANK-VOIGHTS BUS SERVICE-MN ECON DEV ACADEMY | 671.39 | 10/31/2018 | 2009520 | CC Recap-Mark W. Lofthus | 10/2018-MWL | ECO |
| 113 | 689 | BURNSVILLE CHAMBER OF COMMERCE | 10.00 | 11/30/2018 | 362640 | P JOHNSON 11/13 LUNCHEON | 43709 | COMMREL |
| 114 | 3226 | US BANK-MNCHAMBER | 225.00 | 11/30/2018 | 2009520 | CC Recap-Cherry A. Jordan | 10/2018-CAJ | DEYOE |
| 115 | 3226 | US BANK-MNCHAMBER | (70.00) | 11/30/2018 | 2009520 | CC Recap-Cherry A. Jordan | 10/2018-CAJ | DEYOE |
| 116 | 3226 | US BANK-DAKOTA CO. REG. CHAMBER | 25.00 | 11/30/2018 | 2009520 | CC Recap-Cherry A. Jordan | 10/2018-CAJ | SCHREINER |
| 117 | 3226 | US BANK-DAKOTA CO. REG. CHAMBER | 75.00 | 11/30/2018 | 2009526 | CC Recap-Julie A Simonsen | 11/2018-JAS | COMMREL |
| 118 | 3226 | US BANK-BURNSVILLE ROTARY | 105.00 | 11/30/2018 | 2009526 | CC Recap-Julie A Simonsen | 11/2018-JAS | COMMREL |
| 119 | 3226 | US BANK-BENEFICIAL ELECTRIFICATION LEAGUE | 99.92 | 11/30/2018 | 2009526 | CC Recap-Cherry A. Jordan | 11/2018-CAJ | DEYOE |
| 120 | 3226 | US BANK-BURNSVILLE ROTARY | 70.00 | 11/30/2018 | 2009526 | CC Recap-Julie A Simonsen | 11/2018-JAS | DEYOE |
| 121 | 3226 | US BANK-DAKOTA CO. REG. CHAMBER | 150.00 | 11/30/2018 | 2009526 | CC Recap-Julie A Simonsen | 11/2018-JAS | DEYOE |
| 122 | 3226 | US BANK-360 COMMUNITIES | 300.00 | 11/30/2018 | 2009526 | CC Recap-Julie A Simonsen | 11/2018-JAS | DEYOE |
| 123 | 3226 | US BANK-BURNSVILLE ROTARY | 35.00 | 11/30/2018 | 2009526 | CC Recap-Julie A Simonsen | 11/2018-JAS | LEKSON |
| 124 | 3226 | US BANK-360 COMMUNITIES | 150.00 | 11/30/2018 | 2009526 | CC Recap-Julie A Simonsen | 11/2018-JAS | LEKSON |
| 125 | 3226 | US BANK-360 COMMUNITIES | 300.00 | 11/30/2018 | 2009526 | CC Recap-Julie A Simonsen | 11/2018-JAS | PITTMAN |
| 126 | 3226 | US BANK-MNCHAMBER | 75.00 | 11/30/2018 | 2009526 | CC Recap-Cherry A. Jordan | 11/2018-CAJ | SCHREINER |
| 127 | 3226 | US BANK-360 COMMUNITIES | 300.00 | 11/30/2018 | 2009526 | CC Recap-Julie A Simonsen | 11/2018-JAS | SCHREINER |
| 128 | 3226 | US BANK-BURNSVILLE ROTARY | 70.00 | 11/30/2018 | 2009526 | CC Recap-Julie A Simonsen | 11/2018-JAS | SHELDON |
| 129 | 3226 | US BANK-BENEFICIAL ELECTRIFICATION LEAGUE | 99.92 | 11/30/2018 | 2009526 | CC Recap-Cherry A. Jordan | 11/2018-CAJ | VAN |
| 130 | 4060 | MINNESOTA CHAMBER OF COMMERCE | 60.00 | 12/31/2018 | 364319 | 11/15/18-LUNCH | AM2018-102018-1932 | COMMREL |
| 131 | 875 | APPLE VALLEY CHAMBER OF COMM | 20.00 | 12/31/2018 | 364565 | DEC LUCH-JOHNSON.POULSON | 22559 | AEN |
| 132 | 875 | APPLE VALLEY CHAMBER OF COMM | 20.00 | 12/31/2018 | 364565 | DEC LUCH-JOHNSON.POULSON | 22559 | ECO |
| 133 | 653 | LAKEVILLE AREA CHAMBER OF COMM | 30.00 | 12/31/2018 | 364857 | HOLIDAY LUNCHEON 12/13 | 30887 | COMMREL |
| 134 | 653 | LAKEVILLE AREA CHAMBER OF COMM | 60.00 | 12/31/2018 | 364857 | HOLIDAY LUNCHEON 12/13 | 30887 | DEYOE |
| 135 | 653 | LAKEVILLE AREA CHAMBER OF COMM | 30.00 | 12/31/2018 | 364857 | HOLIDAY LUNCHEON 12/13 | 30887 | JONES |
| 136 | 653 | LAKEVILLE AREA CHAMBER OF COMM | 30.00 | 12/31/2018 | 364857 | HOLIDAY LUNCHEON 12/12 | 30861 | LEKSON |
| 137 | 653 | LAKEVILLE AREA CHAMBER OF COMM | 30.00 | 12/31/2018 | 364857 | HOLIDAY LUNCHEON 12/12 | 30861 | PITTMAN |
| 138 | 653 | LAKEVILLE AREA CHAMBER OF COMM | 30.00 | 12/31/2018 | 364857 | HOLIDAY LUNCHEON 12/12 | 30861 | SCHREINER |
| 139 | 653 | LAKEVILLE AREA CHAMBER OF COMM | 30.00 | 12/31/2018 | 364857 | HOLIDAY LUNCHEON 12/13 | 30887 | VAN |
| 140 | 3226 | US BANK-DAKOTA CO. REG. CHAMBER | 25.00 | 12/31/2018 | 2009534 | CC Recap-Julie A Simonsen | 12/2018-JAS | COMMREL |
| 141 | 3226 | US BANK-MNCHAMBER | 150.00 | 12/31/2018 | 2009534 | CC Recap-Margaret (Peggy) P Jo | 12/2018-PPJ | COMMREL |
| 142 | 3226 | US BANK-MNCHAMBER | 850.00 | 12/31/2018 | 2009534 | CC Recap-Margaret (Peggy) P Jo | 12/2018-PPJ | COMMREL |
| 143 | 3226 | US BANK-MNCHAMBER | 150.00 | 12/31/2018 | 2009534 | CC Recap-Margaret (Peggy) P Jo | 12/2018-PPJ | LEKSON |
| 144 | 3226 | US BANK-MNCHAMBER | 150.00 | 12/31/2018 | 2009534 | CC Recap-Margaret (Peggy) P Jo | 12/2018-PPJ | SCHREINER |
| 145 | 3226 | US BANK-MNCHAMBER | 150.00 | 12/31/2018 | 2009534 | CC Recap-Margaret (Peggy) P Jo | 12/2018-PPJ | VAN |


 BOD Total Education \& Training
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> | JANET L LEKSON | 95.00 | $2 / 28 / 2018$ | 2952 | EXPENSE REPORT |
| :--- | ---: | ---: | ---: | ---: |
| JOHN D DEYOE | 99.00 | $2 / 28 / 2018$ | 2945 | EXPENSE REPORT |
| MARGARET D SCHREINER | 100.00 | $4 / 30 / 2018$ | 3037 | EXPENSE REPORT |
| DAVID S JONES | 85.00 | $8 / 31 / 2018$ | 3174 | EXPENSE REPORT |
| KENNETH H DANNER | 95.00 | $10 / 31 / 2018$ | 3238 | EXPENSE REPORT |
| JUDITH H KIMMES | 95.00 | $11 / 30 / 2018$ | 3281 | EXPENSE REPORT |
|  |  |  |  |  | DAVID S JONES




Board of Directors Expenses


\section*{| 400.00 | $1 / 31 / 2018$ | 355488 | J SHELDON $1 / 1-6 / 30 / 18$ | 1111801 | $1 / 18 / 2018$ | SHELDON |
| :---: | :---: | :---: | :--- | :--- | :--- | :--- |
| 350.00 | $7 / 31 / 2018$ | 360423 | S SHELDON $7 / 1-12 / 31 / 18$ | 180730 | $8 / 14 / 2018$ | SHELDON |} | 180730 | $8 / 14 / 2018$ | SHELDON |
| :--- | :--- | :--- |


| JANET L LEKSON | 10.00 | $6 / 30 / 2018$ | 3101 | EXPENSE REPORT | JUNE／2018－d | 43286 |
| :--- | ---: | :---: | :---: | :---: | :---: | :---: |



Total Outside Printing


Total Airfare

| JOHN D DEYOE |
| :--- |
| PAUL A TRAPP |
| JANET L LEKSON |

JANET L LEKSON
JANET L L JONES
GARGARET D SCHREINER
CLAY VAN DE BOGART
の示

－言




| Line | Account \# | Account Name | Vendor \# | Vendor | Pmt Amount | Dist Date | Check/EFT | Description | Invoice | Check Date | Project |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 267 | 84520 | Mileage | 5886 | KENNETH H DANNER | 109.00 | 8/31/2018 | 3171 | EXPENSE REPORT | AUG/2018 | 9/4/2018 | DANNER |
| 268 | 84520 | Mileage | 3048 | MARGARET D SCHREINER | 16.35 | 8/31/2018 | 3178 | EXPENSE REPORT | AUG/2018 | 9/4/2018 | SCHREINER |
| 269 | 84520 | Mileage | 5426 | PAUL A TRAPP | 132.44 | 8/31/2018 | 3180 | EXPENSE REPORT | AUG/2018 | 9/4/2018 | PTRAPP |
| 270 | 84520 | Mileage | 7867 | PAUL D R BAKKEN | 15.26 | 8/31/2018 | 3170 | EXPENSE REPORT | AUG/2018 | 9/4/2018 | BAKKEN |
| 271 | 84520 | Mileage | 3046 | WILLIAM F HOLTON | 10.90 | 8/31/2018 | 3173 | EXPENSE REPORT | AUG/2018 | 9/4/2018 | HOLTON |
| 272 | 84520 | Mileage | 4919 | CLAY VAN DE BOGART | 11.99 | 9/30/2018 | 361788 | EXPENSE REPORT | SEPT/2018 | 10/2/2018 | VAN |
| 273 | 84520 | Mileage | 8060 | DAVID S JONES | 84.48 | 9/30/2018 | 3209 | EXPENSE REPORT | SEPT/2018 | 10/3/2018 | JONES |
| 274 | 84520 | Mileage | 2305 | GERALD F PITTMAN JR | 26.16 | 9/30/2018 | 3213 | EXPENSE REPORT | SEPT/2018 | 10/3/2018 | PITTMAN |
| 275 | 84520 | Mileage | 3052 | JAMES F SHELDON | 19.62 | 9/30/2018 | 3215 | EXPENSE REPORT | SEPT/2018 | 10/3/2018 | SHELDON |
| 276 | 84520 | Mileage | 2625 | JANET L LEKSON | 20.71 | 9/30/2018 | 3212 | EXPENSE REPORT | SEPT/2018 | 10/3/2018 | LEKSON |
| 277 | 84520 | Mileage | 8207 | JOHN D DEYOE | 141.70 | 9/30/2018 | 3205 | EXPENSE REPORT | SEPT/2018 | 10/3/2018 | DEYOE |
| 278 | 84520 | Mileage | 3227 | JUDITH H KIMMES | 14.17 | 9/30/2018 | 3210 | EXPENSE REPORT | SEPT/2018 | 10/3/2018 | KIMMES |
| 279 | 84520 | Mileage | 5886 | KENNETH H DANNER | 10.90 | 9/30/2018 | 3204 | EXPENSE REPORT | SEPT/2018 | 10/3/2018 | DANNER |
| 280 | 84520 | Mileage | 3048 | MARGARET D SCHREINER | 46.87 | 9/30/2018 | 3214 | EXPENSE REPORT | SEPT/2018 | 10/3/2018 | SCHREINER |
| 281 | 84520 | Mileage | 5426 | PAUL A TRAPP | 107.91 | 9/30/2018 | 3216 | EXPENSE REPORT | SEPT/2018 | 10/3/2018 | PTRAPP |
| 282 | 84520 | Mileage | 7867 | PAUL D R BAKKEN | 15.26 | 9/30/2018 | 3202 | EXPENSE REPORT | SEPT/2018 | 10/3/2018 | BAKKEN |
| 283 | 84520 | Mileage | 3046 | WILLIAM F HOLTON | 10.90 | 9/30/2018 | 3208 | EXPENSE REPORT | SEPT/2018 | 10/3/2018 | HOLTON |
| 284 | 84520 | Mileage | 4919 | CLAY VAN DE BOGART | 20.17 | 10/31/2018 | 362565 | EXPENSE REPORT | OCT/2018 | 10/30/2018 | VAN |
| 285 | 84520 | Mileage | 8060 | DAVID S JONES | 19.62 | 10/31/2018 | 3242 | EXPENSE REPORT | OCT/2018 | 10/31/2018 | JONES |
| 286 | 84520 | Mileage | 2305 | GERALD F PITTMAN JR | 25.62 | 10/31/2018 | 3245 | EXPENSE REPORT | OCT/2018 | 10/31/2018 | PITTMAN |
| 287 | 84520 | Mileage | 3052 | JAMES F SHELDON | 37.06 | 10/31/2018 | 3247 | EXPENSE REPORT | OCT/2018 | 10/31/2018 | SHELDON |
| 288 | 84520 | Mileage | 2625 | JANET L LEKSON | 20.17 | 10/31/2018 | 3244 | EXPENSE REPORT | OCT/2018 | 10/31/2018 | LEKSON |
| 289 | 84520 | Mileage | 8207 | JOHN D DEYOE | 45.78 | 10/31/2018 | 3239 | EXPENSE REPORT | OCT/2018 | 10/31/2018 | DEYOE |
| 290 | 84520 | Mileage | 3227 | JUDITH H KIMMES | 53.41 | 10/31/2018 | 3243 | EXPENSE REPORT | OCT/2018 | 10/31/2018 | KIMMES |
| 291 | 84520 | Mileage | 5886 | KENNETH H DANNER | 26.16 | 10/31/2018 | 3238 | EXPENSE REPORT | OCT/2018 | 10/31/2018 | DANNER |
| 292 | 84520 | Mileage | 3048 | MARGARET D SCHREINER | 54.50 | 10/31/2018 | 3246 | EXPENSE REPORT | OCT/2018 | 10/31/2018 | SCHREINER |
| 293 | 84520 | Mileage | 5426 | PAUL A TRAPP | 79.57 | 10/31/2018 | 3248 | EXPENSE REPORT | OCT/2018 | 10/31/2018 | PTRAPP |
| 294 | 84520 | Mileage | 7867 | PAUL D R BAKKEN | 34.88 | 10/31/2018 | 3236 | EXPENSE REPORT | OCT/2018 | 10/31/2018 | BAKKEN |
| 295 | 84520 | Mileage | 3046 | WILLIAM F HOLTON | 21.80 | 10/31/2018 | 3241 | EXPENSE REPORT | OCT/2018 | 10/31/2018 | HOLTON |
| 296 | 84520 | Mileage | 4919 | CLAY VAN DE BOGART | 66.50 | 11/30/2018 | 363764 | EXPENSE REPORT | NOV/2018 | 12/6/2018 | VAN |
| 297 | 84520 | Mileage | 8060 | DAVID S JONES | 87.20 | 11/30/2018 | 3279 | EXPENSE REPORT | NOV/2018 | 12/7/2018 | JONES |
| 298 | 84520 | Mileage | 2305 | GERALD F PITTMAN JR | 54.72 | 11/30/2018 | 3284 | EXPENSE REPORT | NOV/2018 | 12/7/2018 | PITTMAN |
| 299 | 84520 | Mileage | 3052 | JAMES F SHELDON | 61.59 | 11/30/2018 | 3286 | EXPENSE REPORT | NOV/2018 | 12/7/2018 | SHELDON |
| 300 | 84520 | Mileage | 2625 | JANET L LEKSON | 35.97 | 11/30/2018 | 3282 | EXPENSE REPORT | NOV/2018 | 12/7/2018 | LEKSON |
| 301 | 84520 | Mileage | 8207 | JOHN D DEYOE | 100.83 | 11/30/2018 | 3276 | EXPENSE REPORT | NOV/2018 | 12/7/2018 | DEYOE |
| 302 | 84520 | Mileage | 3227 | JUDITH H KIMMES | 41.42 | 11/30/2018 | 3281 | EXPENSE REPORT | NOV/2018 | 12/7/2018 | KIMMES |
| 303 | 84520 | Mileage | 5886 | KENNETH H DANNER | 10.90 | 11/30/2018 | 3275 | EXPENSE REPORT | NOV/2018 | 12/7/2018 | DANNER |
| 304 | 84520 | Mileage | 3048 | MARGARET D SCHREINER | 142.79 | 11/30/2018 | 3285 | EXPENSE REPORT | NOV/2018 | 12/7/2018 | SCHREINER |
| 305 | 84520 | Mileage | 5426 | PAUL A TRAPP | 46.33 | 11/30/2018 | 3287 | EXPENSE REPORT | NOV/2018 | 12/7/2018 | PTRAPP |
| 306 | 84520 | Mileage | 7867 | PAUL D R BAKKEN | 15.26 | 11/30/2018 | 3274 | EXPENSE REPORT | NOV/2018 | 12/7/2018 | BAKKEN |
| 307 | 84520 | Mileage | 3046 | WILLIAM F HOLTON | 34.88 | 11/30/2018 | 3278 | EXPENSE REPORT | NOV/2018 | 12/7/2018 | HOLTON |
| 308 | 84520 | Mileage | 4919 | CLAY VAN DE BOGART | 11.99 | 12/31/2018 | 364418 | EXPENSE REPORT | DEC/2018 | 12/27/2018 | VAN |
| 309 | 84520 | Mileage | 8060 | DAVID S JONES | 73.58 | 12/31/2018 | 3306 | EXPENSE REPORT | DEC/2018 | 12/28/2018 | JONES |
| 310 | 84520 | Mileage | 2305 | GERALD F PITTMAN JR | 27.96 | 12/31/2018 | 3311 | EXPENSE REPORT | DEC/2018 | 12/28/2018 | PITTMAN |
| 311 | 84520 | Mileage | 3052 | JAMES F SHELDON | 44.69 | 12/31/2018 | 3314 | EXPENSE REPORT | DEC/2018 | 12/28/2018 | SHELDON |
| 312 | 84520 | Mileage | 2625 | JANET L LEKSON | 26.16 | 12/31/2018 | 3309 | EXPENSE REPORT | DEC/2018 | 12/28/2018 | LEKSON |
| 313 | 84520 | Mileage | 8207 | JOHN D DEYOE | 36.53 | 12/31/2018 | 3303 | EXPENSE REPORT | DEC/2018 | 12/28/2018 | DEYOE |
| 314 | 84520 | Mileage | 3227 | JUDITH H KIMMES | 35.97 | 12/31/2018 | 3307 | EXPENSE REPORT | DEC/2018 | 12/28/2018 | KIMMES |
| 315 | 84520 | Mileage | 5886 | KENNETH H DANNER | 10.90 | 12/31/2018 | 3302 | EXPENSE REPORT | DEC/2018 | 12/28/2018 | DANNER |
| 316 | 84520 | Mileage | 3048 | MARGARET D SCHREINER | 45.78 | 12/31/2018 | 3313 | EXPENSE REPORT | DEC/2018 | 12/28/2018 | SCHREINER |
| 317 | 84520 | Mileage | 5426 | PAUL A TRAPP | 65.40 | 12/31/2018 | 3315 | EXPENSE REPORT | DEC/2018 | 12/28/2018 | PTRAPP |
| 318 | 84520 | Mileage | 7867 | PAUL D R BAKKEN | 15.26 | 12/31/2018 | 3301 | EXPENSE REPORT | DEC/2018 | 12/28/2018 | BAKKEN |
| 319 | 84520 | Mileage | 3046 | WILLLAM F HOLTON | 21.80 | 12/31/2018 | 3305 | EXPENSE REPORT | DEC/2018 | 12/28/2018 | HOLTON |
|  |  |  |  | Total Mileage | \$ 6,501.40 |  |  |  |  |  |  |

[^10]| Line | Account \# | Account Name | Vendor \# | Vendor | Pmt Amount | Dist Date | Check/EFT | Description | Invoice | Check Date | Project |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 321 | 84545 | Meals | 3048 | MARGARET D SCHREINER | 35.79 | 1/31/2018 | 2916 | EXPENSE REPORT | JAN/2018 | 1/31/2018 | SCHREINER |
| 322 | 84545 | Meals | 2625 | JANET L LEKSON | 278.53 | 2/28/2018 | 2952 | EXPENSE REPORT | FEB/2018 | 2/28/2018 | LEKSON |
| 323 | 84545 | Meals | 3226 | US BANK | 55.00 | 2/28/2018 | 2009467 | CC Recap-Cherry Jordan | 12/2017-CAJ | 12/29/2017 | PTRAPP |
| 324 | 84545 | Meals | 3226 | US BANK | 75.00 | 2/28/2018 | 2009467 | CC Recap-Cherry Jordan | 12/2017-CAJ | 12/29/2017 | DEYOE |
| 325 | 84545 | Meals | 8207 | JOHN D DEYOE | 7.72 | 3/31/2018 | 2983 | EXPENSE REPORT | MAR/2018 | 3/28/2018 | DEYOE |
| 326 | 84545 | Meals | 5426 | PAUL A TRAPP | 131.33 | 3/31/2018 | 2996 | EXPENSE REPORT | MAR/2018 | 3/28/2018 | PTRAPP |
| 327 | 84545 | Meals | 2625 | JANET L LEKSON | 309.59 | 4/30/2018 | 3034 | EXPENSE REPORT | APR/2018 | 5/1/2018 | LEKSON |
| 328 | 84545 | Meals | 8207 | JOHN D DEYOE | 155.83 | 4/30/2018 | 3028 | EXPENSE REPORT | APR/2018 | 5/1/2018 | DEYOE |
| 329 | 84545 | Meals | 4919 | CLAY VAN DE BOGART | 74.47 | 5/31/2018 | 358598 | EXPENSE REPORT | MAY/2018 | 6/7/2018 | VAN |
| 330 | 84545 | Meals | 3048 | MARGARET D SCHREINER | 119.20 | 5/31/2018 | 3077 | EXPENSE REPORT | MAY/2018 | 6/8/2018 | SCHREINER |
| 331 | 84545 | Meals | 5426 | PAUL A TRAPP | 37.89 | 6/30/2018 | 3105 | EXPENSE REPORT | JUNE/2018 | 7/5/2018 | PTRAPP |
| 332 | 84545 | Meals | 8060 | DAVID S JONES | 77.13 | 8/31/2018 | 3174 | EXPENSE REPORT | AUG/2018 | 9/4/2018 | JONES |
| 333 | 84545 | Meals | 2625 | JANET L LEKSON | 111.85 | 8/31/2018 | 3176 | EXPENSE REPORT | AUG/2018 | 9/4/2018 | LEKSON |
| 334 | 84545 | Meals | 5886 | KENNETH H DANNER | 32.87 | 8/31/2018 | 3171 | EXPENSE REPORT | AUG/2018 | 9/4/2018 | DANNER |
| 335 | 84545 | Meals | 5426 | PAUL A TRAPP | 56.40 | 8/31/2018 | 3180 | EXPENSE REPORT | AUG/2018 | 9/4/2018 | PTRAPP |
| 336 | 84545 | Meals | 8060 | DAVID S JONES | 29.61 | 9/30/2018 | 3209 | EXPENSE REPORT | SEPT/2018 | 10/3/2018 | JONES |
| 337 | 84545 | Meals | 2625 | JANET L LEKSON | 290.07 | 9/30/2018 | 3212 | EXPENSE REPORT | SEPT/2018 | 10/3/2018 | LEKSON |
| 338 | 84545 | Meals | 8207 | JOHN D DEYOE | 12.21 | 9/30/2018 | 3205 | EXPENSE REPORT | SEPT/2018 | 10/3/2018 | DEYOE |
| 339 | 84545 | Meals | 5426 | PAUL A TRAPP | 43.03 | 9/30/2018 | 3216 | EXPENSE REPORT | SEPT/2018 | 10/3/2018 | PTRAPP |
| 340 | 84545 | Meals | 8060 | DAVID S JONES | 498.59 | 10/31/2018 | 3242 | EXPENSE REPORT | OCT/2018 | 10/31/2018 | JONES |
| 341 | 84545 | Meals | 3226 | US BANK | 20.00 | 10/31/2018 | 2009501 | CC Recap-Cherry A. Jordan | 7/2018-CAJ | 7/31/2018 | DEYOE |
| 342 | 84545 | Meals | 3226 | US BANK | 20.00 | 10/31/2018 | 2009501 | CC Recap-Cherry A. Jordan | 7/2018-CAJ | 7/31/2018 | PTRAPP |
| 343 | 84545 | Meals | 4919 | CLAY VAN DE BOGART | 24.91 | 11/30/2018 | 363764 | EXPENSE REPORT | NOV/2018 | 12/6/2018 | VAN |
| 344 | 84545 | Meals | 8060 | DAVID S JONES | 228.40 | 11/30/2018 | 3279 | EXPENSE REPORT | NOV/2018 | 12/7/2018 | JONES |
| 345 | 84545 | Meals | 2305 | GERALD F PITTMAN JR | 131.48 | 11/30/2018 | 3284 | EXPENSE REPORT | NOV/2018 | 12/7/2018 | PITTMAN |
| 346 | 84545 | Meals | 3048 | MARGARET D SCHREINER | 926.18 | 11/30/2018 | 3285 | EXPENSE REPORT | NOV/2018 | 12/7/2018 | SCHREINER |
| 347 | 84545 | Meals | 3226 | US BANK | 45.00 | 11/30/2018 | 2009520 | CC Recap-Cherry A. Jordan | 10/2018-CAJ | 10/31/2018 | JONES |
| 348 | 84545 | Meals | 8060 | DAVID S JONES | 51.57 | 12/31/2018 | 3306 | EXPENSE REPORT | DEC/2018 | 12/28/2018 | JONES |
| 349 | 84545 | Meals | 3227 | JUDITH H KIMMES | 80.00 | 12/31/2018 | 3307 | EXPENSE REPORT | DEC/2018 | 12/28/2018 | KIMMES |
|  |  |  |  | Total BOD Meals | \$ 3,988.36 |  |  |  |  |  |  |

\$ 3,988.36


Board of Directors Expenses


Dakota Electric Association
Highest 10 Compensated Employees

| Employee Name | Salary |  | Short Term Incentive |  | Salary + Short Term Incentive |  | Benefits ${ }^{1}$ |  | Grand Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Greg Miller | \$ | 386,676 | \$ | - | \$ | 386,676 | \$ | 141,113 | \$ | 527,789 |
| 2 Lou Ann Weflen | \$ | 222,068 | \$ | 3,000 | \$ | 225,068 | \$ | 83,512 | \$ | 308,580 |
| 3 Douglas Larson | \$ | 217,923 | \$ | 3,000 | \$ | 220,923 | \$ | 77,020 | \$ | 297,943 |
| 4 Michael Fosse | \$ | 201,096 | \$ | 3,000 | \$ | 204,096 | \$ | 82,441 | \$ | 286,537 |
| 5 Randall Poulson | \$ | 192,923 | \$ | 3,000 | \$ | 195,923 | \$ | 69,439 | \$ | 265,362 |
| 6 Dirk Rotty ${ }^{2}$ | \$ | 82,346 | \$ | 3,000 | \$ | 85,346 | \$ | 170,263 | \$ | 255,609 |
| 7 Michael Nelson | \$ | 186,969 | \$ | 3,000 | \$ | 189,969 | \$ | 32,779 | \$ | 222,748 |
| 8 Craig Turner | \$ | 143,719 | \$ | 8,000 | \$ | 151,719 | \$ | 49,164 | \$ | 200,883 |
| 9 Grant Baumberger | \$ | 139,746 | \$ | - | \$ | 139,746 | \$ | 48,268 | \$ | 188,014 |
| 10 Jeffrey Schoenecker ${ }^{3}$ | \$ | 147,692 | \$ | 1,500 | \$ | 149,192 | \$ | 24,566 | \$ | 173,758 |

${ }^{1}$ Benefits may include company paid medical, dental, 401 k , pension, disability, auto, sick and vacation cash outs, and other benefits. ${ }^{2}$ Retired in June 2018.
${ }^{3}$ Promoted to Vice President in June 2018.



| Line | Employee | Expense Type |
| :--- | :--- | :--- |





| Line | Emplovee | Expense Type | Vendor \# | Vendor | Pmt Amount | Dist Date | Check/EFT\# | Description | Business Purpose | Invoice | Check Date | Proiect |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 291 | MICHAEL FOSSE | Other Travel | 3226 | US BANK | 10.00 | 11/30/2018 | 2009526 | CC Recap-Michael G. Fosse | Minnesota Power Systems Conference | 11/2018-MGF | 11/30/2018 | ACS |
| 292 | MICHAEL FOSSE | Other Travel | 3226 | US BANK | 17.00 | 11/30/2018 | 2009526 | CC Recap-Michael G. Fosse | Dakota County Regional Chamber Event | 11/2018-MGF | 11/30/2018 | COMMREL |
| 293 | RANDALL POULSON | Cell Phone | 232 |  | 32.00 | 11/30/2018 | 233519 | PAYROLL |  |  | 10/31/2018 | AEN |
| 294 | RANDALL POULSON | Cell Phone | 232 |  | 8.00 | 11/30/2018 | 233519 | PAYROLL |  |  | 11/1/2018 | AEN |
| 295 | CRAIG TURNER | Cell Phone | 591 |  | 32.00 | 11/30/2018 | 233522 | PAYROLL |  |  | 10/31/2018 | ETS |
| 296 | CRAIG TURNER | Cell Phone | 591 |  | 8.00 | 11/30/2018 | 233522 | PAYROLL |  |  | 11/1/2018 | ETS |
| 297 | JEFFREY SCHOENECKER | Cell Phone | 735 |  | 32.00 | 11/30/2018 | 233542 | PAYROLL |  |  | 10/31/2018 | aUO |
| 298 | JEFFREY SCHOENECKER | Cell Phone | 735 |  | 8.00 | 11/30/2018 | 233542 | PAYROLL |  |  | 11/1/2018 | AUO |
| 299 | DOUGLAS LARSON | Cell Phone | 753 |  | 32.00 | 11/30/2018 | 233528 | PAYROLL |  |  | 10/31/2018 | AMS |
| 300 | DOUGLAS LARSON | Cell Phone | 753 |  | 8.00 | 11/30/2018 | 233528 | PAYROLL |  |  | 11/1/2018 | AMS |
| 301 | MICHAEL FOSSE | Airfare | 3226 | US BANK | 30.00 | 12/31/2018 | 2009534 | CC Recap-Michael G. Fosse | Touchstone Energy BOD Mtg | 12/2018-MGF | 12/31/2018 | ACS |
| 302 | MICHAEL FOSSE | Airfare | 3226 | US BANK | 30.00 | 12/31/2018 | 2009534 | CC Recap-Michael G. Fosse | Touchstone Energy BOD Mtg | 12/2018-MGF | 12/31/2018 | ACS |
| 303 | DOUGLAS LARSON | Meals | 3226 | US BANK | 31.05 | 12/31/2018 | 2009534 | CC Recap-Douglas R. Larson | NARUC (2) | 12/2018-DRL | 12/31/2018 | REG |
| 304 | DOUGLAS LARSON | Meals | 3226 | US BANK | 43.76 | 12/31/2018 | 2009534 | CC Recap-Douglas R. Larson | PUC Mtg (2) | 12/2018-DRL | 12/31/2018 | REG |
| 305 | DOUGLAS LARSON | Meals | 3226 | US BANK | 70.92 | 12/31/2018 | 2009534 | CC Recap-Douglas R. Larson | Mtg GRE Staff - EV (4) | 12/2018-DRL | 12/31/2018 | POWSUP |
| 306 | GREG MILLER | Meals | 3226 | US BANK | 50.29 | 12/31/2018 | 2009534 | CC Recap-Greg C. Miller | GRE Update Mtg (2) | 12/2018-GCM | 12/31/2018 | AMS |
| 307 | GREG MILLER | Meals | 3226 | US BANK | 532.31 | 12/31/2018 | 2009534 | CC Recap-Greg C. Miller | VP Retirement recognition (7) | 12/2018-GCM | 12/31/2018 | AMS |
| 308 | GREG MILLER | Meals | 3226 | US BANK | 33.26 | 12/31/2018 | 2009534 | CC Recap-Greg C. Miller | VP Review (2) | 12/2018-GCM | 12/31/2018 | AMS |
| 309 | DOUGLAS LARSON | Lodging | 3226 | US BANK | 708.75 | 12/31/2018 | 2009534 | CC Recap-Douglas R. Larson | NARUC | 12/2018-DRL | 12/31/2018 | REG |
| 310 | GREG MILLER | Lodging | 3226 | US BANK | 153.63 | 12/31/2018 | 2009534 | CC Recap-Greg C. Miller | GRE Board Meeting | 12/2018-GCM | 12/31/2018 | AMS |
| 311 | MICHAEL FOSSE | Lodging | 3226 | US BANK | 459.30 | 12/31/2018 | 2009534 | CC Recap-Michael G. Fosse | Touchstone Energy BOD Mtg. | 12/2018-MGF | 12/31/2018 | ACS |
| 312 | DOUGLAS LARSON | Other Travel | 2895 | DOUGLAS R LARSON | 95.00 | 12/31/2018 | 3320 | EXPENSE REPORT |  | DEC/2018 | 1/9/2019 | AMS |
| 313 | DOUGLAS LARSON | Other Travel | 3226 | US BANK | 5.00 | 12/31/2018 | 2009534 | CC Recap-Douglas R. Larson | CEE meeting | 12/2018-DRL | 12/31/2018 | REG |
| 314 | DOUGLAS LARSON | Other Travel | 3226 | US BANK | 9.00 | 12/31/2018 | 2009534 | CC Recap-Douglas R. Larson | PUC Meeting | 12/2018-DRL | 12/31/2018 | REG |
| 315 | MICHAEL FOSSE | Other Travel | 3226 | US BANK | 27.95 | 12/31/2018 | 2009534 | CC Recap-Michael G. Fosse | Touchstone Energy BOD Mtg. | 12/2018-MGF | 12/31/2018 | ACS |
| 316 | MICHAEL FOSSE | Other Travel | 3226 | US BANK | 10.70 | 12/31/2018 | 2009534 | CC Recap-Michael G. Fosse | Miscoded - Other Vehicle | 12/2018-MGF | 12/31/2018 | ACS |
| 317 | RANDALL POULSON | Cell Phone | 232 |  | 40.00 | 12/31/2018 | 234127 | PAYROLL |  |  | 12/13/2018 | AEN |
| 318 | CRAIG TURNER | Cell Phone | 591 |  | 40.00 | 12/31/2018 | 234130 | PAYROLL |  |  | 12/13/2018 | ETS |
| 319 | JEFFREY SCHOENECKER | Cell Phone | 735 |  | 40.00 | 12/31/2018 | 234150 | PAYROLL |  |  | 12/13/2018 | AUO |
| 320 | DOUGLAS LARSON | Cell Phone | 753 |  | 40.00 | 12/31/2018 | 234136 | PAYROLL |  |  | 12/13/2018 | AMS |


Dakota Electric Association





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$\begin{array}{ll}262,400 & 2.702 \% \\ 874,300 & 3.702 \%\end{array}$
Actual \& Est

## 

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& \text { Substations }
\end{aligned}
$$


7,090
32,368
4,263
1,789
176


32,36 $\quad 84,300-\quad .02 \%$
4,330



Dakota Electric Association<br>Sales History and Forecasted Test Year Normalization

Enclosed are schedules supporting the test year energy sales figures used in Exhibit (DEA_1) page 12 of 22.

Dakota Electric has experienced an overall downward trend in average kWh per member per month over the last ten years. Our highest level of total kWh sales was achieved in 2007 with 1,897,654,115 kWh sold and 99,959 members/meters at the end of the year. In 2018 we sold 1,851,702,114 kWh while 107,974 members/meters were served at the end of the year. This makes it challenging to estimate kWh for the adjusted test year. We look at ten-year trends as well as the 2019 budget. We use the higher of the budget or the ten-year trend line in these estimates.

For Rate 31 (Residential) which is the most weather sensitive rate class, energy sales are based on a regression analysis (LINEST function) using a ten-year trend of average monthly sales (2009-2018), weather normalized (using 20 years of weather), multiplied by budgeted 2019 number of members.

For Rates 41 (Small General Service), 46 (General Service) and 70 (Interruptible Service - Full) energy sales are based on the 2019 budgeted average kWh per month.

For Rate 71 (Interruptible Service - Partial), energy sales are based on the ten-year average (2009-2018) kWh per month trend multiplied by budgeted 2019 number of members.

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| Dakota Electric Association |  |  |
| :---: | :---: | :---: |
| Residential History－Rate 31 Excluding 51 \＆ 52 \＆8 |  |  |
|  | Jan | Feb |
| 2018 |  |  |
| kWh | 74，407，414 | 63，211，669 |
| \＃Consumers | 98，778 | 98，863 |
| Average kWh | 753 | 639 |
| 2017 |  |  |
| kWh | 72，717，202 | 55，394，163 |
| \＃Consumers | 97，520 | 97，654 |
| Average kWh | 746 | 567 |
| 2016 |  |  |
| kWh | 72，671，837 | 61，325，062 |
| \＃Consumers | 96，555 | 96，633 |
| Average kWh | 753 | 635 |
| 2015 |  |  |
| kWh | 72，489，731 | 64，101，216 |
| \＃Consumers | 95，896 | 95，937 |
| Average kWh | 756 | 668 |
| 2014 |  |  |
| kWh | 80，017，109 | 67，943，393 |
| \＃Consumers | 95，313 | 95，333 |
| Average kWh | 840 | 713 |
| 2013 |  |  |
| kWh | 76，240，051 | 62，500，960 |
| \＃Consumers | 94，686 | 94，736 |
| Average kWh | 805 | 660 |
| 2012 |  |  |
| kWh | 73，438，067 | 61，666，412 |
| \＃Consumers | 94，145 | 94，193 |
| Average kWh | 780 | 655 |
| 2011 |  |  |
| kWh | 78，349，086 | 64，269，923 |
| \＃Consumers | 93，866 | 93，913 |
| Average kWh | 835 | 684 |
| 2010 |  |  |
| kWh | 81，134，695 | 62，633，764 |
| \＃Consumers | 93，572 | 93，617 |
| Average kWh | 867 | 669 |
| 2009 |  |  |
| kWh | 81，370，780 | 63，491，283 |
| \＃Consumers | 93，160 | 93，176 |
| Average kWh | 873 | 681 |

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|  | 9002 рәцодәу |
















Dakota Electric Association
Small General Service - Rate 41
Excluding $51 / 52$


| Small General Service (Rate 41) Average Monthly kWh Usage |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Dakota Electric Association
General Service－Rate 46


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2,217
16,420


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| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |



















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Dakota Electric Association
Full Interruptible Service - Rate 70



|  | $\underset{\substack{\text { N } \\ \text { N } \\ \hline \\ \hline}}{ }$ | N | 付冏 | ন | $\stackrel{\sim}{\sim}$ |  | $\stackrel{\sim}{\sim}$ | $\underset{\sim}{\infty}$ | $\underset{\sim}{\sim}$ | $\underset{\infty}{\mathbb{N}} \underset{\infty}{\mathbb{\infty}}$ |
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Dakota Electric Association
Partial Interruptible Service - Rate 71

kWh




## Dakota Electric Association

Full Year and Monthly Billed Sales 2014-2018

Enclosed are schedules detailing the full year and monthly billed sales by rate class for 2014-2018. This data was downloaded monthly from the AS400 software to Excel spreadsheets for 2014 - February 2018. Beginning in March 2018 the data was downloaded from the new UMAX software.
Dakota Electric Association
SALES BY RATE (Billed)
Full Year 2014
(Accounting Month information downlo

| Account | Rate | kWh |  |  |  |  | KW |  | Fixed |  |  | Revenue <br> Adjustments | TOTAL <br> ADJUSTED <br> REVENUE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Usage | DEA Own Use | $\begin{aligned} & \mathrm{kWh} \\ & \mathrm{NET} \end{aligned}$ | Revenue <br> Adjusted |  | KW | Revenue |  |  |  |  |  |
| 63100 | 31 Residential | 860,418,633 | - | 860,418,633 |  | 90,729,323 | - | - | 9,167,458 |  | 11,352,962 | $(74,532)$ | 111,175,210 |
| 63200 | 32 Resl Dem Ctrl | 428,951 | - | 428,951 |  | 27,796 | 1,093 | 10,999 | 1,977 |  | 5,662 | - | 46,433 |
| 63133 | 33 Resid Electric Vehicles | 41,745 | - | 41,745 |  | 2,957 | - | - | - |  | 551 | - | 3,508 |
| 63036 | 36 Irrigation | 291,601 | - | 291,601 |  | 13,901 | 3,143 | 58,855 | 2,597 |  | 3,791 | - | 79,144 |
| 63039 | 39 Irrigation | 8,295,302 | - | 8,295,302 |  | 395,437 | 67,095 | 271,736 | 105,591 |  | 50,602 | - | 823,365 |
| 64100 | 41 Sm Genl Serv | 48,251,732 | 65,989 | 48,185,743 |  | 4,952,878 | - | - | 523,843 |  | 630,500 | (348) | 6,106,873 |
| 62441-6244: | 44(1-3) Street Lights | 9,676,063 | - | 9,676,063 |  | 1,700,662 | - | - | - |  | 136,357 | - | 1,837,019 |
| 62440 | 44 Security Lgts | 728,226 | - | 728,226 |  | 148,133 | - | - | - |  | 9,980 | - | 158,114 |
| 64500 | 45 Emergency Unmet. | - | - | - |  | 5,184 | - | - | - |  | - | - | 5,184 |
| 64600 | 46 General Service | 442,409,813 | 2,239,488 | 440,170,325 |  | 27,082,477 | 1,388,480 | 13,199,250 | 818,853 |  | 5,721,723 | $(2,272)$ | 46,820,032 |
| 63047 | 47 Municipal | - | - | - |  | 3,900 | - | - | - |  | - | - | 3,900 |
| 64690 | 49 Geotherm Heat Pump | 249,023 | - | 249,023 |  | 14,941 | - | - | - |  | 6,226 | - | 21,167 |
| 63151 | 51 Resid Energy Stg.* | 9,449,794 | - | 9,449,794 |  | 377,363 | - | - | - |  | 22,416 | 262 | 400,041 |
| 64151 | 51 Commer Energy Stg. * | 158,261 | - | 158,261 |  | 6,330 | - | - | - |  | - | 380 | 6,710 |
| 63152 | 52 Resid Interruptible* | 46,736,444 | - | 46,736,444 |  | 2,243,993 | - | - | - |  | 234,019 | 522 | 2,478,534 |
| 64152 | 52 Commer Interruptible * | 1,317,058 | - | 1,317,058 |  | 63,219 | - | - | - |  | 7 | 6,586 | 69,812 |
| 63900 | Resid-Wellspring * | 6,367,200 | - | 6,367,200 |  | 25,469 | - | - | - |  | - | - | 25,469 |
| 64900 | Comm-Wellspring * | 2,684,200 | - | 2,684,200 |  | 10,737 | - | - | - |  | - | - | 10,737 |
| 63530 | 53 Time of Day | 205,826 | - | 205,826 |  | 20,127 | - | - | 2,245 |  | 2,717 | (144) | 24,945 |
| 64540 | 54 Time of Use | 3,521,760 | - | 3,521,760 |  | 154,894 | 15,996 | 122,011 | 2,640 |  | 45,783 | - | 325,328 |
| 64660 | 60 Standby Service | 17,856 | - | 17,856 |  | 4,065 | 322 | 2,790 | 52,328 |  | 232 | - | 59,414 |
| 64700 | 70 Full Interruptable | 388,093,728 | - | 388,093,728 |  | 17,070,016 | 876,840 | 3,772,622 | 213,424 |  | 2,328,562 | $(8,399)$ | 23,376,226 |
| 64701 | 71 Partial Interruptable | 24,782,592 | - | 24,782,592 |  | 1,084,026 | 111,047 | 576,649 | 27,135 |  | 148,696 | (887) | 1,835,618 |
| 63181 | 81 Cycled Air M* | 4,023,645 | - | 4,023,645 |  | $(120,709)$ | - | - | - |  | - | - | $(120,709)$ |
| 63182 | 82\&84 Cycled Air UM | - | - | - |  | $(1,386,675)$ | - | - | - |  | - | - | $(1,386,675)$ |
|  | Total | 1,845,074,408 | 2,305,477 | 1,842,768,931 | \$ | 144,630,443 | 2,464,015 | \$ 18,014,911 | \$ 10,918,091 | \$ | 20,700,786 | \$ (78,833) | 194,185,398 |


SALES BY RATE (Billed) April, 2014

Dakota Electric Association SALES BY RATE (Billed) June, 2014
(Accounting Month information dow

| Account | Rat | kWh |  |  |  |  | KW |  |  | Fixed |  | RTA |  | Revenue | TOTAL <br> revenue <br> per Download |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Usage | $\begin{gathered} \hline \text { DEA } \\ \text { Own Use } \end{gathered}$ | kWh NET |  | Revenue <br> Adjusted | KW | Revenue |  |  |  |  |  |  |  |
| 63100 | 31 Residential | 65,308,495 |  | 65,308,495 | \$ | 7,158,341 | - | \$ | - | \$ | 762,218 | \$ | 861,855 | \$ $(6,193)$ | 8,776,222 |
| 63200 | 32 Resl Dem Ctrl | 17,670 |  | 17,670 | \$ | 1,145 | 66 | \$ | 762 | \$ | 165 | \$ | 233 | \$ - | 2,305 |
| 63133 | 33 Resid Electric Vehicles | 2,629 |  | 2,629 | \$ | 176 | - | \$ | - | \$ | - | \$ | 35 | \$ - | 211 |
| 63036 | 36 Irrigation | 33,177 |  | 33,177 | \$ | 1,582 | 394 | \$ | 9,384 | \$ | 216 | \$ | 431 | \$ - | 11,613 |
| 63037 | 37 Irrigation | 172,396 |  | 172,396 | \$ | 8,218 | 5,621 | \$ | 22,763 | \$ | 8,774 | \$ | 1,052 | \$ - | 40,808 |
| 64100 | 41 Sm Genl Serv | 3,660,862 | 3,102 | 3,657,760 | \$ | 408,035 | - | \$ | - | \$ | 43,683 | \$ | 47,912 | (68) | 499,562 |
| 62441-6244 | *44(1-3) Street Lights | 804,893 |  | 804,893 |  | 141,565.40 | - | \$ | - | \$ | - | \$ | 11,346 | \$ - | 152,911 |
| 62440 | 44 Security Lgts | 61,494 |  | 61,494 | \$ | 12,385 | - | \$ | - | \$ | - | \$ | 836 | \$ - | 13,221 |
| 64500 | 45 Emergency Unmet. | - |  | - | \$ | 432 | - | \$ | - | \$ | - | \$ | - | \$ - | 432 |
| 64600 | 46 General Service | 37,237,992 | 100,800 | 37,137,192 | \$ | 2,301,467 | 126,252 | \$ | 1,465,384 | \$ | 68,039 | \$ | 482,751 | (188) | 4,317,453 |
| 63047 | 47 Municipal | - |  | - | \$ | 325 | - | \$ | - | \$ | - | \$ | - | \$ - | 325 |
| 64690 | 49 Geotherm Heat Pump | 14,124 |  | 14,124 | \$ | 847 | - | \$ | - | \$ | - | \$ | 353 | \$ - | 1,201 |
| 63151 | 51 Resid Energy Stg. | 629,532 |  | 629,532 | \$ | 25,181 | - | \$ | - | \$ | - | \$ | 1,499 | 11 | 26,992 |
| 64151 | 51 Commer Energy Stg. | 9,342 |  | 9,342 | \$ | 374 | - | \$ | - | \$ | - | \$ | - | 22 | 396 |
| 63152 | 52 Resid Interruptible | 2,838,389 |  | 2,838,389 | \$ | 135,963 | - | \$ | - | \$ | - | \$ | 14,181 | 28 | 150,171 |
| 64152 | 52 Commer Interruptible | 56,622 |  | 56,622 | \$ | 2,718 | - | \$ | - | \$ | - | \$ | - | 283 | 3,001 |
| 63900 | Resid-Wellspring * | 520,800 |  | 520,800 | \$ | 2,083 | - | \$ | - | \$ | - | \$ | - | \$ - | 2,083 |
| 64900 | Comm-Wellspring * | 129,100 |  | 129,100 | \$ | 516 | - | \$ | - | \$ | - | \$ | - | \$ - | 516 |
| 63530 | 53 Time of Day | 12,400 |  | 12,400 | \$ | 1,236 | - | \$ | - | \$ | 187 | \$ | 164 | (12) | 1,575 |
| 64540 | 54 Time of Use | 417,456 |  | 417,456 | \$ | 18,406 | 2,036 | \$ | 19,780 | \$ | 240 | \$ | 5,427 | \$ - | 43,853 |
| 64660 | 60 Standby Service | - |  | - | \$ | - | - | \$ | - | \$ | 5,480 | \$ | - | \$ - | 5,480 |
| 64700 | 70 Full Interruptable | 34,847,029 |  | 34,847,029 | \$ | 1,526,490 | 80,706 | \$ | 347,485 | \$ | 17,463 | \$ | 209,082 | (761) | 2,099,760 |
| 64701 | 71 Partial Interruptable | 2,233,080 |  | 2,233,080 | \$ | 97,726 | 10,873 | \$ | 58,781 | \$ | 2,219 | \$ | 13,398 | (73) | 172,052 |
| 63181 | 81 Cycled Air M* | 465,067 |  | 465,067 | \$ | $(13,952)$ | - | \$ | - | \$ | - | \$ | - | \$ - | (13,952) |
| 63182 | 82\&84 Cycled Air UM | - |  | - | \$ | (460,562) | - | \$ | - | \$ | - | \$ | - | \$ - | $(460,562)$ |
|  | Total* | 148,357,582 | 103,902 | 148,253,680 |  | 11,370,697 | 225,948 | \$ | 1,924,339 | \$ | 908,685 | \$ | 1,650,555 | \$ (6,949) | 15,847,327 |

Dakota Electric Association .

| Account | Rate | kWh |  |  |  |  | KW |  |  | Fixed Charges |  | RTA |  | Revenue Adjustments |  | total <br> revenue <br> per Download |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Usage | $\begin{gathered} \text { DEA } \\ \text { Own Use } \end{gathered}$ | kWh NET | Revenue Adjusted |  | KW | Revenue |  |  |  |  |  |  |  |  |
| 63100 | 31 Residential | 79,204,435 |  | 79,204,435 | \$ | 9,143,234 | - | \$ |  | \$ | 763,232 | \$ | 1,045,277 | \$ | $(6,179)$ | 10,945,564 |
| 63200 | 32 Resl Dem Crrl | 17,921 |  | 17,921 | \$ | 1,161 | 83 | \$ | 1,076 | \$ | 165 | \$ | 237 | \$ | - | 2,639 |
| 63133 | 33 Resid Electric Vehicles | 3,173 |  | 3,173 | \$ | 210 | - | \$ | - | \$ | - | \$ | 42 | \$ | - | 252 |
| 63036 | 36 Irrigation | 66,283 |  | 66,283 | \$ | 3,160 | 589 | \$ | 14,018 | \$ | 216 | \$ | 862 | \$ | - | 18,256 |
| 63037 | 37 Irrigation | 2,374,297 |  | 2,374,297 | \$ | 113,183 | 21,895 | \$ | 88,673 | \$ | 8,872 | \$ | 14,483 | \$ | - | 225,211 |
| 64100 | 41 Sm Genl Serv | 3,711,052 | 2,774 | 3,708,278 | \$ | 421,567 | - | \$ | - | \$ | 43,286 | \$ | 48,579 | \$ | (75) | 513,357 |
| 62441-6244. | (44(1-3) Street Lights | 807,120 |  | 807,120 | \$ | 141,909.30 | - | \$ | - | \$ | - | \$ | 11,377 | \$ | - | 153,286 |
| 62440 | 44 Security Lgts | 61,585 |  | 61,585 | \$ | 12,532 | - | \$ | - | \$ | - | \$ | 838 | \$ | - | 13,369 |
| 64500 | 45 Emergency Unmet. | - |  | - | \$ | 432 | - | \$ | - | \$ | - | \$ | - | \$ | - | 432 |
| 64600 | 46 General Service | 40,149,274 | 104,640 | 40,044,634 | \$ | 2,457,016 | 126,788 | \$ | 1,489,763 | \$ | 68,311 | \$ | 520,578 | \$ | (188) | 4,535,480 |
| 63047 | 47 Municipal | - |  | - | \$ | 325 | - | \$ | - | \$ | - | \$ | - | \$ | - | 325 |
| 64690 | 49 Geotherm Heat Pump | 17,159 |  | 17,159 | \$ | 1,030 | - | \$ | - | \$ | - | \$ | 429 | \$ | - | 1,459 |
| 63151 | 51 Resid Energy Stg. | 696,884 |  | 696,884 | \$ | 27,875 | - | \$ | - | \$ | - | \$ | 1,662 | \$ | 11 | 29,548 |
| 64151 | 51 Commer Energy Stg. | 7,503 |  | 7,503 | \$ | 300 | - | \$ | - | \$ | - | \$ | - | \$ | 18 | 318 |
| 63152 | 52 Resid Interruptible | 3,229,482 |  | 3,229,482 | \$ | 154,969 | - | \$ | - | \$ | - | \$ | 16,133 | \$ | 34 | 171,136 |
| 64152 | 52 Commer Interruptible | 63,338 |  | 63,338 | \$ | 3,040 | - | \$ | - | \$ | - | \$ | - | \$ | 317 | 3,357 |
| 63900 | Resid-Wellspring * | 535,200 |  | 535,200 | \$ | 2,141 | - | \$ | - | \$ | - | \$ | - | \$ | - | 2,141 |
| 64900 | Comm-Wellspring * | 127,800 |  | 127,800 | \$ | 511 | - | \$ | - | \$ | - | \$ | - | \$ | - | 511 |
| 63530 | 53 Time of Day | 14,882 |  | 14,882 | \$ | 1,499 | - | \$ | - | \$ | 187 | \$ | 196 | \$ | (12) | 1,871 |
| 64540 | 54 Time of Use | 507,312 |  | 507,312 | \$ | 22,348 | 2,070 | \$ | 17,928 | \$ | 240 | \$ | 6,595 | \$ | - | 47,112 |
| 64660 | 60 Standby Service | - |  | - | \$ | - | - | \$ | - | \$ | 5,480 | \$ | - | \$ | - | 5,480 |
| 64700 | 70 Full Interruptable | 35,811,446 |  | 35,811,446 | \$ | 1,618,617 | 82,612 | \$ | 356,762 | \$ | 17,689 | \$ | 214,869 | \$ | (788) | 2,207,149 |
| 64701 | 71 Partial Interruptable | 2,352,152 |  | 2,352,152 | \$ | 102,971 | 9,907 | \$ | 51,016 | \$ | 2,228 | , | 14,113 | \$ | (73) | 170,254 |
| 63181 | 81 Cycled Air M* | 923,819 |  | 923,819 | \$ | (27,715) | - | \$ | - | \$ | - | \$ | - | \$ | - | $(27,715)$ |
| 63182 | $82 \& 84$ Cycled Air UM | - |  | - | \$ | $(462,782)$ | - | \$ | - | \$ | - | \$ | - | \$ | - | $(462,782)$ |
|  | Total* | 169,095,298 | 107,414 | 168,987,884 | \$ | 13,739,534 | 243,944 | \$ | 2,019,237 | \$ | 909,906 | \$ | 1,896,269 | \$ | $(6,936)$ | 18,558,009 |

Dakota Electric Association August, 2014
(Accounting Month information downlo

|  |  | kWh |  |  |  |  | KW |  |  |  |  |  |  |  |  | TOTAL <br> REVENUE per Download |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Account | Rate | Usage | DEA <br> Own Use | $\begin{aligned} & \text { kWh } \\ & \text { NET } \end{aligned}$ |  | Revenue <br> Adjusted | KW |  | Revenue |  | Fixed <br> Charges |  | RTA |  | Revenue <br> Adjustments |  |
| 63100 | 31 Residential | 87,185,005 |  | 87,185,005 | \$ | 10,063,909 | - | \$ | - | \$ | 763,062 | \$ | 1,150,445 | \$ | $(6,279)$ | 11,971,137 |
| 63200 | 32 Resl Dem Ctrl | 18,110 |  | 18,110 | \$ | 1,174 | 74 | \$ | 948 | \$ | 165 | \$ | 239 | \$ | \$ - | 2,526 |
| 63133 | 33 Resid Electric Vehicles | 3,739 |  | 3,739 | \$ | 280 | - | \$ | - | \$ | - | \$ | 49 | \$ | \$ - | 329 |
| 63036 | 36 Irrigation | 81,212 |  | 81,212 | \$ | 3,871 | 529 | \$ | 12,594 | \$ | 221 | \$ | 1,056 | \$ | \$ - | 17,742 |
| 63037 | 37 Irrigation | 5,157,107 |  | 5,157,107 | \$ | 245,839 | 23,536 | \$ | 95,322 | \$ | 8,886 | \$ | 31,458 | \$ | \$ - | 381,506 |
| 64100 | 41 Sm Genl Serv | 3,908,649 | 2,610 | 3,906,039 | \$ | 444,020 | - | \$ | - | \$ | 43,156 | \$ | 51,165 | \$ | (73) | 538,268 |
| 62441-6244. | 44(1-3) Street Lights | 804,496 |  | 804,496 | \$ | 141,454.09 | - | \$ | - | \$ | - | \$ | 11,340 | \$ | \$ - | 152,794 |
| 62440 | 44 Security Lgts | 61,619 |  | 61,619 | \$ | 12,427 | - | \$ | - | \$ | - | \$ | 838 | \$ | \$ - | 13,265 |
| 64500 | 45 Emergency Unmet. | - |  | - | \$ | 432 | - | \$ | - | \$ | - | \$ | - | \$ | \$ - | 432 |
| 64600 | 46 General Service | 42,593,421 | 108,960 | 42,484,461 | \$ | 2,603,775 | 130,704 | \$ | 1,535,771 | \$ | 69,384 | \$ | 552,288 | \$ | (192) | 4,761,026 |
| 63047 | 47 Municipal | - |  | - | \$ | 325 | - | \$ | - | \$ | - | \$ | - | \$ | \$ - | 325 |
| 64690 | 49 Geotherm Heat Pump | 19,312 |  | 19,312 | \$ | 1,159 | - | \$ | - | \$ | - | \$ | 483 | \$ | \$ - | 1,642 |
| 63151 | 51 Resid Energy Stg. | 740,760 |  | 740,760 | \$ | 29,572 | - | \$ | - | \$ | - | \$ | 1,765 | \$ | 13 | 31,350 |
| 64151 | 51 Commer Energy Stg. | 8,716 |  | 8,716 | \$ | 349 | - | \$ | - | \$ | - | \$ | - | \$ | 21 | 370 |
| 63152 | 52 Resid Interruptible | 3,601,143 |  | 3,601,143 | \$ | 172,855 | - | \$ | - | \$ | - | \$ | 18,040 | \$ | 42 | 190,937 |
| 64152 | 52 Commer Interruptible | 72,979 |  | 72,979 | \$ | 3,503 | - | \$ | - | \$ | - | \$ | - | \$ | 365 | 3,868 |
| 63900 | Resid-Wellspring * | 543,100 |  | 543,100 | \$ | 2,172 | - | \$ | - | \$ | - | \$ | - | \$ | \$ - | 2,172 |
| 64900 | Comm-Wellspring * | 131,800 |  | 131,800 | \$ | 527 | - | \$ | - | \$ | - | \$ | - | \$ | \$ - | 527 |
| 63530 | 53 Time of Day | 14,752 |  | 14,752 | \$ | 1,498 | - | \$ | - | \$ | 187 | \$ | 195 | \$ | (12) | 1,868 |
| 64540 | 54 Time of Use | 711,216 |  | 711,216 | \$ | 31,251 | 2,297 | \$ | 20,218 | \$ | 240 | \$ | 9,246 | \$ | \$ - | 60,955 |
| 64660 | 60 Standby Service | - |  | - | \$ | - | - | \$ | - | \$ | 5,480 | \$ | - | \$ | \$ - | 5,480 |
| 64700 | 70 Full Interruptable | 38,071,040 |  | 38,071,040 | \$ | 1,678,861 | 83,202 | \$ | 358,128 | \$ | 17,949 | \$ | 228,426 | \$ | (738) | 2,282,626 |
| 64701 | 71 Partial Interruptable | 2,402,616 |  | 2,402,616 | \$ | 105,094 | 10,324 | \$ | 57,463 | \$ | 2,228 | \$ | 14,416 | \$ | (73) | 179,127 |
| 63181 | 81 Cycled Air M* | 1,177,942 |  | 1,177,942 | \$ | $(35,338)$ | - | \$ | - | \$ | - | \$ | - | \$ | \$ - | $(35,338)$ |
| 63182 | 82\&84 Cycled Air UM | - |  | - | \$ | $(463,283)$ | - | \$ | - | \$ | - | \$ | - | \$ | \$ - | $(463,283)$ |
|  | Total* | 185,455,892 | 111,570 | 185,344,322 | \$ | 15,045,724 | 250,666 | \$ | 2,080,445 | \$ | 910,958 | \$ | 2,071,449 | \$ | $(6,927)$ | 20,101,650 |


SALES BY RATE (Billed)
(Accounting Month information downloaded from Orcom)
Dakota Electric Association
SALES BY RATE (Billed)






SALES BY RATE (Billed) November, 2014



Dakota Electric Assoc SALES BY RATE (Billed) Full Year 2015

Dakota Electric Association SALES BY RATE (Billed) January, 2015
Workpaper 12

Workpaper 12

Dakota Electric Association April, 2015

| Account | Rate | kWh |  |  |  |  | KW |  |  | Fixed Charges |  | RTA |  | Revenue <br> Adjustments |  | TOTAL <br> revenue <br> per Download |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Usage | $\begin{gathered} \text { DEA } \\ \text { Own Use } \end{gathered}$ | $\mathrm{kWh}$ NET | Revenue Adjusted |  | KW | Revenue |  |  |  |  |  |  |  |  |
| 63100 | 31 Residential | 56,306,483 |  | 56,306,483 | \$ | 5,711,319 |  | \$ |  | \$ | 770,009 | \$ | 878,101 | \$ | $(6,233)$ | 7,353,196 |
| 63200 | 32 Resl Dem Crrl | 35,632 |  | 35,632 | \$ | 2,309 | 77 | \$ | 717 | \$ | 165 | \$ | 556 | \$ | - | 3,747 |
| 63133 | 33 Resid Electric Vehicles | 6,602 |  | 6,602 | \$ | 428 | - | \$ | - | \$ | - | \$ | 103 | \$ | - | 531 |
| 63036 | 36 Irrigation | 8,584 |  | 8,584 | \$ | 409 | 332 | \$ | 4,654 | \$ | 196 | \$ | 135 | \$ | - | 5,394 |
| 63037 | 37 Irrigation | 39,727 |  | 39,727 | \$ | 1,894 | 1,438 | \$ | 5,825 | \$ | 8,947 | \$ | 429 | \$ | - | 17,095 |
| 64100 | 41 Sm Genl Serv | 3,615,640 | 4,217 | 3,611,423 | \$ | 358,880 | - | \$ | - | \$ | 43,019 | \$ | 56,083 | \$ | 0 | 457,983 |
| 62441-6244 | 44(1-3) Street Lights | 809,133 |  | 809,133 |  | 141,964.78 | - | \$ | - | \$ | - | \$ | 13,326 | \$ | - | 155,291 |
| 62440 | 44 Security Lgts | 58,022 |  | 58,022 | \$ | 12,225 | - | \$ | - | \$ | - | \$ | 959 | \$ | - | 13,184 |
| 64500 | 45 Emergency Unmet. | - |  |  | \$ | 432 | - | \$ | - | \$ | - | \$ | - | \$ | - | 432 |
| 64600 | 46 General Service | 33,904,535 | 145,344 | 33,759,191 | \$ | 2,073,012 | 109,124 | \$ | 943,920 | \$ | 70,833 | \$ | 516,489 | \$ | $(1,447)$ | 3,602,807 |
| 63047 | 47 Municipal | - |  | - | \$ | 325 | - | \$ | - | \$ | - | \$ | - | \$ | - | 325 |
| 64690 | 49 Geotherm Heat Pump | 15,418 |  | 15,418 | \$ | 925 | - | \$ | - | \$ | - | \$ | 304 | \$ | - | 1,229 |
| 63151 | 51 Resid Energy Stg. | 756,651 |  | 756,651 | \$ | 30,266 | - | \$ | - | \$ | - | \$ | 1,791 | \$ | 25 | 32,082 |
| 64151 | 51 Commer Energy Stg. | 12,005 |  | 12,005 | \$ | 480 | - | \$ | - | \$ | - | \$ | - | \$ | 29 | 509 |
| 63152 | 52 Resid Interruptible | 3,586,725 |  | 3,586,725 | \$ | 171,899 | - | \$ | - | \$ | - | \$ | 18,648 | \$ | 41 | 190,588 |
| 64152 | 52 Commer Interruptible | 87,687 |  | 87,687 | \$ | 4,209 | - | \$ | - | \$ | - | \$ | 0 | \$ | 456 | 4,665 |
| 63900 | Resid-Wellspring * | 506,100 |  | 506,100 | \$ | 2,024 | - | \$ | - | \$ | - | \$ | - | \$ | - | 2,024 |
| 64900 | Comm-Wellspring * | 128,500 |  | 128,500 | \$ | 514 | - | \$ | - | \$ | - | \$ | - | \$ | - | 514 |
| 63530 | 53 Time of Day | 14,201 |  | 14,201 | \$ | 1,375 | - | \$ | - | \$ | 191 | \$ | 222 | \$ | (12) | 1,776 |
| 64540 | 54 Time of Use | 37,920 |  | 37,920 | \$ | 1,761 | 383 | \$ | 2,896 | \$ | 180 | \$ | 580 | \$ | - | 5,417 |
| 64660 | 60 Standby Service | - |  | - | \$ | - | - | + | - | \$ | 4,310 | \$ | - | \$ | - | 4,310 |
| 64700 | 70 Full Interruptable | 30,435,260 |  | 30,435,260 | \$ | 1,334,019 | 72,138 | \$ | 310,121 | \$ | 18,371 | \$ | 316,527 | \$ | (684) | 1,978,354 |
| 64701 | 71 Partial Interruptable | 1,884,104 |  | 1,884,104 | \$ | 82,390 | 8,460 | \$ | 40,569 | \$ | 2,148 | \$ | 19,595 | \$ | (71) | 144,630 |
| 63181 | 81 Cycled Air M* | 932 |  | 932 | \$ | (28) | - | \$ | - | \$ | - | \$ | - | \$ | - | (28) |
| 63182 | 82\&84 Cycled Air UM | - |  | - | \$ | - | - | \$ | - | \$ | - | \$ | - | \$ | - |  |
|  | Total* | 131,614,329 | 149,561 | 131,464,768 | \$ | 9,933,033 | 191,951 | \$ | 1,308,702 | \$ | 918,370 | \$ | 1,823,847 | \$ | $(7,897)$ | 13,976,055 ${ }^{\text {Jom }}$ |

Dakota Electric Association SALES BY

| Account | Rate | kWh |  |  |  |  | KW |  |  | Fixed Charges |  | RTA |  | Revenue Adjustments |  | total <br> revenue <br> per Download |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Usage | $\begin{gathered} \text { DEA } \\ \text { Own Use } \end{gathered}$ | kWh NET | Revenue <br> Adjusted |  | KW | Revenue |  |  |  |  |  |  |  |  |
| 63100 | 31 Residential | 53,850,561 |  | 53,850,561 | \$ | 5,462,370 | - | \$ | - | \$ | 767,526 | \$ | 839,860 | \$ | $(6,035)$ | 7,063,721 |
| 63200 | 32 Resl Dem Ctrl | 26,061 |  | 26,061 | \$ | 1,689 | 69 | \$ | 637 | \$ | 166 | \$ | 407 | \$ | - | 2,899 |
| 63133 | 33 Resid Electric Vehicles | 6,511 |  | 6,511 | \$ | 433 | - | \$ | - | \$ | - | \$ | 102 | \$ | - | 535 |
| 63036 | 36 Irrigation | 29,166 |  | 29,166 | \$ | 1,390 | 346 | \$ | 4,838 | \$ | 240 | \$ | 458 | \$ | - | 6,927 |
| 63037 | 37 Irrigation | 117,533 |  | 117,533 | \$ | 5,603 | 3,018 | \$ | 12,224 | \$ | 9,088 | \$ | 1,269 | \$ | - | 28,184 |
| 64100 | 41 Sm Genl Serv | 3,292,069 | 2,668 | 3,289,401 | \$ | 326,704 | - | \$ |  | \$ | 42,963 | \$ | 51,075 | \$ | (29) | 420,713 |
| 62441-6244 | 4.44(1-3) Street Lights | 810,120 |  | 810,120 |  | 142,085.20 | - | \$ |  | \$ | - | \$ | 13,343 | \$ | - | 155,428 |
| 62440 | 44 Security Lgts | 57,346 |  | 57,346 | \$ | 12,083 | - | \$ |  | \$ | - | \$ | 947 | \$ | - | 13,030 |
| 64500 | 45 Emergency Unmet. | - |  | - | \$ | 432 | - | \$ | - | \$ | - | \$ | - | \$ | - | 432 |
| 64600 | 46 General Service | 33,215,486 | 100,800 | 33,114,686 | \$ | 2,048,731 | 113,287 | \$ | 979,935 | \$ | 70,654 | \$ | 506,662 | \$ | (903) | 3,605,079 |
| 63047 | 47 Municipal | - |  | - | \$ | 325 | - | \$ | - | \$ | - | \$ | - | \$ | - | 325 |
| 64690 | 49 Geotherm Heat Pump | 10,702 |  | 10,702 | \$ | 642 | - | \$ | - | \$ | - | \$ | 211 | \$ | - | 853 |
| 63151 | 51 Resid Energy Stg. | 603,984 |  | 603,984 | \$ | 24,159 | - | \$ | - | \$ | - | \$ | 1,433 | \$ | 16 | 25,609 |
| 64151 | 51 Commer Energy Stg. | 8,161 |  | 8,161 | \$ | 326 | - | \$ |  | \$ | - | \$ | - | \$ | 20 | 346 |
| 63152 | 52 Resid Interruptible | 2,739,073 |  | 2,739,073 | \$ | 131,185 | - | \$ | - | \$ | - | \$ | 14,239 | \$ | 28 | 145,452 |
| 64152 | 52 Commer Interruptible | 53,070 |  | 53,070 | \$ | 2,547 | - | \$ |  | \$ | - | \$ | 0 | \$ | 276 | 2,823 |
| 63900 | Resid-Wellspring * | 499,100 |  | 499,100 | \$ | 1,996 | - | \$ | - | \$ | - | \$ | - | \$ | - | 1,996 |
| 64900 | Comm-Wellspring * | 120,400 |  | 120,400 | \$ | 482 | - | \$ |  | \$ | - | \$ | - | \$ | - | 482 |
| 63530 | 53 Time of Day | 12,188 |  | 12,188 | \$ | 1,180 | - | \$ | - | \$ | 184 | \$ | 190 | \$ | (12) | 1,542 |
| 64540 | 54 Time of Use | 10,128 |  | 10,128 | \$ | 594 | 384 | \$ | 2,395 | \$ | 180 | \$ | 155 | \$ | - | 3,324 |
| 64660 | 60 Standby Service | 11,232 |  | 11,232 | \$ | 3,792 | 293 | \$ | 2,536 | \$ | 28 | \$ | 172 | \$ | - | 6,528 |
| 64700 | 70 Full Interruptable | 32,832,730 |  | 32,832,730 | \$ | 1,439,471 | 79,042 | \$ | 339,795 | \$ | 18,409 | \$ | 341,460 | \$ | (731) | 2,138,405 |
| 64701 | 71 Partial Interruptable | 2,034,432 |  | 2,034,432 | \$ | 88,985 | 9,963 | \$ | 48,509 | \$ | 2,059 | \$ | 21,158 | \$ | (71) | 160,641 |
| 63181 | 81 Cycled Air M* | 165,093 |  | 165,093 | \$ | $(4,953)$ | - | \$ | - | \$ | - | \$ | - | \$ | - | (4,953) |
| 63182 | 82\&84 Cycled Air UM | - |  | - | \$ | - | - | \$ | - | \$ | - | \$ | - | \$ | - |  |
|  | Total* | 129,720,553 | 103,468 | 129,617,085 | \$ | 9,692,253 | 206,402 | \$ | 1,390,869 | \$ | 911,498 | \$ | 1,793,141 | \$ | $(7,441)$ | 13,780,321 |




Workaper 12
Dakota Electric Association SALES BY RATE (Billed) July, 2015
(Accounting Month information downloaded from Orcom)

| Account | Rate | kWh |  |  |  |  | KW |  |  | $\begin{gathered} \text { Fixed } \\ \text { Charges } \\ \hline \end{gathered}$ |  | RTA |  | Revenue <br> Adjustments |  | TOTAL <br> revenue per Download |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Usage | $\begin{gathered} \text { DEA } \\ \text { Own Use } \end{gathered}$ | kWh NET | Revenue <br> Adjusted |  | KW | Revenue |  |  |  |  |  |  |  |  |
| 63100 | 31 Residential | 80,550,314 |  | 80,550,314 | \$ | 9,299,135 |  | \$ |  | \$ | 770,171 | \$ | 1,256,536 | \$ | $(6,400)$ | 11,319,442 |
| 63200 | 32 Resl Dem Crrl | 16,414 |  | 16,414 | \$ | 1,064 | 61 | \$ | 788 | \$ | 158 | \$ | 256 | \$ | - | 2,265 |
| 63133 | 33 Resid Electric Vehicles | 5,991 |  | 5,991 | \$ | 409 | - | \$ | - | \$ | - | \$ | 93 | \$ | - | 503 |
| 63036 | 36 Irrigation | 48,359 |  | 48,359 | \$ | 2,305 | 540 | \$ | 12,856 | \$ | 216 | \$ | 759 | \$ | - | 16,137 |
| 63037 | 37 Irrigation | 1,646,149 |  | 1,646,149 | \$ | 78,472 | 20,114 | \$ | 81,463 | \$ | 9,130 | \$ | 17,778 | \$ | - | 186,843 |
| 64100 | 41 Sm Genl Serv | 3,595,754 | 2,743 | 3,593,011 | \$ | 407,318 | - | \$ | - | \$ | 42,868 | \$ | 55,899 | \$ | (104) | 505,981 |
| 62441-6244: | 44(1-3) Street Lights | 810,695 |  | 810,695 | \$ | 142,189.07 | - | \$ | - | \$ | - | \$ | 13,352 | \$ | - | 155,541 |
| 62440 | 44 Security Lgts | 57,203 |  | 57,203 | \$ | 12,057 | - | \$ | - | \$ | - | \$ | 945 | \$ | - | 13,002 |
| 64500 | 45 Emergency Unmet. | - |  |  | \$ | 432 | - | \$ | - | \$ | - | \$ | - | \$ | - | 432 |
| 64600 | 46 General Service | 40,698,556 | 108,480 | 40,590,076 | \$ | 2,484,340 | 127,395 | \$ | 1,496,892 | \$ | 71,152 | \$ | 621,021 | \$ | (962) | 4,672,443 |
| 63047 | 47 Municipal | - |  | - | \$ | 325 | - | \$ | - | \$ | - | \$ | - | \$ | - | 325 |
| 64690 | 49 Geotherm Heat Pump | 13,725 |  | 13,725 | \$ | 824 | - | \$ |  | \$ | - | \$ | 270 | \$ |  | 1,094 |
| 63151 | 51 Resid Energy Stg. | 746,300 |  | 746,300 | \$ | 29,852 | - | \$ | - | \$ | - | \$ | 1,791 | \$ | - | 31,643 |
| 64151 | 51 Commer Energy Stg. | 7,645 |  | 7,645 | \$ | 306 | - | \$ | - | \$ | - | \$ | 18 | \$ | - | 324 |
| 63152 | 52 Resid Interruptible | 3,345,706 |  | 3,345,706 | \$ | 160,562 | - | \$ | - | \$ | - | \$ | 17,414 | \$ | - | 177,976 |
| 64152 | 52 Commer Interruptible | 67,463 |  | 67,463 | \$ | 3,238 | - | \$ | - | \$ | - | \$ | 351 | \$ | - | 3,589 |
| 63900 | Resid-Wellspring * | 524,400 |  | 524,400 | \$ | 2,098 | - | \$ | - | \$ | - | \$ | - | \$ | - | 2,098 |
| 64900 | Comm-Wellspring * | 123,100 |  | 123,100 | \$ | 492 | - | \$ | - | \$ | - | \$ | - | \$ | - | 492 |
| 63530 | 53 Time of Day | 14,513 |  | 14,513 | \$ | 1,468 | - | \$ | - | \$ | 187 | \$ | 226 | \$ | (12) | 1,869 |
| 64540 | 54 Time of Use | 89,568 |  | 89,568 | \$ | 3,979 | 725 | \$ | 6,259 | \$ | 180 | \$ | 1,370 | \$ | - | 11,788 |
| 64660 | 60 Standby Service | - |  | - | \$ | - | - | \$ | - | \$ | 5,600 | \$ | - | \$ | - | 5,600 |
| 64700 | 70 Full Interruptable | 37,035,009 |  | 37,035,009 | \$ | 1,653,192 | 83,616 | \$ | 359,766 | \$ | 18,270 | \$ | 385,164 | \$ | (738) | 2,415,654 |
| 64701 | 71 Partial Interruptable | 2,075,352 |  | 2,075,352 | \$ | 90,768 | 9,622 | \$ | 51,334 | \$ | 2,237 | \$ | 21,584 | \$ | (71) | 165,852 |
| 63181 | 81 Cycled Air M* | 1,009,332 |  | 1,009,332 | \$ | $(30,280)$ | - | \$ | - | \$ | - | \$ | - | \$ | - | $(\mathbf{3 0 , 2 8 0})$ |
| 63182 | 82\&84 Cycled Air UM | - |  | - | \$ | (469,254) | - | \$ | - | \$ | - | \$ | - | \$ | - | $(469,254)$ |
|  | Total* | 170,824,716 | 111,223 | 170,713,493 | \$ | 13,875,291 | 242,074 | \$ | 2,009,359 | \$ | 920,168 | \$ | 2,394,829 | \$ | $(8,287)$ | 19,191,36\% |

SALES BY RATE (Billed) 2015

| Account | Rate | August, 2015 <br> (Accounting Month information downloaded from Orcom) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | kWh |  |  |  |  | KW |  |  | Fixed <br> Charges |  | RTA |  | Revenue <br> Adjustments |  | TOTAL <br> REVENUE <br> per Download |
|  |  | Usage | $\begin{gathered} \text { DEA } \\ \text { Own Use } \end{gathered}$ | $\begin{aligned} & \mathrm{kWh} \\ & \mathrm{NET} \end{aligned}$ | Revenue <br> Adjusted |  | KW |  | Revenue |  |  |  |  |  |  |  |
| 63100 | 31 Residential | 93,254,397 |  | 93,254,397 | \$ | 10,764,953 | - | \$ | - | \$ | 766,268 | \$ | 1,454,689 | \$ | $(6,413)$ | 12,979,496 |
| 63200 | 32 Resl Dem Ctrl | 17,928 |  | 17,928 | \$ | 1,162 | 67 | \$ | 858 | \$ | 165 | \$ | 280 | \$ | - | 2,464 |
| 63133 | 33 Resid Electric Vehicles | 6,400 |  | 6,400 | \$ | 445 | - | \$ | - | \$ | - | \$ | 100 | \$ | - | 545 |
| 63036 | 36 Irrigation | 63,041 |  | 63,041 | \$ | 3,005 | 547 | \$ | 13,021 | \$ | 216 | \$ | 990 | \$ | - | 17,232 |
| 63037 | 37 Irrigation | 2,849,222 |  | 2,849,222 | \$ | 135,822 | 23,030 | \$ | 93,271 | \$ | 9,143 | \$ | 30,772 | \$ | - | 269,008 |
| 64100 | 41 Sm Genl Serv | 3,684,717 | 2,770 | 3,681,947 | \$ | 417,257 | - | \$ | - | \$ | 42,749 | \$ | 57,285 | \$ | (112) | 517,179 |
| 62441-6244. | 44(1-3) Street Lights | 815,650 |  | 815,650 | \$ | 143,039.13 | - | \$ | - | \$ | - | \$ | 13,434 | \$ | - | 156,473 |
| 62440 | 44 Security Lgts | 57,443 |  | 57,443 | \$ | 12,110 | - | \$ | - | \$ | - | \$ | 949 | \$ | - | 13,059 |
| 64500 | 45 Emergency Unmet. | - |  | - | \$ | 432 | - | \$ | - | \$ | - | \$ | - | \$ | - | 432 |
| 64600 | 46 General Service | 41,084,265 | 109,440 | 40,974,825 | \$ | 2,523,305 | 132,292 | \$ | 1,554,429 | \$ | 71,409 | \$ | 626,897 | \$ | $(1,032)$ | 4,775,009 |
| 63047 | 47 Municipal | - |  | - | \$ | 325 | - | \$ | - | \$ | - | \$ | - | \$ | - | 325 |
| 64690 | 49 Geotherm Heat Pump | 15,233 |  | 15,233 | \$ | 914 | - | \$ | - | \$ | - | \$ | 300 | \$ | - | 1,214 |
| 63151 | 51 Resid Energy Stg. | 887,874 |  | 887,874 | \$ | 35,515 | - | \$ | - | \$ | - | \$ | 2,131 | \$ | - | 37,646 |
| 64151 | 51 Commer Energy Stg. | 8,972 |  | 8,972 | \$ | 359 | - | \$ | - | \$ | - | \$ | 22 | \$ | - | 380 |
| 63152 | 52 Resid Interruptible | 4,161,841 |  | 4,161,841 | \$ | 199,768 | - | \$ | - | \$ | - | \$ | 21,668 | \$ | - | 221,436 |
| 64152 | 52 Commer Interruptible | 76,922 |  | 76,922 | \$ | 3,692 | - | \$ | - | \$ | - | \$ | 400 | \$ | - | 4,092 |
| 63900 | Resid-Wellspring * | 536,900 |  | 536,900 | \$ | 2,148 | - | \$ | - | \$ | - | \$ | - | \$ | - | 2,148 |
| 64900 | Comm-Wellspring * | 125,900 |  | 125,900 | \$ | 504 | - | \$ | - | \$ | - | \$ | - | \$ | - | 504 |
| 63530 | 53 Time of Day | 15,841 |  | 15,841 | \$ | 1,625 | - | \$ | - | \$ | 187 | \$ | 247 | \$ | (12) | 2,047 |
| 64540 | 54 Time of Use | 129,504 |  | 129,504 | \$ | 5,690 | 1,032 | \$ | 9,148 | \$ | 180 | \$ | 1,981 | \$ | - | 17,000 |
| 64660 | 60 Standby Service | - |  | - | \$ | - | - | \$ | - | \$ | 5,600 | \$ | - | \$ | - | 5,600 |
| 64700 | 70 Full Interruptable | 36,592,895 |  | 36,592,895 | \$ | 1,604,448 | 82,733 | \$ | 355,750 | \$ | 18,270 | \$ | 380,566 | \$ | (763) | 2,358,272 |
| 64701 | 71 Partial Interruptable | 2,271,640 |  | 2,271,640 | \$ | 99,388 | 9,544 | \$ | 53,332 | \$ | 2,059 | \$ | 23,625 | \$ | (72) | 178,333 |
| 63181 | 81 Cycled Air M ${ }^{*}$ | 1,454,347 |  | 1,454,347 | \$ | $(43,630)$ | - | \$ | - | \$ | - | \$ | - | \$ | - | $(43,630)$ |
| 63182 | 82\&84 Cycled Air UM | - |  | - | \$ | $(469,535)$ | - | \$ | - | \$ | - | \$ | - | \$ | - | (469,535) |
|  |  | 185,993,785 | 112,210 | 185,881,575 | \$ | 15,442,741 | 249,244 | \$ | 2,079,810 | \$ | 916,246 | \$ | 2,616,334 | \$ | $(8,403)$ | 21,046,729 |


Dakota Electric Association SALES BY RATE (Billed) September, 2015
(Accounting Month information downloaded from Orcom)

| Account | Rate | kWh |  |  |  |  | KW |  |  | Fixed <br> Charges |  | RTA |  | Revenue <br> Adjustments |  | TOTAL <br> REVENUE per Download |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Usage | $\begin{gathered} \hline \text { DEA } \\ \text { Own Use } \end{gathered}$ | kWh <br> NET | Revenue <br> Adjusted |  | KW | Revenue |  |  |  |  |  |  |  |  |
| 63100 | 31 Residential | 84,262,420 |  | 84,262,420 | \$ | 9,111,077 | - | \$ | - | \$ | 770,849 | \$ | 1,314,401 | \$ | $(6,456)$ | 11,189,871 |
| 63200 | 32 Resl Dem Ctrl | 17,958 |  | 17,958 | \$ | 1,164 | 64 | \$ | 666 | \$ | 165 | \$ | 280 | \$ | - | 2,275 |
| 63133 | 33 Resid Electric Vehicles | 6,255 |  | 6,255 | \$ | 435 | - | \$ | - | \$ | - | \$ | 98 | \$ | - | 533 |
| 63036 | 36 Irrigation | 45,917 |  | 45,917 | \$ | 2,189 | 490 | \$ | 6,856 | \$ | 216 | \$ | 721 | \$ | - | 9,982 |
| 63037 | 37 Irrigation | 792,217 |  | 792,217 | \$ | 37,765 | 17,282 | \$ | 69,991 | \$ | 9,163 | \$ | 8,556 | \$ | - | 125,475 |
| 64100 | 41 Sm Genl Serv | 3,660,045 | 3,051 | 3,656,994 | \$ | 372,000 | - | \$ | - | \$ | 42,779 | \$ | 56,899 | \$ | (87) | 471,592 |
| 62441-6244 | 44(1-3) Street Lights | 818,800 |  | 818,800 |  | 143,553.22 | - | \$ | - | \$ | - | \$ | 13,486 | \$ | - | 157,039 |
| 62440 | 44 Security Lgts | 56,604 |  | 56,604 | \$ | 11,996 | - | \$ | - | \$ | - | \$ | 935 | \$ | - | 12,931 |
| 64500 | 45 Emergency Unmet. | - |  | - | \$ | 432 | - | \$ | - | \$ | - | \$ | - | \$ | - | 432 |
| 64600 | 46 General Service | 41,758,629 | 103,680 | 41,654,949 | \$ | 2,555,839 | 131,746 | \$ | 1,164,334 | \$ | 71,706 | \$ | 637,284 | \$ | (975) | 4,428,188 |
| 63047 | 47 Municipal | - |  | - | \$ | 325 | - | \$ | - | \$ | - | \$ | - | \$ | - | 325 |
| 64690 | 49 Geotherm Heat Pump | 13,251 |  | 13,251 | \$ | 795 | - | \$ | - | \$ | - | \$ | 261 | \$ | - | 1,056 |
| 63151 | 51 Resid Energy Stg. | 738,365 |  | 738,365 | \$ | 29,535 | - | \$ | - | \$ | - | \$ | 1,772 | \$ | - | 31,307 |
| 64151 | 51 Commer Energy Stg. | 7,714 |  | 7,714 | \$ | 309 | - | \$ | - | \$ | - | \$ | 19 | \$ | - | 327 |
| 63152 | 52 Resid Interruptible | 3,376,375 |  | 3,376,375 | \$ | 162,066 | - | \$ | - | \$ | - | \$ | 17,588 | \$ | - | 179,654 |
| 64152 | 52 Commer Interruptible | 61,992 |  | 61,992 | \$ | 2,976 | - | \$ | - | \$ | - | \$ | 322 | \$ | - | 3,298 |
| 63900 | Resid-Wellspring * | 524,700 |  | 524,700 | \$ | 2,099 | - | \$ | - | \$ | - | \$ | - | \$ | - | 2,099 |
| 64900 | Comm-Wellspring * | 123,100 |  | 123,100 | \$ | 492 | - | \$ | - | \$ | - | \$ | - | \$ | - | 492 |
| 63530 | 53 Time of Day | 15,345 |  | 15,345 | \$ | 1,511 | - | \$ | - | \$ | 187 | \$ | 239 | \$ | (12) | 1,926 |
| 64540 | 54 Time of Use | 200,544 |  | 200,544 | \$ | 8,812 | 860 | \$ | 4,313 | \$ | 180 | \$ | 3,068 | \$ | - | 16,373 |
| 64660 | 60 Standby Service | - |  | - | \$ | \$ - | - | \$ | - | \$ | 4,310 | \$ | - | \$ | - | 4,310 |
| 64700 | 70 Full Interruptable | 34,894,881 |  | 34,894,881 | \$ | 1,530,199 | 84,125 | \$ | 361,737 | \$ | 18,279 | \$ | 362,907 | \$ | (758) | 2,272,364 |
| 64701 | 71 Partial Interruptable | 2,382,232 |  | 2,382,232 | \$ | 104,267 | 10,080 | \$ | 47,725 | \$ | 2,059 | \$ | 24,775 | \$ | (71) | 178,755 |
| 63181 | 81 Cycled Air M ${ }^{*}$ | 1,033,785 |  | 1,033,785 | \$ | $(31,014)$ | - | \$ | - | \$ | - | \$ | - | \$ | - | $(31,014)$ |
| 63182 | 82\&84 Cycled Air UM | - |  | - | \$ | (3) | - | \$ | - | \$ | - | \$ | - | \$ | - | (3)- |
|  | Total* | 173,109,544 | 106,731 | 173,002,813 |  | 14,048,820 | 244,646 | \$ | 1,655,623 | \$ | 919,894 | \$ | 2,443,612 | \$ | $(8,359)$ | 19,059,589 ${ }_{\text {¢ }}^{\text {ºm }}$ |

Dakota Electric Association SALES BY

Dakota Electric Association
November, 2015
(Accounting Month information downlo

| Account | Rate | kWh |  |  |  |  | KW |  |  | Fixed <br> Charges |  | RTA |  | RevenueAdjustments |  | TOTAL <br> REVENUE <br> per Download <br> 7,406,659 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Usage | $\begin{gathered} \text { DEA } \\ \text { Own Use } \end{gathered}$ | $\begin{aligned} & \hline \mathrm{kWh} \\ & \mathrm{NET} \\ & \hline \end{aligned}$ | Revenue <br> Adjusted |  | KW | Revenue |  |  |  |  |  |  |  |  |
| 63100 | 31 Residential | 56,792,060 |  | 56,792,060 | \$ | 5,759,868 | - | \$ | - | \$ | 767,336 | \$ | 885,635 | \$ | $(6,181)$ |  |
| 63200 | 32 Resl Dem Ctrl | 22,691 |  | 22,691 | \$ | 1,470 | 59 | \$ | 550 | \$ | 165 | \$ | 354 | \$ | - | 2,539 |
| 63133 | 33 Resid Electric Vehicles | 6,345 |  | 6,345 | \$ | 450 | - | \$ | - | \$ | - | \$ | 99 | \$ | - | 549 |
| 63036 | 36 Irrigation | 8,207 |  | 8,207 | \$ | 391 | 237 | \$ | 3,317 | \$ | 216 | \$ | 129 | \$ | - | 4,054 |
| 63037 | 37 Irrigation | 16,228 |  | 16,228 | \$ | 774 | 790 | \$ | 3,200 | \$ | 9,192 | \$ | 175 | \$ | - | 13,340 |
| 64100 | 41 Sm Genl Serv | 3,218,419 | 3,244 | 3,215,175 | \$ | 319,887 | - | \$ | - | \$ | 42,755 | \$ | 50,009 | \$ | (95) | 412,556 |
| 62441-6244. | 44(1-3) Street Lights | 821,670 |  | 821,670 |  | 143,742.10 | - | \$ | - | \$ | - | \$ | 13,533 | \$ | - | 157,275 |
| 62440 | 44 Security Lgts | 55,538 |  | 55,538 | \$ | 11,810 | - | \$ | - | \$ | - | \$ | 918 | \$ | - | 12,727 |
| 64500 | 45 Emergency Unmet. | - |  | - | \$ | 432 | - | \$ | - | \$ | - | \$ | - | \$ | - | 432 |
| 64600 | 46 General Service | 32,731,185 | 136,704 | 32,594,481 | \$ | 2,016,012 | 106,433 | \$ | 917,959 | \$ | 71,810 | \$ | 498,674 | \$ | (859) | 3,503,596 |
| 63047 | 47 Municipal | - |  | - | \$ | 325 | - | \$ | - | \$ | - | \$ | - | \$ | - | 325 |
| 64690 | 49 Geotherm Heat Pump | 12,386 |  | 12,386 | \$ | 743 | - | \$ | - | \$ | - | \$ | 244 | \$ | - | 987 |
| 63151 | 51 Resid Energy Stg. | 505,194 |  | 505,194 | \$ | 20,208 | - | \$ | - | \$ | - | \$ | 1,212 | \$ | - | 21,420 |
| 64151 | 51 Commer Energy Stg. | 4,844 |  | 4,844 | \$ | 194 | - | \$ | - | \$ | - | \$ | 12 | \$ | - | 205 |
| 63152 | 52 Resid Interruptible | 2,489,952 |  | 2,489,952 | \$ | 119,518 | - | \$ | - | \$ | - | \$ | 13,056 | \$ | - | 132,573 |
| 64152 | 52 Commer Interruptible | 54,442 |  | 54,442 | \$ | 2,613 | - | \$ | - | \$ | - | \$ | 283 | \$ | - | 2,896 |
| 63900 | Resid-Wellspring * | 491,900 |  | 491,900 | \$ | 1,968 | - | \$ | - | \$ | - | \$ | - | \$ | - | 1,968 |
| 64900 | Comm-Wellspring * | 130,700 |  | 130,700 | \$ | 523 | - | \$ | - | \$ | - | \$ | - | \$ | - | 523 |
| 63530 | 53 Time of Day | 13,694 |  | 13,694 | \$ | 1,321 | - | \$ | - | \$ | 189 | \$ | 214 | \$ | (12) | 1,711 |
| 64540 | 54 Time of Use | 110,160 |  | 110,160 | \$ | 4,848 | 632 | \$ | 3,510 | \$ | 180 | \$ | 1,685 | \$ | - | 10,223 |
| 64660 | 60 Standby Service | - |  | - | \$ | - | - | \$ | - | \$ | 4,310 | \$ | - | \$ | - | 4,310 |
| 64700 | 70 Full Interruptable | 29,549,464 |  | 29,549,464 | \$ | 1,294,577 | 70,443 | \$ | 302,904 | \$ | 18,319 | \$ | 307,314 | \$ | (679) | 1,922,436 |
| 64701 | 71 Partial Interruptable | 1,636,216 |  | 1,636,216 | \$ | 71,483 | 9,231 | \$ | 44,637 | \$ | 2,059 | \$ | 17,017 | \$ | (72) | 135,123 |
| 63181 | 81 Cycled Air M ${ }^{*}$ | 29,909 |  | 29,909 | \$ | (897) | - | \$ | - | \$ | - | \$ | - | \$ | - | (897) |
| 63182 | 82\&84 Cycled Air UM | - |  | - | \$ | (36) | - | \$ | - | \$ | - | \$ | - | \$ | - | (36) |
|  | Total* | 128,048,695 | 139,948 | 127,908,747 | \$ | 9,772,222 | 187,825 | \$ | 1,276,077 | \$ | 916,531 | \$ | 1,790,562 | \$ | $(7,897)$ | 13,747,495 |

Dakota Electric Association December, 2015

Dakota Electric Association
SALES BY RATE (Billed)
Full Year 2016
(Accounting Month information downloaded from Orcom)

|  |  | kWh |  |  |  | $\mathbf{K W}$ |  |  |  | Revenue Adjustments | TOTAL ADJUSTED REVENUE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Account | Rate | Usage | DEA Own Use | $\begin{aligned} & \text { kWh } \\ & \text { NET } \end{aligned}$ | Revenue <br> Adjusted | KW | Revenue | Fixed Charges | RTA |  |  |
| 63100 | 31 Residential | 846,714,198 | - | 846,714,198 | 102,673,011 | - | - | 10,474,418 | 2,540,021 | $(70,908)$ | 115,616,541 |
| 63200 | 32 Resl Dem Ctrl | 362,153 | - | 362,153 | 27,524 | 910 | 10,742 | 2,146 | 1,087 | - | 41,498 |
| 63133 | 33 Resid Electric Vehicles | 95,957 | - | 95,957 | 7,972 | - | - | - | 288 | - | 8,260 |
| 63036 | 36 Irrigation | 294,350 | - | 294,350 | 14,688 | 3,515 | 72,777 | 3,060 | 942 | - | 91,467 |
| 63039 | 39 Irrigation | 6,707,773 | - | 6,707,773 | 334,721 | 78,629 | 357,762 | 137,976 | $(10,065)$ | - | 820,394 |
| 64100 | 41 Sm Genl Serv | 42,951,724 | 47,400 | 42,904,324 | 4,988,152 | - | - | 723,373 | 124,117 | $(1,221)$ | 5,834,422 |
| 62441-624 | :44(1-3) Street Lights | 10,668,929 | - | 10,668,929 | 1,881,895 | - | - | - | 30,942 | - | 1,912,837 |
| 62440 | 44 Security Lgts | 497,650 | - | 497,650 | 112,296 | - | - | - | 1,456 | - | 113,753 |
| 62444 | 44 Security Lgts - LED | 46,740 | - | 46,740 | 22,653 | - | - | - | 145 | - | 22,798 |
| 62446 | 44 Street Lgts - LED | 22,325 | - | 22,325 | 7,186 | - | - | - | 65 | - | 7,251 |
| 64500 | 45 Emergency Unmet. | - | - | - | 6,730 | - | - | - | - | - | 6,730 |
| 64600 | 46 General Service | 450,572,701 | 2,005,152 | 448,567,549 | 32,563,063 | 1,411,554 | 14,157,578 | 1,058,971 | 1,345,801 | $(12,136)$ | 49,113,277 |
| 63047 | 47 Municipal | - | - | - | 3,900 | - | - | - | - | - | 3,900 |
| 64690 | 49 Geotherm Heat Pump | 176,572 | - | 176,572 | 16,598 | - | - | - | 247 | - | 16,845 |
| 63151 | 51 Resid Energy Stg. | 9,294,102 | - | 9,294,102 | 408,179 | - | - | - | 13,013 | - | 421,192 |
| 64151 | 51 Commer Energy Stg. | 106,186 | - | 106,186 | 4,672 | - | - | - | 149 | - | 4,821 |
| 63152 | 52 Resid Interruptible | 43,035,327 | - | 43,035,327 | 2,365,419 | - | - | - | 25,895 | - | 2,391,314 |
| 64152 | 52 Commer Interruptible | 1,054,810 | - | 1,054,810 | 58,015 | - | - | - | 633 | - | 58,649 |
| 63900 | Resid-Wellspring* | 6,078,200 | - | 6,078,200 | 24,313 | - | - | - | - | - | 24,313 |
| 63901 | Resid-Wellspring Solar * | 47,600 | - | 47,600 | 952 | - | - | - | - | - | 952 |
| 64900 | Comm-Wellspring * | 2,599,800 | - | 2,599,800 | 10,399 | - | - | - | - | - | 10,399 |
| 64901 | Comm-Wellspring Solar* | 27,500 | - | 27,500 | 550 | - | - | - | - | - | 550 |
| 63530 | 53 Time of Day | 208,318 | - | 208,318 | 23,679 | - | - | 2,594 | 625 | (144) | 26,754 |
| 64540 | 54 Time of Use | 935,040 | - | 935,040 | 47,092 | 7,651 | 58,931 | 2,592 | 2,805 | - | 111,421 |
| 64660 | 60 Standby Service | 10,944 | - | 10,944 | 4,130 | 318 | 2,911 | 60,801 | 33 | 199 | 68,075 |
| 64700 | 70 Full Interruptable | 389,394,755 | - | 389,394,755 | 19,408,971 | 894,529 | 4,249,024 | 304,524 | $(700,911)$ | $(7,813)$ | 23,253,795 |
| 64701 | 71 Partial Interruptable | 22,681,544 | - | 22,681,544 | 1,126,462 | 101,646 | 591,548 | 33,064 | $(40,827)$ | (854) | 1,709,394 |
| 63181 | 81 Cycled Air M* | 4,952,327 | - | 4,952,327 | $(158,475)$ | - | - | - | - | - | $(158,475)$ |
| 63182 | 82\&84 Cycled Air UM | - | - | - | $(1,552,548)$ | - | - | - | - | - | $(1,552,548)$ |
|  | Total | 1,825,832,098 | 2,052,552 | 1,823,779,546 | \$ 164,432,201 | 2,498,752 | \$ 19,501,275 | \$ 12,803,518 | \$ 3,336,462 | \$ $(92,877)$ | 199,980,579 |


Dakota Electric Association January, 2016

| Account | Rate | kWh |  |  |  |  | KW |  |  | Fixed Charges |  | RTA |  | Revenue <br> Adjustments |  | TOTAL <br> revenue <br> per Download |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Usage | $\begin{gathered} \text { DEA } \\ \text { Own Use } \end{gathered}$ | $\begin{aligned} & \hline \mathrm{kWh} \\ & \text { NET } \end{aligned}$ | Revenue Adjusted |  | KW | Revenue |  |  |  |  |  |  |  |  |
| 63100 | 31 Residential | 73,222,904 |  | 73,222,904 | \$ | 8,551,767 | - | \$ | - | \$ | 868,665 | \$ | 219,627 | \$ | (6,415) | 9,633,643 |
| 63200 | 32 Resl Dem Ctrl | 49,466 |  | 49,466 | \$ | 3,759 | 102 | \$ | 1,135 | \$ | 180 | \$ | 148 | \$ | - | 5,223 |
| 63133 | 33 Resid Electric Vehicles | 8,385 |  | 8,385 | \$ | 723 | - | \$ | - | \$ |  | \$ | 25 | \$ | - | 748 |
| 63036 | 36 Irrigation | 326 |  | 326 | \$ | 16 | 6 | \$ | 132 | \$ | 270 | \$ | 1 | \$ | - | 420 |
| 63037 | 37 Irrigation | 8,509 |  | 8,509 | \$ | 425 | (54) | \$ | (243) | \$ | 11,492 | \$ | (16) | \$ | - | 11,657 |
| 64100 | 41 Sm Genl Serv | 4,121,114 | 9,282 | 4,111,832 | \$ | 463,719 | - | \$ | - | \$ | 60,073 | \$ | 11,913 | \$ | (92) | 535,613 |
| 62441-6244. | 44(1-3) Street Lights | 921,014 |  | 921,014 | \$ | 157,175 | - | \$ | - | \$ | - | \$ | 2,671 | \$ | - | 159,845 |
| 62440 | 44 Security Lgts | 49,657 |  | 49,657 | \$ | 10,739 | - | \$ | - | \$ | - | \$ | 143 | \$ | - | 10,882 |
| 62444 | 44 Security Lgts - LED | 1,022 |  | 1,022 | \$ | 387 | - | \$ | - | \$ | - | \$ | 3 | \$ | - | 390 |
| 62446 | 44 Street Lgts - LED | 57 |  | 57 | \$ | 18 | - | \$ | - | \$ | - | \$ | 0 | \$ | - | 19 |
| 64500 | 45 Emergency Unmet. | - |  | - | \$ | 540 | - | \$ | - | \$ | - | \$ | - | \$ |  | 540 |
| 64600 | 46 General Service | 38,471,067 | 289,920 | 38,181,147 | \$ | 2,744,112 | 108,936 | \$ | 997,852 | \$ | 87,728 | \$ | 114,605 | \$ | (847) | 3,943,451 |
| 63047 | 47 Municipal | - |  | - | \$ | 325 | - | \$ | - | \$ | - | \$ | - | \$ | - | 325 |
| 64690 | 49 Geotherm Heat Pump | 20,432 |  | 20,432 | \$ | 1,921 | - | \$ | - | \$ | - | \$ | 29 | \$ | - | 1,949 |
| 63151 | 51 Resid Energy Stg. | 936,110 |  | 936,110 | \$ | 41,189 | - | \$ | - | \$ | - | \$ | 1,311 | \$ | - | 42,500 |
| 64151 | 51 Commer Energy Stg. | 13,008 |  | 13,008 | \$ | 572 | - | \$ | - | \$ | - | \$ | 18 | \$ | - | 591 |
| 63152 | 52 Resid Interruptible | 4,506,291 |  | 4,506,291 | \$ | 247,869 | - | \$ | - | \$ | - | \$ | 2,701 | \$ | - | 250,570 |
| 64152 | 52 Commer Interruptible | 147,884 |  | 147,884 | \$ | 8,134 | - | \$ | - | \$ | - | \$ | 89 | \$ | - | 8,223 |
| 63900 | Resid-Wellspring * | 518,600 |  | 518,600 | \$ | 2,074 | - | \$ | - | \$ | - | \$ | - | \$ | - | 2,074 |
| 63901 | Resid-Wellspring Solar* | 1,400 |  | 1,400 | \$ | 28 | - | \$ | - | \$ | - | \$ | - | \$ | - | 28 |
| 64900 | Comm-Wellspring * | 536,300 |  | 536,300 | \$ | 2,145 | - | \$ | - | \$ | - | \$ | - | \$ | - | 2,145 |
| 64901 | Comm-Wellspring Solar* | - |  | - | \$ | - | - | \$ | - | \$ | - | \$ | - | \$ | - | - |
| 63530 | 53 Time of Day | 20,462 |  | 20,462 | \$ | 2,279 | - | \$ | - | \$ | 216 | \$ | 61 | \$ | (12) | 2,544 |
| 64540 | 54 Time of Use | 123,840 |  | 123,840 | \$ | 6,180 | 633 | \$ | 6,572 | \$ | 216 | \$ | 372 | \$ | - | 13,339 |
| 64660 | 60 Standby Service | - |  | - | \$ | - | - | \$ | - | \$ | 5,520 | \$ | - | \$ | - | 5,520 |
| 64700 | 70 Full Interruptable | 30,635,124 |  | 30,635,124 | \$ | 1,525,882 | 64,648 | \$ | 307,078 | \$ | 24,997 | \$ | $(55,143)$ | \$ | (636) | 1,802,179 |
| 64701 | 71 Partial Interruptable | 1,698,200 |  | 1,698,200 | \$ | 84,357 | 5,681 | \$ | 35,197 | \$ | 2,661 | \$ | $(3,057)$ | \$ | (72) | 119,087 を |
| 63181 | 81 Cycled Air M* | 95 |  | 95 | \$ | (3) | - | \$ | - | \$ | - | \$ | - | \$ | - | (3) |
| 63182 | 82\&84 Cycled Air UM | - |  | - | \$ | - | - | \$ | - | \$ | - | \$ | - | \$ | - | - |
|  | Total* | 154,954,872 | 299,202 | 154,655,670 |  | 13,856,333 | 179,953 | \$ | 1,347,724 | \$ | 1,062,018 | \$ | 295,501 | \$ | $(8,073)$ | 16,553,501®心 |


SALES BY RATE (Billed)
February, 2016
(Accounting Month information downloo

| Account | Rate | kWh |  |  |  |  | KW |  |  | Fixed Charges |  | RTA |  | Revenue <br> Adjustments |  | TOTAL <br> revenue per Download |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Usage | $\begin{gathered} \text { DEA } \\ \text { Own Use } \end{gathered}$ | kWh NET | Revenue <br> Adjusted |  | KW | Revenue |  |  |  |  |  |  |  |  |
| 63100 | 31 Residential | 72,241,650 |  | 72,241,650 | \$ | 8,436,787 | - | \$ |  | \$ | 869,513 | \$ | 216,692 | \$ | $(6,375)$ | 9,516,617 |
| 63200 | 32 Resl Dem Crrl | 62,787 |  | 62,787 | \$ | 4,772 | 111 | \$ | 1,228 | \$ | 180 | \$ | 188 | \$ | - | 6,368 |
| 63133 | 33 Resid Electric Vehicles | 9,371 |  | 9,371 | \$ | 754 | - | \$ | - | \$ | - | \$ | 28 | \$ | - | 782 |
| 63036 | 36 Irrigation | 830 |  | 830 | \$ | 41 | 91 | \$ | 1,915 | \$ | 270 | \$ | 3 | \$ | - | 2,230 |
| 63037 | 37 Irrigation | 22,097 |  | 22,097 | \$ | 1,103 | 29 | \$ | 133 | \$ | 11,460 | \$ | (33) | \$ |  | 12,663 |
| 64100 | 41 Sm Genl Serv | 4,270,604 | 8,576 | 4,262,028 | \$ | 480,615 | - | \$ | - | \$ | 60,119 | \$ | 12,347 | \$ | (110) | 552,971 |
| 62441-6244: | 44(1-3) Street Lights | 888,426 |  | 888,426 |  | 157,145.76 | - | \$ | - | \$ | - | \$ | 2,577 | \$ | - | 159,722 |
| 62440 | 44 Security Lgts | 42,187 |  | 42,187 | \$ | 9,502 | - | \$ | - | \$ | - | \$ | 123 | \$ | - | 9,626 |
| 62444 | 44 Security Lgts - LED | 3,260 |  | 3,260 | \$ | 1,569 | - | \$ | - | \$ | - | \$ | 10 | \$ | - | 1,579 |
| 62446 | 44 Street Lgts - LED | 188 |  | 188 | \$ | 61 | - | \$ | - | \$ | - | \$ | 1 | \$ | - | 62 |
| 64500 | 45 Emergency Unmet. | - |  | - | \$ | 540 | - | \$ | - | \$ | - | \$ | - | \$ | - | 540 |
| 64600 | 46 General Service | 37,792,368 | 257,760 | 37,534,608 | \$ | 2,694,891 | 103,580 | \$ | 948,789 | \$ | 88,077 | \$ | 112,583 | \$ | (861) | 3,843,479 |
| 63047 | 47 Municipal | - |  | - | \$ | 325 | - | \$ | - | \$ | - | \$ | - | \$ | - | 325 |
| 64690 | 49 Geotherm Heat Pump | 25,451 |  | 25,451 | \$ | 2,392 | - | \$ | - | \$ | - | \$ | 36 | \$ | - | 2,428 |
| 63151 | 51 Resid Energy Stg. | 1,044,108 |  | 1,044,108 | \$ | 45,941 | - | \$ | - | \$ | - | \$ | 1,462 | \$ | - | 47,403 |
| 64151 | 51 Commer Energy Stg. | 16,599 |  | 16,599 | \$ | 730 | - | \$ | - | \$ | - | \$ | 23 | \$ | - | 754 |
| 63152 | 52 Resid Interruptible | 5,133,494 |  | 5,133,494 | \$ | 282,201 | - | \$ | - | \$ | - | \$ | 3,092 | \$ | - | 285,293 |
| 64152 | 52 Commer Interruptible | 176,177 |  | 176,177 | \$ | 9,690 | - | \$ | - | \$ | - | \$ | 106 | \$ | - | 9,796 |
| 63900 | Resid-Wellspring * | 518,900 |  | 518,900 | \$ | 2,076 | - | \$ | - | \$ | - | \$ | - | \$ | - | 2,076 |
| 63901 | Resid-Wellspring Solar* | 3,300 |  | 3,300 | \$ | 66 | - | \$ | - | \$ | - | \$ | - | \$ | - | 66 |
| 64900 | Comm-Wellspring * | 270,400 |  | 270,400 | \$ | 1,082 | - | \$ | - | \$ | - | \$ | - | \$ | - | 1,082 |
| 64901 | Comm-Wellspring Solar* | 2,500 |  | 2,500 | \$ | 50 | - | \$ | - | \$ | - | \$ | - | \$ | - | 50 |
| 63530 | 53 Time of Day | 21,668 |  | 21,668 | \$ | 2,429 | - | \$ | - | \$ | 216 | \$ | 65 | \$ | (12) | 2,698 |
| 64540 | 54 Time of Use | 111,984 |  | 111,984 | \$ | 5,588 | 892 | \$ | 9,003 | \$ | 216 | \$ | 336 | \$ | - | 15,143 |
| 64660 | 60 Standby Service | - |  | - | \$ | - | - | \$ | - | \$ | 5,520 | \$ | - | \$ | - | 5,520 |
| 64700 | 70 Full Interruptable | 28,765,062 |  | 28,765,062 | \$ | 1,432,606 | 64,161 | \$ | 304,765 | \$ | 24,997 | \$ | (51,777) | \$ | (625) | 1,709,966 |
| 64701 | 71 Partial Interruptable | 1,524,608 |  | 1,524,608 | \$ | 75,743 | 5,767 | \$ | 36,251 | \$ | 2,661 | \$ | $(2,744)$ | \$ | (71) | 111,839 $\mathrm{H}_{\mathrm{j}}$ |
| 63181 | 81 Cycled Air M* | 532 |  | 532 | \$ | (17) | - | \$ | - | \$ | - | \$ | - | \$ | - | (17t) |
| 63182 | 82\&84 Cycled Air UM | - |  | - | \$ | - | - | \$ | - | \$ | - | \$ | - | \$ | - | $\bigcirc$ |
|  | Total* | 152,152,919 | 266,336 | 151,886,583 |  | 13,648,681 | 174,631 | \$ | 1,302,084 | \$ | 1,063,229 | \$ | 295,118 | \$ | $(8,053)$ | 16,301,058®が |


Dakota Electric Association SALES BY RATE (Billed) March, 2016


Dakota Electric Association
SALES BY RATE (Billed) April, 2016

| Account | (Accounting Month information downloaded from Orcom) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | kWh |  |  |  |  | KW |  |  | Fixed Charges |  | RTA |  | Revenue Adjustments |  | TOTAL <br> REvenue <br> per Download |
|  | Rate | Usage | $\begin{gathered} \hline \text { DEA } \\ \text { Own Use } \\ \hline \end{gathered}$ | $\begin{aligned} & \text { kWh } \\ & \text { NET } \end{aligned}$ | Revenue <br> Adjusted |  | KW | Revenue |  |  |  |  |  |  |  |  |
| 63100 | 31 Residential | 55,824,485 |  | 55,824,485 | \$ | 6,519,598 |  | \$ | - | \$ | 873,200 | \$ | 167,480 | \$ | $(5,842)$ | 7,554,437 |
| 63200 | 32 Resl Dem Crrl | 32,845 |  | 32,845 | \$ | 2,496 | 89 | \$ | 984 | \$ | 180 | \$ | 99 | \$ | - | 3,759 |
| 63133 | 33 Resid Electric Vehicles | 6,955 |  | 6,955 | \$ | 561 | - | \$ | - | \$ | - | \$ | 21 | \$ | - | 582 |
| 63036 | 36 Irrigation | 10,812 |  | 10,812 | \$ | 540 | 269 | \$ | 4,164 | \$ | 270 | \$ | 35 | \$ | - | 5,008 |
| 63037 | 37 Irrigation | 59,824 |  | 59,824 | \$ | 2,986 | 1,887 | \$ | 8,586 | \$ | 11,449 | \$ | (90) | \$ | - | 22,931 |
| 64100 | 41 Sm Genl Serv | 3,329,306 | 4,005 | 3,325,301 | \$ | 374,401 | - | \$ | - | \$ | 60,256 | \$ | 9,617 | \$ | (100) | 444,174 |
| 62441-6244. | 44(1-3) Street Lights | 888,008 |  | 888,008 |  | 157,131.50 | - | \$ | - | \$ | - | \$ | 2,575 | \$ | - | 159,707 |
| 62440 | 44 Security Lgts | 41,078 |  | 41,078 | \$ | 9,314 | - | \$ | - | \$ | - | \$ | 121 | \$ | - | 9,435 |
| 62444 | 44 Security Lgts - LED | 4,207 |  | 4,207 | \$ | 2,051 | - | \$ | - | \$ | - | \$ | 13 | \$ | - | 2,064 |
| 62446 | 44 Street Lgts - LED | 219 |  | 219 | \$ | 70 | - | \$ | - | \$ | - | \$ | 1 | \$ | - | 71 |
| 64500 | 45 Emergency Unmet. | - |  | - | \$ | 550 | - | \$ | - | \$ | - | \$ | - | \$ | - | 550 |
| 64600 | 46 General Service | 32,296,618 | 150,720 | 32,145,898 | \$ | 2,359,600 | 110,858 | \$ | 1,015,455 | \$ | 87,836 | \$ | 96,441 | \$ | (874) | 3,558,457 |
| 63047 | 47 Municipal | - |  | - | \$ | 325 | - | \$ | - | \$ | - | \$ | - | \$ | - | 325 |
| 64690 | 49 Geotherm Heat Pump | 13,065 |  | 13,065 | \$ | 1,228 | - | \$ | - | \$ | - | \$ | 18 | \$ | - | 1,246 |
| 63151 | 51 Resid Energy Stg. | 753,543 |  | 753,543 | \$ | 33,156 | - | \$ | - | \$ | - | \$ | 1,055 | \$ | - | 34,211 |
| 64151 | 51 Commer Energy Stg. | 9,401 |  | 9,401 | \$ | 414 | - | \$ | - | \$ | - | \$ | 13 | \$ | - | 427 |
| 63152 | 52 Resid Interruptible | 3,406,281 |  | 3,406,281 | \$ | 185,853 | - | \$ | - | \$ | - | \$ | 2,048 | \$ | - | 187,901 |
| 64152 | 52 Commer Interruptible | 85,606 |  | 85,606 | \$ | 4,708 | - | \$ | - | \$ | - | \$ | 51 | \$ | - | 4,760 |
| 63900 | Resid-Wellspring * | 492,700 |  | 492,700 | \$ | 1,971 | - | \$ | - | \$ | - | \$ | - | \$ | - | 1,971 |
| 63901 | Resid-Wellspring Solar* | 4,000 |  | 4,000 | \$ | 80 | - | \$ | - | \$ | - | \$ | - | \$ | - | 80 |
| 64900 | Comm-Wellspring * | 119,400 |  | 119,400 | \$ | 478 | - | \$ | - | \$ | - | \$ | - | \$ | - | 478 |
| 64901 | Comm-Wellspring Solar* | 2,500 |  | 2,500 | \$ | 50 | - | \$ | - | \$ | - | \$ | - | \$ | - | 50 |
| 63530 | 53 Time of Day | 14,843 |  | 14,843 | \$ | 1,650 | - | \$ | - | \$ | 221 | \$ | 45 | \$ | (12) | 1,903 |
| 64540 | 54 Time of Use | 81,264 |  | 81,264 | \$ | 4,141 | 551 | \$ | 4,027 | \$ | 216 | \$ | 244 | \$ | - | 8,628 |
| 64660 | 60 Standby Service | - |  | - | \$ | - | - | \$ | - | \$ | 4,810 | \$ | - | \$ | - | 4,810 |
| 64700 | 70 Full Interruptable | 29,787,009 |  | 29,787,009 | \$ | 1,483,667 | 71,732 | \$ | 340,728 | \$ | 24,997 | \$ | $(53,617)$ | \$ | (667) | 1,795,109 |
| 64701 | 71 Partial Interruptable | 1,880,872 |  | 1,880,872 | \$ | 93,485 | 8,375 | \$ | 45,347 | \$ | 2,779 | \$ | $(3,386)$ | \$ | (71) | 138,154 |
| 63181 | 81 Cycled Air M ${ }^{*}$ | 359 |  | 359 | \$ | (11) | - | \$ | - | \$ | - | \$ | - | \$ | - | (1190 |
| 63182 | 82\&84 Cycled Air UM | - |  | - | \$ | - | - | \$ | - | \$ | - | \$ | - | \$ | - |  |
|  | Total* | 128,526,241 | 154,725 | 128,371,516 |  | 11,240,494 | 193,760 | \$ | 1,419,290 | \$ | 1,066,215 | \$ | 222,784 | \$ | $(7,567)$ | 13,941,2162 |


Dakota Electric Association
SALES BY RATE (Billed) May, 2016
(Accounting Month information downloaded from Orcom)

| Account | Rate | kWh |  |  |  |  | KW |  |  | Fixed Charges |  | RTA |  | Revenue <br> Adjustments |  | TOTAL <br> REVENUE per Download |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Usage | $\begin{gathered} \text { DEA } \\ \text { Own Use } \end{gathered}$ | $\begin{aligned} & \hline \mathrm{kWh} \\ & \text { NET } \end{aligned}$ | Revenue Adjusted |  | KW | Revenue |  |  |  |  |  |  |  |  |
| 63100 | 31 Residential | 55,735,369 |  | 55,735,369 | \$ | 6,509,686 | - | \$ | - | \$ | 874,934 | \$ | 167,222 | \$ | $(5,825)$ | 7,546,017 |
| 63200 | 32 Resl Dem Ctrl | 27,252 |  | 27,252 | \$ | 2,071 | 56 | \$ | 618 | \$ | 180 | \$ | 82 | \$ | - | 2,951 |
| 63133 | 33 Resid Electric Vehicles | 6,824 |  | 6,824 | \$ | 565 | - | \$ | - | \$ | - | \$ | 21 | \$ | - | 585 |
| 63036 | 36 Irrigation | 41,926 |  | 41,926 | \$ | 2,092 | 447 | \$ | 6,932 | \$ | 270 | \$ | 134 | \$ | - | 9,429 |
| 63037 | 37 Irrigation | 186,740 |  | 186,740 | \$ | 9,319 | 6,289 | \$ | 28,617 | \$ | 11,450 | \$ | (280) | \$ | - | 49,106 |
| 64100 | 41 Sm Genl Serv | 3,092,653 | 2,548 | 3,090,105 | \$ | 347,718 | - | \$ | - | \$ | 60,195 | \$ | 8,932 | \$ | (94) | 416,751 |
| 62441-6244 | 44(1-3) Street Lights | 887,730 |  | 887,730 |  | 157,084.54 | - | \$ | - | \$ | - | \$ | 2,575 | \$ | - | 159,659 |
| 62440 | 44 Security Lgts | 40,909 |  | 40,909 | \$ | 9,281 | - | \$ | - | \$ | - | \$ | 120 | \$ | - | 9,401 |
| 62444 | 44 Security Lgts - LED | 4,189 |  | 4,189 | \$ | 2,043 | - | \$ | - | \$ | - | \$ | 13 | \$ | - | 2,056 |
| 62446 | 44 Street Lgts - LED | 258 |  | 258 | \$ | 82 | - | \$ | - | \$ | - | \$ | 1 | \$ | - | 83 |
| 64500 | 45 Emergency Unmet. | - |  | - | \$ | 550 | - | \$ | - | \$ | - | \$ | - | \$ | - | 550 |
| 64600 | 46 General Service | 32,684,197 | 101,760 | 32,582,437 | \$ | 2,395,563 | 115,760 | \$ | 1,060,358 | \$ | 87,789 | \$ | 97,755 | \$ | (859) | 3,640,606 |
| 63047 | 47 Municipal | - |  | - | \$ | 325 | - | \$ | - | \$ | - | \$ | - | \$ | - | 325 |
| 64690 | 49 Geotherm Heat Pump | 11,213 |  | 11,213 | \$ | 1,054 | - | \$ | - | \$ | - | \$ | 16 | \$ | - | 1,070 |
| 63151 | 51 Resid Energy Stg. | 634,524 |  | 634,524 | \$ | 27,856 | - | \$ | - | \$ | - | \$ | 888 | \$ | - | 28,744 |
| 64151 | 51 Commer Energy Stg. | 5,945 |  | 5,945 | \$ | 262 | - | \$ | - | \$ | - | \$ | 8 | \$ | - | 270 |
| 63152 | 52 Resid Interruptible | 2,713,526 |  | 2,713,526 | \$ | 149,254 | - | \$ | - | \$ | - | \$ | 1,631 | \$ | - | 150,884 |
| 64152 | 52 Commer Interruptible | 49,841 |  | 49,841 | \$ | 2,741 | - | \$ | - | \$ | - | \$ | 30 | \$ | - | 2,771 |
| 63900 | Resid-Wellspring * | 489,900 |  | 489,900 | \$ | 1,960 | - | \$ | - | \$ | - | \$ | - | \$ | - | 1,960 |
| 63901 | Resid-Wellspring Solar* | 3,900 |  | 3,900 | \$ | 78 | - | \$ | - | \$ | - | \$ | - | \$ | - | 78 |
| 64900 | Comm-Wellspring * | 116,700 |  | 116,700 | \$ | 467 | - | \$ | - | \$ | - | \$ | - | \$ | - | 467 |
| 64901 | Comm-Wellspring Solar* | 2,500 |  | 2,500 | \$ | 50 | - | \$ | - | \$ | - | \$ | - | \$ | - | 50 |
| 63530 | 53 Time of Day | 12,725 |  | 12,725 | \$ | 1,433 | - | \$ | - | \$ | 212 | \$ | 38 | \$ | (12) | 1,670 |
| 64540 | 54 Time of Use | 38,592 |  | 38,592 | \$ | 1,926 | 505 | \$ | 3,155 | \$ | 216 | \$ | 116 | \$ | - | 5,412 |
| 64660 | 60 Standby Service | - |  | - | \$ | - | - | \$ | - | \$ | 6,220 | \$ | - | \$ | - | 6,220 |
| 64700 | 70 Full Interruptable | 33,055,514 |  | 33,055,514 | \$ | 1,646,556 | 78,785 | \$ | 374,228 | \$ | 25,015 | \$ | $(59,500)$ | \$ | (745) | 1,985,553 |
| 64701 | 71 Partial Interruptable | 2,133,000 |  | 2,133,000 | \$ | 105,459 | 9,509 | \$ | 51,797 | \$ | 2,779 | \$ | $(3,839)$ | \$ | (71) | 156,125 |
| 63181 | 81 Cycled Air M* | 185,820 |  | 185,820 | \$ | $(5,946)$ | - |  | - | \$ | - | \$ | - | \$ | - |  |
| 63182 | 82\&84 Cycled Air UM | - |  | - | \$ | - | - |  | - | \$ | - | \$ | - | \$ | - | - |
|  | Total* | 131,362,927 | 104,308 | 131,258,619 |  | 11,369,526 | 211,351 | \$ | 1,525,705 | \$ | 1,069,259 | \$ | 215,962 | \$ | $(7,605)$ | 14,172,847 |


Dakota Electric Association SALES BY RATE (Billed)
June, 2016
(Accounting Month information down

| Account | Rate | kWh |  |  |  |  | KW |  |  | Fixed Charges |  | RTA |  | Revenue <br> Adjustment: | TOTAL <br> REVENUE <br> per Download |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{gathered} \text { DEA } \\ \text { Own Use } \end{gathered}$ |  | Revenue Adjusted |  |  | Revenue |  |  |  |  |  |  |  |
|  |  | Usage |  | NET |  |  | KW |  |  |  |  |  |  |  |  |
| 63100 | 31 Residential | 66,286,271 |  | 66,286,271 | \$ | 8,278,404 | - | \$ | - | \$ | 871,128 | \$ | 198,873 | \$ (5,815) | 9,342,590 |
| 63200 | 32 Resl Dem Ctrl | 19,387 |  | 19,387 | \$ | 1,473 | 53 | \$ | 703 | \$ | 180 | \$ | 58 | \$ - | 2,415 |
| 63133 | 33 Resid Electric Vehicles | 6,840 |  | 6,840 | \$ | 541 | - | \$ | - | \$ | - | \$ | 21 | \$ - | 562 |
| 63036 | 36 Irrigation | 62,427 |  | 62,427 | \$ | 3,115 | 554 | \$ | 14,596 | \$ | 270 | \$ | 200 | \$ - | 18,181 |
| 63037 | 37 Irrigation | 1,671,838 |  | 1,671,838 | \$ | 83,425 | 21,180 | \$ | 96,369 | \$ | 11,509 | \$ | $(2,508)$ | \$ - | 188,795 |
| 64100 | 41 Sm Genl Serv | 3,416,473 | 2,821 | 3,413,652 | \$ | 424,453 | - | \$ | - | \$ | 61,140 | \$ | 9,871 | \$ (97) | 495,366 |
| 62441-6244 | 44(1-3) Street Lights | 884,894 |  | 884,894 |  | 156,581.14 | - | \$ | - | \$ | - | \$ | 2,566 | \$ - | 159,148 |
| 62440 | 44 Security Lgts | 40,418 |  | 40,418 | \$ | 9,172 | - | \$ | - | \$ | - | \$ | 118 | + | 9,290 |
| 62444 | 44 Security Lgts - LED | 4,260 |  | 4,260 | \$ | 2,077 | - | \$ | - | \$ | - | \$ | 13 | \$ - | 2,090 |
| 62446 | 44 Street Lgts - LED | 1,552 |  | 1,552 | \$ | 469 | - | \$ | - | \$ | - | \$ | 5 | \$ - | 474 |
| 64500 | 45 Emergency Unmet. | - |  | - | \$ | 550 | - | \$ | - | \$ | - | \$ | - | \$ - | 550 |
| 64600 | 46 General Service | 40,887,251 | 106,560 | 40,780,691 | \$ | 2,961,064 | 128,492 | \$ | 1,553,520 | \$ | 88,147 | \$ | 122,356 | \$ (974) | 4,724,113 |
| 63047 | 47 Municipal | - |  | - | \$ | 325 | - | \$ | - | \$ | - | \$ | - | \$ - | 325 |
| 64690 | 49 Geotherm Heat Pump | 10,508 |  | 10,508 | \$ | 988 | - | \$ | - | \$ | - | \$ | 15 | \$ - | 1,002 |
| 63151 | 51 Resid Energy Stg. | 684,507 |  | 684,507 | \$ | 29,550 | - | \$ | - | \$ | - | \$ | 958 | \$ - | 30,509 |
| 64151 | 51 Commer Energy Stg. | 6,362 |  | 6,362 | \$ | 280 | - | \$ | - | \$ | - | \$ | 9 | \$ - | 289 |
| 63152 | 52 Resid Interruptible | 2,853,944 |  | 2,853,944 | \$ | 156,977 | - | \$ | - | \$ | - | \$ | 1,714 | \$ - | 158,691 |
| 64152 | 52 Commer Interruptible | 58,612 |  | 58,612 | \$ | 3,224 | - | \$ | - | \$ | - | \$ | 35 | + | 3,259 |
| 63900 | Resid-Wellspring * | 497,700 |  | 497,700 | \$ | 1,991 | - | \$ | - | \$ | - | \$ | - | \$ - | 1,991 |
| 63901 | Resid-Wellspring Solar* | 4,500 |  | 4,500 | \$ | 90 | - | \$ | - | \$ | - | \$ | - | \$ - | 90 |
| 64900 | Comm-Wellspring * | 121,100 |  | 121,100 | \$ | 484 | - | \$ | - | \$ | - | \$ | - | \$ | 484 |
| 64901 | Comm-Wellspring Solar* | 2,500 |  | 2,500 | \$ | 50 | - | \$ | - | \$ | - | \$ | - | \$ - | 50 |
| 63530 | 53 Time of Day | 12,748 |  | 12,748 | \$ | 1,484 | - | \$ | - | \$ | 214 | \$ | 38 | \$ (12) | 1,724 |
| 64540 | 54 Time of Use | 59,952 |  | 59,952 | \$ | 2,992 | 589 | \$ | 3,106 | \$ | 216 | \$ | 180 | \$ - | 6,494 |
| 64660 | 60 Standby Service | - |  | - | \$ | - | - | \$ | - | \$ | 6,220 | \$ | - | \$ | 6,220 |
| 64700 | 70 Full Interruptable | 35,521,428 |  | 35,521,428 | \$ | 1,769,504 | 86,495 | \$ | 410,850 | \$ | 25,163 | \$ | $(63,939)$ | (748) | 2,140,830 |
| 64701 | 71 Partial Interruptable | 1,997,752 |  | 1,997,752 | \$ | 99,347 | 9,715 | \$ | 61,176 | \$ | 2,788 | \$ | $(3,596)$ | \$ (71) | 159,644 |
| 63181 | 81 Cycled Air M* | 534,324 |  | 534,324 | \$ | $(17,099)$ | - | S | - | \$ | - | , | - | \$ | $(17,099)$ |
| 63182 | 82\&84 Cycled Air UM | - |  | - | \$ | (515,726) | - | \$ | - | \$ | - | \$ | - | \$ | (515,726 |
|  | Total* | 154,487,424 | 109,381 | 154,378,043 |  | 13,455,786 | 247,078 | \$ | 2,140,321 |  | ,066,974 | \$ | 266,988 | \$ (7,718) | 16,922,351 ${ }^{\text {a }}$ |


Dakota Electric Association SALES BY RATE (Billed) July, 2016
(Accounting Month information downtor

| Account | Rate | kWh |  |  |  |  | KW |  |  | Fixed <br> Charges |  | RTA |  | Revenue Adjustments |  | TOTAL <br> REVENUE <br> per Download |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Usage | DEA Own Use | $\begin{aligned} & \text { kWh } \\ & \text { NET } \end{aligned}$ |  | Revenue Adjusted | KW |  | Revenue |  |  |  |  |  |  |  |
| 63100 | 31 Residential | 86,908,760 |  | 86,908,760 | \$ | 11,367,099 | - | \$ | - | \$ | 872,002 | \$ | 260,730 | \$ | $(5,857)$ | 12,493,973 |
| 63200 | 32 Resl Dem Ctrl | 15,038 |  | 15,038 | \$ | 1,143 | 59 | \$ | 862 | \$ | 168 | \$ | 45 | \$ | - | 2,218 |
| 63133 | 33 Resid Electric Vehicles | 7,082 |  | 7,082 | \$ | 588 | - | \$ | - | \$ | - | \$ | 21 | \$ | - | 609 |
| 63036 | 36 Irrigation | 62,811 |  | 62,811 | \$ | 3,134 | 545 | \$ | 14,367 | \$ | 240 | \$ | 201 | \$ | - | 17,942 |
| 63037 | 37 Irrigation | 2,676,062 |  | 2,676,062 | \$ | 133,535 | 22,614 | \$ | 102,893 | \$ | 11,532 | \$ | $(4,014)$ | \$ | - | 243,946 |
| 64100 | 41 Sm Genl Serv | 3,546,915 | 1,618 | 3,545,297 | \$ | 452,071 | - | \$ | - | \$ | 60,090 | \$ | 10,250 | \$ | (103) | 522,308 |
| 62441-6244. | 44(1-3) Street Lights | 884,159 |  | 884,159 | \$ | 156,469.94 | - | \$ | - | \$ | - | \$ | 2,564 | \$ | - | 159,034 |
| 62440 | 44 Security Lgts | 40,522 |  | 40,522 | \$ | 9,196 | - | \$ | - | \$ | - | \$ | 119 | \$ | - | 9,315 |
| 62444 | 44 Security Lgts - LED | 4,228 |  | 4,228 | \$ | 2,061 | - | \$ | - | \$ | - | \$ | 13 | \$ | - | 2,074 |
| 62446 | 44 Street Lgts - LED | 1,872 |  | 1,872 | \$ | 594 | - | \$ | - | \$ | - | \$ | 5 | \$ | - | 599 |
| 64500 | 45 Emergency Unmet. | - |  | - | \$ | 550 | - | \$ | - | \$ | - | \$ | - | \$ | - | 550 |
| 64600 | 46 General Service | 40,553,354 | 109,440 | 40,443,914 | \$ | 2,947,521 | 130,860 | \$ | 1,604,347 | \$ | 88,195 | \$ | 121,349 | \$ | (999) | 4,760,411 |
| 63047 | 47 Municipal | - |  | - | \$ | 325 | - | \$ | - | \$ | - | \$ | - | \$ | - | 325 |
| 64690 | 49 Geotherm Heat Pump | 12,769 |  | 12,769 | \$ | 1,200 | - | \$ | - | \$ | - | \$ | 18 | \$ | - | 1,218 |
| 63151 | 51 Resid Energy Stg. | 860,171 |  | 860,171 | \$ | 37,766 | - | \$ | - | \$ | - | \$ | 1,204 | \$ | - | 38,970 |
| 64151 | 51 Commer Energy Stg. | 7,345 |  | 7,345 | \$ | 323 | - | \$ | - | \$ | - | \$ | 10 | \$ | - | 333 |
| 63152 | 52 Resid Interruptible | 3,817,190 |  | 3,817,190 | \$ | 209,955 | - | \$ | - | \$ | - | \$ | 2,295 | \$ | - | 212,250 |
| 64152 | 52 Commer Interruptible | 70,384 |  | 70,384 | \$ | 3,871 | - | \$ | - | \$ | - | \$ | 42 | \$ | - | 3,913 |
| 63900 | Resid-Wellspring * | 524,500 |  | 524,500 | \$ | 2,098 | - | \$ | - | \$ | - | \$ | - | \$ | - | 2,098 |
| 63901 | Resid-Wellspring Solar* | 4,600 |  | 4,600 | \$ | 92 | - | \$ | - | \$ | - | \$ | - | \$ | - | 92 |
| 64900 | Comm-Wellspring * | 116,700 |  | 116,700 | \$ | 467 | - | \$ | - | \$ | - | \$ | - | \$ | - | 467 |
| 64901 | Comm-Wellspring Solar* | 2,500 |  | 2,500 | \$ | 50 | - | \$ | - | \$ | - | \$ | - | \$ | - | 50 |
| 63530 | 53 Time of Day | 17,254 |  | 17,254 | \$ | 2,017 | - | \$ | - | \$ | 216 | \$ | 52 | \$ | (12) | 2,273 |
| 64540 | 54 Time of Use | 111,456 |  | 111,456 | \$ | 5,586 | 878 | \$ | 7,877 | \$ | 216 | \$ | 334 | \$ | - | 14,014 |
| 64660 | 60 Standby Service | - |  | - | \$ | - | - | \$ | - | \$ | 6,220 | \$ | - | \$ | - | 6,220 |
| 64700 | 70 Full Interruptable | 37,195,761 |  | 37,195,761 | \$ | 1,862,286 | 86,013 | \$ | 408,568 | \$ | 25,654 | \$ | $(66,952)$ | \$ | (760) | 2,228,797 |
| 64701 | 71 Partial Interruptable | 2,091,584 |  | 2,091,584 | \$ | 103,965 | 9,952 | \$ | 57,709 | \$ | 2,788 | \$ | $(3,765)$ | \$ | (71) | 160,627 |
| 63181 | 81 Cycled Air M* | 1,185,640 |  | 1,185,640 | \$ | $(37,940)$ | - | \$ | - | \$ | - | \$ | - | \$ | - | (37,9409 \% ${ }^{\text {¢ }}$ |
| 63182 | 82\&84 Cycled Air UM | - |  | - | \$ | $(517,246)$ | - | \$ | - | \$ | - | \$ | - | \$ | - | $(517,246){ }_{0}^{\sim}$ |
|  | Total* | 178,884,717 | 111,058 | 178,773,659 | \$ | 16,748,777 | 250,922 | \$ | 2,196,624 | \$ | 1,067,321 | \$ | 324,523 | \$ | $(7,803)$ | 20,329,441 の' $^{\text {a }}$ |


新

Dakota Electric Association
SALES BY RATE (Billed)
August, 2016
(Accounting Month information downlo

| Account | Rate | kWh |  |  |  |  |  |  |  | Fixed <br> Charges |  | RTA |  | Revenue <br> Adjustments |  | TOTAL <br> REVENUE <br> per Download |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Usage | DEA <br> Own Use | $\begin{aligned} & \hline \mathrm{kWh} \\ & \mathrm{NET} \\ & \hline \end{aligned}$ | Revenue <br> Adjusted |  | KW | Revenue |  |  |  |  |  |  |  |  |
| 63100 | 31 Residential | 100,379,522 |  | 100,379,522 | \$ | 13,128,864 | - | \$ | - | \$ | 873,620 | \$ | 301,133 | \$ | $(5,917)$ | 14,297,700 |
| 63200 | 32 Resl Dem Ctrl | 18,233 |  | 18,233 | \$ | 1,386 | 67 | \$ | 981 | \$ | 180 | \$ | 55 | \$ | - | 2,601 |
| 63133 | 33 Resid Electric Vehicles | 7,270 |  | 7,270 | \$ | 603 | - | \$ | - | \$ | - | \$ | 22 | \$ | - | 625 |
| 63036 | 36 Irrigation | 52,830 |  | 52,830 | \$ | 2,636 | 537 | \$ | 14,144 | \$ | 240 | \$ | 169 | \$ | - | 17,190 |
| 63037 | 37 Irrigation | 1,883,517 |  | 1,883,517 | \$ | 93,988 | 22,018 | \$ | 100,180 | \$ | 11,520 | \$ | $(2,825)$ | \$ | - | 202,862 |
| 64100 | 41 Sm Genl Serv | 3,943,510 | 1,833 | 3,941,677 | \$ | 498,825 | - | \$ | - | \$ | 59,989 | \$ | 11,400 | \$ | (104) | 570,110 |
| 62441-6244 | 44(1-3) Street Lights | 884,614 |  | 884,614 | \$ | 156,570.69 | - | \$ | - | \$ | - | \$ | 2,566 | \$ | - | 159,136 |
| 62440 | 44 Security Lgts | 40,425 |  | 40,425 | \$ | 9,172 | - | \$ | - | \$ | - | \$ | 119 | \$ | - | 9,291 |
| 62444 | 44 Security Lgts - LED | 4,227 |  | 4,227 | \$ | 2,060 | - | \$ | - | \$ | - | \$ | 13 | \$ | - | 2,073 |
| 62446 | 44 Street Lgts - LED | 2,425 |  | 2,425 | \$ | 768 | - | \$ | - | \$ | - | \$ | 7 | \$ | - | 776 |
| 64500 | 45 Emergency Unmet. | - |  | - | \$ | 550 | - | \$ | - | \$ | - | \$ | - | \$ | - | 550 |
| 64600 | 46 General Service | 46,048,154 | 113,280 | 45,934,874 | \$ | 3,309,934 | 135,354 | \$ | 1,659,438 | \$ | 88,382 | \$ | 137,820 | \$ | $(1,047)$ | 5,194,527 |
| 63047 | 47 Municipal | - |  | - | \$ | 325 | - | \$ | - | \$ | - | \$ | - | \$ | - | 325 |
| 64690 | 49 Geotherm Heat Pump | 14,853 |  | 14,853 | \$ | 1,396 | - | \$ | - | \$ | - | \$ | 21 | \$ | - | 1,417 |
| 63151 | 51 Resid Energy Stg. | 997,359 |  | 997,359 | \$ | 43,837 | - | \$ | - | \$ | - | \$ | 1,396 | \$ | - | 45,234 |
| 64151 | 51 Commer Energy Stg. | 8,516 |  | 8,516 | \$ | 375 | - | \$ | - | \$ | - | \$ | 12 | \$ | - | 387 |
| 63152 | 52 Resid Interruptible | 4,514,448 |  | 4,514,448 | \$ | 248,305 | - | \$ | - | \$ | - | \$ | 2,715 | \$ | - | 251,019 |
| 64152 | 52 Commer Interruptible | 81,783 |  | 81,783 | \$ | 4,498 | - | \$ | - | \$ | - | \$ | 49 | \$ | - | 4,547 |
| 63900 | Resid-Wellspring * | 539,200 |  | 539,200 | \$ | 2,157 | - | \$ | - | \$ | - | \$ | - | \$ | - | 2,157 |
| 63901 | Resid-Wellspring Solar* | 4,800 |  | 4,800 | \$ | 96 | - | \$ | - | \$ | - | \$ | - | \$ | - | 96 |
| 64900 | Comm-Wellspring * | 119,200 |  | 119,200 | \$ | 477 | - | \$ | - | \$ | - | \$ | - | \$ | - | 477 |
| 64901 | Comm-Wellspring Solar* | 2,500 |  | 2,500 | \$ | 50 | - | \$ | - | \$ | - | \$ | - | \$ | - | 50 |
| 63530 | 53 Time of Day | 21,192 |  | 21,192 | \$ | 2,517 | - | \$ | - | \$ | 224 | \$ | 64 | \$ | (12) | 2,792 |
| 64540 | 54 Time of Use | 107,424 |  | 107,424 | \$ | 5,395 | 702 | \$ | 3,500 | \$ | 216 | \$ | 322 | \$ | - | 9,433 |
| 64660 | 60 Standby Service | - |  | - | \$ | - | - | \$ | - | \$ | 6,237 | \$ | - | \$ | 85 | 6,323 |
| 64700 | 70 Full Interruptable | 37,681,591 |  | 37,681,591 | \$ | 1,878,524 | 86,191 | \$ | 409,415 | \$ | 25,629 | \$ | $(67,827)$ | \$ | (779) | 2,244,961 |
| 64701 | 71 Partial Interruptable | 2,214,848 |  | 2,214,848 | \$ | 110,151 | 9,842 | \$ | 57,972 | \$ | 2,788 | \$ | $(3,987)$ | \$ | (70) | 166,854 |
| 63181 | 81 Cycled Air M ${ }^{*}$ | 1,647,587 |  | 1,647,587 | \$ | $(52,723)$ | - | \$ | - | \$ | - | \$ | - | \$ | - | $(52,723 \text { 号 }$ |
| 63182 | 82\&84 Cycled Air UM | - |  | - | \$ | $(519,502)$ | - | \$ | - | \$ | - | \$ | - | \$ | - | (519,502 |
|  | Total* | 198,906,741 | 115,113 | 198,791,628 | \$ | 18,931,235 | 254,710 | \$ | 2,245,630 | \$ | 1,069,024 | \$ | 383,243 | \$ | $(7,844)$ | 22,621,287 ${ }_{\text {a }}^{\text {a }}$ |

Dakota Electric Association
SALES BY RATE（Billed）
September， 2016
（Accounting Month information downloa

| Account | Rate | kWh |  |  |  |  | KW |  |  | Fixed Charges |  | RTA |  | Revenue Adjustments |  | total <br> REVENUE <br> per Download |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Usage | $\begin{gathered} \text { DEA } \\ \text { Own Use } \end{gathered}$ | kWh NET | Revenue <br> Adjusted |  | KW | Revenue |  |  |  |  |  |  |  |  |
| 63100 | 31 Residential | 86，869，119 |  | 86，869，119 |  | 10，772，030 | － | \＄ | － | \＄ | 873，428 | \＄ | 260，629 | \＄ | $(5,832)$ | 11，900，255 |
| 63200 | 32 Resl Dem Ctrl | 16，720 |  | 16，720 | \＄ | 1，271 | 62 | \＄ | 767 | \＄ | 178 | \＄ | 50 | \＄ | － | 2，265 |
| 63133 | 33 Resid Electric Vehicles | 6，841 |  | 6，841 | \＄ | 579 | － | \＄ | － | \＄ | － | \＄ | 21 | \＄ | － | 599 |
| 63036 | 36 Irrigation | 28，040 |  | 28，040 | \＄ | 1，399 | 380 | \＄ | 5，886 | \＄ | 240 | \＄ | 90 | \＄ | － | 7，615 |
| 63037 | 37 Irrigation | 66，081 |  | 66，081 | \＄ | 3，298 | 1，834 | \＄ | 8，345 | \＄ | 11，520 | \＄ | （99） | \＄ | － | 23，063 |
| 64100 | 41 Sm Genl Serv | 3，366，249 | 2，062 | 3，364，187 | \＄ | 386，807 | － | \＄ | － | \＄ | 60，141 | \＄ | 9，726 | \＄ | （103） | 456，571 |
| 62441－6244 | 4．44（1－3）Street Lights | 883，262 |  | 883，262 |  | 156，287．79 | － | \＄ | － | \＄ | － | \＄ | 2，562 | \＄ | － | 158，850 |
| 62440 | 44 Security Lgts | 40，413 |  | 40，413 | \＄ | 9，167 | － | \＄ | － | \＄ | － | \＄ | 119 | \＄ | － | 9，286 |
| 62444 | 44 Security Lgts－LED | 4，262 |  | 4，262 | \＄ | 2，078 | － | \＄ | － | \＄ | － | \＄ | 13 | \＄ | － | 2，091 |
| 62446 | 44 Street Lgts－LED | 3，214 |  | 3，214 | \＄ | 1，032 | － | \＄ | － | \＄ | － | \＄ | 9 | \＄ | － | 1，042 |
| 64500 | 45 Emergency Unmet． | － |  | － | \＄ | 550 | － | \＄ | － | \＄ | － | \＄ | － | \＄ | － | 550 |
| 64600 | 46 General Service | 38，914，768 | 101，760 | 38，813，008 | \＄ | 2，831，329 | 131，695 | \＄ | 1，232，322 | \＄ | 88，405 | \＄ | 116，448 | \＄ | $(1,429)$ | 4，267，075 |
| 63047 | 47 Municipal | － |  | － | \＄ | 325 | － | \＄ | － | \＄ | － | \＄ | － | \＄ | － | 325 |
| 64690 | 49 Geotherm Heat Pump | 12，331 |  | 12，331 | \＄ | 1，159 | － | \＄ | － | \＄ | － | \＄ | 17 | \＄ | － | 1，176 |
| 63151 | 51 Resid Energy Stg． | 772，907 |  | 772，907 | \＄ | 34，006 | － | \＄ | － | \＄ | － | \＄ | 1，083 | \＄ | － | 35，089 |
| 64151 | 51 Commer Energy Stg． | 5，973 |  | 5，973 | \＄ | 263 | － | \＄ | － | \＄ | － | \＄ | 8 | \＄ | － | 271 |
| 63152 | 52 Resid Interruptible | 3，475，595 |  | 3，475，595 | \＄ | 191，167 | － | \＄ | － | \＄ | － | \＄ | 2，087 | \＄ | － | 193，254 |
| 64152 | 52 Commer Interruptible | 54，321 |  | 54，321 | \＄ | 2，988 | － | \＄ | － | \＄ | － | \＄ | 33 | \＄ | － | 3，020 |
| 63900 | Resid－Wellspring＊ | 523，700 |  | 523，700 | \＄ | 2，095 | － | \＄ | － | \＄ | － | \＄ | － | \＄ | － | 2，095 |
| 63901 | Resid－Wellspring Solar＊ | 4，600 |  | 4，600 | \＄ | 92 | － | \＄ | － | \＄ | － | \＄ | － | \＄ | － | 92 |
| 64900 | Comm－Wellspring＊ | 127，500 |  | 127，500 | \＄ | 510 | － | \＄ | － | \＄ | － | \＄ | － | \＄ | － | 510 |
| 64901 | Comm－Wellspring Solar＊ | 2，500 |  | 2，500 | \＄ | 50 | － | \＄ | － | \＄ | － | \＄ | － | \＄ | － | 50 |
| 63530 | 53 Time of Day | 15，971 |  | 15，971 | \＄ | 1，849 | － | \＄ | － | \＄ | 212 | \＄ | 48 | \＄ | （12） | 2，096 |
| 64540 | 54 Time of Use | 54，240 |  | 54，240 | \＄ | 2，770 | 691 | \＄ | 4，107 | \＄ | 216 | \＄ | 163 | \＄ | － | 7，256 |
| 64660 | 60 Standby Service | － |  | － | \＄ | － | － | \＄ | － | \＄ | 4，827 | \＄ | － | \＄ | 90 | 4，917 |
| 64700 | 70 Full Interruptable | 34，365，125 |  | 34，365，125 | \＄ | 1，711，867 | 80，636 | \＄ | 383，019 | \＄ | 25，753 | \＄ | （61，857） | \＄ | （726） | 2，058，056 |
| 64701 | 71 Partial Interruptable | 2，104，688 |  | 2，104，688 | \＄ | 104，592 | 9，984 | \＄ | 53，529 | \＄ | 2，788 | \＄ | $(3,788)$ | \＄ | （71） | 157，050 ${ }_{\text {¢ }}$ を |
| 63181 | 81 Cycled Air M＊ | 1，079，397 |  | 1，079，397 | \＄ | （34，541） | － | \＄ | － | \＄ | － | \＄ | － | \＄ | － | （34，541笖 |
| 63182 | 82\＆84 Cycled Air UM | － |  | － | \＄ | （26） | － | \＄ | － | \＄ | － | \＄ | － | \＄ | － | （265） |
|  | Total＊ | 171，060，120 | 103，822 | 170，956，298 |  | 16，184，994 | 225，282 | \＄ | 1，687，975 | \＄ | 1，067，708 | \＄ | 327，360 | \＄ | $(8,082)$ | 19，259，953 ふ |


Dakota Electric Association
SALES BY RATE (Billed) October, 2016

| Account | Rate | (Accounting Month information downloaded from Orcom) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | kWh |  |  |  |  | KW |  |  | Fixed <br> Charges |  | RTA |  | Revenue <br> Adjustments |  | TOTAL <br> REVENUE <br> per Download |
|  |  | Usage | DEA <br> Own Use | $\begin{aligned} & \hline \text { kWh } \\ & \text { NET } \end{aligned}$ | Revenue Adjusted |  | KW | Revenue |  |  |  |  |  |  |  |  |
| 63100 | 31 Residential | 65,065,470 |  | 65,065,470 | \$ | 7,598,829 | - | \$ | - | \$ | 872,395 | \$ | 195,190 | \$ | $(5,748)$ | 8,660,665 |
| 63200 | 32 Resl Dem Ctrl | 16,688 |  | 16,688 | \$ | 1,268 | 50 | \$ | 558 | \$ | 180 | \$ | 50 | \$ | - | 2,056 |
| 63133 | 33 Resid Electric Vehicles | 8,924 |  | 8,924 | \$ | 728 | - | \$ | - | \$ | - | \$ | 27 | \$ | - | 755 |
| 63036 | 36 Irrigation | 26,042 |  | 26,042 | \$ | 1,299 | 383 | \$ | 5,938 | \$ | 240 | \$ | 83 | \$ | - | 7,561 |
| 63037 | 37 Irrigation | 54,971 |  | 54,971 | \$ | 2,744 | 1,338 | \$ | 6,088 | \$ | 11,526 | \$ | (83) | \$ | - | 20,275 |
| 64100 | 41 Sm Genl Serv | 3,159,947 | 1,954 | 3,157,993 | \$ | 355,335 | - | \$ | - | \$ | 60,234 | \$ | 9,128 | \$ | (103) | 424,593 |
| 62441-6244 | 44(1-3) Street Lights | 885,227 |  | 885,227 |  | 156,597.85 | - | \$ | - | \$ | - | \$ | 2,567 | \$ | - | 159,165 |
| 62440 | 44 Security Lgts | 40,319 |  | 40,319 | \$ | 9,145 | - | \$ | - | \$ | - | \$ | 118 | \$ | - | 9,264 |
| 62444 | 44 Security Lgts - LED | 4,253 |  | 4,253 | \$ | 2,073 | - | \$ | - | \$ | - | \$ | 13 | \$ | - | 2,086 |
| 62446 | 44 Street Lgts - LED | 3,775 |  | 3,775 | \$ | 1,239 | - | \$ | - | \$ | - | \$ | 11 | \$ | - | 1,249 |
| 64500 | 45 Emergency Unmet. | - |  | - | \$ | 570 | - | \$ | - | \$ | - | \$ | - | \$ | - | 570 |
| 64600 | 46 General Service | 36,064,430 | 106,560 | 35,957,870 | \$ | 2,627,357 | 121,899 | \$ | 1,116,595 | \$ | 88,849 | \$ | 107,878 | \$ | $(1,335)$ | 3,939,343 |
| 63047 | 47 Municipal | - |  | - | \$ | 325 | - | \$ | - | \$ | - | \$ | - | \$ | - | 325 |
| 64690 | 49 Geotherm Heat Pump | 9,877 |  | 9,877 | \$ | 928 | - | \$ | - | \$ | - | \$ | 14 | \$ | - | 942 |
| 63151 | 51 Resid Energy Stg. | 517,120 |  | 517,120 | \$ | 22,753 | - | \$ | - | \$ | - | \$ | 724 | \$ | - | 23,477 |
| 64151 | 51 Commer Energy Stg. | 4,898 |  | 4,898 | \$ | 216 | - | \$ | - | \$ | - | \$ | 7 | \$ | - | 222 |
| 63152 | 52 Resid Interruptible | 2,319,232 |  | 2,319,232 | \$ | 127,568 | - | \$ | - | \$ | - | \$ | 1,398 | \$ | - | 128,966 |
| 64152 | 52 Commer Interruptible | 36,780 |  | 36,780 | \$ | 2,023 | - | \$ | - | \$ | - | \$ | 22 | \$ | - | 2,045 |
| 63900 | Resid-Wellspring * | 494,400 |  | 494,400 | \$ | 1,978 | - | \$ | - | \$ | - | \$ | - | \$ | - | 1,978 |
| 63901 | Resid-Wellspring Solar* | 4,400 |  | 4,400 | \$ | 88 | - | \$ | - | \$ | - | \$ | - | \$ | - | 88 |
| 64900 | Comm-Wellspring * | 141,100 |  | 141,100 | \$ | 564 | - | \$ | - | \$ | - | \$ | - | \$ | - | 564 |
| 64901 | Comm-Wellspring Solar* | 2,500 |  | 2,500 | \$ | 50 | - | \$ | - | \$ | - | \$ | - | \$ | - | 50 |
| 63530 | 53 Time of Day | 16,049 |  | 16,049 | \$ | 1,821 | - | \$ | - | \$ | 216 | \$ | 48 | \$ | (12) | 2,073 |
| 64540 | 54 Time of Use | 36,816 |  | 36,816 | \$ | 1,959 | 543 | \$ | 3,992 | \$ | 216 | \$ | 110 | \$ | - | 6,277 |
| 64660 | 60 Standby Service | 10,944 |  | 10,944 | \$ | 4,130 | 318 | \$ | 2,911 | \$ | 51 | \$ | 33 | \$ | 24 | 7,150 |
| 64700 | 70 Full Interruptable | 31,199,619 |  | 31,199,619 | \$ | 1,554,929 | 74,156 | \$ | 352,242 | \$ | 25,742 | \$ | $(56,159)$ | \$ | (421) | 1,876,333 |
| 64701 | 71 Partial Interruptable | 1,931,400 |  | 1,931,400 | \$ | 95,964 | 10,101 | \$ | 56,409 | \$ | 2,788 | \$ | $(3,477)$ | \$ | (70) | 151,614 ${ }_{\text {¢ }}$ |
| 63181 | 81 Cycled Air M* | 297,941 |  | 297,941 | \$ | $(9,534)$ | - |  | - | \$ | - | \$ | - | \$ | - | (9,534第家 |
| 63182 | 82\&84 Cycled Air UM | - |  | - | \$ | (13) | - | \$ | - | \$ | - | \$ | - | \$ | - | (13) ${ }^{\text {c }}$ |
|  | Total* | 141,412,781 | 108,514 | 141,304,267 |  | 12,562,933 | 208,788 | \$ | 1,544,734 | \$ | 1,062,437 | \$ | 257,704 | \$ | (7,666) | 15,420,141) |


Dakota Electric Association
SALES BY RATE (Billed)
November, 2016
(Accounting Month information downloa

| Account | Rate | kWh |  |  |  |  | KW |  |  | Fixed Charges |  | RTA |  | Revenue Adjustments |  | total <br> REVENUE per Download |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Usage | $\begin{gathered} \text { DEA } \\ \text { Own Use } \end{gathered}$ | $\begin{aligned} & \hline \text { kWh } \\ & \text { NET } \end{aligned}$ | Revenue Adjusted |  | KW | Revenue |  |  |  |  |  |  |  |  |
| 63100 | 31 Residential | 56,586,138 |  | 56,586,138 | \$ | 6,608,719 | - | \$ | - | \$ | 876,271 | \$ | 169,705 | \$ | $(5,736)$ | 7,648,960 |
| 63200 | 32 Resl Dem Ctrl | 23,342 |  | 23,342 | \$ | 1,774 | 59 | \$ | 651 | \$ | 180 | \$ | 70 | \$ | - | 2,675 |
| 63133 | 33 Resid Electric Vehicles | 8,435 |  | 8,435 | \$ | 721 | - | \$ | - | \$ | - | \$ | 25 | \$ | - | 746 |
| 63036 | 36 Irrigation | 6,966 |  | 6,966 | \$ | 348 | 278 | \$ | 4,316 | \$ | 240 | \$ | 22 | \$ | - | 4,926 |
| 63037 | 37 Irrigation | 34,652 |  | 34,652 | \$ | 1,730 | 1,204 | \$ | 5,477 | \$ | 11,513 | \$ | (52) | \$ | - | 18,668 |
| 64100 | 41 Sm Genl Serv | 3,242,991 | 4,304 | 3,238,687 | \$ | 364,737 | - | \$ | - | \$ | 60,345 | \$ | 9,369 | \$ | (105) | 434,346 |
| 62441-6244: | 44(1-3) Street Lights | 886,565 |  | 886,565 |  | 156,805.01 | - | \$ | - | \$ | - | \$ | 2,571 | \$ | - | 159,376 |
| 62440 | 44 Security Lgts | 40,292 |  | 40,292 | \$ | 9,139 | - | \$ | - | \$ | - | \$ | 118 | \$ | - | 9,258 |
| 62444 | 44 Security Lgts - LED | 4,283 |  | 4,283 | \$ | 2,088 | - | \$ | - | \$ | - | \$ | 13 | \$ | - | 2,101 |
| 62446 | 44 Street Lgts - LED | 4,073 |  | 4,073 | \$ | 1,336 | - | \$ | - | \$ | - | \$ | 12 | \$ | - | 1,348 |
| 64500 | 45 Emergency Unmet. | - |  | - |  | 620 | - | \$ | - | \$ | - | \$ | - | \$ | - | 620 |
| 64600 | 46 General Service | 35,245,669 | 161,760 | 35,083,909 | \$ | 2,542,259 | 109,880 | \$ | 1,006,458 | \$ | 88,613 | \$ | 105,248 | \$ | $(1,144)$ | 3,741,434 |
| 63047 | 47 Municipal | - |  | - | \$ | 325 | - | \$ | - | \$ | - | \$ | - | \$ | - | 325 |
| 64690 | 49 Geotherm Heat Pump | 11,367 |  | 11,367 | \$ | 1,069 | - | \$ | - | \$ | - | \$ | 16 | \$ | - | 1,084 |
| 63151 | 51 Resid Energy Stg. | 500,782 |  | 500,782 | \$ | 22,034 | - | \$ | - | \$ | - | \$ | 701 | \$ | - | 22,735 |
| 64151 | 51 Commer Energy Stg. | 4,505 |  | 4,505 | \$ | 198 | - | \$ | - | \$ | - | \$ | 6 | \$ | - | 205 |
| 63152 | 52 Resid Interruptible | 2,497,621 |  | 2,497,621 | \$ | 137,379 | - | \$ | - | \$ | - | \$ | 1,515 | \$ | - | 138,894 |
| 64152 | 52 Commer Interruptible | 48,911 |  | 48,911 | \$ | 2,690 | - | \$ | - | \$ | - | \$ | 29 | \$ | - | 2,720 |
| 63900 | Resid-Wellspring * | 479,800 |  | 479,800 | \$ | 1,919 | - | \$ | - | \$ | - | \$ | - | \$ | - | 1,919 |
| 63901 | Resid-Wellspring Solar* | 4,200 |  | 4,200 | \$ | 84 | - | \$ | - | \$ | - | \$ | - | \$ | - | 84 |
| 64900 | Comm-Wellspring * | 152,500 |  | 152,500 | \$ | 610 | - | \$ | - | \$ | - | \$ | - | \$ | - | 610 |
| 64901 | Comm-Wellspring Solar* | 2,500 |  | 2,500 | \$ | 50 | - | \$ | - | \$ | - | \$ | - | \$ | - | 50 |
| 63530 | 53 Time of Day | 16,193 |  | 16,193 | \$ | 1,824 | - | \$ | - | \$ | 216 | \$ | 49 | \$ | (12) | 2,077 |
| 64540 | 54 Time of Use | 45,408 |  | 45,408 | \$ | 2,344 | 396 | \$ | 2,801 | \$ | 216 | \$ | 136 | \$ | - | 5,497 |
| 64660 | 60 Standby Service | - |  | - | \$ | - | - | \$ | - | \$ | 4,827 | \$ | - | \$ | - | 4,827 |
| 64700 | 70 Full Interruptable | 29,456,002 |  | 29,456,002 | \$ | 1,467,811 | 69,054 |  | 328,007 | , | 25,730 | \$ | (53,021) | \$ | (432) | 1,768,095 |
| 64701 | 71 Partial Interruptable | 1,818,128 |  | 1,818,128 | \$ | 90,282 | 9,606 | \$ | 54,517 | \$ | 2,788 | \$ | $(3,273)$ | \$ | (71) | 144,244 |
| 63181 | 81 Cycled Air M* | 20,427 |  | 20,427 | \$ | (654) | - | \$ | - | \$ | - | \$ | - | \$ | - | (654答会 |
| 63182 | $82 \& 84$ Cycled Air UM | - |  | - | \$ | - | - | \$ | - | \$ | - | \$ | - | \$ | - | - ${ }^{\circ}$ |
|  | Total* | 130,482,323 | 166,064 | 130,316,259 |  | 11,418,241 | 190,477 | \$ | 1,402,227 | \$ | 1,070,940 | \$ | 233,262 | \$ | (7,500) | 14,117,169ㅇํ ㄱ |


Dakota Electric Association
SALES BY RATE (Billed)
December, 2016
December, 2016
(Accounting Month information downloa

| Account | Rate | kWh |  |  |  |  | KW |  |  | Fixed Charges |  | RTA |  | Revenue <br> Adjustments |  | TOTAL <br> revenue per Download |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Usage | $\begin{gathered} \text { DEA } \\ \text { Own Use } \end{gathered}$ | $\begin{aligned} & \hline \mathrm{kWh} \\ & \mathrm{NET} \\ & \hline \end{aligned}$ | Revenue <br> Adjusted |  | KW | Revenue |  |  |  |  |  |  |  |  |
| 63100 | 31 Residential | 65,006,261 |  | 65,006,261 | \$ | 7,591,508 |  | \$ | - | \$ | 876,368 | \$ | 194,977 | \$ | $(5,751)$ | 8,657,101 |
| 63200 | 32 Resl Dem Ctrl | 34,034 |  | 34,034 | \$ | 2,587 | 83 | \$ | 924 | \$ | 180 | \$ | 102 | \$ | - | 3,793 |
| 63133 | 33 Resid Electric Vehicles | 10,566 |  | 10,566 | \$ | 906 | - | \$ | - | \$ | - | \$ | 32 | \$ | - | 938 |
| 63036 | 36 Irrigation | 583 |  | 583 | \$ | 29 | 2 | \$ | 41 | \$ | 240 | \$ | 2 | \$ | - | 312 |
| 63037 | 37 Irrigation | 29,351 |  | 29,351 | \$ | 1,465 | 65 | \$ | 295 | \$ | 11,565 | \$ | (44) | \$ | - | 13,281 |
| 64100 | 41 Sm Genl Serv | 3,698,667 | 3,693 | 3,694,974 | \$ | 416,103 | - | \$ | - | \$ | 60,490 | \$ | 10,689 | \$ | (107) | 487,175 |
| 62441-6244: | 44(1-3) Street Lights | 886,771 |  | 886,771 |  | 156,864.69 | - | \$ | - | \$ | - | \$ | 2,572 | \$ | - | 159,437 |
| 62440 | 44 Security Lgts | 40,238 |  | 40,238 | \$ | 9,127 | - | \$ | - | \$ | - | \$ | 118 | \$ | - | 9,245 |
| 62444 | 44 Security Lgts - LED | 4,372 |  | 4,372 | \$ | 2,131 | - | \$ | - | \$ | - | \$ | 14 | \$ | - | 2,145 |
| 62446 | 44 Street Lgts - LED | 4,504 |  | 4,504 | \$ | 1,455 | - | \$ | - | \$ | - | \$ | 13 | \$ | - | 1,468 |
| 64500 | 45 Emergency Unmet. | - |  | - | \$ | 620 | - | \$ | - | \$ | - | , | - | \$ | - | 620 |
| 64600 | 46 General Service | 36,755,945 | 313,728 | 36,442,217 | \$ | 2,638,032 | 109,494 | \$ | 1,002,966 | \$ | 89,244 | \$ | 109,320 | \$ | (965) | 3,838,598 |
| 63047 | 47 Municipal | - |  | - | \$ | 325 | - | \$ | - | \$ | - | \$ | - | \$ | - | 325 |
| 64690 | 49 Geotherm Heat Pump | 16,451 |  | 16,451 | \$ | 1,546 | - | \$ | - | \$ | - | \$ | 23 | \$ | - | 1,569 |
| 63151 | 51 Resid Energy Stg. | 713,028 |  | 713,028 | \$ | 31,373 | - | \$ | - | \$ | - | \$ | 998 | \$ | - | 32,372 |
| 64151 | 51 Commer Energy Stg. | 10,243 |  | 10,243 | \$ | 451 | - | \$ | - | \$ | - | \$ | 14 | \$ | - | 465 |
| 63152 | 52 Resid Interruptible | 3,606,457 |  | 3,606,457 | \$ | 198,364 | - | \$ | - | \$ | - | \$ | 2,178 | \$ | - | 200,541 |
| 64152 | 52 Commer Interruptible | 128,013 |  | 128,013 | \$ | 7,041 | - | \$ | - | \$ | - | \$ | 77 | \$ | - | 7,118 |
| 63900 | Resid-Wellspring * | 497,700 |  | 497,700 | \$ | 1,991 | - | \$ | - | \$ | - | \$ | - | \$ | - | 1,991 |
| 63901 | Resid-Wellspring Solar* | 4,400 |  | 4,400 | \$ | 88 | - | \$ | - | \$ | - | \$ | - | \$ | - | 88 |
| 64900 | Comm-Wellspring * | 567,000 |  | 567,000 | \$ | 2,268 | - | \$ | - | \$ | - | \$ | - | \$ | - | 2,268 |
| 64901 | Comm-Wellspring Solar* | 2,500 |  | 2,500 | \$ | 50 | - | \$ | - | \$ | - | \$ | - | \$ | - | 50 |
| 63530 | 53 Time of Day | 22,764 |  | 22,764 | \$ | 2,542 | - | \$ | - | \$ | 216 | \$ | 68 | \$ | (12) | 2,814 |
| 64540 | 54 Time of Use | 52,320 |  | 52,320 | \$ | 2,637 | 536 | \$ | 5,144 | \$ | 216 | \$ | 157 | \$ | - | 8,154 |
| 64660 | 60 Standby Service | - |  | - | \$ | - | - | \$ | - | \$ | 5,537 | \$ | - | \$ | - | 5,537 |
| 64700 | 70 Full Interruptable | 31,274,912 |  | 31,274,912 | \$ | 1,557,963 | 64,940 | \$ | 308,467 | \$ | 25,849 | \$ | $(56,295)$ | \$ | (618) | 1,835,365 |
| 64701 | 71 Partial Interruptable | 1,528,040 |  | 1,528,040 | \$ | 75,754 | 6,180 | \$ | 43,374 | \$ | 2,788 | \$ | $(2,750)$ | \$ | (72) | 119,094 |
| 63181 | 81 Cycled Air M* | 10 |  | 10 | \$ | (0) | - | \$ | - | \$ | - | \$ | - | \$ | - |  |
| 63182 | 82\&84 Cycled Air UM | - |  | - | \$ | - | - | \$ | - | \$ | - | \$ | - | \$ | - |  |
|  | Total* | 143,823,520 | 317,421 | 143,506,099 |  | 12,703,221 | 181,301 | \$ | 1,361,211 | \$ | 1,072,693 | \$ | 262,264 | \$ | (7,525) | 15,391,864 |


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Dakota Electric Association
SALES BY RATE (Billed) January, 2017
(Accounting Month information downloaded from Orcom)

| Account | Rate | kWh |  |  |  |  | KW |  |  |  | Fixed <br> Charges |  | RTA |  | Revenue <br> Adjustments |  | TOTAL <br> REVENUE per Download |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Usage | $\begin{gathered} \text { DEA } \\ \text { Own Use } \end{gathered}$ | $\begin{aligned} & \hline \text { kWh } \\ & \text { NET } \end{aligned}$ | Revenue <br> Adjusted |  |  | KW Revenue |  |  |  |  |  |  |  |  |  |
| 63100 | 31 Residential | 76,265,164 |  | 76,265,164 | \$ | 8,907,347 |  | - | \$ | - | \$ | 880,340 | \$ | 274,502 | \$ | $(5,842)$ |  |
| 63200 | 32 Resl Dem Ctrl | 59,685 |  | 59,685 | \$ | 4,536 |  | 114 | \$ | 1,267 | \$ | 180 | \$ | 215 | \$ | - | 6,198 |
| 63133 | 33 Resid Electric Vehicles | 11,271 |  | 11,271 | \$ | 976 |  | - | \$ | - | \$ | - | \$ | 41 | \$ | - | 1,017 |
| 63036 | 36 Irrigation | 528 |  | 528 | \$ | 26 |  | 1 | \$ | 27 | \$ | 240 | \$ | 2 | \$ | - | 296 |
| 63037 | 37 Irrigation | 7,165 |  | 7,165 | \$ | 358 |  | 8 | \$ | 35 | \$ | 11,490 | \$ | 7 | \$ | - | 11,890 |
| 64100 | 41 Sm Genl Serv | 4,234,966 | 3,866 | 4,231,100 | \$ | 476,591 |  | - | \$ | - | \$ | 60,802 | \$ | 15,612 | \$ | (105) | 552,899 |
| 62440 | 44 Security Lights | 40,133 |  | 40,133 | \$ | 9,103 |  | - | \$ | - | \$ | - | \$ | 145 | \$ | - | 9,248 |
| 62441 | 44-1 Street Lights | 47,358 |  | 47,358 | \$ | 6,264 |  | - | \$ | - | \$ | - | \$ | 170 | \$ | - | 6,434 |
| 62442 | 44-2 Street Lights | 218,307 |  | 218,307 | \$ | 40,423 |  | - | \$ | - | \$ | - | \$ | 786 | \$ | - | 41,209 |
| 62443 | 44-3 Street Lights | 621,337 |  | 621,337 | \$ | 110,217 |  | - | \$ | - | \$ | - | \$ | 2,237 | \$ | - | 112,454 |
| 62444 | 44-4 Security Lgts - LED | 4,379 |  | 4,379 | \$ | 2,135 |  | - | \$ | - | \$ | - | \$ | 16 | \$ | - | 2,151 |
| 62446 | 44-6 Street Lgts - LED | 4,737 |  | 4,737 | \$ | 1,525 |  | - | \$ | - | \$ | - | \$ | 17 | \$ | - | 1,542 |
| 64500 | 45 Emergency Unmet. | - |  | - | \$ | 600 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 600 |
| 64600 | 46 General Service | 38,331,845 | 314,784 | 38,017,061 | \$ | 2,728,136 |  | 107,251 | \$ | 982,418 | \$ | 89,417 | \$ | 129,253 | \$ | (969) | 3,928,254 |
| 63047 | 47 Municipal | - |  | - | \$ | 325 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 325 |
| 64690 | 49 Geotherm Heat Pump | 26,913 |  | 26,913 | \$ | 2,530 |  | - | \$ | - | \$ | - | \$ | 54 | \$ | - | 2,584 |
| 63151 | 51 Resid Energy Stg. | 1,019,446 |  | 1,019,446 | \$ | 44,856 |  | - | \$ | - | \$ | - | \$ | 2,242 | \$ | - | 47,097 |
| 64151 | 51 Commer Energy Stg. | 16,971 |  | 16,971 | \$ | 747 |  | - | \$ | - | \$ | - | \$ | 37 | \$ | - | 784 |
| 63152 | 52 Resid Interruptible | 5,182,739 |  | 5,182,739 | \$ | 285,030 |  | - | \$ | - | \$ | - | \$ | 33,862 | \$ | - | 318,892 |
| 64152 | 52 Commer Interruptible | 193,526 |  | 193,526 | \$ | 10,644 |  | - | \$ | - | \$ | - | \$ | 1,258 | \$ | - | 11,902 |
| 63900 | Resid-Wellspring * | 509,900 |  | 509,900 | \$ | 2,040 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 2,040 |
| 63901 | Resid-Wellspring Solar* | 4,400 |  | 4,400 | \$ | 88 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 88 |
| 64900 | Comm-Wellspring * | 288,000 |  | 288,000 | \$ | 1,152 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 1,152 |
| 64901 | Comm-Wellspring Solar* | 2,500 |  | 2,500 | \$ | 50 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 50 |
| 63530 | 53 Time of Day | 27,251 |  | 27,251 | \$ | 3,052 |  | - | \$ | - | \$ | 216 | \$ | 98 | \$ | (12) | 3,354 |
| 64540 | 54 Time of Use | 101,520 |  | 101,520 | \$ | 5,066 |  | 781 | \$ | 8,374 | \$ | 216 | \$ | 345 | \$ | - | 14,001 |
| 64660 | 60 Standby Service | - |  | - | \$ | - |  | - | \$ | - | \$ | 5,617 | \$ | - | \$ | - | 5,617 |
| 64700 | 70 Full Interruptable | 30,792,518 |  | 30,792,518 | \$ | 1,533,805 |  | 64,332 | \$ | 305,576 | \$ | 25,849 | \$ | 27,713 | \$ | (607) | 1,892,335 |
| 64701 | 71 Partial Interruptable | 1,646,936 |  | 1,646,936 | \$ | 81,822 |  | 6,075 | \$ | 42,392 | \$ | 2,788 | \$ | 1,482 | \$ | (73) | 128,412 |
| 63181 | 81 Cycled Air Resid* | 446 |  | 446 | \$ | (14) | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | (14) |
| 63182 | 82\&84 Cycled Air UM | - |  | - | \$ | - |  | - | \$ | - | \$ | - | \$ | - | \$ | - | - |
|  | Total* | 158,854,695 | 318,650 | 158,536,045 |  | 14,259,428 |  | 178,562 | \$ | 1,340,089 | \$ | 1,077,154 | \$ | 490,095 | \$ | $(7,609)$ | 17,159,156 |




| Account | Rate | kWh |  |  |  |  | KW |  |  |  | Fixed <br> Charges |  | RTA |  | Revenue <br> Adjustments |  | TOTAL <br> REVENUE per Download |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Usage | $\begin{gathered} \text { DEA } \\ \text { Own Use } \end{gathered}$ | $\overline{\mathrm{kWh}}$ <br> NET |  | Revenue <br> Adjusted |  | KW |  | Revenue |  |  |  |  |  |  |  |
| 63100 | 31 Residential | 68,629,017 |  | 68,629,017 | \$ | 8,015,716 |  | - | \$ | - | \$ | 879,504 | \$ | 247,069 | \$ | $(5,838)$ | 9,136,451 |
| 63200 | 32 Resl Dem Ctrl | 50,023 |  | 50,023 | \$ | 3,802 |  | 100 | \$ | 1,114 | \$ | 180 | \$ | 180 | \$ | - | 5,276 |
| 63133 | 33 Resid Electric Vehicles | 11,729 |  | 11,729 | \$ | 1,019 |  | - | \$ | - | \$ | - | \$ | 42 | \$ | - | 1,061 |
| 63036 | 36 Irrigation | 467 |  | 467 | \$ | 23 |  | 1 | \$ | 25 | \$ | 240 | \$ | 2 | \$ | - | 290 |
| 63037 | 37 Irrigation | 6,740 |  | 6,740 | \$ | 337 |  | 9 | \$ | 42 | \$ | 11,490 | \$ | 6 | \$ | - | 11,875 |
| 64100 | 41 Sm Genl Serv | 4,088,599 | 2,933 | 4,085,666 | \$ | 460,075 |  | - | \$ | - | \$ | 60,780 | \$ | 15,078 | \$ | (104) | 535,829 |
| 62440 | 44 Security Lights | 40,200 |  | 40,200 | \$ | 9,118 |  | - | \$ | - | \$ | - | \$ | 145 | \$ | - | 9,264 |
| 62441 | 44-1 Street Lights | 47,358 |  | 47,358 | \$ | 6,264 |  | - | \$ | - | \$ | - | \$ | 170 | \$ | - | 6,434 |
| 62442 | 44-2 Street Lights | 218,307 |  | 218,307 | \$ | 40,423 |  | - | \$ | - | \$ | - | \$ | 786 | \$ | - | 41,209 |
| 62443 | 44-3 Street Lights | 621,253 |  | 621,253 | \$ | 110,201 |  | - | \$ | - | \$ | - | \$ | 2,237 | \$ | - | 112,437 |
| 62444 | 44 Security Lgts - LED | 4,416 |  | 4,416 | \$ | 2,153 |  | - | \$ | - | \$ | - | \$ | 17 | \$ | - | 2,169 |
| 62446 | 44 Street Lgts - LED | 4,759 |  | 4,759 | \$ | 1,531 |  | - | \$ | - | \$ | - | \$ | 17 | \$ | - | 1,548 |
| 64500 | 45 Emergency Unmet. | - |  | - | \$ | 620 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 620 |
| 64600 | 46 General Service | 38,053,702 | 234,912 | 37,818,790 | \$ | 2,708,029 |  | 103,855 | \$ | 951,308 | \$ | 89,515 | \$ | 128,586 | \$ | $(1,009)$ | 3,876,429 |
| 63047 | 47 Municipal | - |  | - | \$ | 325 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 325 |
| 64690 | 49 Geotherm Heat Pump | 19,518 |  | 19,518 | \$ | 1,835 |  | - | \$ | - | \$ | - | \$ | 39 | \$ | - | 1,874 |
| 63151 | 51 Resid Energy Stg. | 979,086 |  | 979,086 | \$ | 42,987 |  | - | \$ | - | \$ | - | \$ | 2,154 | \$ | - | 45,141 |
| 64151 | 51 Commer Energy Stg. | 15,777 |  | 15,777 | \$ | 694 |  | - | \$ | - | \$ | - | \$ | 35 | \$ | - | 729 |
| 63152 | 52 Resid Interruptible | 4,714,522 |  | 4,714,522 | \$ | 259,308 |  | - | \$ | - | \$ | - | \$ | 30,671 | \$ | - | 289,979 |
| 64152 | 52 Commer Interruptible | 147,142 |  | 147,142 | \$ | 8,093 |  | - | \$ | - | \$ | - | \$ | 956 | \$ | - | 9,049 |
| 63900 | Resid-Wellspring * | 501,300 |  | 501,300 | \$ | 2,005 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 2,005 |
| 63901 | Resid-Wellspring Solar* | 4,500 |  | 4,500 | \$ | 90 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 90 |
| 64900 | Comm-Wellspring * | 295,400 |  | 295,400 | \$ | 1,182 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 1,182 |
| 64901 | Comm-Wellspring Solar* | 2,500 |  | 2,500 | \$ | 50 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 50 |
| 63530 | 53 Time of Day | 23,248 |  | 23,248 | \$ | 2,598 |  | - | \$ | - | \$ | 216 | \$ | 84 | \$ | (12) | 2,886 |
| 64540 | 54 Time of Use | 101,616 |  | 101,616 | \$ | 5,118 |  | 681 | \$ | 7,938 | \$ | 216 | \$ | 346 | \$ | - | 13,618 |
| 64660 | 60 Standby Service | - |  | - | \$ | - |  | - | \$ | - | \$ | 5,617 | \$ | - | \$ | - | 5,617 |
| 64700 | 70 Full Interruptable | 27,799,302 |  | 27,799,302 | \$ | 1,384,466 |  | 65,114 | \$ | 309,293 | \$ | 26,086 | \$ | 25,019 | \$ | (564) | 1,744,300 |
| 64701 | 71 Partial Interruptable | 1,571,864 |  | 1,571,864 | \$ | 78,059 |  | 6,205 | \$ | 42,067 | \$ | 2,788 | \$ | 1,415 | \$ | (72) | 124,256 \% \% |
| 63181 | 81 Cycled Air Resid* | 317 |  | 317 | \$ | (10) | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | (10) ${ }_{\circ}^{\text {b }}$ |
| 63182 | 82\&84 Cycled Air UM | - |  | - | \$ | - |  | - | \$ | - | \$ | - | \$ | - | \$ | - | - ه2 |
|  | Total* | 147,148,645 | 237,845 | 146,910,800 |  | 13,146,110 |  | 175,966 | \$ | 1,311,788 | \$ | 1,076,631 | \$ | 455,053 | \$ | $(7,599)$ | 15,981,983 |


Dakota Electric Association
SALES BY RATE (Billed) March, 2017

Dakota Electric Association SA
SALES BY RATE (Billed)
April, 2017

| Account | Rate | kWh |  |  |  |  | KW |  |  |  | Fixed Charges |  | RTA |  | Revenue <br> Adjustments |  | TOTAL <br> REVENUE per Download |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Usage | $\begin{gathered} \text { DEA } \\ \text { Own Use } \end{gathered}$ | $\begin{aligned} & \hline \mathrm{kWh} \\ & \mathrm{NET} \\ & \hline \end{aligned}$ |  | Revenue <br> Adjusted |  | KW |  | Revenue |  |  |  |  |  |  |  |
| 63100 | 31 Residential | 56,247,922 |  | 56,247,922 | , | 6,569,698 |  | - | \$ | - | \$ | 880,763 | \$ | 202,481 | \$ | $(5,730)$ | 7,647,213 |
| 63200 | 32 Resl Dem Ctrl | 34,353 |  | 34,353 | \$ | 2,611 |  | 87 | \$ | 960 | \$ | 180 | \$ | 124 | \$ | - | 3,875 |
| 63133 | 33 Resid Electric Vehicles | 10,174 |  | 10,174 | \$ | 906 |  | - | \$ | - | \$ | - | \$ | 37 | \$ | - | 943 |
| 63036 | 36 Irrigation | 6,717 |  | 6,717 | \$ | 335 |  | 244 | \$ | 3,780 | \$ | 240 | \$ | 24 | \$ | - | 4,380 |
| 63037 | 37 Irrigation | 29,604 |  | 29,604 | \$ | 1,478 |  | 879 | \$ | 3,998 | \$ | 11,580 | \$ | 30 | \$ | - | 17,086 |
| 64100 | 41 Sm Genl Serv | 3,272,102 | 2,933 | 3,269,169 | \$ | 367,956 |  | - | \$ | - | \$ | 60,716 | \$ | 12,059 | \$ | (92) | 440,638 |
| 62440 | 44 Security Lights | 39,705 |  | 39,705 | \$ | 9,005 |  | - | \$ | - | \$ | - | \$ | 144 | \$ | - | 9,149 |
| 62441 | 44-1 Street Lights | 47,376 |  | 47,376 | \$ | 6,266 |  | - | \$ | - | \$ | - | \$ | 171 | \$ | - | 6,436 |
| 62442 | 44-2 Street Lights | 217,042 |  | 217,042 | \$ | 40,140 |  | - | \$ | - | \$ | - | \$ | 781 | \$ | - | 40,922 |
| 62443 | 44-3 Street Lights | 622,701 |  | 622,701 | \$ | 110,436 |  | - | \$ | - | \$ | - | \$ | 2,242 | \$ | - | 112,678 |
| 62444 | 44 Security Lgts - LED | 4,540 |  | 4,540 | \$ | 2,213 |  | - | \$ | - | \$ | - | \$ | 17 | \$ | - | 2,230 |
| 62446 | 44 Street Lgts - LED | 5,240 |  | 5,240 | \$ | 1,686 |  | - | \$ | - | \$ | - | \$ | 19 | \$ | - | 1,705 |
| 64500 | 45 Emergency Unmet. | - |  | - | \$ | 630 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 630 |
| 64600 | 46 General Service | 32,250,020 | 234,912 | 32,015,108 | \$ | 2,336,660 |  | 104,319 | \$ | 955,559 | \$ | 94,631 | \$ | 109,199 | \$ | $(1,001)$ | 3,495,048 |
| 63047 | 47 Municipal | - |  | - | \$ | 325 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 325 |
| 64690 | 49 Geotherm Heat Pump | 12,124 |  | 12,124 | \$ | 1,140 |  | - | \$ | - | \$ | - | \$ | 24 | \$ | - | 1,164 |
| 63151 | 51 Resid Energy Stg. | 777,429 |  | 777,429 | \$ | 34,207 |  | - | \$ | - | \$ | - | \$ | 1,710 | \$ | - | 35,917 |
| 64151 | 51 Commer Energy Stg. | 7,546 |  | 7,546 | \$ | 332 |  | - | \$ | - | \$ | - | \$ | 17 | \$ | - | 349 |
| 63152 | 52 Resid Interruptible | 3,563,797 |  | 3,563,797 | \$ | 196,018 |  | - | \$ | - | \$ | - | \$ | 23,193 | \$ | - | 219,211 |
| 64152 | 52 Commer Interruptible | 79,625 |  | 79,625 | \$ | 4,379 |  | - | \$ | - | \$ | - | \$ | 518 | \$ | - | 4,897 |
| 63900 | Resid-Wellspring * | 483,500 |  | 483,500 | \$ | 1,934 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 1,934 |
| 63901 | Resid-Wellspring Solar* | 5,900 |  | 5,900 | \$ | 118 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 118 |
| 64900 | Comm-Wellspring * | 128,200 |  | 128,200 | \$ | 513 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 513 |
| 64901 | Comm-Wellspring Solar* | 2,500 |  | 2,500 | \$ | 50 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 50 |
| 63530 | 53 Time of Day | 17,728 |  | 17,728 | \$ | 1,979 |  | - | \$ | - | \$ | 221 | \$ | 64 | \$ | (12) | 2,252 |
| 64540 | 54 Time of Use | 34,032 |  | 34,032 | \$ | 1,784 |  | 546 | \$ | 4,040 | \$ | 216 | \$ | 116 | \$ | - | 6,155 |
| 64660 | 60 Standby Service | - |  | - | \$ | - |  | - | \$ | - | \$ | 17 | \$ | - | \$ | 95 | 112 |
| 64700 | 70 Full Interruptable | 29,759,743 |  | 29,759,743 | \$ | 1,482,511 |  | 69,687 | \$ | 331,015 | \$ | 26,086 | \$ | 26,784 | \$ | (642) | 1,865,754 |
| 64701 | 71 Partial Interruptable | 1,772,384 |  | 1,772,384 | \$ | 88,090 |  | 9,517 | \$ | 51,666 | \$ | 2,898 | \$ | 1,595 | \$ | (73) | $\mathbf{1 4 4 , 1 7 6} \text { 茄 }$ |
| 63181 | 81 Cycled Air Resid* | 571 |  | 571 | \$ | (18) | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | (18) ${ }_{\text {c }}^{\text {d }}$ |
| 63182 | 82\&84 Cycled Air UM | - |  | - | \$ | - |  | - | \$ | - | \$ | - | \$ | - | \$ | - | - 2 |
|  | Total* | 128,811,904 | 237,845 | 128,574,059 |  | 11,263,380 |  | 185,278 | \$ | 1,351,019 | \$ | 1,077,549 | \$ | 381,347 | \$ | $(7,455)$ | 14,065,839 |


Dakota Electric Association May, 2017

| Account | Rate | kWh |  |  |  |  | KW |  |  |  | Fixed <br> Charges |  | RTA |  | Revenue <br> Adjustments |  | TOTAL <br> REVENUE <br> per Download |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Usage | DEA Own Use | $\begin{aligned} & \hline \text { kWh } \\ & \text { NET } \\ & \hline \end{aligned}$ |  | Revenue <br> Adjusted |  | KW |  | Revenue |  |  |  |  |  |  |  |
| 63100 | 31 Residential | 53,742,837 |  | 53,742,837 | \$ | 6,275,534 |  | - | \$ | - | \$ | 884,474 | \$ | 193,466 | \$ | $(5,792)$ | 7,347,683 |
| 63200 | 32 Resl Dem Ctrl | 23,884 |  | 23,884 | \$ | 1,815 |  | 55 | \$ | 614 | \$ | 180 | \$ | 86 | \$ | - | 2,695 |
| 63133 | 33 Resid Electric Vehicles | 11,081 |  | 11,081 | \$ | 951 |  | - | \$ | - | \$ | - | \$ | 40 | \$ | - | 991 |
| 63036 | 36 Irrigation | 21,275 |  | 21,275 | \$ | 1,062 |  | 462 | \$ | 7,166 | \$ | 240 | \$ | 77 | \$ | - | 8,544 |
| 63037 | 37 Irrigation | 108,560 |  | 108,560 | \$ | 5,417 |  | 3,371 | \$ | 15,337 | \$ | 11,490 | \$ | 109 | \$ | - | 32,353 |
| 64100 | 41 Sm Genl Serv | 3,146,969 | 2,519 | 3,144,450 | \$ | 353,879 |  | - | \$ | - | \$ | 60,713 | \$ | 11,598 | \$ | (93) | 426,097 |
| 62440 | 44 Security Lights | 39,865 |  | 39,865 | \$ | 9,041 |  | - | \$ | - | \$ | - | \$ | 144 | \$ | - | 9,186 |
| 62441 | 44-1 Street Lights | 47,376 |  | 47,376 | \$ | 6,266 |  | - | \$ | - | \$ | - | \$ | 171 | \$ | - | 6,436 |
| 62442 | 44-2 Street Lights | 216,736 |  | 216,736 | \$ | 40,086 |  | - | \$ | - | \$ | - | \$ | 780 | \$ | - | 40,867 |
| 62443 | 44-3 Street Lights | 622,767 |  | 622,767 | \$ | 110,451 |  | - | \$ | - | \$ | - | \$ | 2,242 | \$ | - | 112,693 |
| 62444 | 44 Security Lgts - LED | 4,560 |  | 4,560 | \$ | 2,223 |  | - | \$ | - | \$ | - | \$ | 17 | \$ | - | 2,240 |
| 62446 | 44 Street Lgts - LED | 5,406 |  | 5,406 | \$ | 1,807 |  | - | \$ | - | \$ | - | \$ | 19 | \$ | - | 1,827 |
| 64500 | 45 Emergency Unmet. | - |  | - | \$ | 630 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 630 |
| 64600 | 46 General Service | 34,999,432 | 2,112 | 34,997,320 | \$ | 2,542,973 |  | 116,714 | \$ | 1,069,096 | \$ | 89,871 | \$ | 118,656 | \$ | $(1,095)$ | 3,819,502 |
| 63047 | 47 Municipal | - |  | - | \$ | 325 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 325 |
| 64690 | 49 Geotherm Heat Pump | 10,471 |  | 10,471 | \$ | 984 |  | - | \$ | - | \$ | - | \$ | 21 | \$ | - | 1,005 |
| 63151 | 51 Resid Energy Stg. | 622,207 |  | 622,207 | \$ | 27,377 |  | - | \$ | - | \$ | - | \$ | 1,369 | \$ | - | 28,746 |
| 64151 | 51 Commer Energy Stg. | 6,069 |  | 6,069 | \$ | 267 |  | - | \$ | - | \$ | - | \$ | 13 | \$ | - | 280 |
| 63152 | 52 Resid Interruptible | 2,664,764 |  | 2,664,764 | \$ | 146,572 |  | - | \$ | - | \$ | - | \$ | 17,345 | \$ | - | 163,917 |
| 64152 | 52 Commer Interruptible | 53,574 |  | 53,574 | \$ | 2,947 |  | - | \$ | - | \$ | - | \$ | 348 | \$ | - | 3,295 |
| 63900 | Resid-Wellspring * | 477,500 |  | 477,500 | \$ | 1,910 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 1,910 |
| 63901 | Resid-Wellspring Solar* | 5,800 |  | 5,800 | \$ | 116 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 116 |
| 64900 | Comm-Wellspring * | 122,100 |  | 122,100 | \$ | 488 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 488 |
| 64901 | Comm-Wellspring Solar* | 2,500 |  | 2,500 | \$ | 50 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 50 |
| 63530 | 53 Time of Day | 14,450 |  | 14,450 | \$ | 1,620 |  | - | \$ | - | \$ | 212 | \$ | 52 | \$ | (12) | 1,873 |
| 64540 | 54 Time of Use | 64,800 |  | 64,800 | \$ | 3,348 |  | 523 | \$ | 3,889 | \$ | 216 | \$ | 220 | \$ | - | 7,673 |
| 64660 | 60 Standby Service | - |  | - | \$ | - |  | - | \$ | - | \$ | - | \$ | - | \$ | 5,150 | 5,150 |
| 64700 | 70 Full Interruptable | 32,704,146 |  | 32,704,146 | \$ | 1,628,923 |  | 77,812 | \$ | 369,608 | \$ | 25,080 | \$ | 29,434 | \$ | 196 | 2,053,240 |
| 64701 | 71 Partial Interruptable | 2,153,960 |  | 2,153,960 | \$ | 107,079 |  | 10,449 | \$ | 58,137 | \$ | 2,750 | \$ | 1,939 | \$ | 76 | 169,981 |
| 63181 | 81 Cycled Air Resid* | 164,091 |  | 164,091 | \$ | $(5,251)$ | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | $(5,251)$ |
| 63182 | 82\&84 Cycled Air UM | - |  | - | \$ | - |  | - | \$ | - | \$ | - | \$ | - | \$ | - | - |
|  | Total* | 131,285,189 | 4,631 | 131,280,558 |  | 11,268,892 |  | 209,386 | \$ | 1,523,846 | \$ | 1,075,226 | \$ | 378,147 | \$ | $(1,571)$ | 14,244,540 |


Dakota Electric Association
(Accounting Month information downloaded from Orcom)


*Note: kWh Sales total does not foot since rates 81 and Wellspring are also included in the base rates and therefore excluded from the total
Dakota Electric Association July, 2017
(Accounting Month information downloaded from Orcom)

| Account | Rate | kWh |  |  |  |  | KW |  |  |  | Fixed <br> Charges |  | RTA |  | Revenue <br> Adjustments |  | TOTAL <br> REVENUE per Download |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Usage | $\begin{gathered} \text { DEA } \\ \text { Own Use } \end{gathered}$ | kWh <br> NET |  | Revenue <br> Adjusted |  | KW |  | Revenue |  |  |  |  |  |  |  |
| 63100 | 31 Residential | 81,075,859 |  | 81,075,859 | \$ | 10,603,453 |  | - | \$ | - | \$ | 881,304 | \$ | 291,844 | \$ | $(5,858)$ | 11,770,743 |
| 63200 | 32 Resl Dem Ctrl | 12,329 |  | 12,329 | \$ | 937 |  | 58 | \$ | 855 | \$ | 180 | \$ | 44 | \$ | - | 2,016 |
| 63133 | 33 Resid Electric Vehicles | 10,759 |  | 10,759 | \$ | 844 |  | - | \$ | - | \$ | - | \$ | 39 | \$ | - | 883 |
| 63036 | 36 Irrigation | 71,166 |  | 71,166 | \$ | 3,551 |  | 524 | \$ | 13,801 | \$ | 240 | \$ | 256 | \$ | - | 17,849 |
| 63037 | 37 Irrigation | 3,424,673 |  | 3,424,673 | \$ | 170,891 |  | 22,884 | \$ | 104,122 | \$ | 11,520 | \$ | 3,425 | \$ | - | 289,958 |
| 64100 | 41 Sm Genl Serv | 3,326,157 | 2,643 | 3,323,514 | \$ | 420,492 |  | - | \$ | - | \$ | 60,910 | \$ | 12,260 | \$ | (96) | 493,566 |
| 62440 | 44 Security Lights | 39,355 |  | 39,355 | \$ | 8,925 |  | - | \$ | - | \$ | - | \$ | 142 | \$ | - | 9,067 |
| 62441 | 44-1 Street Lights | 46,614 |  | 46,614 | \$ | 6,165 |  | - | \$ | - | \$ | - | \$ | 168 | \$ | - | 6,333 |
| 62442 | 44-2 Street Lights | 216,794 |  | 216,794 | \$ | 40,092 |  | - | \$ | - | \$ | - | \$ | 781 | \$ | - | 40,873 |
| 62443 | 44-3 Street Lights | 623,185 |  | 623,185 | \$ | 110,519 |  | - | \$ | - | \$ | - | \$ | 2,244 | \$ | - | 112,763 |
| 62444 | 44 Security Lgts - LED | 4,614 |  | 4,614 | \$ | 2,250 |  | - | \$ | - | \$ | - | \$ | 17 | \$ | - | 2,267 |
| 62446 | 44 Street Lgts - LED | 5,785 |  | 5,785 | \$ | 1,974 |  | - | \$ | - | \$ | - | \$ | 21 | \$ | - | 1,995 |
| 64500 | 45 Emergency Unmet. | - |  | - | \$ | 630 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 630 |
| 64600 | 46 General Service | 39,431,284 | 96,192 | 39,335,092 | \$ | 2,854,249 |  | 132,812 | \$ | 1,628,468 | \$ | 89,891 | \$ | 133,752 | \$ | $(1,203)$ | 4,705,157 |
| 63047 | 47 Municipal | - |  | - | \$ | 330 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 330 |
| 64690 | 49 Geotherm Heat Pump | 11,142 |  | 11,142 | \$ | 1,047 |  | - | \$ | - | \$ | - | \$ | 22 | \$ | - | 1,070 |
| 63151 | 51 Resid Energy Stg. | 851,722 |  | 851,722 | \$ | 37,476 |  | - | \$ | - | \$ | - | \$ | 1,874 | \$ | - | 39,350 |
| 64151 | 51 Commer Energy Stg. | 5,941 |  | 5,941 | \$ | 261 |  | - | \$ | - | \$ | - | \$ | 13 | \$ | - | 274 |
| 63152 | 52 Resid Interruptible | 3,490,268 |  | 3,490,268 | \$ | 191,685 |  | - | \$ | - | \$ | - | \$ | 22,751 | \$ | - | 214,436 |
| 64152 | 52 Commer Interruptible | 59,119 |  | 59,119 | \$ | 3,252 |  | - | \$ | - | \$ | - | \$ | 384 | \$ | - | 3,636 |
| 63900 | Resid-Wellspring * | 510,400 |  | 510,400 | \$ | 2,042 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 2,042 |
| 63901 | Resid-Wellspring Solar* | 9,100 |  | 9,100 | \$ | 182 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 182 |
| 64900 | Comm-Wellspring * | 136,200 |  | 136,200 | \$ | 545 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 545 |
| 64901 | Comm-Wellspring Solar* | 2,500 |  | 2,500 | \$ | 50 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 50 |
| 63530 | 53 Time of Day | 17,011 |  | 17,011 | \$ | 2,000 |  | - | \$ | - | \$ | 216 | \$ | 61 | \$ | (12) | 2,265 |
| 64540 | 54 Time of Use | 159,120 |  | 159,120 | \$ | 7,940 |  | 885 | \$ | 8,872 | \$ | 216 | \$ | 541 | \$ | - | 17,569 |
| 64660 | 60 Standby Service | - |  | - | \$ | - |  | - | \$ | - | \$ | - | \$ | - | \$ | 6,626 | 6,626 |
| 64700 | 70 Full Interruptable | 37,331,643 |  | 37,331,643 | \$ | 1,865,982 |  | 84,063 | \$ | 399,298 | \$ | 25,080 | \$ | 33,599 | \$ | 170 | 2,324,128 |
| 64701 | 71 Partial Interruptable | 2,050,176 |  | 2,050,176 | \$ | 101,908 |  | 9,641 | \$ | 63,102 | \$ | 2,750 | \$ | 1,845 | \$ | 76 | 169,682 ${ }^{\text {浣 }}$ |
| 63181 | 81 Cycled Air Resid* | 1,041,077 |  | 1,041,077 | \$ | $(33,314)$ | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | $(33,314)^{\text {b }}$ |
| 63182 | 82\&84 Cycled Air UM | - |  | - | \$ | $(525,330)$ |  |  | \$ | - | \$ | - | \$ | - | \$ | - | (525,330) ${ }^{\text {a }}$ |
|  | Total* | 172,264,716 | 98,835 | 172,165,881 | \$ | 15,881,027 |  | 250,866 | \$ | 2,218,518 | \$ | 1,072,307 | \$ | 506,083 | \$ | (298) | 19,677,637 |

Dakota Electric Association 17
Sales by rate (billed)
,

| Account | Rate | kWh |  |  |  |  |  | KW |  |  | Fixed Charges |  | RTA |  | Revenue <br> Adjustments |  | TOTAL <br> REVENUE <br> per Download |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Usage | $\begin{gathered} \text { DEA } \\ \text { Own Use } \end{gathered}$ | $\begin{aligned} & \hline \mathrm{kWh} \\ & \text { NET } \end{aligned}$ |  | Revenue <br> Adjusted |  | KW |  | Revenue |  |  |  |  |  |  |  |
| 63100 | 31 Residential | 90,662,750 |  | 90,662,750 | \$ | 11,856,428 |  | - | \$ | - | \$ | 883,072 | \$ | 326,360 | \$ | $(5,927)$ | 13,059,933 |
| 63200 | 32 Resl Dem Ctrl | 18,379 |  | 18,379 | \$ | 1,397 |  | 64 | \$ | 942 | \$ | 180 | \$ | 66 | \$ | - | 2,585 |
| 63133 | 33 Resid Electric Vehicles | 10,896 |  | 10,896 | \$ | 853 |  | - | \$ | - | \$ | - | \$ | 39 | \$ | - | 892 |
| 63036 | 36 Irrigation | 42,234 |  | 42,234 | \$ | 2,107 |  | 437 | \$ | 11,515 | \$ | 240 | \$ | 152 | \$ | - | 14,015 |
| 63037 | 37 Irrigation | 1,717,382 |  | 1,717,382 | \$ | 85,697 |  | 21,978 | \$ | 100,000 | \$ | 11,571 | \$ | 1,718 | \$ | - | 198,986 |
| 64100 | 41 Sm Genl Serv | 3,705,984 | 2,925 | 3,703,059 | \$ | 468,675 |  | - | \$ | - | \$ | 60,927 | \$ | 13,666 | \$ | (101) | 543,167 |
| 62440 | 44 Security Lights | 39,255 |  | 39,255 | \$ | 8,901 |  | - | \$ | - | \$ | - | \$ | 142 | \$ | - | 9,043 |
| 62441 | 44-1 Street Lights | 46,614 |  | 46,614 | \$ | 6,165 |  | - | \$ | - | \$ | - | \$ | 168 | \$ | - | 6,333 |
| 62442 | 44-2 Street Lights | 215,642 |  | 215,642 | \$ | 39,866 |  | - | \$ | - | \$ | - | \$ | 776 | \$ | - | 40,643 |
| 62443 | 44-3 Street Lights | 623,647 |  | 623,647 | \$ | 110,605 |  | - | \$ | - | \$ | - | \$ | 2,245 | \$ | - | 112,850 |
| 62444 | 44 Security Lgts - LED | 4,656 |  | 4,656 | \$ | 2,270 |  | - | \$ | - | \$ | - | \$ | 17 | \$ | - | 2,287 |
| 62446 | 44 Street Lgts - LED | 6,451 |  | 6,451 | \$ | 2,193 |  | - | \$ | - | \$ | - | \$ | 23 | \$ | - | 2,216 |
| 64500 | 45 Emergency Unmet. | - |  | - | \$ | 620 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 620 |
| 64600 | 46 General Service | 44,398,617 | 95,040 | 44,303,577 | \$ | 3,172,994 |  | 130,332 | \$ | 1,597,872 | \$ | 89,930 | \$ | 150,641 | \$ | $(1,150)$ | 5,010,287 |
| 63047 | 47 Municipal | - |  | - | \$ | 320 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 320 |
| 64690 | 49 Geotherm Heat Pump | 13,914 |  | 13,914 | \$ | 1,308 |  | - | \$ | - | \$ | - | S | 28 | \$ | - | 1,336 |
| 63151 | 51 Resid Energy Stg. | 910,304 |  | 910,304 | \$ | 40,053 |  | - | \$ | - | \$ | - | \$ | 2,003 | \$ | - | 42,056 |
| 64151 | 51 Commer Energy Stg. | 6,893 |  | 6,893 | \$ | 303 |  | - | \$ | - | \$ | - | \$ | 15 | \$ | - | 318 |
| 63152 | 52 Resid Interruptible | 3,899,907 |  | 3,899,907 | \$ | 214,505 |  | - | \$ | - | \$ | - | \$ | 25,406 | \$ | - | 239,911 |
| 64152 | 52 Commer Interruptible | 67,054 |  | 67,054 | \$ | 3,688 |  | - | \$ | - | \$ | - | \$ | 436 | \$ | - | 4,124 |
| 63900 | Resid-Wellspring * | 518,200 |  | 518,200 | \$ | 2,073 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 2,073 |
| 63901 | Resid-Wellspring Solar* | 10,000 |  | 10,000 | \$ | 200 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 200 |
| 64900 | Comm-Wellspring * | 130,100 |  | 130,100 | \$ | 520 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 520 |
| 64901 | Comm-Wellspring Solar* | 2,500 |  | 2,500 | \$ | 50 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 50 |
| 63530 | 53 Time of Day | 18,337 |  | 18,337 | \$ | 2,182 |  | - | \$ | - | \$ | 216 | , | 66 | \$ | (12) | 2,452 |
| 64540 | 54 Time of Use | 124,656 |  | 124,656 | \$ | 6,220 |  | 930 | \$ | 10,003 | \$ | 216 | \$ | 424 | \$ | - | 16,863 |
| 64660 | 60 Standby Service | - |  | - | \$ | - |  | - | \$ | - | \$ | - | \$ | - | \$ | 6,523 | 6,523 |
| 64700 | 70 Full Interruptable | 35,837,960 |  | 35,837,960 | \$ | 1,774,876 |  | 80,850 | \$ | 384,036 | \$ | 25,146 | \$ | 32,254 | \$ | 195 | 2,216,507 |
| 64701 | 71 Partial Interruptable | 2,226,456 |  | 2,226,456 | \$ | 110,695 |  | 10,211 | \$ | 71,048 | \$ | 2,750 | \$ | 2,004 | \$ | 76 | 186,573 |
| 63181 | 81 Cycled Air Resid* | 1,249,524 |  | 1,249,524 | \$ | $(39,985)$ | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | ( $39,985{ }^{\text {¢ }}$ |
| 63182 | 82\&84 Cycled Air UM | - |  | - | \$ | (525,508) |  | - | \$ | - | \$ | - | \$ | - | \$ | - | (525,508) |
|  | Total* | 184,597,988 | 97,965 | 184,500,023 | \$ | 17,350,274 |  | 244,802 | \$ | 2,175,417 | \$ | 1,074,248 | \$ | 558,649 | \$ | (395) | 21,158,192 |

Dakota Electric Association
SALES BY RATE (Billed)
September, 2017

| Account | Rate | (Accounting Month information downloaded from Orcom) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | kWh |  |  |  |  |  | KW |  |  | Fixed <br> Charges |  | RTA |  | Revenue <br> Adjustments |  | TOTAL <br> REVENUE <br> per Download |
|  |  | Usage | $\begin{gathered} \text { DEA } \\ \text { Own Use } \end{gathered}$ | $\begin{aligned} & \hline \mathrm{kWh} \\ & \mathrm{NET} \\ & \hline \end{aligned}$ | Revenue <br> Adjusted |  |  | KW |  | Revenue |  |  |  |  |  |  |  |
| 63100 | 31 Residential | 75,731,106 |  | 75,731,106 | \$ | 9,356,842 |  | - | \$ | - | \$ | 887,102 | \$ | 272,610 | \$ | $(5,839)$ | 10,510,716 |
| 63200 | 32 Resl Dem Ctrl | 17,405 |  | 17,405 | \$ | 1,323 |  | 60 | \$ | 736 | \$ | 180 | \$ | 63 | \$ | - | 2,301 |
| 63133 | 33 Resid Electric Vehicles | 13,259 |  | 13,259 | \$ | 1,023 |  | - | \$ | - | \$ | - | \$ | 48 | \$ | - | 1,070 |
| 63036 | 36 Irrigation | 52,816 |  | 52,816 | \$ | 2,636 |  | 458 | \$ | 7,105 | \$ | 240 | \$ | 190 | \$ | - | 10,170 |
| 63037 | 37 Irrigation | 1,277,787 |  | 1,277,787 | \$ | 63,762 |  | 18,030 | \$ | 82,036 | \$ | 11,520 | \$ | 1,278 | \$ | - | 158,596 |
| 64100 | 41 Sm Genl Serv | 3,427,346 | 2,852 | 3,424,494 | \$ | 393,445 |  | - | \$ | - | \$ | 61,041 | \$ | 12,635 | \$ | (97) | 467,024 |
| 62440 | 44 Security Lights | 39,128 |  | 39,128 | \$ | 8,842 |  | - | \$ | - | \$ | - | \$ | 141 | \$ | - | 8,984 |
| 62441 | 44-1 Street Lights | 46,614 |  | 46,614 | \$ | 6,165 |  | - | \$ | - | \$ | - | \$ | 168 | \$ | - | 6,333 |
| 62442 | 44-2 Street Lights | 213,317 |  | 213,317 | \$ | 39,426 |  | - | \$ | - | \$ | - | \$ | 768 | \$ | - | 40,194 |
| 62443 | 44-3 Street Lights | 623,698 |  | 623,698 | \$ | 110,613 |  | - | \$ | - | \$ | - | \$ | 2,245 | \$ | - | 112,858 |
| 62444 | 44 Security Lgts - LED | 4,672 |  | 4,672 | \$ | 2,234 |  | - | \$ | - | \$ | - | \$ | 17 | \$ | - | 2,252 |
| 62446 | 44 Street Lgts - LED | 7,370 |  | 7,370 | \$ | 2,079 |  | - | \$ | - | \$ | - | \$ | 26 | \$ | - | 2,105 |
| 64500 | 45 Emergency Unmet. | - |  | - | \$ | 630 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 630 |
| 64600 | 46 General Service | 39,950,586 | 87,360 | 39,863,226 | \$ | 2,884,300 |  | 129,669 | \$ | 1,211,344 | \$ | 90,243 | \$ | 135,544 | \$ | $(1,169)$ | 4,320,261 |
| 63047 | 47 Municipal | - |  | - | \$ | 320 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 320 |
| 64690 | 49 Geotherm Heat Pump | 10,942 |  | 10,942 | \$ | 1,029 |  | - | \$ | - | \$ | - | \$ | 22 | \$ | - | 1,050 |
| 63151 | 51 Resid Energy Stg. | 671,419 |  | 671,419 | \$ | 29,520 |  | - | \$ | - | \$ | - | \$ | 1,477 | \$ | - | 30,997 |
| 64151 | 51 Commer Energy Stg. | 5,179 |  | 5,179 | \$ | 228 |  | - | \$ | - | \$ | - | \$ | 11 | \$ | - | 239 |
| 63152 | 52 Resid Interruptible | 2,844,712 |  | 2,844,712 | \$ | 156,469 |  | - | \$ | - | \$ | - | \$ | 18,538 | \$ | - | 175,007 |
| 64152 | 52 Commer Interruptible | 51,263 |  | 51,263 | \$ | 2,820 |  | - | \$ | - | \$ | - | \$ | 333 | \$ | - | 3,153 |
| 63900 | Resid-Wellspring * | 500,700 |  | 500,700 | \$ | 2,003 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 2,003 |
| 63901 | Resid-Wellspring Solar* | 11,200 |  | 11,200 | \$ | 224 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 224 |
| 64900 | Comm-Wellspring * | 127,300 |  | 127,300 | \$ | 509 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 509 |
| 64901 | Comm-Wellspring Solar* | 2,500 |  | 2,500 | \$ | 50 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 50 |
| 63530 | 53 Time of Day | 15,207 |  | 15,207 | \$ | 1,744 |  | - | \$ | - | \$ | 216 | \$ | 55 | \$ | (12) | 2,003 |
| 64540 | 54 Time of Use | 114,960 |  | 114,960 | \$ | 5,812 |  | 771 | \$ | 6,410 | \$ | 216 | \$ | 391 | \$ | - | 12,828 |
| 64660 | 60 Standby Service | - |  | - | \$ | - |  | - | \$ | - | \$ | - | \$ | - | \$ | 5,031 | 5,031 |
| 64700 | 70 Full Interruptable | 34,227,595 |  | 34,227,595 | \$ | 1,704,853 |  | 84,167 | \$ | 399,794 | \$ | 25,190 | \$ | 30,805 | \$ | 189 | 2,160,830 |
| 64701 | 71 Partial Interruptable | 2,137,072 |  | 2,137,072 | \$ | 106,272 |  | 10,760 | \$ | 60,543 | \$ | 2,750 | \$ | 1,923 | \$ | 76 | 171,564 |
| 63181 | 81 Cycled Air Resid* | 629,022 |  | 629,022 | \$ | $(20,129)$ | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | $(20,129)$ |
| 63182 | 82\&84 Cycled Air UM | - |  | - | \$ | (507) |  | - | \$ | - | \$ | - | \$ | - | \$ | - | (507) |
|  | Total* | 161,483,453 | 90,212 | 161,393,241 |  | 14,864,534 |  | 243,916 | \$ | 1,767,967 | \$ | 1,078,698 | \$ | 479,290 | \$ | $(\mathbf{1 , 8 2 1})$ | 18,188,668 |




| Account | Rate | $\mathbf{k W h}$ |  |  |  |  | KW |  |  |  | Fixed Charges |  | RTA |  | Revenue Adjustments |  | TOTAL REVENUE per Download |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Usage | DEA Own Use | $\begin{aligned} & \text { kWh } \\ & \text { NET } \end{aligned}$ |  | Revenue <br> Adjusted |  | KW |  | Revenue |  |  |  |  |  |  |  |
| 63100 | 31 Residential | 69,409,890 |  | 69,409,890 | \$ | 8,106,909 |  | - | \$ | - | \$ | 884,326 | \$ | 249,867 | \$ | $(5,828)$ | $9,235,273$ |
| 63200 | 32 Resl Dem Ctrl | 16,524 |  | 16,524 | \$ | 1,256 |  | 61 | \$ | 674 | \$ | 180 | \$ | 59 | \$ | - | 2,170 |
| 63133 | 33 Resid Electric Vehicles | 13,489 |  | 13,489 | \$ | 1,048 |  | - | \$ | - | \$ | - | \$ | 49 | \$ | - | 1,097 |
| 63036 | 36 Irrigation | 25,306 |  | 25,306 | \$ | 1,263 |  | 308 | \$ | 4,768 | \$ | 240 | \$ | 91 | \$ | - | 6,361 |
| 63037 | 37 Irrigation | 41,455 |  | 41,455 | \$ | 2,069 |  | 1,509 | \$ | 6,866 | \$ | 11,533 | \$ | 42 | \$ | - | 20,510 |
| 64100 | 41 Sm Genl Serv | 3,197,301 | 2,237 | 3,195,064 | \$ | 359,408 |  | - | \$ | - | \$ | 60,991 | \$ | 11,780 | \$ | (93) | 432,088 |
| 62440 | 44 Security Lights | 38,858 |  | 38,858 | \$ | 8,810 |  | - | \$ | - | \$ | - | \$ | 140 | \$ | - | 8,951 |
| 62441 | 44-1 Street Lights | 46,446 |  | 46,446 | \$ | 6,142 |  | - | \$ | - | \$ | - | \$ | 167 | \$ | - | 6,310 |
| 62442 | 44-2 Street Lights | 210,597 |  | 210,597 | \$ | 38,935 |  | - | \$ | - | \$ | - | \$ | 758 | \$ | - | 39,694 |
| 62443 | 44-3 Street Lights | 621,592 |  | 621,592 | \$ | 110,279 |  | - | \$ | - | \$ | - | \$ | 2,238 | \$ | - | 112,516 |
| 62444 | 44 Security Lgts - LED | 4,710 |  | 4,710 | \$ | 2,246 |  | - | \$ | - | \$ | - | \$ | 18 | \$ | - | 2,264 |
| 62446 | 44 Street Lgts - LED | 9,548 |  | 9,548 | \$ | 2,739 |  | - | \$ | - | \$ | - | \$ | 34 | \$ | - | 2,773 |
| 64500 | 45 Emergency Unmet. | - |  | - | \$ | 660 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 660 |
| 64600 | 46 General Service | 36,868,990 | 113,280 | 36,755,710 | \$ | 2,679,877 |  | 127,903 | \$ | 1,171,590 | \$ | 90,721 | \$ | 124,976 | \$ | $(1,075)$ | 4,066,089 |
| 63047 | 47 Municipal | - |  | - | \$ | 325 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 325 |
| 64690 | 49 Geotherm Heat Pump | 11,263 |  | 11,263 | \$ | 1,059 |  | - | \$ | - | \$ | - | \$ | 23 | \$ | - | 1,081 |
| 63151 | 51 Resid Energy Stg. | 640,242 |  | 640,242 | \$ | 28,171 |  | - | \$ | - | \$ | - | \$ | 1,409 | \$ | - | 29,579 |
| 64151 | 51 Commer Energy Stg. | 4,979 |  | 4,979 | \$ | 219 |  | - | \$ | - | \$ | - | \$ | 11 | \$ | - | 230 |
| 63152 | 52 Resid Interruptible | 2,644,648 |  | 2,644,648 | \$ | 145,317 |  | - | \$ | - | \$ | - | \$ | 17,214 | \$ | - | 162,531 |
| 64152 | 52 Commer Interruptible | 45,563 |  | 45,563 | \$ | 2,506 |  | - | \$ | - | \$ | - | \$ | 296 | \$ | - | 2,802 |
| 63900 | Resid-Wellspring * | 491,500 |  | 491,500 | \$ | 1,966 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 1,966 |
| 63901 | Resid-Wellspring Solar* | 11,100 |  | 11,100 | \$ | 222 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 222 |
| 64900 | Comm-Wellspring * | 123,700 |  | 123,700 | \$ | 495 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 495 |
| 64901 | Comm-Wellspring Solar* | 2,500 |  | 2,500 | \$ | 50 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 50 |
| 63530 | 53 Time of Day | 15,406 |  | 15,406 | \$ | 1,749 |  | - | \$ | - | \$ | 216 | \$ | 55 | \$ | (12) | 2,008 |
| 64540 | 54 Time of Use | 67,272 |  | 67,272 | \$ | 3,549 |  | 530 | \$ | 4,042 | \$ | 216 | \$ | 229 | \$ | - | 8,036 |
| 64660 | 60 Standby Service | - |  | - | \$ | - |  | - | \$ | - | \$ | - | \$ | - | \$ | 4,972 | 4,972 |
| 64700 | 70 Full Interruptable | 31,337,126 |  | 31,337,126 | \$ | 1,560,369 |  | 75,047 | \$ | 356,475 | \$ | 25,238 | \$ | 28,203 | \$ | 268 | 1,970,552 ه |
| 64701 | 71 Partial Interruptable | 2,239,328 |  | 2,239,328 | \$ | 111,332 |  | 10,486 | \$ | 57,399 | \$ | 2,860 | \$ | 2,015 | \$ | 84 | 173,690 \%ัٌ \% |
| 63181 | 81 Cycled Air Resid* | 495,464 |  | 495,464 | \$ | $(15,855)$ | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | $(15,855)$ ) |
| 63182 | 82\&84 Cycled Air UM | - |  | - | \$ | (962) |  | - | \$ | - | \$ | - | \$ | - | \$ | - | (962) ${ }^{\circ}$ ® ${ }^{\text {a }}$ |
|  | Total* | 147,510,533 | 115,517 | 147,395,016 |  | 13,162,152 |  | 215,843 | \$ | 1,601,813 | \$ | 1,076,521 | \$ | 439,675 | \$ | $(1,684)$ | 16,278,476 |

Dakota Electric Association
SALES BY RATE (Billed)
November, 2017
(Accounting Month information downloa


Dakota Electric Association
SALES BY RATE (Billed)
December, 2017
(Accounting Month information downloa

| Account | Rate | kWh |  |  |  |  | KW |  |  |  | Fixed <br> Charges |  | RTA |  | Revenue <br> Adjustments |  | TOTAL <br> REVENUE per Download |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Usage | DEA Own Use | kWh <br> NET |  | Revenue <br> Adjusted |  | KW |  | Revenue |  |  |  |  |  |  |  |
| 63100 | 31 Residential | 66,462,465 |  | 66,462,465 | \$ | 7,762,243 |  | - | \$ | - | \$ | 889,304 | \$ | 239,231 | \$ | $(5,773)$ | 8,885,005 |
| 63200 | 32 Resl Dem Ctrl | 39,311 |  | 39,311 | \$ | 2,988 |  | 93 | \$ | 1,031 | \$ | 180 | \$ | 142 | \$ | - | 4,340 |
| 63133 | 33 Resid Electric Vehicles | 19,397 |  | 19,397 | \$ | 1,468 |  | - | \$ | - | \$ | - | \$ | 70 | \$ | - | 1,537 |
| 63036 | 36 Irrigation | 451 |  | 451 | \$ | 23 |  | 5 | \$ | 107 | \$ | 240 | \$ | 2 | \$ | - | 371 |
| 63037 | 37 Irrigation | 20,305 |  | 20,305 | \$ | 1,014 |  | 247 | \$ | 1,123 | \$ | 11,468 | \$ | 20 | \$ | - | 13,625 |
| 64100 | 41 Sm Genl Serv | 3,578,408 | 2,505 | 3,575,903 | \$ | 402,400 |  | - | \$ | - | \$ | 61,071 | \$ | 13,188 | \$ | (94) | 476,565 |
| 62440 | 44 Security Lights | 38,487 |  | 38,487 | \$ | 8,725 |  | - | \$ | - | \$ | - | \$ | 139 | \$ | - | 8,864 |
| 62441 | 44-1 Street Lights | 46,650 |  | 46,650 | \$ | 6,169 |  | - | \$ | - | \$ | - | \$ | 168 | \$ | - | 6,337 |
| 62442 | 44-2 Street Lights | 208,556 |  | 208,556 | \$ | 38,525 |  | - | \$ | - | \$ | - | \$ | 751 | \$ | - | 39,276 |
| 62443 | 44-3 Street Lights | 619,313 |  | 619,313 | \$ | 109,927 |  | - | \$ | - | \$ | - | \$ | 2,230 | \$ | - | 112,157 |
| 62444 | 44 Security Lgts - LED | 4,841 |  | 4,841 | \$ | 2,308 |  | - | \$ | - | \$ | - | \$ | 18 | \$ | - | 2,326 |
| 62446 | 44 Street Lgts - LED | 12,151 |  | 12,151 | \$ | 3,617 |  | - | \$ | - | \$ | - | \$ | 44 | \$ | - | 3,661 |
| 64500 | 45 Emergency Unmet. | - |  | - | \$ | 660 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 660 |
| 64600 | 46 General Service | 34,744,246 | 288,864 | 34,455,382 | \$ | 2,504,446 |  | 109,899 | \$ | 1,006,674 | \$ | 90,829 | \$ | 117,147 | \$ | $(1,262)$ | 3,717,835 |
| 63047 | 47 Municipal | - |  | - | \$ | 330 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 330 |
| 64690 | 49 Geotherm Heat Pump | 16,957 |  | 16,957 | \$ | 1,594 |  | - | \$ | - | \$ | - | \$ | 34 | \$ | - | 1,628 |
| 63151 | 51 Resid Energy Stg. | 828,033 |  | 828,033 | \$ | 36,422 |  | - | \$ | - | \$ | - | \$ | 1,822 | \$ | - | 38,244 |
| 64151 | 51 Commer Energy Stg. | 9,121 |  | 9,121 | \$ | 401 |  | - | \$ | - | \$ | - | \$ | 20 | \$ | - | 421 |
| 63152 | 52 Resid Interruptible | 4,066,066 |  | 4,066,066 | \$ | 223,644 |  | - | \$ | - | \$ | - | \$ | 26,497 | \$ | - | 250,141 |
| 64152 | 52 Commer Interruptible | 101,974 |  | 101,974 | \$ | 5,609 |  | - | \$ | - | \$ | - | \$ | 663 | \$ | - | 6,271 |
| 63900 | Resid-Wellspring * | 497,100 |  | 497,100 | \$ | 1,988 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 1,988 |
| 63901 | Resid-Wellspring Solar* | 10,300 |  | 10,300 | \$ | 206 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 206 |
| 64900 | Comm-Wellspring * | 493,800 |  | 493,800 | \$ | 1,975 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 1,975 |
| 64901 | Comm-Wellspring Solar* | 2,500 |  | 2,500 | \$ | 50 |  | - | \$ | - | \$ | - | \$ | - | \$ | - | 50 |
| 63530 | 53 Time of Day | 20,476 |  | 20,476 | \$ | 2,305 |  | - | \$ | - | \$ | 216 | \$ | 74 | \$ | (12) | 2,583 |
| 64540 | 54 Time of Use | 63,504 |  | 63,504 | \$ | 3,173 |  | 376 | \$ | 4,355 | \$ | 216 | \$ | 216 | \$ | - | 7,959 |
| 64660 | 60 Standby Service | - |  | - | \$ | - |  | - | \$ | - | \$ | - | \$ | - | \$ | 5,600 | 5,600 |
| 64700 | 70 Full Interruptable | 30,275,977 |  | 30,275,977 | \$ | 1,508,193 |  | 64,451 | \$ | 306,143 | \$ | 25,410 | \$ | 27,248 | \$ | 405 | 1,867,399 |
| 64701 | 71 Partial Interruptable | 1,701,992 |  | 1,701,992 | \$ | 84,506 |  | 6,847 | \$ | 43,828 | \$ | 2,860 | \$ | 1,532 | \$ | 78 | 132,804 |
| 63181 | 81 Cycled Air Resid* | 86 |  | 86 | \$ | (3) | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | (3) |
| 63182 | 82\&84 Cycled Air UM | - |  | - | \$ | - |  | - | \$ | - | \$ | - | \$ | - | \$ | - |  |
|  | Total* | 142,878,681 | 291,369 | 142,587,312 |  | 12,714,905 |  | 181,917 | \$ | 1,363,261 | \$ | 1,081,793 | \$ | 431,254 | \$ | $(1,057)$ | 15,590,156 |



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Full Year 2018

| Account | Rate | kWh |  |  |  | KW |  | Fixed <br> Charges <br> RTA |  | Revenue Adjustments | $\begin{gathered} \text { Coincidental } \\ \text { Demand } \\ \hline \end{gathered}$ | TOTAL <br> ADJUSTED <br> REVENUE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Usage | DEA <br> Own Use | $\begin{aligned} & \hline \mathrm{kWh} \\ & \mathrm{NET} \end{aligned}$ | Revenue <br> Adjusted | KW | Revenue |  |  |  |  |  |
| 63100 | 31 Residential | 867,819,897 | - | 867,819,897 | 105,192,123 | - | - | 10,703,322 | 1,041,328 | $(69,697)$ | - | 116,867,077 |
| 63200 | 32 Resl Dem Ctrl | 407,603 | - | 407,603 | 31,002 | 989.16 | 11,700 | 2,162 | 489 | - | - | 45,353 |
| 63133 | 33 Resid Electric Vehicles | 332,257 | - | 332,257 | 25,456 | - | - | - | 398 | - | - | 25,854 |
| 63036 | 36 Irrigation | 301,498 | - | 301,498 | 15,045 | 3,463.95 | 72,079 | 3,120 | 392 | - | - | 90,636 |
| 63037 | 37 Irrigation | 8,585,963 | - | 8,585,963 | 428,476 | 81,869.37 | 372,508 | 137,754 | 23,185 | - | - | 961,923 |
| 64100 | 41 Sm Genl Serv | 42,671,392 | 28,835 | 42,642,557 | 4,953,969 | - | - | 740,730 | 51,072 | $(1,177)$ | - | 5,744,594 |
| 62440 | 44 Street Lgts | 446,106 | - | 446,106 | 101,671 | - | - | - | 721 | - | - | 102,393 |
| 62441 | 44-1 Street Lights | 523,536 | - | 523,536 | 69,245 | - | - | - | 890 | - | - | 70,135 |
| 62442 | 44-2 Street Lights | 2,487,972 | - | 2,487,972 | 459,611 | - | - | - | 4,228 | - | - | 463,839 |
| 62443 | 44-3 Street Lights | 7,432,586 | - | 7,432,586 | 1,318,836 | - | - | - | 12,632 | - | - | 1,331,468 |
| 62444 | 44 Security Lgts - LED | 63,709 | - | 63,709 | 30,430 | - | - | - | 128 | - | - | 30,558 |
| 62445 | 44-5 Street Lgts - LED | 8,056 | - | 8,056 | 1,181 | - | - | - | 15 | - | - | 1,196 |
| 62446 | 44 Street Lgts - LED | 171,871 | - | 171,871 | 51,404 | - | - | - | 316 | - | - | 51,719 |
| 64500 | 45 Emergency Unmet. | - | - | - | 7,888 | - | - | - | - | - | - | 7,888 |
| 64600 | 46 General Service | 452,048,090 | 2,090,976 | 449,957,114 | 32,587,049 | 1,404,898.80 | 14,034,675 | 1,097,366 | 584,964 | $(67,161)$ | - | 48,236,894 |
| 63047 | 47 Municipal | - | - | - | 3,960 | - | - | - | - | - | - | 3,960 |
| 64690 | 49 Geotherm Heat Pump | 203,303 | - | 203,303 | 19,110 | - | - | - | 671 | - | - | 19,781 |
| 63151 | 51 Resid Energy Stg. | 10,750,523 | - | 10,750,523 | 472,804 | - | - | - | 23,647 | - | - | 496,451 |
| 64151 | 51 Commer Energy Stg. | 102,715 | - | 102,715 | 4,520 | - | - | - | 226 | - | - | 4,745 |
| 63152 | 52 Resid Interruptible | 47,853,706 | - | 47,853,706 | 2,631,711 | - | - | 406 | 243,786 | - | - | 2,875,902 |
| 64152 | 52 Commer Interruptible | 1,224,491 | - | 1,224,491 | 67,348 | - | - | - | 6,245 | - | - | 73,593 |
| 63900 | Resid-Wellspring * | 6,039,300 | - | 6,039,300 | 4,112 | - | - | - | - | - | - | 4,112 |
| 63901 | Resid-Wellspring Solar * | 146,000 | - | 146,000 | 432 | - | - | - | - | - | - | 432 |
| 64900 | Comm-Wellspring * | 2,952,300 | - | 2,952,300 | 2,315 | - | - | - | - | - | - | 2,315 |
| 64901 | Comm-Wellspring Solar* | 30,000 | - | 30,000 | 100 | - | - | - | - | - | - | 100 |
| 63530 | 53 Time of Day | 217,249 | - | 217,249 | 24,451 | - | - | 2,588 | 262 | (144) | - | 27,157 |
| 64540 | 54 Time of Use | 1,143,456 | - | 1,143,456 | 57,058 | 7,338.24 | 73,531 | 2,592 | 1,486 | - | - | 134,668 |
| 64660 | 60 Standby Service | 20,003 | - | 20,003 | - | - | - | - | - | 65,387 | - | 65,387 |
| 64700 | 70 Full Interruptable | 384,258,036 | - | 384,258,036 | 19,174,924 | 870,612.08 | 4,132,948 | 307,000 | 997,973 | $(25,037)$ | 25,908 | 24,613,715 |
| 64701 | 71 Partial Interruptable | 25,529,544 | - | 25,529,544 | 1,275,031 | 102,789.51 | 522,326 | 35,310 | 66,377 | $(4,293)$ | 167,938 | 2,062,689 |
| 63181 | 81 Cycled Air M ${ }^{*}$ | 5,181,693 | - | 5,181,693 | $(165,926)$ | - | - | - | - | - | - | $(165,926)$ |
| 63182 | 82\&84 Cycled Air UM | - | - | - | $(1,620,131)$ | - |  | - | - | - | - | $(1,620,131)$ |
|  | Total | 1,854,583,558 | 2,119,811 | 1,852,463,747 | \$ 167,225,205 | 2,471,961.11 | \$ 19,219,768 | \$ 13,032,349 | \$ 3,061,432 | \$ (102,121) | \$ 193,846 | 202,630,479 |

Dakota Electric Association
SALES BY RATE (Billed)
January, 2018

| Account | Rate | (Accounting Month information downloaded from Orcom) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | kWh |  |  |  |  | KW |  |  | Fixed Charges |  | RTA |  | Revenue <br> Adjustments |  | total <br> revenue <br> per Download |
|  |  | Usage | $\begin{gathered} \hline \text { DEA } \\ \text { Own Use } \end{gathered}$ | $\begin{aligned} & \hline \mathrm{kWh} \\ & \text { NET } \\ & \hline \end{aligned}$ | Revenue <br> Adjusted |  | KW | Revenue |  |  |  |  |  |  |  |  |
| 63100 | 31 Residential | 78,317,079 |  | 78,317,079 | \$ | 9,148,742 |  | \$ | - | \$ | 890,059 | \$ | 94,065 | \$ | $(5,880)$ | 10,126,986 |
| 63200 | 32 Resl Dem Ctrl | 67,701 |  | 67,701 | \$ | 5,145 | 118 | \$ | 1,308 | \$ | 180 | \$ | 81 | \$ | - | 6,714 |
| 63133 | 33 Resid Electric Vehicles | 21,576 |  | 21,576 | \$ | 1,720 | - | \$ | - | \$ | - | \$ | 26 | \$ | - | 1,746 |
| 63036 | 36 Irrigation | 425 |  | 425 | \$ | 21 | 1 | \$ | 26 | \$ | 240 | \$ | 1 | \$ | - | 288 |
| 63037 | 37 Irrigation | 7,772 |  | 7,772 | \$ | 388 | (54) | \$ | (244) | \$ | 11,505 | \$ | 21 | \$ | - | 11,670 |
| 64100 | 41 Sm Genl Serv | 4,329,447 | 3,059 | 4,326,388 | \$ | 487,155 | - | \$ | - | \$ | 61,530 | \$ | 5,177 | \$ | (99) | 553,763 |
| 62440 | 44 Security Lights | 38,476 |  | 38,476 | \$ | 8,722 | - | \$ | - | \$ | - | \$ | 62 | \$ | - | 8,784 |
| 62441 | 44-1 Street Lights | 46,158 |  | 46,158 | \$ | 6,104 | - | \$ | - | \$ | - | \$ | 78 | \$ | - | 6,183 |
| 62442 | 44-2 Street Lights | 208,553 |  | 208,553 | \$ | 38,525 | - | \$ | - | \$ | - | \$ | 354 | \$ | - | 38,879 |
| 62443 | 44-3 Street Lights | 619,288 |  | 619,288 | \$ | 109,934 | - | \$ | - | \$ | - | \$ | 1,053 | \$ | - | 110,987 |
| 62444 | 44-4 Security Lgts - LED | 4,878 |  | 4,878 | \$ | 2,327 | - | \$ | - | \$ | - | \$ | 9 | \$ |  | 2,336 |
| 62445 | 44-5 Street Lgts - LED | 118 |  | 118 | \$ | 20 | - | \$ | - | \$ | - | \$ | 0 | \$ | - | 20 |
| 62446 | 44-6 Street Lgts - LED | 12,670 |  | 12,670 | \$ | 3,841 | - | \$ | - | \$ | - | \$ | 21 | \$ | - | 3,863 |
| 64500 | 45 Emergency Unmet. | - |  | - | \$ | 660 | - | \$ | - | \$ | - | \$ |  | \$ | - | 660 |
| 64600 | 46 General Service | 39,783,889 | 321,024 | 39,462,865 | \$ | 2,813,889 | 108,500 | \$ | 993,856 | \$ | 91,152 | \$ | 51,342 | \$ | $(1,001)$ | 3,949,238 |
| 63047 | 47 Municipal | - |  | - | \$ | 330 | - | \$ | - | \$ | - | \$ | - | \$ | - | 330 |
| 64690 | 49 Geotherm Heat Pump | 26,804 |  | 26,804 | \$ | 2,520 | - | \$ | - | \$ | - | \$ | 88 | \$ | - | 2,608 |
| 63151 | 51 Resid Energy Stg. | 1,092,389 |  | 1,092,389 | \$ | 48,065 | - | \$ | - | \$ | - | \$ | 2,403 | \$ | - | 50,468 |
| 64151 | 51 Commer Energy Stg. | 14,923 |  | 14,923 | \$ | 657 | - | \$ | - | \$ | - | \$ | 33 | \$ | - | 689 |
| 63152 | 52 Resid Interruptible | 5,424,444 |  | 5,424,444 | \$ | 298,353 | - | \$ | - | \$ | - | \$ | 27,776 | \$ | - | 326,130 |
| 64152 | 52 Commer Interruptible | 174,652 |  | 174,652 | \$ | 9,606 | - | \$ | - | \$ | - | \$ | 891 | \$ | - | 10,497 |
| 63900 | Resid-Wellspring * | 516,600 |  | 516,600 | \$ | 2,066 | - | \$ | - | \$ | - | \$ | - | \$ | - | 2,066 |
| 63901 | Resid-Wellspring Solar* | 10,900 |  | 10,900 | \$ | 218 | - | \$ | - | \$ | - | \$ | - | \$ | - | 218 |
| 64900 | Comm-Wellspring * | 305,700 |  | 305,700 | \$ | 1,223 | - | \$ | - | \$ | - | \$ | - | \$ | - | 1,223 |
| 64901 | Comm-Wellspring Solar* | 2,500 |  | 2,500 | \$ | 50 | - | \$ | - | \$ | - | \$ | - | \$ | - | 50 |
| 63530 | 53 Time of Day | 25,408 |  | 25,408 | \$ | 2,825 | - | \$ | - | \$ | 216 | \$ | 30 | \$ | (12) | 3,059 |
| 64540 | 54 Time of Use | 61,440 |  | 61,440 | \$ | 3,066 | 382 | \$ | 4,412 | \$ | 216 | \$ | 80 | \$ | - | 7,773 |
| 64660 | 60 Standby Service | - |  | - | \$ | - | - | \$ | - | \$ | - | \$ | - | \$ | 5,750 | 5,750 |
| 64700 | 70 Full Interruptable | 30,622,046 |  | 30,622,046 | \$ | 1,525,303 | 63,342 | \$ | 300,874 | \$ | 25,410 | \$ | 79,617 | \$ | 402 | 1,931,607 |
| 64701 | 71 Partial Interruptable | 1,775,480 |  | 1,775,480 | \$ | 88,158 | 5,302 | \$ | 40,998 | \$ | 2,860 | \$ | 4,616 | \$ | 82 | 136,713 |
| 63181 | 81 Cycled Air Resid* | 122 |  | 122 | \$ | (4) | - | \$ |  | \$ | - | \$ | - | \$ | - | (4) |
| 63182 | $82 \& 84$ Cycled Air UM | - |  | - | \$ | - | - | \$ | - | \$ | - | \$ | - | \$ | - | - |
|  | Total* | 162,675,616 | 324,083 | 162,351,533 | \$ | 14,609,628 | 177,591 | \$ | 1,341,230 | \$ | 1,083,368 | \$ | 267,827 | \$ | (758) | 17,301,295 |



Dakota Electric Association Febriary 2018

|  | （L89） | \＄ | s8s＇trz | \＄ | z81＇s80＇I | \＄ | s8z＇88z＇ı | \＄ |  |  | $88 z^{\prime} L 600^{\prime}$ ¢ | \＄ | 097＇0e\＆＇sti | $66 z^{\prime} L L \tau$ | 6Ss＇L00＇9tI | ${ }_{*}^{\text {Propo }}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| － | －\＄ | \＄ | － | \＄ | － | \＄ | －\＄ | \＄ | － |  |  | \＄ |  |  |  |  | 28IE9 |
| －${ }^{\circ}$（0） | －\＄ | \＄ | － | \＄ | － | \＄ | －\＄ | \＄ | － | \＄ | （01） | \＄ | £0¢ |  | £0¢ | ＊p！spy nery peofo is | 181¢9 |
| 发 9ヶ9＇ze1 | 08 | \＄ | 292＇t | \＄ | 098＇z | \＄ | tototo | \＄ | zex＇s |  | 00t＇t8 | \＄ | 88876¢9 1 |  | 88876¢9 |  | 104t9 |
| ＊8St＇8Lu＇I | tてt | \＄ | 0t6 $1 /$ | \＄ | 01t＇sz | \＄ | zLĚzos | \＄ | Ls9＇¢9 |  | HE์8 $8 \varepsilon^{4} \mathrm{~T}$ | \＄ | 00t＇699＇Lz |  | $00 \dagger^{\prime} 699^{\circ} \mathrm{LZ}$ |  | 00＜t9 |
| 0¢L＇s | 0sL＇s | \＄ |  | \＄ | － | \＄ | －\＄ | \＄ |  |  |  | \＄ |  |  |  |  | 09959 |
| 6168 | － | \＄ | ＋6 | \＄ | 912 | \＄ | $600{ }^{\circ} \mathrm{s}$ | \＄ | 90s |  | 009 ＇$\varepsilon$ | \＄ | tutaz |  | ttick | әsп ⿺о әш！ L ts | 0tSt9 |
| £ย9\％ | （zI） | \＄ | 82 | \＄ | 912 | \＄ | － | \＄ | － |  | $10{ }^{\text {cor }}$ | \＄ | ¢8でzz |  | ¢8でてz | KıG jo əu！L ¢S | $0 ¢ ¢ \varepsilon 9$ |
| os | －\＄ | \＄ | － | \＄ | － | \＄ | －\＄ | \＄ | － |  | os | \＄ | 00s＇z |  | 00s＇z |  | 106t9 |
| z60＇I | －\＄ | \＄ | － | \＄ | － | \＄ | －\＄ | \＄ | － |  | $260^{\circ} 1$ | \＄ | 001 ＇$\varepsilon$ Lz |  | 001 ＇$\varepsilon$ Lz |  | 006t9 |
| ゅtz | －\＄ | \＄ | － | \＄ | － | \＄ | －\＄ | \＄ | － |  | ヵt | \＄ | 00＜0ı |  | 00＜＜0\％ |  | 10699 |
| Sto ${ }^{\text {c }}$ | －\＄ | \＄ | － | \＄ | － | \＄ | －\＄ | \＄ | － |  | Sto ${ }^{\circ}$ | \＄ | 00čits |  | 00ع＇tis |  | $006 ¢ 9$ |
| 2966 | －\＄ | \＄ | ¢58 | \＄ | － | \＄ | －\＄ | \＄ | － |  | 911＇6 | \＄ | zsL＇s91 |  | zsL＇s91 |  | 2SIt9 |
| ャ19¢50 | －\＄ | \＄ | ze0＇9z | \＄ | － | \＄ | －\＄ | \＄ | － |  | 288＊6Lz | \＄ | 0zI＇ 880 ＇s |  | 02 I ＇ 880 ＇s |  | 2SIE9 |
| to9 | －\＄ | \＄ | İ | \＄ | － | \＄ | －\＄ | \＄ | － |  | $\downarrow 19$ | \＄ | 6 tc ¢ ${ }^{\text {d }}$ |  | ${ }_{666}$ ¢ ${ }^{\text {c }}$ |  | ISIt9 |
| L9148t | －\＄ | \＄ | ขて¢์z | \＄ | － | \＄ | －\＄ | \＄ | － |  | tutst | \＄ | Escssso＇t |  | Ess＇sso＇t |  | ISIE9 |
| 6 LI ＇z | －\＄ | \＄ | ul | \＄ | － | \＄ | －\＄ | \＄ | － |  | L0 $0^{\circ} \mathrm{z}$ | \＄ | ＋Lくな |  | カレL゙İ |  | 069＋9 |
| $0 \varepsilon \varepsilon$ | － | \＄ |  | \＄ | － | \＄ | －\＄ | \＄ | － |  | Oع์ | \＄ |  |  |  | rediounn Lt | Ltoc9 |
| ttritas $\varepsilon$ | （686） | \＄ | LoE＇9t | \＄ | £8t＇t6 | \＄ | ¢8t＇s¢6 | \＄ | Lzı＇zoı |  | 856689s＇z | \＄ | ¢¢1＇L¢9＇¢¢ | カ9ttロL | $66 \mathrm{~S}^{\prime} 116^{\prime} ¢ \varepsilon$ |  | 009t9 |
| 099 | －\＄ | \＄ | － | \＄ | － | \＄ | －\＄ | \＄ | － |  | 099 | \＄ | － |  | － |  | 00¢59 |
| $898{ }^{\text {¢ }}$ ¢ | －\＄ | \＄ | Iz | \＄ | － | \＄ | －\＄ | \＄ | － |  | $9788^{\prime} \varepsilon$ | \＄ | 989\％r |  | 989 てl | dat－sำ7 | 9ttz9 |
| 00 I | － | \＄ | I | \＄ | － | \＄ | －\＄ | \＄ | － |  | 66 | \＄ | $8<9$ |  | $8\llcorner 9$ |  | Sttz9 |
| 8LE\％ | －\＄ | \＄ | 6 | \＄ | － | \＄ | －\＄ | \＄ | － |  | $69 \varepsilon^{\prime} \tau$ | \＄ | L96＇t |  | L96＇t |  | tt＋z9 |
| 026015 | －\＄ | \＄ | 2soit | \＄ | － | \＄ | －\＄ | \＄ | － |  | 816601 | \＄ | ع0z＇619 |  | ع0z＇619 |  | \＆もtて9 |
| 198＇8¢ | －\＄ | \＄ | tse | \＄ | － | \＄ | －\＄ | \＄ | － |  | Los＇88 | \＄ | tstr 80 z |  | tstr 80 \％ |  | でャて9 |
| 086 ¢ | － | \＄ | ¢ | \＄ | － | \＄ | －\＄ | \＄ | － |  | ¢ $8_{8} \mathrm{~s}$ ¢ | \＄ | 29ztot |  | 29\％＇to | slye̊！poons Ittt | Itャz9 |
| EtL＇s | －\＄ | \＄ | z9 | \＄ | － | \＄ | －\＄ | \＄ | － |  | $189{ }^{\circ} 8$ | \＄ | 0cz＇8¢ |  | $0 \leq$ č8 |  | $0 \downarrow$ ¢ 29 |
| L69¢EIS | （101） | \＄ | 8SL＇t | \＄ | E88＇19 | \＄ | －\＄ | \＄ | － |  | 259くth | \＄ | ขzE์9L6＇ | ¢ $¢ 8^{\prime}$ z | LSI＇6L6＇E |  | 001t9 |
| ＋16＇ı | －\＄ | \＄ | 02 | \＄ | 09t＇II | \＄ | $\varepsilon L$ | \＄ | 91 |  | 298 | \＄ | $0+て ゙ し$ |  | 0 でく |  | Lع0¢9 |
| s9z | － | \＄ | 0 | \＄ | 0tr | \＄ | 9 | \＄ | 0 |  | 61 | \＄ | 28E |  | 28E |  | 980¢9 |
| 97L＇土 | －\＄ | \＄ | 97 | \＄ | － | \＄ | －\＄ | \＄ | － |  | 104＇ı | \＄ | 608 12 |  | $60 \varepsilon^{4} 12$ |  | £̇İ9 |
| ยzz＇9 | － | \＄ | tL | \＄ | 081 | \＄ | L6て＇I | \＄ | LII |  | 2L9＇t | \＄ | tLt＇t9 |  | †ちti9 |  | $00 \tau \varepsilon 9$ |
| 818¢90\％ | （688＇s） | \＄ | 661 ＇$¢ 8$ | \＄ | ¢¢L＇168 | \＄ | － | \＄ | － |  | \＆LL＇960＇8 | \＄ | ¢¢9＇tsc＊ 69 |  | ¢¢9＇けธ¢ 69 |  | $001 \varepsilon 9$ |
| peopumog．．ad | sturamsn！！py <br> әпиəวу |  |  |  |  |  | әпиวлу | MY |  | $\text { popsr! } \mathrm{p}_{\mathrm{py}}$әпиəләу |  | Lan |  | ${ }^{\text {as }}$ U Mm | ${ }^{\text {28xs }}$ ก | ग『บ | ${ }^{\text {Junoso }} \mathrm{V}$ |
| minaiay |  |  |  |  |  |  |  |  |  |  | ЧМ＊ | vad |  |  |  |
| TVLOL |  |  |  |  |  |  |  | M |  |  |  |  |  |  |  |  |  | H＊ |  |


Dakota Electric Association
SALES BY RATE (Billed) March, 2018

Dakota Electric Association
SALES BY RATE (Billed)
April, 2018
(Accounting Month information downt

Dakta Electric Association
SALES BY RATE (Billed)
May, 2018
(Accounting Month information down


Dakota Electric Association
SALES BY RATE (Billed)

| Account | Rate | SALES BY RATE (Billed) <br> July, 2018 <br> (Accounting Month information downloaded from UMAX) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | kWh |  |  |  |  | KW |  |  |  | Fixed Charges |  | RTA |  | Revenue <br> Adjustments |  | CoincindentalDemand | TOTALREVENUEper Download $\|$$13,109,976$ |
|  |  | Usage | $\begin{gathered} \text { DEA } \\ \text { Own Use } \end{gathered}$ | $\begin{aligned} & \hline \mathrm{kWh} \\ & \mathrm{NET} \\ & \hline \end{aligned}$ | Revenue <br> Adjusted |  |  | KW | Revenue |  |  |  |  |  |  |  |  |  |
| 63100 | 31 Residential | 92,663,962 |  | 92,663,962 | \$ | 12,109,731 |  | - | \$ | - | \$ | 895,035 | \$ | 111,200 | \$ | $(5,990)$ |  |  |
| 63200 | 32 Resl Dem Ctrl | 18,834 |  | 18,834 | \$ | 1,434 |  | 61 | \$ | 898 | \$ | 180 | \$ | 23 | \$ | - |  | 2,535 |
| 63133 | 33 Resid Electric Vehicles | 23,165 |  | 23,165 | \$ | 1,979 |  | - | \$ | - | \$ | - | \$ | 28 | \$ | - |  | 2,006 |
| 63036 | 36 Irrigation | 72,733 |  | 72,733 | \$ | 3,629 |  | 558 | \$ | 14,713 | \$ | 270 | \$ | 95 | \$ | - |  | 18,707 |
| 63037 | 37 Irrigation | 3,100,117 |  | 3,100,117 | \$ | 154,697 |  | 22,112 | \$ | 100,609 | \$ | 11,497 | \$ | 8,370 | \$ | - |  | 275,173 |
| 64100 | 41 Sm Genl Serv | 3,652,631 | 1,520 | 3,651,111 | \$ | 463,461 |  | - | \$ | - | \$ | 61,811 | \$ | 4,382 | \$ | (101) |  | 529,553 |
| 62440 | 44 Security Lights | 37,549 |  | 37,549 | \$ | 8,573 |  | - | \$ | - | \$ | - | \$ | 61 | \$ | - |  | 8,634 |
| 62441 | 44-1 Street Lights | 43,332 |  | 43,332 | \$ | 5,731 |  | - | \$ | - | \$ | - | \$ | 74 | \$ | - |  | 5,805 |
| 62442 | 44-2 Street Lights | 207,100 |  | 207,100 | \$ | 38,255 |  | - | \$ | - | \$ | - | \$ | 352 | \$ | - |  | 38,607 |
| 62443 | 44-3 Street Lights | 618,914 |  | 618,914 | \$ | 109,808 |  | - | \$ | - | \$ | - | \$ | 1,052 | \$ | - |  | 110,859 |
| 62444 | 44 Security Lgts - LED | 5,191 |  | 5,191 | \$ | 2,483 |  | - | \$ | - | \$ | - | \$ | 10 | \$ | - |  | 2,492 |
| 62445 | 44-5 Street Lgts - LED | 726 |  | 726 | \$ | 106 |  | - | \$ | - | \$ | - | \$ | 1 | \$ | - |  | 107 |
| 62446 | 44 Street Lgts - LED | 13,527 |  | 13,527 | \$ | 3,936 |  | - | \$ | - | \$ | - | \$ | 23 | \$ | - |  | 3,959 |
| 64500 | 45 Emergency Unmet. | - |  | - | \$ | 668 |  | - | \$ | - | \$ | - | \$ | - | \$ | - |  | 668 |
| 64600 | 46 General Service | 43,463,071 | 98,400 | 43,364,671 | \$ | 3,144,817 |  | 135,163 | \$ | 1,657,108 | \$ | 91,452 | \$ | 56,374 | \$ | $(8,859)$ |  | 4,940,892 |
| 63047 | 47 Municipal | - |  | - | \$ | 330 |  | - | \$ | - | \$ | - | \$ | - | \$ | - |  | 330 |
| 64690 | 49 Geotherm Heat Pump | 14,084 |  | 14,084 | \$ | 1,324 |  | - | \$ | - | \$ | - | \$ | 46 | \$ | - |  | 1,370 |
| 63151 | 51 Resid Energy Stg. | 999,795 |  | 999,795 | \$ | 43,992 |  | - | \$ | - | \$ | - | \$ | 2,200 | \$ | - |  | 46,192 |
| 64151 | 51 Commer Energy Stg. | 6,470 |  | 6,470 | \$ | 285 |  | - | \$ | - | \$ | - | \$ | 14 | \$ | - |  | 299 |
| 63152 | 52 Resid Interruptible | 4,119,863 |  | 4,119,863 | \$ | 226,604 |  | - | \$ | - | \$ | 27 | \$ | 20,965 | \$ | - |  | 247,596 |
| 64152 | 52 Commer Interruptible | 80,542 |  | 80,542 | \$ | 4,430 |  | - | \$ | - | \$ | - | \$ | 411 | \$ | - |  | 4,841 |
| 63900 | Resid-Wellspring * | 537,200 |  | 537,200 | \$ | - |  | - | \$ | - | \$ | - | \$ | - | \$ | - |  | - |
| 63901 | Resid-Wellspring Solar* | 14,500 |  | 14,500 | \$ | - |  | - | \$ | - | \$ | - | \$ | - | \$ | - |  | - |
| 64900 | Comm-Wellspring * | 131,500 |  | 131,500 | \$ | - |  | - | \$ | - | \$ | - | \$ | - | \$ | - |  | - |
| 64901 | Comm-Wellspring Solar* | 2,500 |  | 2,500 | \$ | - |  | - | \$ | - | \$ | - | \$ | - | \$ | - |  | - |
| 63530 | 53 Time of Day | 17,954 |  | 17,954 | \$ | 2,115 |  | - | \$ | - | \$ | 215 | \$ | 22 | \$ | (12) |  | 2,340 |
| 64540 | 54 Time of Use | 163,632 |  | 163,632 | \$ | 8,165 |  | 795 | \$ | 10,734 | \$ | 216 | \$ | 213 | \$ | - |  | 19,328 |
| 64660 | 60 Standby Service | 2,000 |  | 2,000 | \$ | - |  | - | \$ | - | \$ | - | \$ | - | \$ | 6,490 |  | 6,490 |
| 64700 | 70 Full Interruptable | 37,349,811 |  | 37,349,811 | \$ | 1,876,818 |  | 85,003 | \$ | 403,762 | \$ | 26,070 | \$ | 97,003 | \$ | $(3,273)$ | \$ 25,908 | 2,426,289 |
| 64701 | 71 Partial Interruptable | 2,444,376 |  | 2,444,376 | \$ | 122,169 |  | 10,315 | \$ | 48,995 | \$ | 2,970 | \$ | 6,355 | \$ | (509) | \$ 29,279 | 209,259- |
| 63181 | 81 Cycled Air Resid* | 1,336,411 |  | 1,336,411 | \$ | $(42,765)$ | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |  | $\left(42,76\right.$ \% ${ }^{\text {a }}$ |
| 63182 | 82\&84 Cycled Air UM | - |  | - | \$ | $(516,207)$ |  | - | \$ | - | \$ | - | \$ | - | \$ | - |  | (516,20\% |
|  | Total* | 189,117,380 | 99,920 | 189,017,460 | \$ | 17,776,566 |  | 254,007 | \$ | 2,236,820 | \$ | 1,089,743 | \$ | 309,273 | \$ | $(12,255)$ | \$ 55,187 | 21,455,335 |

Dakota Electric Association
SALES BY RATE (Billed)
August, 2018
(Accounting Month information downlo

| Account | Rate | kWh |  |  |  |  | KW |  |  |  | FixedCharges |  | RTA |  | Revenue Adjustments |  | Coincindental Demand |  | TOTAL <br> REVENUE per Download |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Usage | DEA Own Use | $\begin{aligned} & \hline \mathrm{kWh} \\ & \mathrm{NET} \end{aligned}$ | Revenue <br> Adjusted |  |  | KW | Revenue |  |  |  |  |  |  |  |  |  |  |
| 63100 | 31 Residential | 95,569,046 |  | 95,569,046 | \$ | 12,502,819 |  | - | \$ | - | \$ | 890,770 | \$ | 114,684 | \$ | $(5,867)$ |  |  | 13,502,405 |
| 63200 | 32 Resl Dem Ctrl | 16,626 |  | 16,626 | \$ | 1,266 |  | 66 | \$ | 972 | \$ | 180 | \$ | 20 | \$ | - |  |  | 2,438 |
| 63133 | 33 Resid Electric Vehicles | 25,891 |  | 25,891 | \$ | 2,212 |  | - | \$ | - | \$ | - | \$ | 31 | \$ | - |  |  | 2,243 |
| 63036 | 36 Irrigation | 72,614 |  | 72,614 | \$ | 3,623 |  | 558 | \$ | 14,698 | \$ | 270 | \$ | 94 | \$ | - |  |  | 18,686 |
| 63037 | 37 Irrigation | 4,173,975 |  | 4,173,975 | \$ | 208,282 |  | 22,686 | \$ | 103,222 | \$ | 11,520 | \$ | 11,270 | \$ | - |  |  | 334,294 |
| 64100 | 41 Sm Genl Serv | 3,477,256 | 1,709 | 3,475,547 | \$ | 441,192 |  | - | \$ | - | \$ | 61,740 | \$ | 4,171 | \$ | (98) |  |  | 507,005 |
| 62440 | 44 Security Lights | 36,328 |  | 36,328 | \$ | 8,274 |  | - | \$ | - | \$ | - | \$ | 59 | \$ | - |  |  | 8,332 |
| 62441 | 44-1 Street Lights | 43,233 |  | 43,233 | \$ | 5,718 |  | - | \$ | - | \$ | - | \$ | 74 | \$ | - |  |  | 5,792 |
| 62442 | 44-2 Street Lights | 206,906 |  | 206,906 | \$ | 38,219 |  | - | \$ | - | \$ | - | \$ | 352 | \$ | - |  |  | 38,570 |
| 62443 | 44-3 Street Lights | 618,167 |  | 618,167 | \$ | 109,662 |  | - | \$ | - | \$ | - | \$ | 1,051 | \$ | - |  |  | 110,712 |
| 62444 | 44 Security Lgts - LED | 5,632 |  | 5,632 | \$ | 2,686 |  | - | \$ | - | \$ | - | \$ | 10 | \$ | - |  |  | 2,696 |
| 62445 | 44-5 Street Lgts - LED | 726 |  | 726 | \$ | 106 |  | - | \$ | - | \$ | - | \$ | 1 | \$ | - |  |  | 107 |
| 62446 | 44 Street Lgts - LED | 14,297 |  | 14,297 | \$ | 4,152 |  | - | \$ | - | \$ | - | \$ | 24 | \$ | - |  |  | 4,177 |
| 64500 | 45 Emergency Unmet. | - |  | - | \$ | 660 |  | - | \$ | - | \$ | - | \$ | - | \$ | - |  |  | 660 |
| 64600 | 46 General Service | 42,207,105 | 99,552 | 42,107,553 | \$ | 3,037,527 |  | 131,359 | \$ | 1,610,457 | \$ | 91,460 | \$ | 54,740 | \$ | $(8,778)$ |  |  | 4,785,406 |
| 63047 | 47 Municipal | - |  | - | \$ | 330 |  | - | \$ | - | \$ | - | \$ | - | \$ | - |  |  | 330 |
| 64690 | 49 Geotherm Heat Pump | 15,002 |  | 15,002 | \$ | 1,410 |  | - | \$ | - | \$ | - | \$ | 50 | \$ | - |  |  | 1,460 |
| 63151 | 51 Resid Energy Stg. | 970,127 |  | 970,127 | \$ | 42,687 |  | - | \$ | - | \$ | - | \$ | 2,134 | \$ | - |  |  | 44,821 |
| 64151 | 51 Commer Energy Stg. | 7,092 |  | 7,092 | \$ | 312 |  | - | \$ | - | \$ | - | \$ | 16 | \$ | - |  |  | 328 |
| 63152 | 52 Resid Interruptible | 4,041,975 |  | 4,041,975 | \$ | 222,320 |  | - | \$ | - | \$ | 44 | \$ | 20,553 | \$ | - |  |  | 242,918 |
| 64152 | 52 Commer Interruptible | 76,717 |  | 76,717 | \$ | 4,219 |  | - | \$ | - | \$ | - | \$ | 391 | \$ | - |  |  | 4,611 |
| 63900 | Resid-Wellspring * | 532,200 |  | 532,200 | \$ | - |  | - | \$ | - | \$ | - | \$ | - | \$ | - |  |  | - |
| 63901 | Resid-Wellspring Solar* | 14,800 |  | 14,800 | \$ | - |  | - | \$ | - | \$ | - | \$ | - | \$ | - |  |  | - |
| 64900 | Comm-Wellspring * | 151,400 |  | 151,400 | \$ | - |  | - | \$ | - | \$ | - | \$ | - | \$ | - |  |  | - |
| 64901 | Comm-Wellspring Solar* | 2,500 |  | 2,500 | \$ | - |  | - | \$ | - | \$ | - | \$ | - | \$ | - |  |  | - |
| 63530 | 53 Time of Day | 16,736 |  | 16,736 | \$ | 1,970 |  | - | \$ | - | \$ | 213 | \$ | 20 | \$ | (12) |  |  | 2,191 |
| 64540 | 54 Time of Use | 157,296 |  | 157,296 | \$ | 7,849 |  | 981 | \$ | 11,559 | \$ | 216 | \$ | 204 | \$ | - |  |  | 19,828 |
| 64660 | 60 Standby Service | 2,000 |  | 2,000 | \$ | - |  | - | \$ | - | \$ | - | \$ | - | \$ | 6,490 |  |  | 6,490 |
| 64700 | 70 Full Interruptable | 37,670,413 |  | 37,670,413 | \$ | 1,879,796 |  | 83,259 | \$ | 395,482 | \$ | 25,630 | \$ | 97,877 | \$ | $(3,345)$ | \$ | - | 2,395,440 |
| 64701 | 71 Partial Interruptable | 2,528,544 |  | 2,528,544 | \$ | 126,369 |  | 10,505 | \$ | 49,901 | \$ | 2,970 | \$ | 6,574 | \$ | (499) | \$ | 25,972 | 211,287 |
| 63181 | 81 Cycled Air Resid* | 1,324,027 |  | 1,324,027 | \$ | $(42,369)$ | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |  |  | $(42,369)$ |
| 63182 | 82\&84 Cycled Air UM | - |  | - | \$ | $(519,342)$ |  | - | \$ | - | \$ | - | \$ | - | \$ | - |  |  | (519,342) ${ }^{\text {cod }}$ |
|  | Total* | 191,951,704 | 101,261 | 191,850,443 | \$ | 18,091,949 |  | 249,415 | \$ | 2,186,291 | \$ | 1,085,013 | \$ | 314,400 | \$ | $(12,109)$ | \$ | 25,972 | 21,691,517 |


Dakota Electric Association
SALES BY RATE (Billed)
November, 2018
(Accounting Month information downloa

| Account | Rate | kWh |  |  |  |  | KW |  |  |  | FixedCharges |  | RTA |  | Revenue <br> Adjustments |  | Coincindental Demand |  | TOTAL <br> REVENUE per Download $\mathbf{7 , 8 1 0 , 7 1 5}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Usage | DEA <br> Own Use | $\begin{aligned} & \hline \mathrm{kWh} \\ & \text { NET } \end{aligned}$ |  | Revenue <br> Adjusted |  | KW |  | Revenue |  |  |  |  |  |  |  |  |  |
| 63100 | 31 Residential | 58,638,849 |  | 58,638,849 | \$ | 6,851,113 |  | - | \$ | - | \$ | 894,772 | \$ | 70,368 | \$ | $(5,538)$ |  |  |  |
| 63200 | 32 Resl Dem Ctrl | 26,390 |  | 26,390 | \$ | 2,008 |  | 80 | \$ | 885 | \$ | 180 | \$ | 32 | \$ | - - |  |  | 3,105 |
| 63133 | 33 Resid Electric Vehicles | 41,454 |  | 41,454 | \$ | 3,129 |  | - | \$ | - | \$ | - | \$ | 50 | \$ | - |  |  | 3,179 |
| 63036 | 36 Irrigation | 3,796 |  | 3,796 | \$ | 189 |  | 296 | \$ | 4,586 | \$ | 270 | \$ | 5 | \$ | - |  |  | 5,051 |
| 63037 | 37 Irrigation | 113,248 |  | 113,248 | \$ | 5,657 |  | 2,886 | \$ | 13,133 | \$ | 11,502 | \$ | 306 | \$ | - |  |  | 30,598 |
| 64100 | 41 Sm Genl Serv | 3,425,538 | 3,186 | 3,422,352 | \$ | 379,490 |  | - | \$ | - | \$ | 61,885 | \$ | 4,037 | \$ | (95) |  |  | 445,316 |
| 62440 | 44 Security Lights | 35,761 |  | 35,761 | \$ | 8,143 |  | - | \$ | - | \$ | - | \$ | 58 | \$ | - - |  |  | 8,201 |
| 62441 | 44-1 Street Lights | 43,458 |  | 43,458 | \$ | 5,752 |  | - | \$ | - | \$ | - | \$ | 74 | \$ | - |  |  | 5,826 |
| 62442 | 44-2 Street Lights | 206,275 |  | 206,275 | \$ | 38,098 |  | - | \$ | - | \$ | - | \$ | 351 | \$ | - |  |  | 38,449 |
| 62443 | 44-3 Street Lights | 618,127 |  | 618,127 | \$ | 109,649 |  | - | \$ | - | \$ | - | \$ | 1,051 | \$ | - |  |  | 110,700 |
| 62444 | 44 Security Lgts - LED | 5,830 |  | 5,830 | \$ | 2,780 |  | - | \$ | - | \$ | - | \$ | 11 | \$ | - |  |  | 2,791 |
| 62445 | 44-5 Street Lgts - LED | 726 |  | 726 | \$ | 106 |  | - | \$ | - | \$ | - | \$ | 1 | \$ | - |  |  | 107 |
| 62446 | 44 Street Lgts - LED | 17,578 |  | 17,578 | \$ | 5,250 |  | - | \$ | - | \$ | - | \$ | 30 | \$ | - |  |  | 5,280 |
| 64500 | 45 Emergency Unmet. | - |  | - | \$ | 660 |  | - | \$ | - | \$ | - | \$ | - | \$ | - |  |  | 660 |
| 64600 | 46 General Service | 35,051,471 | 242,016 | 34,809,455 | \$ | 2,513,011 |  | 107,714 | \$ | 986,662 | \$ | 91,365 | \$ | 45,252 | \$ | $(6,481)$ |  |  | 3,629,809 |
| 63047 | 47 Municipal | - |  | - | \$ | 330 |  | - | \$ | - | \$ | - | \$ | - | \$ | - - |  |  | 330 |
| 64690 | 49 Geotherm Heat Pump | 16,062 |  | 16,062 | \$ | 1,510 |  | - | \$ | - | \$ | - | \$ | 53 | \$ | - |  |  | 1,563 |
| 63151 | 51 Resid Energy Stg. | 686,351 |  | 686,351 | \$ | 30,013 |  | - | \$ | - | \$ | - | \$ | 1,505 | \$ | - |  |  | 31,518 |
| 64151 | 51 Commer Energy Stg. | 5,778 |  | 5,778 | \$ | 254 |  | - | \$ | - | \$ | - | \$ | 13 | \$ | - |  |  | 267 |
| 63152 | 52 Resid Interruptible | 3,217,762 |  | 3,217,762 | \$ | 176,634 |  | - | \$ | - | \$ | 77 | \$ | 16,313 | \$ | - |  |  | 193,024 |
| 64152 | 52 Commer Interruptible | 92,293 |  | 92,293 | \$ | 5,076 |  | - | \$ | - | \$ | - | \$ | 471 | \$ | - |  |  | 5,547 |
| 63900 | Resid-Wellspring * | 490,100 |  | 490,100 | \$ | - |  | - | \$ | - | \$ | - | \$ | - | \$ | - |  |  | . |
| 63901 | Resid-Wellspring Solar* | 11,200 |  | 11,200 | \$ | - |  | - | \$ | - | \$ | - | \$ | - | \$ | - |  |  | - |
| 64900 | Comm-Wellspring * | 515,900 |  | 515,900 | \$ | - |  | - | \$ | - | \$ | - | \$ | - | \$ | - |  |  | - |
| 64901 | Comm-Wellspring Solar* | 2,500 |  | 2,500 | \$ | - |  | - | \$ | - | \$ | - | \$ | - | \$ | - |  |  | - |
| 63530 | 53 Time of Day | 13,536 |  | 13,536 | \$ | 1,527 |  | - | \$ | - | \$ | 201 | \$ | 16 | \$ | (12) |  |  | 1,732 |
| 64540 | 54 Time of Use | 52,128 |  | 52,128 | \$ | 2,601 |  | 388 | \$ | 2,704 | \$ | 216 | \$ | 68 | \$ | - |  |  | 5,589 |
| 64660 | 60 Standby Service | 2,000 |  | 2,000 | \$ | - |  | - | \$ | - | \$ | - | \$ | - | \$ | 5,020 |  |  | 5,020 |
| 64700 | 70 Full Interruptable | 29,178,956 |  | 29,178,956 | \$ | 1,457,123 |  | 62,536 | \$ | 297,045 | \$ | 25,960 | \$ | 75,847 | \$ | $(2,520)$ | \$ | - | 1,853,455 |
| 64701 | 71 Partial Interruptable | 2,001,656 |  | 2,001,656 | \$ | 100,077 |  | 9,462 | \$ | 44,945 | \$ | 2,970 | \$ | 5,204 | \$ | (507) | \$ | 12,480 | 165,170 |
| 63181 | 81 Cycled Air Resid* | 8,877 |  | 8,877 | \$ | (284) | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |  |  | (284) |
| 63182 | 82\&84 Cycled Air UM | - |  | - | \$ | $(7,192)$ |  | - | \$ | - | \$ | - | \$ | - | \$ | - |  |  | (7,192ั~ |
|  | Total* | 133,493,022 | 245,202 | 133,247,820 | \$ | 11,692,706 |  | 183,362 | \$ | 1,349,961 | \$ | 1,089,397 | \$ | 221,114 | \$ | $(10,133)$ | \$ | 12,480 | 14,355,522 |

SALES BY RATE (Billed)
December, 2018
(Accounting Month information downlo

| Account | Rate | kWh |  |  |  |  | KW |  |  | Fixed <br> Charges |  | RTA |  | Revenue |  | Coincindental Demand | total revenue per Download |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Usage | $\begin{gathered} \hline \text { DEA } \\ \text { Own Use } \end{gathered}$ | $\begin{aligned} & \hline \text { kWh } \\ & \text { NET } \end{aligned}$ | Revenue |  | KW | Revenue |  |  |  |  |  |  |  |  |  |
| 63100 | 31 Residential | 67,712,680 |  | 67,712,680 | \$ | 7,910,573 | - | \$ |  | \$ | 899,351 | \$ | 81,252 | \$ | (5,749) |  | 8,881,426 |
| 63200 | 32 Resl Dem Ctrl | 46,724 |  | 46,724 | \$ | 3,553 | 116 | \$ | 1,284 | \$ | 186 | \$ | 56 | \$ | - |  | 5,079 |
| 63133 | 33 Resid Electric Vehicles | 49,740 |  | 49,740 | \$ | 3,761 | - | \$ | - | \$ | - | \$ | 60 | \$ | - |  | 3,821 |
| 63036 | 36 Irrigation | 1,809 |  | 1,809 | \$ | 90 | 8 | \$ | 164 | \$ | 270 | \$ | 2 | \$ | - |  | 526 |
| 63037 | 37 Irrigation | 23,492 |  | 23,492 | \$ | 1,177 | 715 | \$ | 3,254 | \$ | 11,479 | \$ | 64 | \$ |  |  | 15,974 |
| 64100 | 41 Sm Genl Serv | 3,671,674 | 3,578 | 3,668,096 | \$ | 413,644 | - | \$ | - | \$ | 62,597 | \$ | 4,395 | \$ | (96) |  | 480,540 |
| 62440 | 44 Security Lights | 35,711 |  | 35,711 | \$ | 8,151 | - | \$ |  | \$ | - | \$ | 58 | \$ | - |  | 8,208 |
| 62441 | 44-1 Street Lights | 43,128 |  | 43,128 | \$ | 5,705 | - | \$ |  | \$ | - | \$ | 73 | \$ | - |  | 5,778 |
| 62442 | 44-2 Street Lights | 206,392 |  | 206,392 | \$ | 38,131 | - | \$ |  | \$ | - | \$ | 351 | \$ | - |  | 38,481 |
| 62443 | 44-3 Street Lights | 618,332 |  | 618,332 | \$ | 109,691 | - | \$ | - | \$ | - | \$ | 1,051 | \$ | - |  | 110,742 |
| 62444 | 44 Security Lett - LED | 5,891 |  | 5,891 | \$ | 2,816 | - | \$ |  | \$ | - | \$ | 11 | \$ | - |  | 2,827 |
| 62445 | 44-5 Street Lgts - LED | 726 |  | 726 | \$ | 106 | - | s |  | \$ |  | \$ | 1 | \$ |  |  | 107 |
| 62446 | 44 Street Lgtt - LED | 18,230 |  | 18,230 | \$ | 5,493 | - | \$ | - | \$ | - | \$ | 31 | \$ | - |  | 5,524 |
| 64500 | 45 Emergency Unmet. |  |  | - | \$ | 660 | - | \$ | - | \$ | - | \$ | - | \$ | - |  | 660 |
| 64600 | 46 General Service | 34,156,287 | 242,304 | 33,913,983 | \$ | 2,462,115 | 105,130 | s | 962,990 | \$ | 91,646 | \$ | 44,089 | \$ | (6,557) |  | 3,554,283 |
| 63047 | 47 Municipal | - |  | - | \$ | 330 | - | \$ |  | \$ | - | \$ | - | \$ | - |  | 330 |
| 64690 | 49 Geotherm Heat Pump | 20,888 |  | 20,888 | \$ | 1,963 | - | \$ |  | \$ | - | \$ | 69 | \$ | - |  | 2,032 |
| 63151 | 51 Resid Energy Stg. | 934,425 |  | 934,425 | \$ | 41,116 | - | \$ |  | \$ | - | \$ | 2,056 | \$ | - |  | 43,172 |
| 64151 | 51 Commer Energy Stg. | 12,508 |  | 12,508 | \$ | 550 | - | \$ | - | \$ | - | \$ | 28 | \$ | - |  | 578 |
| 63152 | 52 Resid Interruptible | 4,316,386 |  | 4,316,386 | \$ | 237,406 | - | \$ | - | \$ | 65 | \$ | 21,993 | \$ | - |  | 259,465 |
| 64152 | 52 Commer Interupible | 125,469 |  | 125,469 | \$ | 6,901 | - | \$ | . | \$ | - | \$ | 640 | \$ | - |  | 7,541 |
| 63900 | Resid-Wellspring* | 476,200 |  | 476,200 | \$ | - | - | \$ | - | s | - | \$ | - | \$ | . |  | . |
| 63901 | Resid-Wellspring Solar* | 11,500 |  | 11,500 | \$ | - | - | \$ | - | \$ | - | \$ | - | \$ | - |  |  |
| 64900 | Comm-Wellspring * | 540,800 |  | 540,800 | \$ | - | - | \$ | - | \$ | - | \$ | - | \$ | - |  | - |
| 64901 | Comm-Wellspring Solar* | 2,500 |  | 2.500 | \$ | - | - | \$ | - | \$ | - | \$ | - | \$ | - |  |  |
| 63530 | 53 Time of Day | 19,274 |  | 19,274 | \$ | 2,143 | - | \$ | - | \$ | 238 | \$ | 23 | \$ | (12) |  | 2,392 |
| 64540 | 54 Time of Use | 54,528 |  | 54,528 | \$ | 2,721 | 390 | \$ | 3,097 | \$ | 216 | \$ | 71 | \$ | - |  | 6,105 |
| 64660 | 60 Standby Service | 2,000 |  | 2,000 | \$ | - | - | \$ | - | \$ | - | \$ | - | \$ | 5,750 |  | 5,750 |
| 64700 | 70 Full Interuptable | 29,821,368 |  | 29,821,368 | \$ | 1,489,166 | 59,951 | \$ | 284,770 | \$ | 25,850 | \$ | 77,514 | \$ | (2,576) | \$ | 1,874,724 |
| 64701 | 71 Partial Interuptable | 1,777,448 |  | 1,777,448 | \$ | 88,889 | 6,089 | \$ | 28,921 | \$ | 2,970 | \$ | 4,621 | \$ | (510) | \$ 5,190 | 130,082 |
| 63181 | 81 Cycled Air Resid* | 1,190 |  | 1,190 | , | (38) \$ | - | \$ | - |  | - | \$ | - | \$ | - |  | (38) |
| 63182 | 82884 Cycled Air UM | - |  | - | \$ | (16,800) | - | \$ | - | \$ | - | \$ | - | \$ | - |  | (16,800 |
|  | Total* | 143,673,110 | 245,882 | 143,427,228 | \$ | 12,820,013 | 172,399 | \$ | 1,284,478 | \$ | 1,990,868 | \$ | 238,508 | \$ | (9,749) | 5,190 | 15,429,3088\% |

Individual Member Actual 2018 Usage and Demand by Rate Class

Workpaper 11
Page 1 of 13
Rate 31 Residential \& Farm Service
2018 Actual Billed

| Item | January | February | March | April | May | June | July | August | September | October | November | December | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| kWh | 78,269,908 | 69,335,675 | 56,649,523 | 63,041,013 | 56,192,721 | 77,904,757 | 92,663,962 | 95,569,046 | 84,031,403 | 67,744,229 | 58,638,849 | 67,712,680 | 867,753,766 |
| \$ | \$ 10,119,130.22 | \$ 9,066,260.18 | \$ 7,555,692.60 | \$ 8,311,541.70 | \$ 7,525,190.20 | \$ 10,446,297.22 | \$ 13,109,975.68 | \$ 13,502,405.35 | \$ 11,629,096.94 | \$ 8,901,932.56 | \$ 7,810,714.96 | \$ 8,881,425.97 | \$ 116,859,663.58 |
| Premises |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 98,623 | 98,611 | 98,670 | 98,820 | 98,973 | 98,892 | 99,053 | 98,916 | 99,010 | 99,262 | 99,354 | 99,538 |  |

Rate 32 Residential Demand Control

| Item | January | February | March | April | May | June | July | August | September | October | November | December | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Billed kW | 117.80 | 116.84 | 83.06 | 78.59 | 67.00 | 68.97 | 61.37 | 66.13 | 68.41 | 65.56 | 79.76 | 115.67 | 989.16 |
| kWh | 67,701 | 61,474 | 42,954 | 43,930 | 29,499 | 16,121 | 18,834 | 16,626 | 17,694 | 19,656 | 26,390 | 46,724 | 407,603 |
| \$ | \$ 6,714.08 | \$ 6,222.70 | \$ 4,417.64 | \$ 4,446.16 | \$ 3,203.40 | \$ 2,270.93 | \$ 2,535.16 | \$ 2,438.04 | \$ 2,466.63 | \$ 2,454.18 | \$ 3,105.02 | \$ 5,079.02 | \$ 45,352.96 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Premises | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 14 | 15 | 15 | 15 |  |

Rate 36 Firm Irrigation
2018 Actual Billed

| Item | January | February | March | April | May | June | July | August | September | October | November |  | December | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Billed kW | 1.26 | 0.27 | 0.13 | 40.53 | 464.10 | 557.11 | 558.37 | 558.35 | 548.20 | 431.71 | 295.90 |  | 8.02 | 3,463.95 |
| kWh | 425 | 382 | 408 | 533 | 45,452 | 47,841 | 72,733 | 72,614 | 40,248 | 15,257 | 3,796 |  | 1,809 | 301,498 |
| \$ | \$ 288.16 | \$ 265.21 | \$ 263.23 | \$ 895.72 | \$ 9,810.03 | \$ 16,516.03 | \$ 18,706.98 | \$ 18,685.52 | \$ 11,885.81 | \$ 7,742.70 | \$ 5,050.80 | \$ | 526.17 | \$ 90,636.36 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Premises | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |  | 9 |  |
| Summer kW 1,673.83 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Winter kW |  | 9.55 |  |  |  |  |  |  |  |  |  |  |  |  |
| Other kW |  | 1,780.57 |  |  |  |  |  |  |  |  |  |  |  |  |

Rate 36 Interruptible Irrigation
2018 Actual Billed


2018 Actual Billed

| Item | January | February | March | April | May | June | July | August | September | October | November | December | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| kWh | 4,333,811 | 3,979,286 | 3,464,212 | 3,598,039 | 3,025,934 | 3,432,398 | 3,651,111 | 3,475,547 | 3,574,793 | 3,027,364 | 3,422,352 | 3,668,096 | 42,652,944 |
| \$ | \$ 553,895.24 | \$ 513,636.07 | \$ 456,218.63 | \$ 471,421.12 | \$ 408,081.95 | \$ 479,325.51 | \$ 529,552.70 | \$ 507,005.43 | \$ 492,019.78 | \$ 407,658.46 | \$ 445,316.35 | \$ 480,540.35 | \$ 5,744,671.59 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Premises | 4,392 | 4,383 | 4,373 | 4,340 | 4,397 | 4,374 | 4,411 | 4,411 | 4,420 | 4,423 | 4,407 | 4,439 |  |

Rate 46 General Service

| Item | January | February | March | April | May | June | July | August | September | October | November | December | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Billed kW | 107,845.55 | 103,035.88 | 99,294.82 | 99,129.14 | 131,695.07 | 136,324.35 | 135,162.79 | 131,358.63 | 134,008.75 | 114,454.41 | 107,714.10 | 105,129.90 | 1,405,153.39 |
| First 200 kWh | 20,478,815 | 19,693,334 | 18,904,791 | 18,850,915 | 22,014,483 | 24,684,234 | 24,662,027 | 24,109,370 | 24,439,671 | 20,514,614 | 19,700,147 | 19,473,431 | 257,525,832 |
| Next 200 kWh | 13,998,237 | 12,963,993 | 12,002,000 | 12,558,268 | 10,411,187 | 14,165,570 | 15,101,214 | 14,625,692 | 15,041,454 | 10,481,731 | 11,891,948 | 11,579,771 | 154,821,065 |
| Over 400 kWh | 4,976,498 | 2,994,119 | 2,941,256 | 3,264,944 | 1,867,057 | 2,946,554 | 3,601,430 | 3,372,491 | 3,409,133 | 2,163,590 | 3,217,360 | 2,860,781 | 37,615,213 |
| Total kWh | 39,453,550 | 35,651,446 | 33,848,047 | 34,674,127 | 34,292,727 | 41,796,358 | 43,364,671 | 42,107,553 | 42,890,258 | 33,159,935 | 34,809,455 | 33,913,983 | 449,962,110 |
| \$ | \$ 3,951,109.46 | \$ 3,657,765.67 | \$ 3,492,803.08 | \$ 3,549,971.73 | \$ 3,777,261.00 | \$ 4,704,370.04 | \$ 4,940,892.42 | \$ 4,785,405.98 | \$ 4,611,317.50 | \$ 3,600,303.80 | \$ 3,629,808.73 | \$ 3,554,282.93 | \$ 48,255,292.34 |


| 2,679 | 2,683 |
| :--- | :--- |

Rate 51 Controlled Energy Storage
2018 Actual Billed

| Item | January | February | March | April | May | June | July | August | September | October | November | December | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| kWh | 1,106,238 | 1,070,776 | 842,619 | 1,011,158 | 768,093 | 881,191 | 1,006,265 | 977,219 | 867,728 | 683,089 | 692,129 | 946,933 | 10,853,438 |
| \$ | \$ 51,102.04 | \$ 49,466.93 | \$ 38,930.50 | \$ 46,673.05 | \$ 35,486.83 | \$ 40,712.06 | \$ 46,490.80 | \$ 45,148.67 | \$ 40,090.97 | \$ 31,560.20 | \$ 31,785.21 | \$ 43,749.59 | \$ 501,196.85 |


| Premises | 1,617 | 1,610 | 1,605 | 1,611 | 1,632 | 1,639 | 1,625 | 1,634 | 1,636 | 1,667 | 1,655 | 1,683 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |


| Item | January | February | March | April | May | June | July | August | September | October | November | December | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| kWh | 1,091,315 | 1,056,827 | 833,258 | 1,002,160 | 761,089 | 874,403 | 999,795 | 970,127 | 862,054 | 678,919 | 686,351 | 934,425 | 10,750,723 |
| \$ | \$ 50,412.62 | \$ 48,822.48 | \$ 38,498.05 | \$ 46,257.34 | \$ 35,163.25 | \$ 40,398.40 | \$ 46,191.88 | \$ 44,821.01 | \$ 39,828.84 | \$ 31,367.53 | \$ 31,518.27 | \$ 43,171.71 | \$ 496,451.38 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Premises | 1,602 | 1,595 | 1,590 | 1,595 | 1,617 | 1,625 | 1,612 | 1,620 | 1,624 | 1,655 | 1,640 | 1,668 |  |
| Small General Service 4151 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Item | January | February | March | April | May | June | July | August | September | October | November | December | Total |
| kWh | 7,910 | 7,324 | 4,303 | 4,461 | 3,048 | 2,566 | 2,233 | 2,439 | 2,239 | 2,313 | 3,508 | 6,201 | 48,545 |
| \$ | \$ 365.42 | \$ 338.38 | \$ 198.78 | \$ 206.09 | \$ 140.82 | \$ 118.60 | \$ 103.17 | \$ 112.70 | \$ 103.44 | \$ 106.87 | \$ 162.07 | \$ 286.49 | \$ 2,242.83 |

## 


Rate 52 Controlled Interruptible Service
2018 Actual Billed

| Item | January | February | March | April | May | June | July | August | September | October | November | December | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| kWh | 5,562,145 | 5,287,263 | 4,185,976 | 4,547,171 | 3,287,312 | 3,581,170 | 4,200,405 | 4,118,692 | 3,624,688 | 2,932,905 | 3,310,055 | 4,441,855 | 49,079,637 |
| \$ | \$ 334,198.79 | \$ 317,687.01 | \$ 251,555.67 | \$ 273,279.51 | \$ 197,553.07 | \$ 215,218.50 | \$ 252,436.80 | \$ 247,528.62 | \$ 217,874.90 | \$ 176,269.90 | \$ 198,570.70 | \$ 267,005.54 | \$ 2,949,179.01 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Premises | 6,519 | 6,474 | 6,473 | 6,470 | 6,640 | 6,855 | 6,852 | 6,838 | 6,832 | 6,820 | 6,518 | 6,542 |  |
| Residential 3152 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Item | January | February | March | April | May | June | July | August | September | October | November | December | Total |
| kWh | 5,387,021 | 5,121,189 | 4,066,783 | 4,424,731 | 3,214,010 | 3,502,913 | 4,119,863 | 4,041,975 | 3,561,537 | 2,880,182 | 3,217,762 | 4,316,386 | 47,854,352 |
| \$ | \$ 323,702.10 | \$ 307,725.27 | \$ 244,392.09 | \$ 265,920.75 | \$ 193,147.46 | \$ 210,515.16 | \$ 247,596.14 | \$ 242,917.89 | \$ 214,079.45 | \$ 173,101.16 | \$ 193,023.75 | \$ 259,464.73 | \$ 2,875,585.95 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Premises | 6,437 | 6,395 | 6,392 | 6,391 | 6,562 | 6,781 | 6,782 | 6,769 | 6,761 | 6,746 | 6,439 | 6,458 |  |
| Small General Service 4152 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Item | January | February | March | April | May | June | July | August | September | October | November | December | Total |
| kWh | 80,826 | 83,544 | 55,591 | 60,482 | 34,859 | 21,664 | 17,437 | 18,026 | 13,669 | 14,963 | 40,115 | 61,088 | 502,264 |
| \$ | \$ 4,829.36 | \$ 5,001.67 | \$ 3,341.10 | \$ 3,635.04 | \$ 2,095.13 | \$ 1,302.10 | \$ 1,048.01 | \$ 1,083.38 | \$ 821.55 | \$ 899.33 | \$ 2,411.00 | \$ 3,671.46 | \$ 30,139.13 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Premises | 45 | 44 | 46 | 44 | 42 | 40 | 35 | 34 | 37 | 38 | 44 | 48 |  |
| General Service 4652 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Item | January | February | March | April | May | June | July | August | September | October | November | December | Total |
| kWh | 94,298 | 82,530 | 63,602 | 61,958 | 38,443 | 56,593 | 63,105 | 58,691 | 49,482 | 37,760 | 52,178 | 64,381 | 723,021 |
| \$ | \$ 5,667.33 | \$ 4,960.07 | \$ 3,822.48 | \$ 3,723.72 | \$ 2,310.48 | \$ 3,401.24 | \$ 3,792.65 | \$ 3,527.35 | \$ 2,973.90 | \$ 2,269.41 | \$ 3,135.95 | \$ 3,869.35 | \$ 43,453.93 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Premises | 37 | 35 | 35 | 35 | 36 | 34 | 35 | 35 | 34 | 36 | 35 | 36 |  |

Rate 53 Time of Day
2018 Actual Billed

| Item | January | February | March | April | May | June | July | August | September | October | November | December | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| On Peak Kwh | 5,459 | 5,243 | 4,410 | 4,214 | 3,121 | 4,061 | 4,523 | 4,192 | 3,790 | 2,963 | 3,148 | 4,109 | 49,233 |
| Off Peak kWh | 19,948 | 15,840 | 17,426 | 16,400 | 10,820 | 12,284 | 13,431 | 12,544 | 12,318 | 10,251 | 10,388 | 15,170 | 166,820 |
| \$ | \$ 3,059.48 | \$ 2,633.45 | \$ 2,635.58 | \$ 2,505.98 | \$ 1,783.25 | \$ 2,120.44 | \$ 2,339.58 | \$ 2,190.91 | \$ 2,075.10 | \$ 1,689.94 | \$ 1,731.66 | \$ 2,392.07 | \$ 27,157.44 |

$\begin{array}{ll}\text { Summer on Peak kWh } & 12,776 \\ \text { Other on Peak kWh } & 36,457\end{array}$
Rate 54 General Service Time of Use
2018 Actual Billed

| Item |  | January |  | February |  | March |  | April |  | May | June | July | August | September |  | October | November | December | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Max kW |  | 199.20 |  | 323.04 |  | 312.48 |  | 277.92 |  | 458.40 | 449.76 | 449.28 | 637.92 | 521.28 |  | 280.80 | 284.16 | 285.60 | 4,479.84 |
| Peak kW |  | 183.88 |  | 183.36 |  | 265.92 |  | 262.56 |  | 258.72 | 346.56 | 346.08 | 343.20 | 360.48 |  | 100.32 | 104.16 | 104.16 | 2,859.40 |
| On Peak kWh |  | 4,416 |  | 3,984 |  | 6,576 |  | 8,784 |  | 2,592 | 5,904 | 6,144 | 7,872 | 3,120 |  | 2,256 | 2,640 | 3,600 | 57,888 |
| Off Peak kWh |  | 57,024 |  | 68,160 |  | 76,368 |  | 85,056 |  | 70,848 | 135,840 | 157,488 | 149,424 | 131,040 |  | 53,904 | 49,488 | 50,928 | 1,085,568 |
| Total \$ | \$ | 7,773.49 | \$ | 8,918.88 | \$ | 9,840.48 | \$ | 9,753.99 | \$ | 9,516.88 | \$ 16,764.49 | \$ 19,328.14 | \$ 19,828.19 | \$ 15,520.81 | \$ | 5,729.37 | \$ 5,588.79 | \$ 6,104.53 | \$ 134,668.04 |
| 边 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Premises |  | 6 |  | 6 |  | 6 |  | 6 |  | 6 | 6 | 6 | 6 | 6 |  | 6 | 6 | 6 |  |
| Summer Peak kW Winter Peak kW Other Peak kW |  |  |  | 1,035.84 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | 471.40 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | 1,352.16 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Rate 70 Full Interruptible Service
2018 Actual Billed

| Item | January | February | March | April | May | June | July | August | September | October | November | December | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Billed kW | 63,341.97 | 63,657.26 | 58,301.06 | 69,103.30 | 85,088.58 | 84,703.88 | 85,002.61 | 83,259.35 | 83,037.40 | 72,629.45 | 62,535.75 | 59,951.47 | 870,612.08 |
| Coinc kW | - | - | - | - | - | - | 1,042.80 | - | - | - | - | - | 1,042.80 |
| kWh | 30,622,046 | 27,669,400 | 29,653,518 | 28,846,311 | 34,741,023 | 35,173,960 | 37,349,811 | 37,670,413 | 33,196,188 | 30,335,042 | 29,178,956 | 29,821,368 | 384,258,036 |
| \$ | \$ 1,931,610.46 | \$ 1,778,454.68 | \$ 1,857,985.15 | \$ 1,866,737.49 | \$ 2,251,492.54 | \$2,272,554.84 | \$ 2,428,513.23 | \$ 2,396,775.88 | \$ 2,161,295.08 | \$ 1,961,963.57 | \$ 1,853,820.12 | \$ 1,875,161.46 | \$ 24,636,364.50 |

$\qquad$ 1,042.80
-
-
$97,822.10$
Sum of Max Demands 97,822.10
Rate 71 Partial Interruptible Service

| Item | January | February | March | April | May | June | July | August | September | October | November | December | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Billed kW | 5,302.11 | 5,331.97 | 4,946.42 | 7,609.86 | 10,444.42 | 10,899.97 | 10,314.63 | 10,505.48 | 11,230.77 | 10,654.56 | 9,462.17 | 6,088.63 | 102,790.99 |
| Coinc kW | 834.45 | 987.69 | 808.08 | 764.83 | 819.90 | 619.77 | 1,235.73 | 1,102.86 | 1,095.87 | 1,015.24 | 989.05 | 922.54 | 11,196.01 |
| Excess kW | - | - | - | - | - | - | 5.45 | - | - | - | - | - | 5.45 |
| kWh | 1,775,480 | 1,639,288 | 1,719,928 | 1,928,576 | 2,519,360 | 2,389,864 | 2,444,376 | 2,528,544 | 2,408,936 | 2,396,088 | 2,001,656 | 1,777,448 | 25,529,544 |
| \$ | \$ 136,713.35 | \$ 132,645.81 | \$ 126,890.94 | \$ 150,019.74 | \$ 195,034.26 | \$ 194,061.80 | \$ 209,258.79 | \$ 211,287.31 | \$ 208,361.29 | \$ 203,163.92 | \$ 165,170.02 | \$ 130,081.60 | \$ 2,062,688.83 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Premises | 26 | 26 | 26 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 26 |  |
| Coincidental kW |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Summer |  | 2,958.36 |  |  |  |  |  |  |  |  |  |  |  |
| Winter |  | 2,744.68 |  |  |  |  |  |  |  |  |  |  |  |
| Other |  | 5,492.97 |  |  |  |  |  |  |  |  |  |  |  |
| Sum of Max Demands |  | 12,911.63 |  |  |  |  |  |  |  |  |  |  |  |

Rate 81 Cycled Air Conditioning
2018 Actual Billed

| Item |  | January |  | bruary |  | March |  | April | May | June | July | August | September | October |  | November |  | ecember | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total Rate 81 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Off Peak kWh |  | 122 |  | 303 |  | 3,458 |  | 777 | 213,468 | 863,749 | 1,336,411 | 1,324,027 | 1,062,795 | 370,025 |  | 8,877 |  | 1,190 | 5,185,202 |
| \$ | \$ | (8.45) | \$ | (4.83) | \$ | (110.66) | \$ | (24.87) | \$ $(6,830.97)$ | \$ (27,639.86) | \$ (42,765.39) | \$ (42,368.80) | \$ (34,009.28) | \$ (11,840.85) | \$ | (284.09) | \$ | (38.08) | \$ (165,926.13) |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Premises |  |  |  |  |  |  |  |  |  | 3,508 | 3,536 | 3,522 | 3,511 |  |  |  |  |  |  |
| Rate 81 Residential |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Off Peak kWh |  | 122 |  | 303 |  | 3,232 |  | 777 | 149,135 | 804,868 | 1,269,260 | 1,257,710 | 1,007,575 | 351,034 |  | 8,836 |  | 990 | 4,853,842 |
| \$ | \$ | (8.45) | \$ | (4.83) | \$ | (103.43) | \$ | (24.87) | \$ (4,772.31) | \$ (25,755.66) | \$ (40,616.57) | \$ (40,246.64) | \$ (32,242.24) | \$ (11,233.14) | \$ | (282.78) | \$ | (31.68) | \$ (155,322.60) |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Premises |  |  |  |  |  |  |  |  |  | 3,477 | 3,505 | 3,491 | 3,480 |  |  |  |  |  |  |
| Rate 81 Commercial |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Off Peak kWh |  | - |  | - |  | 226 |  | - | 64,333 | 58,881 | 67,151 | 66,317 | 55,220 | 18,991 |  | 41 |  | 200 | 331,360 |
| \$ | \$ | - | \$ | - | \$ | (7.23) | \$ | - | \$ $(2,058.66)$ | \$ (1,884.20) | \$ (2,148.82) | \$ $(2,122.16)$ | \$ (1,767.04) | \$ (607.71) | \$ | (1.31) | \$ | (6.40) | \$ (10,603.53) |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Premises |  |  |  |  |  |  |  |  |  | 31 | 31 | 31 | 31 |  |  |  |  |  |  |


Dakota Electric Association

| (A) | (B) | (C) | (D) | (E) | (F) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | kWh <br> Purchased | kWh <br> Sold | kWh <br> Own Use | kWh <br> Loss* | Line Loss \% <br> of Purchases |
| Year |  |  |  |  |  |
| 2014 | $1,887,361,641$ | $1,828,435,319$ | $2,305,477$ | $56,620,845$ | $3.000 \%$ |
| 2015 | $1,849,855,685$ | $1,792,314,743$ | $2,045,275$ | $55,495,668$ | $3.000 \%$ |
| 2016 | $1,872,717,331$ | $1,821,974,126$ | $2,052,552$ | $48,690,653$ | $2.600 \%$ |
| 2017 | $1,840,403,827$ | $1,820,488,783$ | $2,064,546$ | $17,850,498$ | $0.970 \%$ |
| 2018 | $1,901,355,817$ | $1,851,702,114$ | $2,119,811$ | $47,533,892$ | $2.500 \%$ |
| Total | $9,351,694,301$ | $9,114,915,085$ | $10,587,661$ | $226,191,556$ | $2.420 \%$ |

* 2016 reflects the impact of a reduction in line loss \% from $3.0 \%$ to $2.6 \%$ based on a system-wide
* 2017 kWh sold includes a 30 million kWh impact for an unbilled/line loss true-up. Line loss \% of purchases is $2.6 \%$ excluding the true-up
* 2018 reflects the impact of a reduction in line loss \% from $2.6 \%$ to $2.5 \%$ based on a system-wide line loss analysis
Source of Data \& Computations
(B) CFC Form 7, Part R, Line 16: 12/31
(D) CFC Form 7, Part R, Line 15: 12/31
$\begin{array}{ll}\text { (E) } & \text { (B) }-(\mathrm{C})-(\mathrm{D}) \\ \text { (F) } & \text { (E) } /(\mathrm{B})\end{array}$


Dakota Electric Association<br>Conservation Improvement Program Filing Summary

Dakota Electric CIP information is included in the consolidated GRE conservation report, most recently submitted to the Minnesota Department of Commerce in June 2019. Dakota Electric submits our Annual Conservation Tracker information to the MPUC as part of our Resource and Tax Adjustment mechanism.

A schedule detailing the 2019 budget of $\$ 2,206,787$ is included. In addition, a schedule showing the 2018 actual conservation and DSM expenditures of $\$ 2,407,082$ and the 2018 year-end tracker balance is also enclosed.

## Dakota Electric Association 2019 Conservation Improvement Program

| Project Name | Description | 2019 Budget |
| :---: | :---: | :---: |
| ACTUNEUP | Air Conditioning Tune-Up Proj | 2,138 |
| AUDC | Energy Audits Commercial \& Ind | 8,691 |
| AUDLOW | Low Income Audit Program | 938 |
| AUDR | Energy Audits Residential | 20,858 |
| CACCI | Cycled Air - Comml \& Ind | 4,232 |
| CACRES | Cycled Air - Residential | 55,824 |
| CIGRANT | C\&I Energy Grant | 566,912 |
| CIGROUP | C\&I Energy Group | 16,000 |
| CIPDIGITAL | Digital Advertising-Energy Efficiency/Conserv | 36,600 |
| CIPGOALS | CIP Goals | 118,893 |
| CIPNEWS | Newspaper Advert-Energy Efficiency | 11,000 |
| CIPTV | TV Advertising-Energy Efficiency | 85,740 |
| CIRC | Circuits | 425,148 |
| DEHUMID | Dehumidifier Rebate | 1,163 |
| E3TRAIN | Energy Effic Training \& Educatation | 18,274 |
| ECMMOTOR | ECM Rebate Program | 7,350 |
| EIL | Energy Intelligent Lifestyle | 43,306 |
| EILPROD | Energy Intel Lifestyle-Product | 34,670 |
| ELECCAR | Electric Car | 64,090 |
| ELECHEAT | Electric Heat | 18,461 |
| ESDRYER | Energy Star Clothes Dryer | 338 |
| FAIRSHOW | Fairs \& Shows | 20,335 |
| FRECYCLE | Fluorescent Lamp Recycling | 15,438 |
| FREEZER | Energy Star - Freezer | 900 |
| GENMT | Generator Maint \& Testing | 29,940 |
| GPUMPRES | Geothermal Heat Pump Residential | 1,417 |
| HIEFF | High Efficiency A/C Rebates | 252,408 |
| HPUMP | Heat Pumps - Residential | 23,454 |
| HPWH | Heat Pump Water Heater | - |
| INCELIGIBL | Income Eligible Non Cap Projects | 1,125 |
| IRRIG | Interruptible Irrigation | 23,093 |
| LEDLIGHTS | LED - Lights | 23,650 |
| LEDYARD | LED Yard Light | - |
| LIACMAINT | Low Income A/C Tune-up | - |
| LIAIRCON | Low Income Central Air Conditioner Replace | - |
| LICLSWSHR | Low Income Clothes Washer | - |
| LIDEHUMID | Low Income Dehumidifier Units | - |
| LIDISH | Low Income Dishwashers | - |
| LIFREEZER | Low Income Freezers | - |
| LIMICRO | Low Income Microwave Ovens | - |
| LIROOMAC | Low Income Room Air Conditioner | - |
| LIWTRHTR | Low Income Water Heater | - |
| LOADCTRL | Load Control | 103,463 |
| NCEEP | New Construction Energy Efficient Program | 5,700 |
| PEAK | Peak Alert Rate 70 | 8,866 |
| PLCMASTER | Power Line Carrier Master | 45,456 |
| POOLHEAT | Heat Pump Pool Heater | - |
| POOLPUMP | Pool Pump Variable Speed Motor | 150 |
| REFRIGLOW | Low Income Refrig Replacement | 1,350 |
| REGD | Regulatory - DSM | 141,320 |
| RENEW | Optional Renewable Energy | 3,875 |
| RFGRCYC | Refrigerator Recycling | 3,675 |
| ROOMSTORG | Room storage-electric heat | 4,998 |
| SOLAR | Solar Electric General Activity \& Education | 69,500 |
| WARFZ | Working Appliance Recyc Freeze | 360 |
| WARRF | Working Appliance Recycling Refrigerator | 638 |
| WTRHTR | Water Heaters | 66,019 |
| DSM | DSM Depreciation | 118,212 |
| TOTAL |  | \$ 2,505,968 |
|  | Less 70\% of CIRC as non-CIP | $(297,604)$ |
|  | Less RENEW Labor \& Payroll OH | $(1,575)$ |
| TOTAL CIP |  | \$ 2,206,789 |

## Dakota Electric Association

DSM/Conservation Tracker Account
Year Ended December 31, 2018

| A | B | C | D | E | F | G |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Conservation Account \# | Carrying Cost @ | Resource | Additions | Conservation Expenses |  |
| Month | $16120$ <br> Balance | 6.52\% | Adjustment <br> Recovery | to Tracker <br> Account | Expenses Incurred | Recovery in Base Rates |
| Dec-17 | 959,145.50 |  |  |  |  |  |
| Jan-18 | 901,002.41 | 5,211.00 | $(81,175.77)$ | 17,821.68 | 212,643.52 | $(194,821.84)$ |
| Feb-18 | 776,499.93 | 4,895.00 | $(72,865.13)$ | $(56,532.35)$ | 118,343.96 | $(174,876.31)$ |
| Mar-18 | 712,357.35 | 4,219.00 | $(65,741.35)$ | $(2,620.23)$ | 155,159.02 | $(157,779.25)$ |
| Apr-18 | 610,062.21 | 3,870.00 | (69,392.95) | $(36,772.19)$ | 129,770.89 | $(166,543.08)$ |
| May-18 | 552,507.17 | 3,315.00 | $(68,065.99)$ | 7,195.95 | 170,554.34 | $(163,358.39)$ |
| Jun-18 | 448,798.77 | 3,002.00 | $(83,515.63)$ | $(23,194.77)$ | 177,242.74 | (200,437.51) |
| Jul-18 | 253,389.00 | 2,438.00 | $(94,508.73)$ | $(103,339.04)$ | 123,481.91 | $(226,820.95)$ |
| Aug-18 | 113,724.11 | 1,377.00 | $(95,925.22)$ | $(45,116.67)$ | 185,103.86 | $(230,220.53)$ |
| Sep-18 | 56,045.48 | 618.00 | $(86,005.36)$ | 27,708.73 | 234,121.59 | $(206,412.86)$ |
| Oct-18 | 13,847.34 | 305.00 | (70,698.22) | 28,195.08 | 197,870.80 | $(169,675.72)$ |
| Nov-18 | 161,724.13 | 75.00 | $(66,623.91)$ | 214,425.70 | 374,323.08 | $(159,897.38)$ |
| Dec-18 | 247,243.44 | 879.00 | $(71,713.61)$ | 156,353.92 | 328,466.59 | $(172,112.67)$ |
| Annual Total | (711,902.06) | 30,204.00 | $(926,231.87)$ | 184,125.81 | 2,407,082.30 | (2,222,956.49) |



## Dakota Electric Association <br> Depreciation Summary

Dakota Electric's most recent 5-year depreciation study was filed June 2017 in Docket No. E111/D-17-505. The current annual depreciation rates by plant account are detailed on the enclosed summary schedule from this filing.
Dakota Electric Association
Annual Depreciation
Annual Depreciation
Year 2017
Schedule A 2017

| Schedule A 2017 |  |  | $\begin{gathered} 50 \% \text { of } \\ \text { Estimated } \end{gathered}$ |  |  | PRESENT |  |  |  | PROPOSED |  |  |  | Proposed <br> Increase <br> (Decrease) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Account Number | Description |  |  | $50 \%$ of <br> Estimated 2017 <br> Retirement | Average <br> Balance 2017 | Average or Weighted Serice Life (Yrs) | Net Salvage Percent | Accrual Rate or Weighted Average Accrual Rate | Annual Accrual | Average or Weighted Service Life (Yrs) | Net <br> Salvage <br> Percent | Accrual Rate or Weighted Average Accrual Rate | Annual Accrual |  |
| Distribution Plant |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 36000 | Land and Land Rights | 4,004,579 | 19,285 |  | 4,023,863 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 36200 | Station Equipment | 28,927,702 | 1,150,000 | $(23,315)$ | 30,054,387 | 37.00 | 0.00\% | 2.70\% | 811,468 | 37.00 | 0.00\% | 2.70\% | 811,468 |  |
| 36250 | Station Equipment - DSM | 3,931,509 |  |  | 3,931,509 | 11.00 | 0.00\% | 9.09\% | - | 11.00 | 0.00\% | 9.09\% | - |  |
| 36255 | Station Equipment - DSM Post 2008 | 767,103 | 248,000 | - | 1,015,103 | 11.00 | 0.00\% | 9.09\% | 92,273 | 11.00 | 0.00\% | 9.09\% | 92,273 |  |
| 36260 | Station Equipment - Comm | 760,766 |  | $(37,800)$ | 722,966 | 6.00 | 0.00\% | 16.67\% |  | 6.00 | 0.00\% | 16.67\% |  |  |
| 36265 | Station Equipment - Comm Post 2009 | 577,894 | 315,000 |  | 892,894 | 6.00 | 0.00\% | 16.67\% | 148,845 | 6.00 | 0.00\% | 16.67\% | 148,845 |  |
| 36400 | Poles, Towers and Fixtures | 18,370,537 | 342,418 | $(102,258)$ | 18,610,697 | 29.00 | -5.00\% | 3.62\% | 673,707 | 29.00 | -5.00\% | 3.62\% | 673,707 |  |
| 36500 | Overhead Conductors and Devices | 20,033,477 | 322,469 | $(109,313)$ | 20,246,633 | 30.00 | 2.00\% | 3.27\% | 662,065 | 30.00 | 2.00\% | 3.27\% | 662,065 |  |
| 36700 | Underground Conductors and Devices | 117,131,608 | 1,673,273 | $(699,112)$ | 118,105,769 | 33.00 | 5.00\% | 2.88\% | 3,401,446 | 33.00 | 5.00\% | 2.88\% | 3,401,446 |  |
| 36800 | Line Transformers | 38,540,620 | 699,637 | $(298,561)$ | 38,941,696 | 29.00 | 10.00\% | 3.10\% | 1,207,193 | 29.00 | 10.00\% | 3.10\% | 1,207,193 |  |
| 36900 | Senices | 3,309,321 | 34,666 | $(1,310)$ | 3,342,678 | 35.00 | -20.00\% | 3.43\% | 114,654 | 35.00 | -20.00\% | 3.43\% | 114,654 | - |
| 37000 | Meters | 6,866,992 | 62,309 | $(39,276)$ | 6,890,025 | 25.00 | 0.00\% | 4.00\% | 275,601 | 15.00 | 0.00\% | 6.67\% | 459,565 | 183,964 |
| 37020 | Meters - Used | 85,400 | - | - | 85,400 | 15.00 | 0.00\% | 6.67\% | 5,696 | 5.00 | 0.00\% | 20.00\% | 17,080 | 11,384 |
| 37050 | Load Control Meters - DSM | 633,490 | - |  | 633,490 | 25.00 | 0.00\% | 4.00\% | 25,340 | 15.00 | 0.00\% | 6.67\% | 42,254 | 16,914 |
| 37100 | Installations on Customers' Premises | 233,244 | 1,352 | $(24,769)$ | 209,827 | 20.00 | -7.00\% | 5.35\% | 11,226 | 20.00 | -10.00\% | 5.50\% | 11,540 | 314 |
| 37120 | Installations on Customers' Premises - LED* | 121,704 | 61,512 | (660) | 182,556 |  | 0.00\% | 0.00\% | - | 16.00 | 0.00\% | 6.25\% | 11,410 | 11,410 |
| 37150 | Load Control Receivers - DSM | 228,463 |  | $(1,606)$ | 226,858 | 12.00 | 0.00\% | 8.33\% |  | 12.00 | 0.00\% | 8.33\% |  |  |
| 37300 | Street Lighting and Signal Systems | 7,717,703 | 306,121 | $(54,636)$ | 7,969,187 | 22.00 | 10.00\% | 4.09\% | 325,940 | 22.00 | -5.00\% | 4.77\% | 380,130 | 54,190 |
| 37320 | Street Lighting and Signal Systems - LED* | 38,326 | 19,163 | . | 57,490 | - | 0.00\% | 0.00\% | . | 16.00 | 0.00\% | 6.25\% | 3,593 | 3,593 |
|  | TOTAL | 252,280,440 | 5,255,205 | $(1,392,616)$ | 256,143,028 | 32.51 |  | 3.08\% | 7,755,454 | 31.37 |  | 3.19\% | 8,037,223 | 281,769 |
| *New account category; split from parent account |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Plant |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 38900 | Land and Land Rights | 102,278 | - | - | 102,278 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 39000 | Structure and Improvements | 7,821,782 | 121,158 | $(7,770)$ | 7,935,170 | 37.50 | 12.50\% | 2.33\% | 184,889 | 34.50 | 12.50\% | 2.54\% | 201,553 | 16,664 |
| 39050 | Security Equipment | 316,269 | 7,006 | $(39,059)$ | 284,216 | 6.00 | 0.00\% | 16.67\% | 47,379 | 6.00 | 0.00\% | 16.67\% | 47,379 | - |
| 39100 | Office Fumiture and Equipment | 1,104,287 | 2,081 | $(69,838)$ | 1,036,529 | 12.00 | 0.00\% | 8.33\% | 86,343 | 12.00 | 0.00\% | 8.33\% | 86,343 | - |
| 39110 | Computer Equipment | 4,940,452 | 84,017 | $(16,362)$ | 5,008,107 | 5.40 | 0.00\% | 14.69\% | 725,916 | 5.00 | 0.00\% | 16.33\% | 806,573 | 80,657 |
| 39120 | Computer Equipment - DSM | 1,432,598 | - |  | 1,432,598 | 6.00 | 0.00\% | 16.67\% | 238,814 | 6.00 | 0.00\% | 16.67\% | 238,814 | - |
| 39130 | Computer Equipment - Leased | 426,168 | 151,675 | $(210,890)$ | 366,953 | 4.00 | 0.00\% | 25.00\% | 91,738 | 4.00 | 0.00\% | 25.00\% | 91,738 | - |
| 39200 | Autos \& Small Trucks | 1,943,593 | 80,768 | $(106,269)$ | 1,918,093 | 7.00 | 10.00\% | 10.58\% | 205,544 | 7.00 | 10.00\% | 10.58\% | 205,544 | - |
| 39300 | Stores Equipment | 52,570 | 2,118 | (133) | 54,554 | 15.00 | 0.00\% | 6.67\% | 3,639 | 15.00 | 0.00\% | 6.67\% | 3,639 |  |
| 39400 | Tools and Line Equipment | 818,627 | 5,021 | $(115,248)$ | 708,399 | 16.00 | 0.00\% | 6.25\% | 44,275 | 16.00 | 0.00\% | 6.25\% | 44,275 |  |
| 39410 | Shop and Garage Equipment | 167,264 | 7,936 | $(15,054)$ | 160,146 | 20.00 | 0.00\% | 5.00\% | 8,007 | 20.00 | 0.00\% | 5.00\% | 8,007 |  |
| 39450 | Tools and Related Line Equipment - DSM |  | - |  |  | 16.00 | 0.00\% | 6.25\% | - | 16.00 | 0.00\% | 6.25\% | - | - |
| 39500 | Laboratory Equipment | 319,265 | 50,020 | $(6,278)$ | 363,008 | 20.00 | 0.00\% | 5.00\% | 18,150 | 15.00 | 0.00\% | 6.67\% | 24,213 | 6,063 |
| 39510 | Hand Held Meter Reading Devices | 98,598 | 3,080 | $(11,316)$ | 90,362 | 6.00 | 0.00\% | 16.67\% | 15,063 | 6.00 | 0.00\% | 16.67\% | 15,063 | - |
| 39620 | Power Operated Equipment | 1,028,226 | $(3,767)$ | - | 1,024,459 | 12.00 | 5.00\% | 6.86\% | 70,278 | 12.00 | 5.00\% | 6.86\% | 70,278 | - |
| 39630 | Heaw Transportation Equipment | 4,561,863 | 116,955 | $(182,830)$ | 4,495,988 | 14.22 | 9.54\% | 4.71\% | 214,994 | 11.80 | 9.54\% | 4.85\% | 221,362 | 6,368 |
| 39700 | Communication Equipment | 774,886 | 93,349 | $(15,040)$ | 853,195 | 7.50 | 0.00\% | 13.33\% | 113,731 | 7.50 | 0.00\% | 13.33\% | 113,731 | - |
| 39710 | Base Stations and Tower | 137,908 | - | - | 137,908 | 20.00 | 0.00\% | 5.00\% | 6,895 | 20.00 | 0.00\% | 5.00\% | 6,895 | - |
| 39800 | Miscellaneous Equipment | 260,521 | 22,155 | $(7,869)$ | 274,807 | 9.00 | 0.00\% | 11.11\% | 30,531 | 9.00 | 0.00\% | 11.11\% | 30,531 | . |
|  | total | 26,307, 156 | 743,571 | (803,957) | 26,246,770 | 12.41 |  | 8.06\% | 2,106,186 | 11.80 |  | 8.48\% | 2,215,938 | 109,752 |
| 39999 | General Plant Work in Process | 2,393,925 |  |  |  |  |  |  |  |  |  |  |  |  |
|  | TOTAL ELECTRIC PLANT IN SERVICE | 278,587,595 | 5,998,776 | $(2,196,574)$ | 282,389,798 | 28.22 |  | 3.54\% | 9,861,640 | 27.14 |  | 3.68\% | 10,253,161 | 391,521 |



Dakota Electric Association<br>Cost Allocation Policy

Dakota Electric uses a fully allocated costing approach to assign and allocate costs between regulated and non-regulated activities which follows the cost allocation principles recommended by the Public Utilities Commission in Docket No. G, E999/CI-90-1008. Enclosed is a copy of Dakota Electric’s November 1994 Compliance Report. The Cooperative continues to adhere to the hierarchical principles adopted by the Commission in 1994.

Since our rate filing in 2009, Dakota Electric has phased out a large portion of its forprofit subsidiaries. During 2011, Midwest Energy Services (MES) sold all of its shares of stock in Consulting Engineers Group, Inc. (CEG). During 2012, Energy Alternatives Parent, Inc. (EAI) sold all of its membership interests in its leasing and wholesale generation businesses.

Dakota Electric currently has a for-profit wholly-owned subsidiary holding company, Midwest Energy Services (MES), which owns Energy Alternatives Parent, Inc. (EAI) (formerly named Dakota Energy at the time of the enclosed Compliance Report). EAI owns Energy Alternatives Solar, LLC (EAS). EAS leased customer-sited solar photovoltaic generation. The remaining leases were all terminated in 2019 prior to this rate filing.

The cost allocation system for contracted Dakota Electric services for the subsidiaries are formalized through annual agreements. The subsidiaries books are kept separately and the net income of the consolidated subsidiaries is separately identified in Form 7 (Workpaper 1) on line 24 of the income statement entitled Income (Loss) from Equity Investments.

All revenues and expenses related to Dakota Electric's internal non-regulated activities are tracked in detail using separate project codes. These projects are mapped to FERC accounts 415 and 416 when preparing the annual Form 7 income statement and are therefore captured in line 25 of the Form 7 entitled Non Operating Margins - Other (Workpaper 1). These non-regulated activities currently include sub-contracting services to other utilities and equipment sales to customers.


Dakota Electric Association Summary of Lead Lag Analysis Cash Working Capital Analysis





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| $\$$ | $7,028,924$ |
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ले
（A）Operating payroll is estimated to be $86 \%$ of total payroll
（B）Revenue Collection or Customer Payment Lag
（A）Operating payroll is estimated to be $86 \%$ of total payroll
（B）Revenue Collection or Customer Payment Lag
Total Expenses
Sales Tax
Working Capital Required／（Provided）
 Property Taxes

# Dakota Electric Association <br> Lead-Lag Study Notes 

## Working capital definition

Cash working capital is the amount of investment in addition to net plant and materials and supplies that is necessary to provide safe and quality electric service.

## Lead/lag study description

A lead/lag study is an analysis which measures the length of time from providing electric service until payment is received from the customer and the length of time from the receipt of goods or services from the utility's vendors until the utility pays its vendors.

Period of time used to determine the revenue and expense lead/lag days in the study The revenue and expense days were measured for the 12 months ending December 31, 2018.

## Results of the lead/lag study

The lead/lag study resulted in a cash working capital requirement of $\$ 6,816,147$.
Description of the summary page entitled Dakota Electric Association, Cash Working Capital Analysis, for the twelve months ending December 31, 2018
The summary page sets forth the results of the lead/lag analysis. For each line item of expense, the average expense lead or lag days has been calculated. This number is then subtracted from the revenue lag. The net lead or lag is then multiplied by the average daily expense. The result is the amount of cash working capital provided by or required for that expense.

## Revenue lag calculation

The revenue lag was determined by adding together the service period lag, billing lag and collection lag. A service period lag of 15.2 days was calculated by dividing the average number of days in a month by two ( $30.4 / 2=15.2$ ). This calculation assumes that, on average, the customer receives all of the service for the period for which the meter is read at the midpoint of that period.

A billing lag of 11.6 days was determined by averaging the number of days from each meter reading date to its associated billing date in the 12 month time period.

A collection lag or customer payment lag of 28.3 days was calculated by dividing the sum of the daily accounts receivable balances of the 12 month time period by the sum of billed revenues and sales tax for the same period. The sum of the three lags amounted to a total revenue lag of 55.1 days.

## Purchased power

All invoices from Great River Energy were analyzed for purchased power transactions. The lag days were developed from the midpoint in the service period to the date each invoice was paid. From this analysis an average lag of 51.7 days was calculated.

## Payroll

The determination of lag days for payroll involved the analysis of both hourly and salary payroll dollars. Separate lags were calculated for net payroll, payroll taxes, contributions to 401 K , credit union, investment funds deductions, and union dues withholdings. A weighted average of the lags for net payroll and withholdings was then calculated separately for both hourly and salary payrolls. A second weighted average of 11.0 days was calculated for the two payrolls and assigned to total gross payroll.

## Benefits

Benefits were divided into six groups; including disability, 401K contributions, pension, HSA funding, medical/dental premiums, and life insurance. Lags were based on actual payment dates that occurred during the 12 month period, with the largest change occurring in the timing of pension payments. The total average lag was negative 37.5 days.

## Other O\&M expenses.

A lag of 18.3 days was calculated by analyzing a sample of invoices paid during the 12 month period. This sample included vendors with total payments that were greater than $\$ 10,000$. A comparison was made between invoice date and payment date and the lag days for O\&M expenses are a weighted average of total invoices included in this sample.

## Determination of expense lags for remaining expense items on the summary page

The lag of negative 180.6 days assigned to prepaid insurance is a weighted average lag based on actual payment dates. The lag of 14.4 assigned to employer FICA and Medicare is the weighted average of the lags for payroll taxes for hourly and salary payrolls. The lag of 60.0 days assigned to federal and state unemployment taxes is based on payments made on the $15^{\text {th }}$ on the month following the last month of the quarter. The lag of negative 30.5 days assigned to property taxes is a weighted average based on statutory payment due dates for property and real estate taxes.

## Determination of the net lead for sales tax and the effect of collecting sales tax on DEA's cash working capital requirement.

The net lead for sales tax of 6.6 days was determined by measuring the number of days from when customers are billed for services provided, until DEA pays the sales tax associated with the billed services, and the number of days it takes DEA to collect the sales tax from customers. An expense lag of 34.9 days was calculated for DEA to pay the sales tax compared to a revenue lag of 28.3 days for DEA to collect it. Therefore, DEA is provided with 6.6 days of working capital related to the collection of sales tax.

## Dakota Electric Association

Cash Working Capital Analysis
Determination of Revenue Lag
Twelve Months Ending December 31, 2018

| Service Period Lag | 15.2 Days |  |
| :--- | :--- | :--- |
| Billing Lag | 11.6 | (Total days billed/total customers billed) |
| Payment Lag | 28.3 |  |
|  |  |  |
| Total Revenue Lag | 55.1 | Days |

Determination of Payment Lag

| Total Billed for 12 Months | \$ | 227,300,733 |
| :--- | :--- | ---: |
| Total of 365 days A/R Balances 12 Months | $\$$ | $6,443,825,455$ |
| Payment Lag |  | 28.3 Days |

Dakota Electric Association<br>Cash Working Capital Analysis<br>Determination of Lag for Purchased Power<br>Twelve Months Ending December 31, 2018

Great River Energy

| Service Period |  |  | Amount | Date <br> Paid | $\begin{aligned} & \text { Days } \\ & \text { Lag } \\ & \hline \end{aligned}$ | Dollar <br> Days |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start | Finish | Mid-Point |  |  |  |  |  |
| 1-Jan-18 | 31-Jan-18 | 16-Jan-18 | \$ 12,993,995 | 7-Mar-18 | 50.0 | \$ | 649,699,750 |
| 1-Feb-18 | 28-Feb-18 | 14-Feb-18 | 11,358,844 | 6-Apr-18 | 50.5 |  | 573,621,622 |
| 1-Mar-18 | 31-Mar-18 | 16-Mar-18 | 9,600,693 | 7-May-18 | 52.0 |  | 499,236,036 |
| 1-Apr-18 | 30-Apr-18 | 15-Apr-18 | 9,035,685 | 7-Jun-18 | 52.5 |  | 474,373,463 |
| 1-May-18 | 31-May-18 | 16-May-18 | 11,978,294 | 6-Jul-18 | 51.0 |  | 610,892,994 |
| 1-Jun-18 | 30-Jun-18 | 15-Jun-18 | 17,453,044 | 7-Aug-18 | 52.5 |  | 916,284,810 |
| 1-Jul-18 | 31-Jul-18 | 16-Jul-18 | 18,419,484 | 7-Sep-18 | 53.0 |  | 976,232,652 |
| 1-Aug-18 | 31-Aug-18 | 16-Aug-18 | 18,210,712 | 5-Oct-18 | 50.0 |  | 910,535,600 |
| 1-Sep-18 | 30-Sep-18 | 15-Sep-18 | 12,431,474 | 7-Nov-18 | 52.5 |  | 652,652,385 |
| 1-Oct-18 | 31-Oct-18 | 16-Oct-18 | 8,853,817 | 7-Dec-18 | 52.0 |  | 460,398,484 |
| 1-Nov-18 | 30-Nov-18 | 15-Nov-18 | 9,368,446 | 7-Jan-19 | 52.5 |  | 491,843,415 |
| 1-Dec-18 | 31-Dec-18 | 16-Dec-18 | 9,652,333 | 7-Feb-19 | 53.0 |  | 511,573,649 |
| Total |  |  | \$ 149,356,821 |  |  |  | 7,727,344,860 |

# Dakota Electric Association 

Cash Working Capital Analysis
Payroll Summary
Twelve Months Ending December 31, 2018

Combined Salary and Hourly Payroll

| Description | Amount |  | $\begin{gathered} \text { Days } \\ \text { Lag } \end{gathered}$ |  | Dollar <br> Days |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Salary Payroll | \$ | 8,629,752 | 7.6 | \$ | 65,866,532 |
| Hourly Payroll |  | 8,942,972 | 14.2 |  | 126,829,910 |
| Total - Average Lag | \$ | 17,572,724 | 11.0 | \$ | 192,696,442 |

Salary Payroll
Description
Net Payroll
Payroll Taxes
401 K
Homestead
$\quad$ Subtotal - Average Lag

Other

Total

|  |  |
| ---: | ---: |
| $\$$ | $\underline{\text { Amount }}$ |
| $5,410,692$ |  |
| $2,284,610$ |  |
| 899,855 |  |
|  | 34,595 |
| $\$$ | $8,629,752$ |

\$ 895,371
\$ 9,525,123
N/A

$$
9,525,123
$$

Hourly Payroll

| Description | \$ | Amount | Days |  | Dollar |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Lag |  | Days |
| Net Payroll |  | 5,692,489 | 13.0 | \$ | 74,002,357 |
| Payroll Taxes |  | 2,159,652 | 18.0 |  | 38,873,736 |
| 401K |  | 908,619 | 13.0 |  | 11,812,047 |
| Homestead |  | 75,662 | 10.0 |  | 756,620 |
| Union Dues |  | 106,550 | 13.0 |  | 1,385,150 |
| Subtotal - Average Lag | \$ | 8,942,972 | 14.2 | \$ | 126,829,910 |
| Other | \$ | 815,191 | N/A |  |  |
| Total | \$ | 9,758,163 |  |  |  |

\(\left.$$
\begin{array}{rr}\text { Days } \\
\text { Lag }\end{array}
$$ \quad \begin{array}{r}Dollar <br>

Days\end{array}\right\}\)| 6.0 | $\$ 2,464,152$ |
| ---: | ---: |
| 11.0 | $25,130,710$ |
| 9.0 | $8,098,695$ |
| 5.0 | 172,975 |
|  | $65,866,532$ |

Total

Dakota Electric Association
Cash Working Capital Analysis
Determination of Lag for Employee Benefits
Twelve Months Ending December 31, 2018

| Description | Amount |  | $\begin{gathered} \text { Days } \\ \text { Lag } \end{gathered}$ |  | Dollar <br> Days |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Disability Insurance | \$ | 86,324 | (12.7) | \$ | $(1,098,852)$ |
| 401K Contributions |  | 1,057,908 | 10.0 |  | 10,567,750 |
| Pension |  | 3,029,176 | (70.3) |  | $(212,805,112)$ |
| HSA Funding |  | 262,810 | 8.8 |  | 2,317,225 |
| Medical/Dental Insurance |  | 1,469,351 | (15.7) |  | $(23,087,831)$ |
| Life Insurance |  | 97,609 | (12.7) |  | $(1,244,071)$ |
| Total - Average Lag | \$ | 6,003,178 | (37.5) | \$ | $(225,350,891)$ |

## Dakota Electric Association

Cash Working Capital Analysis
Determination of Lag for Prepaid Insurance
Twelve Months Ending December 31, 2018

| Description | Amount |  | Days <br> Lag |  | Dollar Days |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Workers Compensation | \$ | 194,743 | (195.0) | \$ | $(37,974,885)$ |
| Work Place Violance |  | 840 | (199.0) |  | $(167,160)$ |
| General Liability, Property, Directors \& Officers Liability |  | 374,708 | (173.0) |  | $(64,824,484)$ |
| Total - Average Lag | \$ | 570,291 | (180.6) | \$ | $(102,966,529)$ |

Dakota Electric Association<br>Cash Working Capital Analysis<br>Determination of Lag for FICA and Medicare<br>Twelve Months Ending December 31, 2018

Company Paid Payroll Taxes:

| FICA | $\$$ | $1,071,963$ |
| :--- | ---: | ---: |
| Medicare |  | 262,845 |
| Total | $\$ 1,334,808$ |  |


| Employee Paid Payroll Taxes: |  |  |  |  |  |
| :--- | :---: | ---: | ---: | ---: | ---: |
| Salary | $\$$ | $2,284,610$ | 11 | $\$$ | $25,130,710$ |
| Hourly |  | $2,159,652$ | $\underline{18}$ |  | $38,873,736$ |
| Total | $\$$ | $4,444,262$ | 14.4 | $\$$ | $64,004,446$ |

Payroll taxes are paid the Wednesday following payday for both payrolls. Therefore, the lag for salary payroll is equal to the lag for net payroll ( 6 days) plus 5 days, which equals 11 days; and the lag for hourly payroll is equal to the lag for net payroll (13 days) plus 5 days, which equals 18 days.

Dakota Electric Association<br>Cash Working Capital Analysis<br>Determination of Lag for Unemployment Taxes<br>Twelve Months Ending December 31, 2018

Federal Taxes
First Quarter, 2018
Second Quarter, 2018
\$ 8,179
Third Quarter, 2018
Fourth Quarter, 2018
Subtotal
Minnesota State
First Quarter, 2018
Second Quarter, 2018
Third Quarter, 2018
Fourth Quarter, 2018
Subtotal
Grand Total $\quad \$ \quad 26,186$

Federal and state unemployment taxes are paid on the 15th of the month
following the last month of the quarter. The lag is equal to 45 days (the midpoint of the quarter) plus 15 days, or 60 days total lag.

## Dakota Electric Association

Cash Working Capital Analysis
Determination of Lag for Property and Real Estate Taxes
Twelve Months Ending December 31, 2018

| Description | Amount |  | Service Period |  |  | Payment Date | $\underline{\text { Lag Days }}$ | Dollar Days |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Start | Finish | Mid-Point |  |  |  |
| Property Tax \& 50\% Real Estate Tax | (A) | \$ 3,040,165 | 1-Jan-18 | 31-Dec-18 | 2-Jul-18 | 15-May-18 | (48.0) | \$ (145,927,920) |
| 50\% Real Estate Tax |  | 392,277 | 1-Jan-18 | 31-Dec-18 | 2-Jul-18 | 15-Oct-18 | 105.0 | 41,189,085 |
| Total - Average Lag |  | \$ 3,432,442 |  |  |  |  | (30.5) | \$ (104,738,835) |

## Dakota Electric Association

Cash Working Capital Analysis
Determination of Lag for Sales, Use and Transit Tax
Twelve Months Ending December 31, 2018

| Service Period |  |  | \$ | Amount | Date <br> Paid | Days <br> Lag | \$ | Dollar Days |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start | Finish | Mid-Point |  |  |  |  |  |  |
| 1-Jan-18 | 31-Jan-18 | 16-Jan-18 |  | 1,019,618 | 20-Feb-18 | 35.0 |  | 35,686,630 |
| 1-Feb-18 | 28-Feb-18 | 14-Feb-18 |  | 926,951 | 20-Mar-18 | 33.5 |  | 31,052,859 |
| 1-Mar-18 | 31-Mar-18 | 16-Mar-18 |  | 800,081 | 20-Apr-18 | 35.0 |  | 28,002,835 |
| 1-Apr-18 | 30-Apr-18 | 15-Apr-18 |  | 863,374 | 21-May-18 | 35.5 |  | 30,649,777 |
| 1-May-18 | 31-May-18 | 16-May-18 |  | 807,053 | 20-Jun-18 | 35.0 |  | 28,246,855 |
| 1-Jun-18 | 30-Jun-18 | 15-Jun-18 |  | 657,000 | 28-Jun-18 | 12.5 |  | 8,212,500 |
| 1-Jun-18 | 30-Jun-18 | 15-Jun-18 |  | 407,886 | 20-Aug-18 | 65.5 |  | 26,716,533 |
| 1-Jul-18 | 31-Jul-18 | 16-Jul-18 |  | 1,267,763 | 20-Aug-18 | 35.0 |  | 44,371,705 |
| 1-Aug-18 | 31-Aug-18 | 16-Aug-18 |  | 1,278,336 | 20-Sep-18 | 35.0 |  | 44,741,760 |
| 1-Sep-18 | 30-Sep-18 | 15-Sep-18 |  | 1,126,600 | 22-Oct-18 | 36.5 |  | 41,120,900 |
| 1-Oct-18 | 31-Oct-18 | 16-Oct-18 |  | 891,332 | 20-Nov-18 | 35.0 |  | 31,196,620 |
| 1-Nov-18 | 30-Nov-18 | 15-Nov-18 |  | 824,178 | 20-Dec-18 | 34.5 |  | 28,434,141 |
| 1-Dec-18 | 31-Dec-18 | 16-Dec-18 |  | 897,232 | 21-Jan-19 | 36.0 |  | 32,300,352 |
| Total |  |  | \$ | 11,767,404 |  | 34.9 | \$ | 410,733,467 |








| 9. Operations and Maintenance Expense <br> or | $\$ 118.73$ $\$ 99.70$ | $\begin{aligned} & \$ 116.74 \\ & \$ 106.59 \end{aligned}$ | $\begin{aligned} & \$ 125.02 \\ & \$ 110.92 \end{aligned}$ | $\begin{aligned} & \$ 130.69 \\ & \$ 116.22 \end{aligned}$ | $\begin{gathered} \$ 133.34 \\ \hline 1118.63 \end{gathered}$ | $\begin{aligned} & \$ 135.93 \\ & \$ 120.97 \end{aligned}$ | s138.76 <br> \$123 | $\begin{aligned} & \$ 141.55 \\ & \hline \$ 126.03 \end{aligned}$ |  | $\begin{aligned} & \text { \$147.26 } \\ & \hline \$ 131.18 \end{aligned}$ | $\$ 150.23$ $\$ 133.86$ | $\$ 153.26$ $\$ 136.58$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rat |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 5.40 | 5.55 | 5.66 | 5.60 | ${ }^{5.59}$ | ${ }^{5.58}$ |  |  | 5.62 | ${ }^{5.53}$ |  |  |  |
|  | 5.37\%, |  |  |  |  | ${ }^{2.133 \%}$ | ${ }^{2.3539}$ | ${ }^{2} 5.555$ | 1.8.625 | 2.2350 |  | 2.02\% |  |
| 13. Requeque Rateo nocrease overer Presenent Ratas |  |  |  | S186,1.55\% |  | (190.0.03 | S192, $2.84 \%$ | S195.565\% | (196.05 |  | S198.53\% | 5200.159\% | ${ }_{\substack{\text { S201.95 } \\ 7.27 \%}}$ |
| Modificd Ratios |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Modifed Debt Senice Coverage (MDSC) | 1.83 | 1.70 | 1.50 | 1.50 | 1.50 | ${ }^{1.50}$ | 1.50 | 1.50 | 1.50 | 1.50 | ${ }^{1.50}$ | 1.50 | 1.50 |
| Modfied Times interest Eamed Ratio MTIER) | 2.32 |  |  | 1.17 | 1.06 | 0.99 | 1.02 | 0.96 | 0.71 | 0.80 | 0.57 | 0.63 | 0.75 |
| Operaing ${ }^{\text {a }}$ Times Interest Eamed Ralio (OTIER) | ${ }^{2,37}$ | ${ }^{21,14}$ | ${ }_{1}^{1.56}$ | ${ }_{1}^{1.19}$ | 1.07 | ${ }^{1.01}$ | ${ }_{1}^{1.05}$ | 0.98 | ${ }^{0.73}$ | 0.82 | 0.60 | 0.65 |  |
| 18. Operating Debit Serice Coverage Ratio (ODSC) | 1.81 | 1.67 | 1.48 | 1.49 | 1.49 | 1.49 | 1.49 | 1.49 | 1.49 | 1.49 | 1.49 | 1.49 | 1.49 |

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| 250,291 | $386,642,886$ | $396,799,258$ |
| :--- | :--- | :--- |



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| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $129,730,189$ | $133,782,627$ | $137,790,103$ | $141,790,967$ | $145,803,067$ | $149,860,363$ | $153,958,039$ | $158,059,806$ | $162,210,731$ |
| $1,465,319$ | $1,734,627$ | $1,462,628$ | $1,397,874$ | $1,411,646$ | $1,121,585$ | $1,158,239$ |  |  |
|  |  |  |  |  |  |  |  |  |


 $\begin{array}{lll}178, .123,694 & 176,777,430 & 176,124,124 \\ & & \end{array}$
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59


| DETERMINATION OF LOAD - RUS FORM 325 E MN065 <br> ITEM | Dakota Electric Association |  |  |  |  |  |  |  |  |  |  |  | 8/15/2019 <br> Base 2018 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Historical | Historical | Historical | Future | Future | Future | Future | Future | Future | Future | Future | Future | Future |
|  | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 |
| 4. Annual Power Requirements in MWHs |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. Total MWHs Sold | 1,821,975 | 1,820,489 | 1,851,701 | 1,809,303 | 1,825,880 | 1,839,701 | 1,852,296 | 1,862,865 | 1,873,771 | 1,884,370 | 1,894,897 | 1,905,286 | 1,919,131 |
| A1. Total MWHs Sold (No Line Loss) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| B. System own Use | 2,053 | 2,065 | 2,120 | 2,075 | 2,075 | 2,075 | 2,075 | 2,075 | 2,075 | 2,075 | 2,075 | 2,075 | 2,075 |
| C. System Loss Percentage (\%) | 2.60\% | 0.97\% | 2.50\% | 2.50\% | 2.50\% | 2.50\% | 2.50\% | 2.50\% | 2.50\% | 2.50\% | 2.50\% | 2.50\% | 2.50\% |
| C1. System Loss Percentage (MWHs) | 48,689 | 17,850 | 47,535 | 46,446 | 46,871 | 47,225 | 47,548 | 47,819 | 48,099 | 48,370 | 48,640 | 48,907 | 49,262 |
| D. Total MWHs Purchased | 1,872,717 | 1,840,404 | 1,901,356 | 1,857,823 | 1,874,826 | 1,889,001 | 1,901,919 | 1,912,759 | 1,923,944 | 1,934,815 | 1,945,613 | 1,956,268 | 1,970,467 |
| E. Total MWH's Generated | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| F. Total MWH's Purchased and Generated | 1,872,717 | 1,840,404 | 1,901,356 | 1,857,823 | 1,874,826 | 1,889,001 | 1,901,919 | 1,912,759 | 1,923,944 | 1,934,815 | 1,945,613 | 1,956,268 | 1,970,467 |






|  |  |
| ---: | ---: |
|  |  |
|  | $12,520,719$ |
| 0 | 367,445 |
| 0 | 0 |
| 43 | 0 | $\begin{array}{rr}0 & 0 \\ 5,370,213 & 5,531,319 \\ \mathbf{3}, 850, \mathbf{2 9 1} & \mathbf{3 8 6 , 6 4 2 , 8 8 6}\end{array}$

$$
\begin{array}{rr} 
\\
& \\
\hline, 979 & 12,156,038 \\
\hline 352 & 356,74 \\
\hline 0 & \\
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\hline
\end{array}
$$

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\begin{array}{r}
0 \\
\hline 0 \\
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$$

 | 12,781 | 0 |
| ---: | ---: |
| 0 | 12,888, |
| 12,781 | $12,888,164$ |
| 0 | 0 | $\underbrace{0}_{0}$





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| MN065 <br> DETERMINATION OF DEBT AND DEBT SE | ICE - CFC FORM |  |  |  |  | Dakota | ctric Asso | ion |  |  |  |  | $\begin{aligned} & 8 / 15 / 2019 \\ & \text { Base } 2018 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Future | Future | Future | Future | Future | Future | Future | Future | Future | Future |
| CFCNote ${ }^{\text {904040003 }}$ |  |  |  | 21 |  |  |  |  | 2024 | 2025 | 2026 | 2027 | 2028 |
| 9040003 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6. A. Year/ Month | 2018 | 12 | E. Balance Beginning | 3,794,320 | 3,504,388 | 3,203,656 | 2,890,956 | 2,566,204 | 2,228,934 | 1,878,902 | 1,515,140 | 1,137,357 | 745,012 |
| B. Original Amount / Payments per Year | 3,794,320 | 4 | F. Plus Interest | 140,046 | 129,246 | 117,279 | 105,226 | 92,708 | 79,947 | 66,216 | 52,195 | 37,63 | 22,591 |
| C. Amort. Period / Deferral | 10.83 | 0.00 | H. Less Discounts | 9,215 | 5,045 | 4,591 | 3,462 | 3,051 | 2,623 | 2,179 | 1,718 | 1,239 | 742 |
| D. Amortization Type | Level Debt Service |  | I. Less Payments | 420,764 | 424,933 | 425,387 | 426,516 | 426,928 | 427,355 | 427,799 | 428,260 | 428,739 | 429,237 |
| E. Interest Rate / Loan Type | 3.80000\% | Fixed | J. Balance End of year | 3,504,388 | 3,203,656 | 2,890,956 | 2,566,204 | 2,228,934 | 1,878,902 | 1,515,140 | 1,137,357 | 745,012 | 337,625 |
| 9042001 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7. A. Year/ Month | 2018 | 12 | E. Balance Beginning | 11,379,844 | 11,002,726 | 10,613,140 | 10,208,439 | 9,789,179 | 9,354,837 | 8,905,803 | 8,439,680 | 7,956,788 | 7,456,525 |
| B. Original Amount / Payments per Year | 11,379,844 | 4 | F. Plus Interest | 398,935 | 386,467 | 371,353 | 356,793 | 341,710 | 327,019 | 309,930 | 293,162 | 275,789 | 258,537 |
| C. Amort. Period / Deferral | 20.83 | 0.00 | H. Less Discounts | 28,095 | 27,142 | 26,153 | 23,433 | 20,070 | 16,937 | 14,140 | 11,238 | 9,712 | 9,079 |
| D. Amortization Type | Level Debt Service |  | I. Less Payments | 747,958 | 748,911 | 749,900 | 752,620 | 755,983 | 759,116 | 761,914 | 764,816 | 766,341 | 766,974 |
| E. Interest Rate / Loan Type | 3.55000\% | Fixed | J. Balance End of year | 11,002,726 | 10,613,140 | 10,208,439 | 9,789,179 | 9,354,837 | 8,905,803 | 8,439,680 | 7,956,788 | 7,456,525 | 6,939,009 |
| 9043001 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8. A. Year/ Month | 2018 | 12 | E. Balance Beginning | 4,704,028 | 4,562,900 | 4,417,150 | 4,265,701 | 4,108,804 | 3,946,262 | 3,778,267 | 3,603,834 | 3,423,126 | 3,235,917 |
| B. Original Amount / Payments per Year | 4,704,028 | 4 | F. Plus Interest | 165,102 | 160,481 | 154,781 | 149,333 | 143,689 | 138,235 | 131,797 | 125,522 | 119,021 | 112,609 |
| C. Amort. Period / Deferral | 22.33 | 0.00 | H. Less Discounts | 11,627 | 11,271 | 10,901 | 10,517 | 10,119 | 9,708 | 9,28 | 8,84 | 7,260 | 4,920 |
| D. Amortization Type | Level Debt Service |  | I. Less Payments | 294,603 | 294,960 | 295,330 | 295,713 | 296,111 | 296,522 | 296,948 | 297,390 | 298,970 | 301,310 |
| E. Interest Rate / Loan Type | 3.55000\% | Fixed | J. Balance End of year | 4,562,900 | 4,417,150 | 4,265,701 | 4,108,804 | 3,946,262 | 3,778,267 | 3,603,834 | 3,423,126 | 3,235,917 | 3,042,296 |
| 9044001 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9. A. Year/ Month | 2018 | 12 | E. Balance Beginning | 4,337,267 | 4,228,976 | 4,117,014 | 4,000,347 | 3,879,243 | 3,753,534 | 3,623,440 | 3,488,002 | 3,347,413 | 3,201,478 |
| B. Original Amount / Payments per Year | 4,337,267 | 4 | F. Plus Interest | 161,112 | 157,441 | 152,736 | 148,299 | 143,693 | 139,309 | 133,965 | 128,814 | 123,468 | 118,256 |
| C. Amort. Period / Deferral | 24.83 | 0.00 | H. Less Discounts | 10,741 | 10,467 | 10,183 | 9,887 | 9,580 | 9,262 | 8,931 | 8,588 | 8,232 | 7,862 |
| D. Amortization Type | Level Debt Service |  | I. Less Payments | 258,662 | 258,936 | 259,220 | 259,516 | 259,823 | 260,141 | 260,471 | 260,815 | 261,171 | 261,541 |
| E. Interest Rate | 3.75000\% | Fixed | J. Balance End of year | 4,228,976 | 4,117,014 | 4,000,347 | 3,879,243 | 3,753,534 | 3,623,440 | 3,488,002 | 3,347,413 | 3,201,478 | 3,050,331 |
| 9044002 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10. A. Year/ Month | 2018 | 12 | E. Balance Beginning | 1,917,161 | 1,754,430 | 1,586,424 | 1,412,643 | 1,233,056 | 1,047,468 | 855,777 | 657,584 | 452,770 | 241,112 |
| B. Original Amount / Payments per Year | 1,917,161 | 4 | F. Plus Interest | 61,249 | 55,974 | 50,198 | 44,392 | 38,392 | 32,289 | 25,787 | 19,165 | 12,322 | 5,273 |
| C. Amort. Period / Deferral | 10.08 | 0.00 | H. Less Discounts | 4,641 | 4,229 | 3,804 | 3,364 | 2,909 | 2,440 | 1,955 | 1,453 | 935 | 399 |
| D. Amortization Type | Level Debt Service |  | I. Less Payments | 219,339 | 219,751 | 220,176 | 220,616 | 221,070 | 221,540 | 222,025 | 222,527 | 223,045 | 223,581 |
| E. Interest Rate | 3.30000\% | Fixed | J. Balance End of year | 1,754,430 | 1,586,424 | 1,412,643 | 1,233,056 | 1,047,468 | 855,777 | 657,584 | 452,770 | 241,112 | 22,406 |
| 9044004 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11. A. Year/ Month | 2018 | 12 | E. Balance Beginning | 1,309,090 | 1,017,028 | 717,667 | 410,681 | 95,948 | 0 | 0 | 0 | 0 | 0 |
| B. Original Amount / Payments per Year | 1,309,090 | 4 | F. Plus Interest | 29,984 | 22,685 | 15,059 | 7,312 | 691 | 0 | 0 | 0 | 0 | 0 |
| C. Amort. Period / Deferral | 4.33 | 0.00 | H. Less Discounts | 3,000 | 2,263 | 1,508 | 733 | 70 | 0 | 0 | 0 | 0 | 0 |
| D. Amortization Type | Level Debt Service |  | I. Less Payments | 319,046 | 319,783 | 320,538 | 321,313 | 96,569 | 0 | 0 | 0 | 0 | 0 |
| E. Interest Rate | 2.50000\% | Fixed | J. Balance End of year | 1,017,028 | 717,667 | 410,681 | 95,948 | 0 | 0 | 0 | 0 | 0 | 0 |

[^11]| DETERMINATION OF DEBT AND DEBT SERVICE - CFC FORM 325 IMN065 |  |  |  | Dakota Electric Association |  |  |  |  |  |  |  |  | $\begin{array}{r} 8 / 15 / 2019 \\ \text { Base } 2018 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CFC Note Information |  |  |  | $\begin{gathered} \text { Future } \\ 2019 \\ \hline \end{gathered}$ | $\begin{gathered} \text { Future } \\ 2020 \\ \hline \end{gathered}$ | Future <br> 2021 | $\begin{aligned} & \text { Future } \\ & 2022 \\ & \hline \end{aligned}$ | $\begin{gathered} \text { Future } \\ 2023 \\ \hline \end{gathered}$ | $\begin{gathered} \text { Future } \\ 2024 \\ \hline \end{gathered}$ | $\begin{gathered} \text { Future } \\ 2025 \end{gathered}$ | $\begin{gathered} \text { Future } \\ 2026 \\ \hline \end{gathered}$ | $\begin{aligned} & \text { Future } \\ & 2027 \end{aligned}$ | $\begin{gathered} \text { Future } \\ 2028 \end{gathered}$ |
| 9044005 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12. A. Year/ Month | 2018 | 12 | E. Balance Beginning | 4,705,933 | 4,565,591 | 4,420,591 | 4,269,838 | 4,113,584 | 3,951,628 | 3,784,163 | 3,610,187 | 3,429,863 | 3,242,959 |
| B. Original Amount / Payments per Year | 4,705,933 | 4 | F. Plus Interest | 167,507 | 162,848 | 157,095 | 151,594 | 145,892 | 140,383 | 133,872 | 127,524 | 120,944 | 114,453 |
| C. Amort. Period / Deferral | 22.33 | 0.00 | H. Less Discounts | 11,633 | 11,278 | 10,910 | 10,528 | 10,132 | 9,722 | 9,297 | 8,857 | 8,400 | 7,927 |
| D. Amortization Type | Level Debt Service |  | I. Less Payments | 296,215 | 296,570 | 296,938 | 297,320 | 297,716 | 298,126 | 298,551 | 298,992 | 299,448 | 299,921 |
| E. Interest Rate | 3.60000\% | Fixed | J. Balance End of year | 4,565,591 | 4,420,591 | 4,269,838 | 4,113,584 | 3,951,628 | 3,784,163 | 3,610,187 | 3,429,863 | 3,242,959 | 3,049,564 |
| 9045001 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13. A. Year/ Month | 2018 | 12 | E. Balance Beginning | 9,749,608 | 9,487,146 | 9,215,703 | 8,932,936 | 8,639,414 | 8,334,730 | 8,019,339 | 7,691,073 | 7,350,322 | 6,996,613 |
| B. Original Amount / Payments per Year | 9,749,608 | 4 | F. Plus Interest | 361,892 | 352,913 | 341,587 | 330,833 | 319,671 | 308,964 | 296,089 | 283,605 | 270,646 | 257,933 |
| C. Amort. Period / Deferral | 23.58 | 0.00 | H. Less Discounts | 24,127 | 23,463 | 22,773 | 22,056 | 21,312 | 20,542 | 19,740 | 18,908 | 18,044 | 17,149 |
| D. Amortization Type | Level Debt Service |  | I. Less Payments | 600,228 | 600,892 | 601,582 | 602,299 | 603,043 | 603,813 | 604,615 | 605,447 | 606,311 | 607,206 |
| E. Interest Rate | 3.75000\% | Fixed | J. Balance End of year | 9,487,146 | 9,215,703 | 8,932,936 | 8,639,414 | 8,334,730 | 8,019,339 | 7,691,073 | 7,350,322 | 6,996,613 | 6,630,191 |
| 9045002 ( 9 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14. A. Year/ Month | 2018 | 12 | E. Balance Beginning | 9,957,793 | 9,783,338 | 9,602,525 | 9,412,729 | 9,214,736 | 9,008,194 | 8,793,816 | 8,569,098 | 8,334,676 | 8,090,131 |
| B. Original Amount / Payments per Year | 9,957,793 | 4 | F. Plus Interest | 420,390 | 414,032 | 405,049 | 396,853 | 388,303 | 380,467 | 370,127 | 360,423 | 350,300 | 340,713 |
| C. Amort. Period / Deferral | 29.33 | 0.00 | H. Less Discounts | 24,729 | 24,288 | 23,827 | 23,345 | 22,842 | 22,319 | 21,773 | 21,202 | 20,607 | 19,987 |
| D. Amortization Type | Level Debt Service |  | I. Less Payments | 570,116 | 570,557 | 571,018 | 571,500 | 572,003 | 572,526 | 573,072 | 573,643 | 574,238 | 574,858 |
| E. Interest Rate / Loan Type | 4.25000\% | Fixed | J. Balance End of year | 9,783,338 | 9,602,525 | 9,412,729 | 9,214,736 | 9,008,194 | 8,793,816 | 8,569,098 | 8,334,676 | 8,090,131 | 7,835,999 |
| Subtotal Debt and Debt Service - CFC |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| C. Interest Expense |  |  |  | 2,291,071 | 2,187,729 | 2,067,986 | 1,950,619 | 1,841,492 | 1,743,576 | 1,632,528 | 1,522,706 | 1,419,003 | 1,319,062 |
| D. Performance Discounts |  |  |  | 76,069 | 72,296 | 68,380 | 64,340 | 60,633 | 57,254 | 53,777 | 50,179 | 46,731 | 43,264 |
| E. Collateral Discounts |  |  |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| F. Equity Discounts |  |  |  | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 |
| G. Volume Discounts |  |  |  | 64,588 | 58,006 | 55,761 | 51,084 | 46,519 | 42,450 | 38,715 | 34,838 | 31,177 | 27,628 |
| H. Less Discounts |  |  |  | 140,657 | 130,301 | 124,141 | 115,425 | 107,152 | 99,704 | 92,492 | 85,017 | 77,908 | 70,892 |
| I. Debt Payments |  |  |  | 5,133,200 | 5,143,556 | 5,149,716 | 4,970,615 | 4,471,553 | 4,382,361 | 4,389,573 | 4,267,217 | 4,079,092 | 4,086,109 |
| J. Debt - End of Year |  |  |  | 58,990,498 | 55,904,370 | 52,698,499 | 49,563,078 | 46,825,866 | 44,087,376 | 41,237,839 | 38,408,310 | 35,670,313 | 32,832,375 |

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| DETERMINATION OF DEBT AND DEBT SERVICE - RUS FORM 325 I - Other Lender MN065 |  |  |  | Dakota Electric Association |  |  |  |  |  |  |  |  | $8 / 15 / 2019$Base 2018 Future |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Future | Future | Future | Future | Future | Future | re | Future | re |  |
| Note Information |  |  |  | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 202 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. A. Year/ Month | 2018 | 12 | E. Balance Beginning | 3,841,338 | 3,112,984 | 2,365,393 | 1,597,600 | 809,290 | 0 | 0 | 0 | 0 | 0 |
| B. Original Amount / Payments per Year | 3,841,338 | 12 | F. Plus Interest | 92,578 | 73,341 | 53,139 | 32,622 | 11,557 | 0 | 0 | 0 | 0 | 0 |
| C. Amort. Period / Deferral | 5.08 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |
| D. Amortization Type | Monthly |  | I. Less Payments | 820,932 | 820,932 | 820,932 | 820,932 | 820,846 | 0 | 0 | 0 | 0 | 0 |
| E. Interest Rate / Loan Type | 2.64000\% | Debt Sers | J. Balance End of year | 3,112,984 | 2,365,393 | 1,597,600 | 809,290 | 0 | 0 | 0 | 0 | 0 | 0 |
| , 1, 1, |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. A. Year/ Month | 2018 | 12 | E. Balance Beginning | 1,059,986 | 481,549 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| B. Original Amount / Payments per Year | 1,059,986 | 12 | F. Plus Interest | 35,548 | 9,562 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| C. Amort. Period / Deferral | 1.75 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |
| D. Amortization Type | Monthly |  | I. Less Payments | 613,985 | 491,111 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E. Interest Rate / Loan Type | 4.47000\% | Debt Sers | J. Balance End of year | 481,549 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. A. Year/ Month | 2018 | 12 | E. Balance Beginning | 4,904,209 | 4,743,536 | 4,576,610 | 4,402,046 | 4,220,082 | 4,030,401 | 3,833,151 | 3,627,063 | 3,412,237 | 3,188,302 |
| B. Original Amount / Payments per Year | 4,904,209 | 12 | F. Plus Interest | 200,931 | 194,677 | 187,041 | 179,639 | 171,923 | 164,354 | 155,516 | 146,778 | 137,668 | 128,547 |
| C. Amort. Period / Deferral | 20.08 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |
| D. Amortization Type | Monthly |  | I. Less Payments | 361,604 | 361,604 | 361,604 | 361,604 | 361,604 | 361,604 | 361,604 | 361,604 | 361,604 | 361,604 |
| E. Interest Rate / Loan Type | 4.16000\% | Debt Sers | J. Balance End of year | 4,743,536 | 4,576,610 | 4,402,046 | 4,22,082 | 4,030,401 | 3,833,151 | 3,627,063 | 3,412,237 | 3,188,302 | 2,955,245 |
| 0 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4. A. Year/ MonthB. Original Amount / Payments per YearC. Amort. Period / DeferralD. Amorizaion TypeE. Interest Rate / Loan Type | 2018 | 12 | E. Balance Beginning | 1,088,704 | 977,010 | 861,372 | 741,451 | 617,191 | 488,434 | 355,066 | 216,824 | 73,580 | 0 |
|  | 1,088,704 | 12 | F. Plus Interest | 36,932 | 32,987 | 28,706 | 24,366 | 19,870 | 15,258 | 10,384 | 5,382 | 758 | 0 |
|  | 8.58 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |
|  | Monthly |  | I. Less Payments | 148,626 | 148,626 | 148,626 | 148,626 | 148,626 | 148,626 | 148,626 | 148,626 | 74,338 | 0 |
|  | $3.56000 \%$ rel Debt Ser J. Balance End of year |  |  | 977,010 | 861,372 | 741,451 | 617,191 | 488,434 | 355,066 | 216,824 | 73,580 | 0 | 0 |
| 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5. A. Year/ Month <br> B. Original Amount / Payments per Year <br> C. Amort. Period / Deferral <br> D. Amortization Type <br> E. Interest Rate / Loan Type | 2018 | 12 | E. Balance Beginning | 4,332,287 | 4,236,755 | 4,137,262 | 4,032,506 | 3,922,795 | 3,807,895 | 3,688,062 | 3,562,061 | 3,430,101 | 3,291,899 |
|  | 4,332,287 | 12 | F. Plus Interest | 198,535 | 194,575 | 189,312 | 184,357 | 179,168 | 174,235 | 168,067 | 162,107 | 155,866 | 149,763 |
|  | 24.75 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |
|  | Monthly |  | I. Less Payments | 294,068 | 294,068 | 294,068 | 294,068 | 294,068 | 294,068 | 294,068 | 294,068 | 294,068 | 294,068 |
|  | 4.63000\% | Debt Ser | J. Balance End of year | 4,236,755 | 4,137,262 | 4,032,506 | 3,922,795 | 3,807,895 | 3,688,062 | 3,562,061 | 3,430,101 | 3,291,899 | 3,147,594 |

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NRUCFC Confidential

6. A. Year/ Month
A. Year/Mon
B. Original Amou C. Amort. Period / De D. Amortization Type
E. Interest Rate / Loan

| DETERMINATION OF DEBT AND DEBT SERVICE - RUS FORM 325 I - Other LenderMN065 |  |  |  | Dakota Electric Association |  |  |  |  |  |  | $8 / 15 / 2019$Base 2018 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Note Information |  |  |  | Future $2019$ | Future <br> 2020 | Future <br> 2021 | Future <br> 2022 | $\begin{aligned} & \text { Future } \\ & 2023 \end{aligned}$ | Future <br> 2024 | $\begin{aligned} & \text { Future } \\ & 2025 \end{aligned}$ | $\begin{gathered} \text { Future } \\ 2026 \end{gathered}$ | $\begin{gathered} \text { Future } \\ 2027 \end{gathered}$ | Future <br> 2028 |
| 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6. A. Year/ Month | 2018 | 12 | E. Balance Beginning | 3,433,732 | 3,277,427 | 3,115,108 | 2,945,788 | 2,769,552 | 2,586,118 | 2,395,483 | 2,196,770 | 1,989,940 | 1,774,662 |
| B. Original Amount / Payments per Year | 3,433,732 | 12 | F. Plus Interest | 134,807 | 128,794 | 121,793 | 114,877 | 107,679 | 100,478 | 92,400 | 84,283 | 75,835 | 67,242 |
| C. Amort. Period / Deferral | 16.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |
| D. Amortization Type | Monthly |  | I. Less Payments | 291,113 | 291,113 | 291,113 | 291,113 | 291,113 | 291,113 | 291,113 | 291,113 | 291,113 | 291,113 |
| E. Interest Rate / Loan Type | 4.01000\% | Debt Serr | J. Balance End of year | 3,277,427 | 3,115,108 | 2,945,788 | 2,769,552 | 2,586,118 | 2,395,483 | 2,196,770 | 1,989,940 | 1,774,662 | 1,550,791 |
| 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7. A. Year/ MonthB. Original Amount / Payments per YearC. Amort. Period / DeferralD. Amortization TypeE. Interest Rate / Loan Type | 2018 | 12 | E. Balance Beginning | 4,574,903 | 3,985,922 | 3,376,978 | 2,746,627 | 2,094,507 | 1,419,866 | 722,058 | 0 | 0 | 0 |
|  | 4,574,903 | 12 | F. Plus Interest | 146,353 | 126,390 | 104,983 | 83,214 | 60,693 | 37,525 | 13,296 | 0 | 0 | 0 |
|  | 7.08 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |
|  | Monthly |  | I. Less Payments | 735,334 | 735,334 | 735,334 | 735,334 | 735,334 | 735,334 | 735,354 | 0 | 0 | 0 |
|  | 3.40000\% | Debt Serr | J. Balance End of year | 3,985,922 | 3,376,978 | 2,746,627 | 2,094,507 | 1,419,866 | 722,058 | 0 | 0 | 0 | 0 |
| 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8. A. Year/ Month <br> B. Original Amount / Payments per Yea <br> C. Amort. Period / Deferral <br> D. Amortization Type <br> E. Interest Rate / Loan Type | 2018 | 12 | E. Balance Beginning | 3,738,278 | 3,643,759 | 3,545,783 | 3,443,381 | 3,336,785 | 3,225,825 | 3,110,687 | 2,990,469 | 2,865,327 | 2,735,061 |
|  | 3,738,278 | 12 | F. Plus Interest | 148,522 | 145,066 | 140,639 | 136,446 | 132,081 | 127,904 | 122,823 | 117,900 | 112,775 | 107,751 |
|  | 24.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |
|  | Monthly |  | I. Less Payments | 243,041 | 243,041 | 243,041 | 243,041 | 243,041 | 243,041 | 243,041 | 243,041 | 243,041 | 243,041 |
|  | 4.02000\% | Debt Ser | J. Balance End of year | 3,643,759 | 3,545,783 | 3,443,381 | 3,336,785 | 3,225,825 | 3,110,687 | 2,990,469 | 2,865,327 | 2,735,061 | 2,599,771 |
| 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9. A. Year/ Month | 2018 | 12 | E. Balance Beginning | 167,115 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| B. Original Amount / Payments per Year <br> C. Amort. Period / Deferral | 167,115 | 12 | F. Plus Interest | 1,779 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | 1.08 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |
| D. Amortization TypeE. Interest Rate | Monthly |  | I. Less Payments | 168,894 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | 1.97000\% | Debt Serı | J. Balance End of year | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10. A. Year/ Month | 2018 | 12 | E. Balance Beginning | 1,546,883 | 1,344,045 | 1,135,538 | 920,991 | 700,337 | 473,402 | 240,043 | 0 | 0 | 0 |
| B. Original Amount / Payments per Year <br> C. Amort. Period / Deferral | 1,546,883 | 12 | F. Plus Interest | 40,849 | 35,180 | 29,140 | 23,033 | 16,752 | 10,328 | 3,650 | 0 | 0 | 0 |
|  | 7.08 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |
| D. Amortization Type | Monthly |  | I. Less Payments | 243,687 | 243,687 | 243,687 | 243,687 | 243,687 | 243,687 | 243,693 | 0 | 0 | 0 |
| E. Interest Rate | 2.81000\% | Debt Sers | J. Balance End of year | 1,344,045 | 1,135,538 | 920,991 | 700,337 | 473,402 | 240,043 | 0 | 0 | 0 | 0 |
| 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11. A. Year/ Month | 2018 | 12 | E. Balance Beginning | 3,745,754 | 3,651,045 | 3,552,873 | 3,450,266 | 3,343,458 | 3,232,276 | 3,116,908 | 2,996,449 | 2,871,057 | 2,740,530 |
| B. Original Amount / Payments per Year | 3,745,754 | 12 | F. Plus Interest | 148,819 | 145,356 | 140,921 | 136,719 | 132,345 | 128,160 | 123,068 | 118,136 | 113,001 | 107,967 |
| C. Amort. Period / Deferral | 24.08 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |
| D. Amortization TypeE. Interest Rate | Monthly |  | I. Less Payments | 243,528 | 243,528 | 243,528 | 243,528 | 243,528 | 243,528 | 243,528 | 243,528 | 243,528 | 243,528 |
|  | 4.02000\% | Debt Sert | J. Balance End of year | 3,651,045 | 3,552,873 | 3,450,266 | 3,343,458 | 3,232,276 | 3,116,908 | 2,996,449 | 2,871,057 | 2,740,530 | 2,604,970 |
| Subtotal Debt and Debt Service - Other Lender |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. Debt - First of Year |  |  |  | 32,433,190 | 29,454,032 | 26,666,916 | 24,280,656 | 21,813,996 | 19,264,217 | 17,461,459 | 15,589,636 | 14,642,241 | 13,730,454 |
| B. New Funds - Advanced |  |  |  |  |  |  |  |  |  |  |  |  |  |
| C. Interest Expense |  |  |  | 1,185,654 | 1,085,927 | 995,672 | 915,273 | 832,068 | 758,242 | 689,203 | 634,585 | 595,904 | 561,270 |
| E. Debt Payments |  |  |  | 4,164,812 | 3,873,044 | 3,381,933 | 3,381,933 | 3,381,847 | 2,561,001 | 2,561,026 | 1,581,980 | 1,507,691 | 1,433,353 |
| F. Debt - End of Year |  |  |  | 29,454,032 | 26,666,916 | 24,280,656 | 21,813,996 | 19,264,217 | 17,461,459 | 15,589,636 | 14,642,241 | 13,730,454 | 12,858,371 |


| DETERMINATION OF DEBT AND DEBT SERVICE - RUS FORM 325 I - Other LenderMN065 |  |  |  | Dakota Electric Association |  |  |  |  |  |  | $8 / 15 / 2019$Base 2018 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Note Information |  |  |  | Future $2019$ | Future <br> 2020 | Future <br> 2021 | Future <br> 2022 | $\begin{aligned} & \text { Future } \\ & 2023 \end{aligned}$ | Future <br> 2024 | $\begin{aligned} & \text { Future } \\ & 2025 \end{aligned}$ | $\begin{gathered} \text { Future } \\ 2026 \end{gathered}$ | $\begin{gathered} \text { Future } \\ 2027 \end{gathered}$ | Future <br> 2028 |
| 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6. A. Year/ Month | 2018 | 12 | E. Balance Beginning | 3,433,732 | 3,277,427 | 3,115,108 | 2,945,788 | 2,769,552 | 2,586,118 | 2,395,483 | 2,196,770 | 1,989,940 | 1,774,662 |
| B. Original Amount / Payments per Year | 3,433,732 | 12 | F. Plus Interest | 134,807 | 128,794 | 121,793 | 114,877 | 107,679 | 100,478 | 92,400 | 84,283 | 75,835 | 67,242 |
| C. Amort. Period / Deferral | 16.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |
| D. Amortization Type | Monthly |  | I. Less Payments | 291,113 | 291,113 | 291,113 | 291,113 | 291,113 | 291,113 | 291,113 | 291,113 | 291,113 | 291,113 |
| E. Interest Rate / Loan Type | 4.01000\% | Debt Serr | J. Balance End of year | 3,277,427 | 3,115,108 | 2,945,788 | 2,769,552 | 2,586,118 | 2,395,483 | 2,196,770 | 1,989,940 | 1,774,662 | 1,550,791 |
| 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7. A. Year/ MonthB. Original Amount / Payments per YearC. Amort. Period / DeferralD. Amortization TypeE. Interest Rate / Loan Type | 2018 | 12 | E. Balance Beginning | 4,574,903 | 3,985,922 | 3,376,978 | 2,746,627 | 2,094,507 | 1,419,866 | 722,058 | 0 | 0 | 0 |
|  | 4,574,903 | 12 | F. Plus Interest | 146,353 | 126,390 | 104,983 | 83,214 | 60,693 | 37,525 | 13,296 | 0 | 0 | 0 |
|  | 7.08 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |
|  | Monthly |  | I. Less Payments | 735,334 | 735,334 | 735,334 | 735,334 | 735,334 | 735,334 | 735,354 | 0 | 0 | 0 |
|  | 3.40000\% | Debt Serr | J. Balance End of year | 3,985,922 | 3,376,978 | 2,746,627 | 2,094,507 | 1,419,866 | 722,058 | 0 | 0 | 0 | 0 |
| 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8. A. Year/ Month <br> B. Original Amount / Payments per Yea <br> C. Amort. Period / Deferral <br> D. Amortization Type <br> E. Interest Rate / Loan Type | 2018 | 12 | E. Balance Beginning | 3,738,278 | 3,643,759 | 3,545,783 | 3,443,381 | 3,336,785 | 3,225,825 | 3,110,687 | 2,990,469 | 2,865,327 | 2,735,061 |
|  | 3,738,278 | 12 | F. Plus Interest | 148,522 | 145,066 | 140,639 | 136,446 | 132,081 | 127,904 | 122,823 | 117,900 | 112,775 | 107,751 |
|  | 24.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |
|  | Monthly |  | I. Less Payments | 243,041 | 243,041 | 243,041 | 243,041 | 243,041 | 243,041 | 243,041 | 243,041 | 243,041 | 243,041 |
|  | 4.02000\% | Debt Ser | J. Balance End of year | 3,643,759 | 3,545,783 | 3,443,381 | 3,336,785 | 3,225,825 | 3,110,687 | 2,990,469 | 2,865,327 | 2,735,061 | 2,599,771 |
| 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9. A. Year/ Month | 2018 | 12 | E. Balance Beginning | 167,115 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| B. Original Amount / Payments per Year <br> C. Amort. Period / Deferral | 167,115 | 12 | F. Plus Interest | 1,779 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | 1.08 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |
| D. Amortization TypeE. Interest Rate | Monthly |  | I. Less Payments | 168,894 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | 1.97000\% | Debt Serı | J. Balance End of year | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10. A. Year/ Month | 2018 | 12 | E. Balance Beginning | 1,546,883 | 1,344,045 | 1,135,538 | 920,991 | 700,337 | 473,402 | 240,043 | 0 | 0 | 0 |
| B. Original Amount / Payments per Year <br> C. Amort. Period / Deferral | 1,546,883 | 12 | F. Plus Interest | 40,849 | 35,180 | 29,140 | 23,033 | 16,752 | 10,328 | 3,650 | 0 | 0 | 0 |
|  | 7.08 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |
| D. Amortization Type | Monthly |  | I. Less Payments | 243,687 | 243,687 | 243,687 | 243,687 | 243,687 | 243,687 | 243,693 | 0 | 0 | 0 |
| E. Interest Rate | 2.81000\% | Debt Sers | J. Balance End of year | 1,344,045 | 1,135,538 | 920,991 | 700,337 | 473,402 | 240,043 | 0 | 0 | 0 | 0 |
| 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11. A. Year/ Month | 2018 | 12 | E. Balance Beginning | 3,745,754 | 3,651,045 | 3,552,873 | 3,450,266 | 3,343,458 | 3,232,276 | 3,116,908 | 2,996,449 | 2,871,057 | 2,740,530 |
| B. Original Amount / Payments per Year | 3,745,754 | 12 | F. Plus Interest | 148,819 | 145,356 | 140,921 | 136,719 | 132,345 | 128,160 | 123,068 | 118,136 | 113,001 | 107,967 |
| C. Amort. Period / Deferral | 24.08 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |
| D. Amortization TypeE. Interest Rate | Monthly |  | I. Less Payments | 243,528 | 243,528 | 243,528 | 243,528 | 243,528 | 243,528 | 243,528 | 243,528 | 243,528 | 243,528 |
|  | 4.02000\% | Debt Sert | J. Balance End of year | 3,651,045 | 3,552,873 | 3,450,266 | 3,343,458 | 3,232,276 | 3,116,908 | 2,996,449 | 2,871,057 | 2,740,530 | 2,604,970 |
| Subtotal Debt and Debt Service - Other Lender |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. Debt - First of Year |  |  |  | 32,433,190 | 29,454,032 | 26,666,916 | 24,280,656 | 21,813,996 | 19,264,217 | 17,461,459 | 15,589,636 | 14,642,241 | 13,730,454 |
| B. New Funds - Advanced |  |  |  |  |  |  |  |  |  |  |  |  |  |
| C. Interest Expense |  |  |  | 1,185,654 | 1,085,927 | 995,672 | 915,273 | 832,068 | 758,242 | 689,203 | 634,585 | 595,904 | 561,270 |
| E. Debt Payments |  |  |  | 4,164,812 | 3,873,044 | 3,381,933 | 3,381,933 | 3,381,847 | 2,561,001 | 2,561,026 | 1,581,980 | 1,507,691 | 1,433,353 |
| F. Debt - End of Year |  |  |  | 29,454,032 | 26,666,916 | 24,280,656 | 21,813,996 | 19,264,217 | 17,461,459 | 15,589,636 | 14,642,241 | 13,730,454 | 12,858,371 |

7. A. Year/ Month C. Amort. Period / Deferra | C. Amort. Period / Deferral | 7.08 | 0.00 |  |
| :--- | :---: | :---: | :---: |
| D. Amortization Type | Monthly | $3.40000 \%$ rel Debt Sert J. Balance End of y |  |
| E. Interest Rate / Loan Type | 0 |  |  |
| 0 |  |  |  |

$$
\begin{array}{llll}
\text { 8. A. Year/ Month } 2018 & 12 & \text { E. Balance Beginning }
\end{array}
$$

A. Year/ Month
B. Original Amount
C. Amort. Period / De
D. Amortization Type
E. Interest Rate / Loan T
$\begin{array}{lllll}\text { 9. A. Year/ Month } & 2018 & 12 & \text { E. Balance Beginning } \\ \text { B. Original Amount / Payments per Year } & 167,115 & 12 & \text { F. Plus Interest }\end{array}$
$\begin{array}{lcc}\text { C. Amort. Period / Deferral } 1.08 & 0.00\end{array}$

| D. Amortization Type | Monthly |
| :--- | :---: |
| E. Interest Rate | $1.97000 \%$ vel Debt Serv J. Balance End of year |

10. A. Year/ Month $0 \quad 2018 \quad 12$ E. Balance Beginning
$\begin{array}{lcl}1,546,883 & 12 & \text { F. Plus Interest }\end{array}$
Monthly
$2.81000 \%$ rel Debt SerI J. Balance End of ye
$\begin{array}{lll}2018 & 12 & \text { E. Balance Beginning } \\ 3,745,754 & 12 & \text { F. Plus Interest }\end{array}$
B. Original Amount / Payments per Year
C. Amort. Period / Deferral
D. Amortization Type
E. Interest Rate
11. A. Year/ Month
12. A. Year/ Month
C. Amort. Period / Deferral

| C. Amort. Period / Deferral | Monthly |  |
| :--- | :---: | :---: | :---: |
| D. Amortization Type | $4.02000 \%$ vel Debt Sery J. Balance End of year |  |
| E. Interest Rate |  |  |

## Subtotal Debt and Debt Service - Other Lender

A. Debt - First of Year
B. New Funds - Advanced
E. Debt Payments
F. Debt - End of Year

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| DETERMINATION OF DEBT AND DEBT SERVICE - CFC FORM 325 I - NEW CFC DEBTMN065 |  |  |  | $\begin{gathered} \text { Future } \\ 2019 \end{gathered}$ | $\begin{gathered} \text { Future } \\ 2020 \end{gathered}$ | Future$2021$ | Dakota Electric Association |  |  |  | Future$2026$ | $\begin{aligned} & \text { Future } \\ & 2027 \end{aligned}$ | 8/15/2019 <br> Base 2018 <br> Future <br> 2028 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Note Information |  |  |  |  |  |  | $\begin{gathered} \text { Future } \\ 2022 \end{gathered}$ | $\begin{gathered} \text { Future } \\ 2023 \end{gathered}$ | $\begin{gathered} \text { Future } \\ 2024 \end{gathered}$ | $\begin{gathered} \text { Future } \\ 2025 \end{gathered}$ |  |  |  |
| 2019 CFC |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. A. Year/ Month <br> B. Original Amount / Payments per Year <br> C. Amort. Period / Deferral <br> D. Amortization Type <br> E. Interest Rate / Loan Type | 2019 | 6 | E. Balance Beginning | 0 | 12,268,115 | 12,082,313 | 11,885,301 | 11,678,252 | 11,460,655 | 11,233,603 | 10,993,353 | 10,740,863 | 10,475,511 |
|  | 12,355,916 | 4 | F. Plus Interest | 310,887 | 611,575 | 600,364 | 590,328 | 579,779 | 570,324 | 557,127 | 544,887 | 532,024 | 519,995 |
|  | 30.00 | 0.00 | H. Less Discounts | 15,417 | 30,495 | 30,018 | 29,516 | 28,989 | 28,438 | 27,857 | 27,245 | 26,602 | 25,929 |
|  | Level Debt Servir |  | I. Less Payments | 383,271 | 766,882 | 767,358 | 767,860 | 768,387 | 768,939 | 769,520 | 770,132 | 770,775 | 771,448 |
|  | 5.00000\% | Fixed | J. Balance End of year | 12,268,115 | 12,082,313 | 11,885,301 | 11,678,252 | 11,460,655 | 11,233,603 | 10,993,353 | 10,740,863 | 10,475,511 | 10,198,129 |
| 2020 CFC |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. A. Year/ Month <br> B. Original Amount / Payments per Year <br> C. Amort. Period / Deferral <br> D. Amortization Type <br> E. Interest Rate / Loan Type | 2020 | 6 | E. Balance Beginning |  | 0 | 12,492,879 | 12,301,896 | 12,101,184 | 11,890,247 | 11,670,254 | 11,437,363 | 11,192,607 | 10,935,382 |
|  | 12,582,288 | 4 | F. Plus Interest |  | 316,583 | 621,003 | 611,273 | 601,048 | 591,993 | 579,094 | 567,229 | 554,760 | 543,211 |
|  | 30.00 | 0.00 | H. Less Discounts |  | 15,699 | 31,050 | 30,564 | 30,052 | 29,518 | 28,955 | 28,362 | 27,738 | 27,086 |
|  | Level Debt Ser |  | I. Less Payments |  | 390,293 | 780,935 | 781,422 | 781,933 | 782,467 | 783,030 | 783,623 | 784,247 | 784,899 |
|  | 5.00000\% | Fixed | J. Balance End of year |  | 12,492,879 | 12,301,896 | 12,101,184 | 11,890,247 | 11,670,254 | 11,437,363 | 11,192,607 | 10,935,382 | 10,666,608 |
| 2021 CFC |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. A. Year/ Month <br> B. Original Amount / Payments per Year <br> C. Amort. Period / Deferral <br> D. Amortization Type <br> E. Interest Rate / Loan Type | 2021 | 6 | E. Balance Beginning |  |  | 0 | 11,411,892 | 11,237,435 | 11,054,091 | 10,862,977 | 10,660,556 | 10,447,822 | 10,224,250 |
|  | 11,493,566 | 4 | F. Plus Interest |  |  | 289,189 | 567,269 | 558,381 | 550,612 | 539,304 | 528,992 | 518,154 | 508,218 |
|  | 30.00 | 0.00 | H. Less Discounts |  |  | 14,341 | 28,363 | 27,919 | 27,455 | 26,965 | 26,450 | 25,908 | 25,341 |
|  | Level Debt Ser |  | I. Less Payments |  |  | 356,522 | 713,362 | 713,807 | 714,271 | 714,760 | 715,276 | 715,818 | 716,384 |
|  | 5.00000\% | Fixed | J. Balance End of year |  |  | 11,411,892 | 11,237,435 | 11,054,091 | 10,862,977 | 10,660,556 | 10,447,822 | 10,224,250 | 9,990,742 |
| 2022 CFC |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4. A. Year/ Month <br> B. Original Amount / Payments per Year <br> C. Amort. Period / Deferral <br> D. Amortization Type <br> E. Interest Rate / Loan Type | 2022 | 6 | E. Balance Beginning |  |  |  | 0 | 11,722,622 | 11,551,129 | 11,372,183 | 11,181,927 | 10,981,484 | 10,770,309 |
|  | 11,802,530 | 4 | F. Plus Interest |  |  |  | 311,838 | 612,000 | 604,545 | 593,236 | 583,049 | 572,317 | 562,622 |
|  | 30.00 | 0.00 | H. Less Discounts |  |  |  | 14,728 | 29,143 | 28,709 | 28,249 | 27,764 | 27,253 | 26,718 |
|  | Level Debt Servis |  | I. Less Payments |  |  |  | 377,018 | 754,349 | 754,783 | 755,243 | 755,728 | 756,239 | 756,774 |
|  | 5.25000\% | Fixed | J. Balance End of year |  |  |  | 11,722,622 | 11,551,129 | 11,372,183 | 11,181,927 | 10,981,484 | 10,770,309 | 10,549,439 |
| 2023 CFC |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5. A. Year/ Month <br> B. Original Amount / Payments per Year <br> C. Amort. Period / Deferral <br> D. Amortization Type <br> E. Interest Rate / Loan Type | 2023 | 6 | E. Balance Beginning |  |  |  |  | 0 | 12,778,844 | 12,602,021 | 12,413,263 | 12,213,908 | 12,003,360 |
|  | 12,861,761 | 4 | F. Plus Interest |  |  |  |  | 356,035 | 701,081 | 689,147 | 678,549 | 667,356 | 657,420 |
|  | 30.00 | 0.00 | H. Less Discounts |  |  |  |  | 16,051 | 31,780 | 31,325 | 30,843 | 30,334 | 29,801 |
|  | Level Debt Ser |  | I. Less Payments |  |  |  |  | 422,901 | 846,125 | 846,579 | 847,061 | 847,570 | 848,104 |
|  | 5.50000\% | Fixed | J. Balance End of year |  |  |  |  | 12,778,844 | 12,602,021 | 12,413,263 | 12,213,908 | 12,003,360 | 11,782,876 |

Program provided by National Rural Utilities Cooperative Finance Corporation - Compass Version 4.0

| DETERMINATION OF DEBT AND DEBT SERVICE - CFC FORM 325 I - NEW CFC DEBTMN065 |  |  |  |  |  |  |  | Dakota | lectric Ass | iation |  |  | 8/15/2019 Base 2018 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Note Information |  |  |  | Future 2019 | Future <br> 2020 | Future <br> 2021 | Future <br> 2022 | Future 2023 | Future <br> 2024 | Future 2025 | Future 2026 | Future <br> 2027 | Future <br> 2028 |
| 2024 CFC |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6. A. Year/ Month | 2024 | 6 | E. Balance Beginning |  |  |  |  |  | 0 | 11,380,717 | 11,228,422 | 11,067,179 | 10,896,463 |
| B. Original Amount / Payments per Year | 11,450,967 | 4 | F. Plus Interest |  |  |  |  |  | 331,416 | 651,036 | 642,088 | 632,615 | 624,377 |
| C. Amort. Period / Deferral | 30.00 | 0.00 | H. Less Discounts |  |  |  |  |  | 14,291 | 28,306 | 27,917 | 27,505 | 27,072 |
| D. Amortization Type | Level Debt Serv |  | I. Less Payments |  |  |  |  |  | 387,374 | 775,026 | 775,414 | 775,826 | 776,259 |
| E. Interest Rate / Loan Type | 5.75000\% | Fixed | J. Balance End of year |  |  |  |  |  | 11,380,717 | 11,228,422 | 11,067,179 | 10,896,463 | 10,717,509 |
| 2025 CFC |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7. A. Year/ Month | 2025 | 6 | E. Balance Beginning |  |  |  |  |  |  | 0 | 11,725,684 | 11,575,693 | 11,416,497 |
| B. Original Amount / Payments per Year | 11,794,496 | 4 | F. Plus Interest |  |  |  |  |  |  | 356,227 | 700,086 | 690,882 | 683,076 |
| C. Amort. Period / Deferral | 30.00 | 0.00 | H. Less Discounts |  |  |  |  |  |  | 14,721 | 29,170 | 28,787 | 28,383 |
| D. Amortization Type | Level Debt Serv |  | I. Less Payments |  |  |  |  |  |  | 410,318 | 820,907 | 821,291 | 821,694 |
| E. Interest Rate / Loan Type | 6.00000\% | Fixed | J. Balance End of year |  |  |  |  |  |  | 11,725,684 | 11,575,693 | 11,416,497 | 11,249,496 |
| 2026 CFC |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8. A. Year/ Month | 2026 | 6 | E. Balance Beginning |  |  |  |  |  |  |  | 0 | 12,080,971 | 11,933,304 |
| B. Original Amount / Payments per Year | 12,148,331 | 4 | F. Plus Interest |  |  |  |  |  |  |  | 382,229 | 751,510 | 744,203 |
| C. Amort. Period / Deferral | 30.00 | 0.00 | H. Less Discounts |  |  |  |  |  |  |  | 15,164 | 30,060 | 29,686 |
| D. Amortization Type | Level Debt Servis |  | I. Less Payments |  |  |  |  |  |  |  | 434,425 | 869,118 | 869,492 |
| E. Interest Rate / Loan Type | 6.25000\% | Fixed | J. Balance End of year |  |  |  |  |  |  |  | 12,080,971 | 11,933,304 | 11,778,329 |
| 2027 CFC |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9. A. Year/ Month | 2027 | 6 | E. Balance Beginning |  |  |  |  |  |  |  |  | 0 | 12,446,887 |
| B. Original Amount / Payments per Year | 12,512,781 | 4 | F. Plus Interest |  |  |  |  |  |  |  |  | 409,472 | 807,732 |
| C. Amort. Period / Deferral | 30.00 | 0.00 | H. Less Discounts |  |  |  |  |  |  |  |  | 15,620 | 30,981 |
| D. Amortization Type | Level Debt Servis |  | I. Less Payments |  |  |  |  |  |  |  |  | 459,746 | 919,751 |
| E. Interest Rate | 6.50000\% | Fixed | J. Balance End of year |  |  |  |  |  |  |  |  | 12,446,887 | 12,303,887 |
| 2028 CFC |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10. A. Year/ Month | 2028 | 6 | E. Balance Beginning |  |  |  |  |  |  |  |  |  | 0 |
| B. Original Amount / Payments per Year | 12,888,164 | 4 | F. Plus Interest |  |  |  |  |  |  |  |  |  | 438,007 |
| C. Amort. Period / Deferral | 30.00 | 0.00 | H. Less Discounts |  |  |  |  |  |  |  |  |  | 16,090 |
| D. Amortization Type | Level Debt Serv |  | I. Less Payments |  |  |  |  |  |  |  |  |  | 486,333 |
| E. Interest Rate | 6.75000\% | Fixed | J. Balance End of year |  |  |  |  |  |  |  |  |  | 12,823,750 |
| Total Debt and Debt Service - CFC NEW DEBT |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. Debt - First of Year |  |  |  | 0 | 12,268,115 | 24,575,192 | 35,599,090 | 46,739,494 | 58,734,966 | 69,121,755 | 79,640,568 | 90,300,528 | 101,101,964 |
| B. New Funds - Advanced |  |  |  | 12,355,916 | 12,582,288 | 11,493,566 | 11,802,530 | 12,861,761 | 11,450,967 | 11,794,496 | 12,148,331 | 12,512,781 | 12,888,164 |
| C. Interest Expense |  |  |  | 310,887 | 928,158 | 1,510,557 | 2,080,707 | 2,707,243 | 3,349,971 | 3,965,170 | 4,627,110 | 5,329,091 | 6,088,861 |
| D. Performance Discounts |  |  |  | 7,709 | 23,097 | 37,705 | 51,586 | 66,077 | 80,095 | 93,189 | 106,457 | 119,904 | 133,543 |
| E. Collateral Discounts |  |  |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| F. Equity Discounts |  |  |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| G. Volume Discounts |  |  |  | 7,709 | 23,097 | 37,705 | 51,586 | 66,077 | 80,095 | 93,189 | 106,457 | 119,904 | 133,543 |
| H. Less Discounts |  |  |  | 15,417 | 46,194 | 75,409 | 103,171 | 132,154 | 160,191 | 186,378 | 212,914 | 239,807 | 267,087 |
| I. Debt Payments |  |  |  | 383,271 | 1,157,175 | 1,904,815 | 2,639,662 | 3,441,377 | 4,253,958 | 5,054,475 | 5,902,566 | 6,800,628 | 7,751,137 |
| J. Debt - End of Year |  |  |  | 12,268,115 | 24,575,192 | 35,599,090 | 46,739,494 | 58,734,966 | 69,121,755 | 79,640,568 | 90,300,528 | 101,101,964 | 112,060,765 |

$\begin{array}{ccccccccc}\text { Dakota } & \text { Electric } & \text { Association } & & & & & \begin{array}{c}\text { 8/15/2019 } \\ \text { Base 2018 }\end{array} \\ \text { Future } & \text { Future } & \text { Future } & \text { Future } & \text { Future } & \text { Future } & \text { Future } & \text { Future } \\ \text { 2021 } & 2022 & 2023 & 2024 & 2025 & 2026 & 2027 & 2028\end{array}$
$\begin{array}{llllllll}2,640,819 & 2,546,883 & 2,448,891 & 2,346,667 & 2,240,312 & 2,129,081 & 2,013,048 & 1,892,003\end{array}$

| 10,730 | 106,674 | 102,442 | 98,310 | 93,435 | 88,632 | 83,622 | 78,622 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

204,666
$1,765,960$
$\begin{array}{rrrrrrrrrr} \\ 1,632,746 & 1,330,572 & 1,016,801 & 690,695 & 351,919 & 0 & 0 & 0 & 0 & 0 \\ 58,196 & 46,599 & 34,264 & 21,594 & 8,431 & 0 & 0 & 0 & 0 & 0 \\ 360,370 & 360,370 & 360,370 & 360,370 & 360,350 & 0 & 0 & 0 & 0 & 0 \\ 1,330,572 & 1,016,801 & 690,695 & 351,919 & 0 & 0 & 0 & 0 & 0 & 0 \\ 992,292 & 866,755 & 736,256 & 600,403 & 459,074 & 312,052 & 159,139 & 0 & 0 & 0 \\ 37,525 & 32,564 & 27,208 & 21,734 & 16,039 & 10,150 & 3,953 & 0 & 0 & 0 \\ 163,062 & 163,062 & 163,062 & 163,062 & 163,062 & 163,062 & 163,092 & 0 & 0 & 0 \\ 866,755 & 736,256 & 600,403 & 459,074 & 312,052 & 159,139 & 0 & 0 & 0 & 0\end{array}$



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| DETERMINATION OF DEBT AND DE MN065 | - CFC FORM |  |  |  | Dakota E | ctric As | ciation |  |  | $8 / 15 / 2019$ $\text { Base } 2018$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ITEM | Future 2019 | Future $2020$ | Future 2021 | Future $2022$ | Future 2023 | Future 2024 | Future 2025 | Future $2026$ | Future 2027 | Future 2028 |
| 5. Debt and Debt Service - CFC Una |  |  |  |  |  |  |  |  |  |  |
| A. Debt First of Year | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| B. Loan Funds Advanced | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| C. Interest | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| D. Less Discounts | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| D. Principal Payments | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E. Additional Principal Payments | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| F. Total Payments | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| G. Debt End of Year | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6. Debt and Debt Service - CFC Ne |  |  |  |  |  |  |  |  |  |  |
| A. Debt First of Year | 0 | 12,268,115 | 24,575,192 | 35,599,090 | 46,739,494 | 58,734,966 | 69,121,755 | 79,640,568 | 90,300,528 | 101,101,964 |
| B. Loan Funds Advanced | 12,355,916 | 12,582,288 | 11,493,566 | 11,802,530 | 12,861,761 | 11,450,967 | 11,794,496 | 12,148,331 | 12,512,781 | 12,888,164 |
| C. Interest | 310,887 | 928,158 | 1,510,557 | 2,080,707 | 2,707,243 | 3,349,971 | 3,965,170 | 4,627,110 | 5,329,091 | 6,088,861 |
| D. Less Discounts | 15,417 | 46,194 | 75,409 | 103,171 | 132,154 | 160,191 | 186,378 | 212,914 | 239,807 | 267,087 |
| D. Principal Payments | 87,801 | 275,211 | 469,668 | 662,126 | 866,289 | 1,064,178 | 1,275,683 | 1,488,371 | 1,711,345 | 1,929,363 |
| E. Additional Principal Payments | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| F. Total Payments | 383,271 | 1,157,175 | 1,904,815 | 2,639,662 | 3,441,377 | 4,253,958 | 5,054,475 | 5,902,566 | 6,800,628 | 7,751,137 |
| G. Debt End of Year | 12,268,115 | 24,575,192 | 35,599,090 | 46,739,494 | 58,734,966 | 69,121,755 | 79,640,568 | 90,300,528 | 101,101,964 | 112,060,765 |
| 7. Debt and Debt Service - NCSC |  |  |  |  |  |  |  |  |  |  |
| A. Debt First of Year | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| B. Loan Funds Advanced | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| C. Interest | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| D. Principal Payments | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E. Additional Principal Payments | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| F. Total Payments | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| G. Debt End of Year | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8. Debt and Debt Service - NCSC |  |  |  |  |  |  |  |  |  |  |
| A. Debt First of Year | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| B. Loan Funds Advanced | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| C. Interest | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| D. Principal Payments | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E. Additional Principal Payments | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| F. Total Payments | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| G. Debt End of Year | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |


| DETERMINATION OF DEBT AND DEBT SERVICE TOTAL - CFC FORM 325 J MN065 |  |  | Dakota Electric Association |  |  |  |  |  |  | 8/15/2019 <br> Base 2018 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ITEM | Future 2019 | Future <br> 2020 | Future <br> 2021 | Future <br> 2022 | Future $2023$ | Future <br> 2024 | Future <br> 2025 | Future <br> 2026 | Future $2027$ | Future $2028$ |
| 9. Debt and Debt Service - Farmer Mac Existing Loans |  |  |  |  |  |  |  |  |  |  |
| A. Debt First of Year | 5,441,922 | 4,927,878 | 4,393,876 | 3,837,981 | 3,259,884 | 2,658,719 | 2,399,451 | 2,129,081 | 2,013,048 | 1,892,003 |
| B. Loan Funds Advanced | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| C. Interest | 214,054 | 194,096 | 172,202 | 150,001 | 126,912 | 108,460 | 97,388 | 88,632 | 83,622 | 78,622 |
| D. Principal Payments | 514,044 | 534,002 | 555,895 | 578,096 | 601,166 | 259,268 | 270,370 | 116,034 | 121,044 | 126,044 |
| E. Additional Principal Payments | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| F. Total Payments | 728,098 | 728,098 | 728,098 | 728,098 | 728,078 | 367,728 | 367,758 | 204,666 | 204,666 | 204,666 |
| G. Debt End of Year | 4,927,878 | 4,393,876 | 3,837,981 | 3,259,884 | 2,658,719 | 2,399,451 | 2,129,081 | 2,013,048 | 1,892,003 | 1,765,960 |
| 10. Debt and Debt Service - Farmer Mac New Loans |  |  |  |  |  |  |  |  |  |  |
| A. Debt First of Year | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| B. Loan Funds Advanced | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| C. Interest | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| D. Principal Payments | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E. Additional Principal Payments | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| F. Total Payments | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| G. Debt End of Year | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11. Debt and Debt Service - Other Existing Loans |  |  |  |  |  |  |  |  |  |  |
| A. Debt First of Year | 32,433,190 | 29,454,032 | 26,666,916 | 24,280,656 | 21,813,996 | 19,264,217 | 17,461,459 | 15,589,636 | 14,642,241 | 13,730,454 |
| B. Loan Funds Advanced | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| C. Interest | 1,185,654 | 1,085,927 | 995,672 | 915,273 | 832,068 | 758,242 | 689,203 | 634,585 | 595,904 | 561,270 |
| D. Principal Payments | 2,979,157 | 2,787,116 | 2,386,260 | 2,466,660 | 2,549,779 | 1,802,758 | 1,871,823 | 947,394 | 911,787 | 872,084 |
| E. Additional Principal Payments | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| F. Total Payments | 4,164,812 | 3,873,044 | 3,381,933 | 3,381,933 | 3,381,847 | 2,561,001 | 2,561,026 | 1,581,980 | 1,507,691 | 1,433,353 |
| G. Debt End of Year | 29,454,032 | 26,666,916 | 24,280,656 | 21,813,996 | 19,264,217 | 17,461,459 | 15,589,636 | 14,642,241 | 13,730,454 | 12,858,371 |
| 12. Debt and Debt Service - Other New Loans |  |  |  |  |  |  |  |  |  |  |
| A. Debt First of Year | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| B. Loan Funds Advanced | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| C. Interest | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| D. Principal Payments | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E. Additional Principal Payments | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| F. Total Payments | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| G. Debt End of Year | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

[^12]| DETERMINATION OF DEBT AND DEBT SER MN065 | CFC FOR |  |  |  | Dakota E | ectric As | ciation |  |  | 8/15/2019 <br> Base 2018 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ITEM | Future 2019 | Future 2020 | Future 2021 | Future 2022 | Future 2023 | Future 2024 | Future 2025 | Future 2026 | Future 2027 | Future 2028 |
| 13. Debt and Debt Service - Total Loans |  |  |  |  |  |  |  |  |  |  |
| A. Debt First of Year | 99,848,396 | 105,640,524 | 111,540,354 | 116,416,226 | 121,376,453 | 127,483,768 | 133,070,041 | 138,597,124 | 145,364,127 | 152,394,734 |
| B. Loan Funds Advanced | 12,355,916 | 12,582,288 | 11,493,566 | 11,802,530 | 12,861,761 | 11,450,967 | 11,794,496 | 12,148,331 | 12,512,781 | 12,888,164 |
| C. Interest | 4,001,666 | 4,395,909 | 4,746,417 | 5,096,600 | 5,507,715 | 5,960,248 | 6,384,290 | 6,873,033 | 7,427,619 | 8,047,815 |
| D. Less Discounts | 156,074 | 176,495 | 199,550 | 218,596 | 239,306 | 259,895 | 278,870 | 297,932 | 317,716 | 337,978 |
| D. Principal Payments | 6,563,789 | 6,682,458 | 6,617,695 | 6,842,303 | 6,754,446 | 5,864,694 | 6,267,414 | 5,381,328 | 5,482,174 | 5,765,429 |
| E. Additional Principal Payments | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| F. Total Payments | 10,409,380 | 10,901,872 | 11,164,561 | 11,720,307 | 12,022,854 | 11,565,048 | 12,372,833 | 11,956,429 | 12,592,078 | 13,475,265 |
| G. Debt End of Year | 105,640,524 | 111,540,354 | 116,416,226 | 121,376,453 | 127,483,768 | 133,070,041 | 138,597,124 | 145,364,127 | 152,394,734 | 159,517,470 |


| DETERMINATION OF OPERATING EXPENSE MN065 | $\text { Y } 325 \mathrm{~K}$ |  |  |  | Dak | ta Electri | c Associa |  |  |  |  |  | 8/15/2019 <br> Base 2018 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ITEM | Historical | Historical | Historical | Future | Future | Future | Future | Future | Future | Future | Future | Future | Future |
|  | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. A. Total MWHs Required | 1,872,717 | 1,840,404 | 1,901,356 | 1,857,823 | 1,874,826 | 1,889,001 | 1,901,919 | 1,912,759 | 1,923,944 | 1,934,815 | 1,945,613 | 1,956,268 | 1,970,467 |
| B. Cost per MWH Purchased | 79.36 | 80.35 | 78.54 | 80.42 | 82.27 | 83.27 | 84.55 | 85.12 | 85.74 | 87.51 | 87.86 | 86.36 | 83.97 |
| C. Flow Through Adjustment - MWH |  |  |  |  |  |  |  |  |  |  |  |  |  |
| D. Cost of Purchased Power | 148,623,624 | 147,874,758 | 149,330,034 | 149,397,033 | 154,233,073 | 157,296,497 | 160,805,319 | 162,813,811 | 164,966,045 | 169,314,301 | 170,938,007 | 168,937,190 | 165,455,176 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. A. Consumer Accounts Expense | 7,896,797 | 8,460,154 | 8,898,715 | 9,386,590 | 9,668,188 | 9,958,233 | 10,256,980 | 10,564,690 | 10,881,630 | 11,208,079 | 11,544,322 | 11,890,651 | 12,247,371 |
| B. Cost per Consumer Served | 75.23 | 79.67 | 82.85 | 86.60 | 88.36 | 90.08 | 91.95 | 93.80 | 95.66 | 97.58 | 99.55 | 101.56 | 103.63 |
| C. Average Number of Consumers | 104,975 | 106,193 | 107,410 | 108,386 | 109,416 | 110,553 | 111,550 | 112,629 | 113,748 | 114,856 | 115,963 | 117,076 | 118,181 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. A. Operations and Maintenance Expense | 12,463,701 | 12,396,845 | 13,428,522 | 14,164,745 | 14,589,687 | 15,027,378 | 15,478,199 | 15,942,545 | 16,420,822 | 16,913,446 | 17,420,850 | 17,943,475 | 18,481,780 |
| B. Ratio to Total Utility Plant | 4.36 | 4.18 | 4.41 | 4.54 | 4.54 | 4.55 | 4.56 | 4.57 | 4.59 | 4.60 | 4.62 | 4.64 | 4.66 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4. A. Administration and General Expense | 10,503,325 | 11,341,864 | 11,907,838 | 12,560,689 | 12,937,510 | 13,325,635 | 13,725,404 | 14,137,166 | 14,561,281 | 14,998,120 | 15,448,063 | 15,911,505 | 16,388,850 |
| B. Ratio to Total Utility Plant | 3.67 | 3.83 | 3.91 | 4.03 | 4.03 | 4.04 | 4.05 | 4.05 | 4.07 | 4.08 | 4.10 | 4.12 | 4.13 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5. A. Depreciation \& Amortization Expense | 8,850,603 | 9,491,587 | 10,281,975 | 10,925,665 | 11,673,368 | 11,979,222 | 12,319,643 | 12,688,126 | 13,024,025 | 13,370,001 | 13,726,356 | 14,093,402 | 14,093,402 |
| B. Ratio to Total Utility Plant | 3.09 | 3.20 | 3.38 | 3.50 | 3.63 | 3.63 | 3.63 | 3.63 | 3.64 | 3.64 | 3.64 | 3.65 | 3.55 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6. A. Tax Expense | 3,597,538 | 3,609,198 | 3,372,283 | 3,700,800 | 3,811,824 | 3,926,179 | 4,043,964 | 4,165,283 | 4,290,241 | 4,418,949 | 4,551,517 | 4,688,063 | 4,828,705 |
| B. Ratio to Total Utility Plant | 1.26 | 1.22 | 1.11 | 1.19 | 1.19 | 1.19 | 1.19 | 1.19 | 1.20 | 1.20 | 1.21 | 1.21 | 1.22 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7. A. Discount on Debt |  |  |  | 171,491 | 222,690 | 274,960 | 321,767 | 371,460 | 420,086 | 465,248 | 510,846 | 557,523 | 605,065 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8. A. Total Utility Plant | 285,990,343 | 296,333,819 | 304,564,342 | 311,993,877 | 321,275,972 | 330,157,166 | 339,280,764 | 349,150,845 | 358,112,457 | 367,342,917 | 376,850,291 | 386,642,886 | 396,729,258 |

[^13]
A. Subscript Copital Securities
B. Member Capita
D. Loan CTC's (After 1983)

Total Equity Investment
Loan CTCs Required
2. Changes in Equity Investment in CFC
A. Purchase of Loan CTC's B. Purchase of Member Capital Securities
D. Patronage Capital Accrual
E. Patronage Capital Rotation

Total Equity Changes
3. Income from Investments in CFC
A. Interest from Subscription CTC's
B. Interest from Member Capital CTC's
D. Patronage Capital Income

Total Income CFC Equity

| 3. Income from Investments in CFC |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A. Interest from Subscription CTC's | 70,942 | 70,942 | 70,942 | 70,942 | 70,942 | 70,942 | 70,942 | 70,942 | 70,942 | 70,942 |
| B. Interest from Member Capital Securities | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 |
| C. Interest from Pre 1983 Loan CTC's | 15,971 | 15,971 | 15,971 | 15,971 | 15,971 | 15,971 | 15,971 | 15,971 | 15,971 | 15,971 |
| D. Patronage Capital Income | 664,675 | 595,228 | 618,239 | 641,326 | 670,790 | 703,528 | 733,615 | 768,921 | 809,254 | 856,032 |
| Total Income CFC Equity | 801,587 | 732,141 | 755,151 | 778,238 | 807,703 | 840,441 | 870,528 | 905,833 | 946,166 | 992,945 |

$$
\begin{array}{rrr}
\hline 0 & 0 & 0 \\
\hline 0 & 0 & 0 \\
\hline 0 & 0 & 0 \\
\hline 641,326 & 670,790 & 703,528 \\
\hline 353,901 & 379,749 & 374,512 \\
\hline \mathbf{2 8 7 , 4 2 5} & \mathbf{2 9 1 , 0 4 1} & \mathbf{3 2 9 , 0 1 6} \\
\hline & & \\
& & \\
\hline 70,942 & 70,942 & 70,942 \\
\hline 50,000 & 50,000 & 50,000 \\
\hline \mathbf{1 5 , 9 7 1} & \mathbf{1 5 , 9 7 1} & 15,971 \\
\hline 641, \mathbf{3 2 6} & 670,790 & 703,528 \\
\hline \mathbf{7 7 8 , \mathbf { 2 3 8 }} & \mathbf{8 0 7 , 7 0 3} & \mathbf{8 4 0 , 4 4 1} \\
\hline
\end{array}
$$

$\square$ | 0 | 0 | 0 |
| ---: | ---: | ---: |
| 0 | 0 | 0 |
| 117,997 | 0 | 0 |
| 768,921 | 809,254 | 856,032 |
| 408,558 | 405,599 | 429,659 |
| $\mathbf{2 4 2 , 3 6 5}$ | $\mathbf{4 0 3 , 6 5 5}$ | $\mathbf{4 2 6 , 3 7 3}$ |
|  |  |  |
| 70,942 | 70,942 | 70,942 |
| 50,000 | 50,000 | 50,000 |
| 15,971 | 15,971 | 15,971 |
| 768,921 | 809,254 | 856,032 |
| $\mathbf{9 0 5 , 8 3 3}$ | $\mathbf{9 4 6 , 1 6 6}$ | $\mathbf{9 9 2 , 9 4 5}$ |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |



## Dakota Electric Association 2019 Budget

| Account - Description | $\begin{gathered} \hline 2017 \\ \text { Actual } \end{gathered}$ | $\begin{gathered} \hline 2018 \\ \text { Actual } \end{gathered}$ | 2019 <br> Budget | \% Chg to <br> '18 Actual |
| :---: | :---: | :---: | :---: | :---: |
| Revenue |  |  |  |  |
| 62000-65000 - Rate Revenue | 199,382,850 | 201,822,220 | 200,967,995 | -0.4\% |
| 65020-65040-Total Trackers | 994,532 | 155,939 | 235,098 | -50.8\% |
| 65510-65560-Charges \& Fees | 849,609 | 1,160,515 | 1,220,000 | 5.1\% |
| 66010 - Miscellaneous Sales | 53,540 | 49,233 | 20,520 | -58.3\% |
| 66030 - Rent-Elec Prop-Cable TV/Tel | 152,643 | 156,791 | 153,601 | -2.0\% |
| 66195 - Interco-Support \& Occupancy | 8,729 | 6,129 |  | -100.0\% |
| 66210 - Energy Product Sales | 133,681 | 150,090 | 150,822 | 0.5\% |
| 66310 - Utility Services Revenue | 435,085 | 428,972 | 347,380 | -19.0\% |
| 66315 - Engineering Svcs Revenue | 191,048 | 100,232 | 33,000 | -67.1\% |
| 66320 - Rev-Emp Inventoried Tool Sale | 1,739 | 1,253 | 2,600 | 107.5\% |
| 66325 - Billable Project Revenue | 19,511 |  |  | N/A |
| Total Revenue | 202,222,967 | 204,031,374 | 203,131,016 | -0.4\% |
| Power Cost |  |  |  |  |
| 70110 - Purchased Power - Capacity | 32,898,219 | 33,126,800 | 33,959,792 | 2.5\% |
| 70115 - GRE PCA Adjustment - Capacity | 526,561 | $(389,799)$ | 0 | -100.0\% |
| 70116 - A/C Control Credit - \$6R/\$2C\&I | $(891,128)$ | $(901,924)$ | $(772,584)$ | -14.3\% |
| 70120 - Purchased Power - Energy | 89,878,020 | 95,391,286 | 94,502,720 | -0.9\% |
| 70121 - KWH Credit - Off Peak Sales | $(720,020)$ | $(796,695)$ | $(806,494)$ | 1.2\% |
| 70125 - GRE PCA Adjustment - Energy | 273,693 | $(2,761,760)$ | 0 | -100.0\% |
| 70140 - Purch Power - Trans/Ancillary | 25,846,826 | 25,595,905 | 22,463,459 | -12.2\% |
| 70190 - Wellspring Wind Energy | 33,962 | 35,411 | 19,722 | -44.3\% |
| 70191 - Wellspring Solar Energy | 2,394 | 2,895 | 3,648 | 26.0\% |
| 70205 - Purchased Power - Generation Credit | (37) | (14) | 0 | N/A |
| 70210 - Purchased Power - Other | 26,269 | 27,930 | 27,060 | -3.1\% |
| Total Power Cost | 147,874,759 | 149,330,035 | 149,397,323 | 0.0\% |
| Other Cost of Sales |  |  |  |  |
| 71010 - Miscellaneous - COS | 20,345 | 18,843 | 4,500 | -76.1\% |
| 71210 - Energy Products - COS | 125,238 | 147,183 | 145,664 | -1.0\% |
| 71310 - Utility Services - COS | 209,453 | 239,887 | 176,914 | -26.3\% |
| 71312 - Utlty Svcs-Inventory COS | 63,126 | 100,655 | 61,000 | -39.4\% |
| 71315 - Engineering Services-COS | 125,527 | 57,412 | 21,000 | -63.4\% |
| 71320 - Inventoried Tools Employee COS | 1,434 | 1,176 | 2,000 | 70.1\% |
| 71325 - Billable Projects - COS | 19,511 | 5,145 | 0 | -100.0\% |
| 71370 - Communication Fee - COS | 8,400 | 8,255 | 9,000 | 9.0\% |
| Total Other Cost of Sales | 573,034 | 578,556 | 420,078 | -27.4\% |
| Total Cost of Sales | 148,447,793 | 149,908,591 | 149,817,401 | -0.1\% |
| Gross Margin | 53,775,174 | 54,122,783 | 53,313,615 | -1.5\% |
| Labor |  |  |  |  |
| 81110 - Salaries | 8,322,344 | 8,793,264 | 9,029,080 | 2.7\% |
| 81120 - Wages | 6,083,493 | 6,339,959 | 6,765,015 | 6.7\% |
| 81125 - Overtime | 442,988 | 548,877 | 514,933 | -6.2\% |
| 81130 - Part Time | 112,594 | 126,034 | 137,214 | 8.9\% |
| 81190 - Other Pay | 175,166 | 200,240 | 80,244 | -59.9\% |
| 81199 - Payroll Overheads | 214,401 | 243,510 | 250,420 | 2.8\% |
| 81220 - Temporary Help | 123,567 | 88,807 | 98,395 | 10.8\% |
| Total Labor | 15,474,553 | 16,340,691 | 16,875,301 | 3.3\% |

## Dakota Electric Association 2019 Budget

| Account - Description | $\begin{gathered} 2017 \\ \text { Actual } \end{gathered}$ | $\begin{gathered} 2018 \\ \text { Actual } \end{gathered}$ | 2019 <br> Budget | $\begin{aligned} & \text { \% Chg to } \\ & \text { '18 Actual } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| Payroll Taxes |  |  |  |  |
| 81410 - FICA | 1,092,504 | 1,159,549 | 1,175,968 | 1.4\% |
| 81420 - FUTA | 8,129 | 8,241 | 7,330 | -11.1\% |
| 81430 - SUTA | 17,084 | 15,613 | 14,621 | -6.4\% |
| Total Payroll Taxes | 1,117,717 | 1,183,403 | 1,197,919 | 1.2\% |
| Insurance/Pension |  |  |  |  |
| 81510 - Medical \& Dental Insurance | 1,531,414 | 1,657,000 | 1,788,418 | 7.9\% |
| 81515 - Other Medical Expense | 295,495 | 258,269 | 262,401 | 1.6\% |
| 81520 - Life Insurance | 81,482 | 84,336 | 95,265 | 13.0\% |
| 81530-401K Expense | 835,647 | 914,071 | 1,026,652 | 12.3\% |
| 81531-401K Adminisration Fee | 58,524 | 50,738 | 52,000 | 2.5\% |
| 81540 - Pension Expense | 2,498,839 | 2,587,633 | 2,567,123 | -0.8\% |
| 81541 - Pension Administration Fees | 84,467 | 92,851 | 94,591 | 1.9\% |
| 81550 - Post-Employment 106 Benefits | 414,228 | 539,650 | 147,377 |  |
| Total Insurance/Pension | 5,800,096 | 6,184,548 | 6,033,827 | -2.4\% |
| Total Internal Labor | 22,392,366 | 23,708,642 | 24,107,047 | 1.7\% |
| Other Benefits |  |  |  |  |
| 81610 - Education \& Training Fees | 79,802 | 102,032 | 140,060 | 37.3\% |
| 81620 - Tuition Aid | 7,773 | 700 | 3,000 | 328.6\% |
| 81630 - Employee Physicals | 17,678 | 9,834 | 25,500 | 159.3\% |
| 81640 - Employee Clothing | 134,939 | 119,577 | 124,050 | 3.7\% |
| 81650 - Employee Functions \& Awards | 21,108 | 18,504 | 41,000 | 121.6\% |
| 81660 - Recruiting Expense | 30,026 | 59,355 | 35,000 | -41.0\% |
| 81665 - Other Hiring Expense | 1,862 | 13,902 | 8,000 | -42.5\% |
| 81690 - Other Benefits Expense | 77,118 | 61,057 | 58,200 | -4.7\% |
| Total Other Benefits | 370,306 | 384,961 | 434,810 | 12.9\% |
| External Labor |  |  |  |  |
| 81230 - Contract Help | 1,197,746 | 1,268,744 | 1,266,390 | -0.2\% |
| Total External Labor | 1,197,746 | 1,268,744 | 1,266,390 | -0.2\% |
| Professional Fees \& Services |  |  |  |  |
| 82110 - Attorney Fees | 89,183 | 147,262 | 129,000 | -12.4\% |
| 82120 - Auditor Fees | 36,205 | 35,055 | 40,000 | 14.1\% |
| 82140 - Consultant Fees | 323,424 | 450,666 | 570,500 | 26.6\% |
| 82150 - Customer Surveys | 15,100 | 19,420 | 8,000 | -58.8\% |
| 82160 - Contracted Services-Other | 1,920,132 | 2,428,184 | 3,126,023 | 28.7\% |
| 82210 - Filing Fees | 387,007 | 410,200 | 439,000 | 7.0\% |
| 82220 - Miscellaneous Fees | 80,728 | 78,875 | 85,688 | 8.6\% |
| 82310 - Bank Service Charge | 49,257 | 64,972 | 129,774 | 99.7\% |
| 82410 - Board Fees | 372,153 | 377,995 | 383,225 | 1.4\% |
| Total Prof Fees \& Services | 3,273,189 | 4,012,629 | 4,911,210 | 22.4\% |

## Dakota Electric Association <br> 2019 Budget

|  | 2017 | 2018 | 2019 | \% Chg to |
| :---: | :---: | :---: | :---: | :---: |
| Account - Description | Actual | Actual | Budget | '18 Actual |

## Corporate Insurance

82510 - Property Insurance
82520 - Workers Comp Insurance
82530 - Gen Liability \& Umbrella
82550 - Gen Claims \& Settlements
Total Corp Insurance

| 88,374 | 80,651 | 82,236 | $2.0 \%$ |
| ---: | ---: | ---: | ---: |
| 151,934 | 188,060 | 210,646 | $12.0 \%$ |
| 227,730 | 229,717 | 232,956 | $1.4 \%$ |
| 1,746 | 2,446 | 2,400 | $-1.9 \%$ |
| 469,784 | 500,874 | 528,238 | $5.5 \%$ |

## Advertising/Promotion

| 83010 - Radio Ads | 6,618 | 6,848 | 6,800 | -0.7\% |
| :---: | :---: | :---: | :---: | :---: |
| 83015 - Television Advertising | 93,250 | 108,605 | 138,330 | 27.4\% |
| 83020 - Digital Advertising | 36,158 | 41,631 | 43,300 | 4.0\% |
| 83025 - Newspaper Advertising | 28,718 | 11,090 | 18,125 | 63.4\% |
| 83030 - Other Ads | 16,464 | 15,282 | 18,960 | 24.1\% |
| 83035 - Directory Advertising | 19,671 | 20,064 | 20,295 | 1.2\% |
| 83040 - Bill Inserts | 40,796 | 43,765 | 50,050 | 14.4\% |
| 83060 - Billboards/Signs | 4,042 | 0 | 0 | N/A |
| 83200 - Photography \& Supplies | 1,777 | 1,679 | 2,450 | 45.9\% |
| 83300 - Promotional Items | 54,245 | 42,768 | 59,393 | 38.9\% |
| 83410 - Grants | 500 | 500 | 20,500 | 4000.0\% |
| 83420 - Rebates | 2,592,743 | 1,851,587 | 1,744,490 | -5.8\% |
| 83500 - Registration | 2,320 | 2,285 | 2,500 | 9.4\% |
| 85160 - Product Warranties | 7,514 | 10,367 | 8,960 | -13.6\% |
| tal Advertising/Promo | 2,904,816 | 2,156,471 | 2,134,153 | -1.0\% |

## Supplies \& Office

83610 - Dues \& Memberships
84110 - Supplies-Office
84120 - Outside Printing
84130 - Computer Hardware
84140 - Computer Software
84150 - Office Machine Lease or Rental
84160 - Office Equip \& Software Maint
84190 - Other Supplies
84200 - Books \& Mag. Subscriptions
84300 - Postage
84310 - UPS/Fed Express/Courier
tal Supplies \& Office

| 317,555 | 325,544 | 337,281 | $3.6 \%$ |
| ---: | ---: | ---: | ---: |
| 66,398 | 62,997 | 64,769 | $2.8 \%$ |
| 226,849 | 213,156 | 219,545 | $3.0 \%$ |
| 68,857 | 129,415 | 83,428 | $-35.5 \%$ |
| 38,936 | 29,802 | 48,499 | $62.7 \%$ |
| 8,047 | 8,022 | 8,328 | $3.8 \%$ |
| 555,500 | 723,003 | 769,877 | $6.5 \%$ |
| 48,338 | 49,284 | 43,000 | $-12.8 \%$ |
| 8,762 | 11,552 | 9,205 | $-20.3 \%$ |
| 597,459 | 587,743 | 608,850 | $3.6 \%$ |
| 2,952 | 2,058 | 4,185 | $103.4 \%$ |
| $1,939,653$ | $2,142,576$ | $2,196,967$ | $2.5 \%$ |

## Travel \& Meals

84510 - Airfare
84520 - Mileage
84545 - Meals
84546 - Meal Allowances
84550 - Lodging
84560 - Community Events
84585 - Travel Per Diem
84590 - Other Travel Expense
tal Travel \& Meals

| 23,588 | 21,463 | 47,950 | $123.4 \%$ |
| ---: | ---: | ---: | ---: |
| 12,362 | 12,795 | 15,681 | $22.6 \%$ |
| 67,513 | 68,526 | 84,230 | $22.9 \%$ |
| 21,223 | 22,620 | 21,650 | $-4.3 \%$ |
| 57,462 | 52,290 | 84,610 | $61.8 \%$ |
| 12,443 | 15,929 | 14,100 | $-11.5 \%$ |
| 5,323 | 0 | 0 | N/A |
| 11,340 | 10,961 | 11,825 | $7.9 \%$ |
| 211,254 | 204,584 | 280,046 | $36.9 \%$ |

## Dakota Electric Association <br> 2019 Budget

|  | 2017 | 2018 | 2019 | \% Chg to |
| :---: | :---: | :---: | :---: | :---: |
| Account - Description | Actual | Actual | Budget | '18 Actual |

## Occupancy

85110 - Building Rent \& Lease
85120 - Office Electric Sales Tax
85130 - Telephone \& Cell Phone
85140 - Telecommunications-Other
85150 - Sewer \& Water
85310 - Building Maintenance
85320 - Equip Repair \& Maintenance
tal Occupancy

| 6,685 | 8,317 | 9,100 | $9.4 \%$ |
| ---: | ---: | ---: | ---: |
| 11,251 | 10,656 | 12,000 | $12.6 \%$ |
| 156,983 | 152,351 | 164,648 | $8.1 \%$ |
| 70,542 | 97,965 | 136,318 | $39.1 \%$ |
| 26,454 | 28,266 | 27,000 | $-4.5 \%$ |
| 63,601 | 47,386 | 55,000 | $16.1 \%$ |
| 65,136 | 35,810 | 38,750 | $8.2 \%$ |
| 400,652 | 380,751 | 442,816 | $16.3 \%$ |

Vehicle Expenses
82540 - Auto Insurance
85410 - Fuel \& Oil
85420 - Repair Parts
85430 - Shop Supplies
85440 - Other Vehicle Exp
85510 - Heavy Vehicle \& Trlr Exp Clrd
87125 - Depreciation-Vehicles

| 65,057 | 64,696 | 65,934 | $1.9 \%$ |
| ---: | ---: | ---: | ---: |
| 253,636 | 311,064 | 325,600 | $4.7 \%$ |
| 169,101 | 144,738 | 169,000 | $16.8 \%$ |
| 54,358 | 46,404 | 42,000 | $-9.5 \%$ |
| 31,934 | 43,236 | 33,950 | $-21.5 \%$ |
| $(284,314)$ | $(358,270)$ | $(401,887)$ | $12.2 \%$ |
| 546,419 | 644,712 | 709,348 | $10.0 \%$ |
| 836,191 | 896,580 | 943,945 | $5.3 \%$ |

Distribution Materials

| 86110 - Distribution Mntnce Materials | 348,001 | 323,240 | 351,598 | $8.8 \%$ |
| :--- | ---: | ---: | ---: | ---: |
| 86120 - Distribution Supplies-Tools | 171,300 | 139,344 | 125,805 | $-9.7 \%$ |
| 86130 - Distribution Supplies-Other | 243,561 | 199,694 | 214,000 | $7.2 \%$ |
| 86140 - Inventory Count Variance | 3,555 | 8,985 | 5,000 | $-44.4 \%$ |
| 86160 -Inventory PO Cost Variance | 24 | $(13)$ | 100 | $-869.2 \%$ |
| 86165 -Inventory Obsolescence Write-off | 12,000 | 24,000 | 24,000 | $0.0 \%$ |
| 86170 -Other Inventory Expense | 7,052 | 7,801 | 5,000 | $-35.9 \%$ |
| 86210 - Distr Load Control Receivers | 42,270 | 27,278 | 12,760 | $-53.2 \%$ |
| 86215 - Distr Generation Automation | 42,295 | 23,666 | 30,000 | $26.8 \%$ |
| 86295 - Distr Equipment Rent \& Lease | 10,319 | 7,111 | 11,300 | $58.9 \%$ |
| 86300 - Distr Maintenance - Other | 335,038 | 355,766 | 384,484 | $8.1 \%$ |
| tal Distribution Materials | $1,215,415$ | $1,116,872$ | $1,164,047$ | $4.2 \%$ |
|  |  |  |  |  |
| 86145 - Burden - Accounting Use Only |  |  |  |  |
| (al Material Burden/Clearing | $(532,657)$ | $(536,965)$ | $(555,295)$ | $3.4 \%$ |

## Miscellaneous

| 89010 - Miscellaneous Expense |  | 19,000 | N/A |  |
| :--- | :---: | ---: | ---: | ---: |
| 89020 - Bad Debt Expense | 80,004 | 372,996 | 413,000 | $10.7 \%$ |
| 89025 - Member Relations | 42,753 | 32,388 | 42,800 | $32.1 \%$ |
| 89030 - Donations | 83,498 | 78,485 | 78,500 | $0.0 \%$ |
| 89035 - Sponsorships | 41,910 | 48,185 | 41,250 | $-14.4 \%$ |
| 89040 - Discounts | $(5,297)$ | $(5,698)$ | $(5,000)$ | $-12.2 \%$ |
| 89050 - Freight | 9,855 | 8,091 | 11,823 | $46.1 \%$ |
| 89055 - Invoice Cost Variance | $(1)$ | 1 | 0 | $-100.0 \%$ |
| (alas Miscellaneous | 252,722 | 534,448 | 601,373 | $12.5 \%$ |

## Dakota Electric Association 2019 Budget

|  | 2017 | 2018 | 2019 | \% Chg to |
| :---: | :---: | :---: | :---: | :---: |
| Account - Description | Actual | Actual | Budget | '18 Actual |

## Reimbursements/Transfers

66005 - Reimbursements
66007 - GRE Reimbursements
89901 - Util \& Eng Service Trx to COS
89902 - Billable Project Trx to COS
Total Reimbursements/Transfers

87120 - Depreciation-General Plant
Total Depreciation General Plant

## Total Non Labor Expense

Total Department Expense

87110 - Deprec-Distribution Plant
Total Distribution Depreciation

## Business Taxes

87510 - Property \& Real Estate Tax
87520 - Sales \& Use Tax
87530 - Membership Tax
Total Business Taxes

| $(41,523)$ | $(40,437)$ | $(40,000)$ | $-1.1 \%$ |
| ---: | ---: | ---: | ---: |
| $(1,416,302)$ | $(1,207,140)$ | $(1,286,212)$ | $6.6 \%$ |
| $(285,195)$ | $(271,377)$ | $(229,664)$ | $-15.4 \%$ |
| $(15,237)$ | $(12,790)$ | 0 | $-100.0 \%$ |
| $(1,758,257)$ | $(1,531,744)$ | $(1,555,876)$ | $1.6 \%$ |
|  |  |  |  |
| 932,678 | $1,341,590$ | $1,597,317$ | $19.1 \%$ |
| 932,678 | $1,341,590$ | $1,597,317$ | $19.1 \%$ |
|  |  |  |  |
| $\mathbf{1 1 , 7 1 3 , 4 9 2}$ | $\mathbf{1 2 , 8 7 2 , 3 7 1}$ | $\mathbf{1 4 , 3 9 0 , 1 4 1}$ | $\mathbf{1 1 . 8 \%}$ |
| $\mathbf{3 4 , 1 0 5 , 8 5 8}$ | $\mathbf{3 6 , 5 8 1 , 0 1 3}$ | $\mathbf{3 8 , 4 9 7 , 1 8 8}$ | $\mathbf{5 . 2 \%}$ |
|  |  |  |  |
| $8,012,490$ | $8,295,673$ | $8,619,000$ | $3.9 \%$ |
| $8,012,490$ | $8,295,673$ | $8,619,000$ | $3.9 \%$ |
|  |  |  |  |
| $3,608,629$ | $3,371,493$ | $3,700,000$ | $9.7 \%$ |
| $(1)$ | 0 | 0 | $\mathrm{~N} / \mathrm{A}$ |
| 570 | 790 | 800 | $1.3 \%$ |
| $3,609,198$ | $3,372,283$ | $3,700,800$ | $9.7 \%$ |

## Interest Expense

88010 - Interest on LT Debt
88020 - Interest on LOC - CFC
88030 - Interest on LOC - CoBank
88040 - Interest on Lease Obligation
88070 - CFC Mrtg Registration Tax
88090 - Interest Expense - Other
88980 - Interest Expense - Intercompany
88990 - RUS Buyout Gain Amort
Total Interest Expense

Total Depreciation, Taxes, \& Interest
Total Operating Expenses
Operating Margin

## Other Income

| 91010 - Int Inc-Cnsrvtn Loans\&Deposits | 434 | 434 | 434 | 0.0\% |
| :---: | :---: | :---: | :---: | :---: |
| 91030 - Int Inc-DSM Trkr Carrying Cost | 51,551 | 36,892 | $(9,765)$ | N/A |
| 91040 - Int Inc-Financial Institutions | 137,301 | 137,402 | 137,180 | -0.2\% |
| 92510 - Gain(Loss) Asset Sale | 7,578 | 96,557 | 18,748 | -80.6\% |
| 92530 - Gain(Loss) Asset Disposal | $(18,544)$ | $(19,530)$ | 0 | N/A |
| 66100 - Interco-Subsidiary Earnings | $(158,851)$ | 8,227 | 0 | N/A |
| 66040 - Cap Credit Rev - GRE | 6,403,850 | 4,311,432 | 3,934,030 | -8.8\% |
| 66041 - Cap Credit Rev - CFC | 200,591 | 209,803 | 312,108 | 48.8\% |
| 66042 - Cap Credit Rev - Other | 150,577 | 119,277 | 143,000 | 19.9\% |
| 66043 - Cap Credit Rev - CoBank | 410,525 | 470,700 | 301,545 | -35.9\% |
| tal Other Income | 7,185,012 | 5,371,194 | 4,837,280 | -9.9\% |
| t Income | 11,143,653 | 7,026,561 | 2,586,197 | -63.2\% |



Dakota Electric Association<br>Accounting System Description and<br>Cross-Reference Projects to Form 72018

Prior to 1997, Dakota Electric utilized an accounting system which was based on the FERC Uniform System of Accounts. Dakota Electric converted to Lawson Software's (now Infor) general ledger system effective January 1997. This system allows the Cooperative to track expenditures in much greater detail since this software has a module to capture expenditures by project code (or activity) in addition to accounts and the system also has the ability to track many cost centers. Instead of implementing the existing FERC Uniform System of Accounts when converting to Lawson, Dakota Electric decided to adopt a new chart of accounts which better categorizes expenditures. The chart of accounts for expenses is shown in the 2019 budget detail in Workpaper 4.

Finance staff creates internal monthly and annual financial reports utilizing the non-FERC chart of accounts which are used by the Board of Directors, management, and cost-center managers. On an annual basis, project codes are mapped to FERC accounts in order to create the Form 7 required by our lender, National Rural Utilities Cooperative Finance Corporation (CFC). The enclosed schedules detail the project codes used by Dakota Electric to track expenses and the FERC account number assigned to each project code to generate the annual Form 7 income statement.
DEA 2018 Form 7 Income Statement (Built from Projects)

| FERC <br> Account | Description |  | Revenue |  | Cost of Sales |  | Internal Labor w/o *VSH |  | *VSH |  | Payroll <br> Benefits |  | Reimb \& Trsfr to Cost of Sales |  | All Other Expenses |  | Other Inc/(Loss) |  | Income / <br> (Loss) |  | Summary Income / (Loss) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 440 | Residential | \$ | 119,397,406 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 119,397,406 |  |  |
| 441 | Irrigation |  | 1,049,852 |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | 1,049,852 |  |  |
| 442 | Commercial |  | 79,327,445 |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | 79,327,445 |  |  |
| 444 | Street Lights |  | 2,043,558 |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | 2,043,558 |  |  |
| 445 | Municipal |  | 3,960 |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | 3,960 |  |  |
| 450 | Late Charges |  | 743,718 |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | 743,718 |  |  |
| 451 | Processing Fees \& Other Billing Adjustments |  | 416,797 |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | 416,797 |  |  |
| 449 | DSM Exp \& Tax Recovery |  | 155,939 |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | 155,939 |  |  |
| Line 1 | Operating Revenue |  | 203,138,675 |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | 203,138,675 | \$ | 203,138,675 |
| 555 | Purchased Power Cost- Line 3 |  | - |  | 149,330,034 |  | - |  | - |  | - |  | - |  | - |  | - |  | $(149,330,034)$ |  | $(149,330,034)$ |
| 580 | Operation |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  |  |
| 581 | Load Dispatching |  | 64,808 |  | 33,187 |  | 902,612 |  | - |  | 597,621 |  | $(33,187)$ |  | 116,050 |  | - |  | $(1,551,475)$ |  |  |
| 582 | Station Expense |  | - |  | - |  | 373,042 |  | - |  | 179,287 |  | - |  | 142,539 |  | - |  | $(694,868)$ |  |  |
| 583 | Overhead Line Expense |  | - |  | - |  | 15,571 |  | - |  | 7,774 |  | - |  | 225 |  | - |  | $(23,570)$ |  |  |
| 584 | Underground Line Expense |  | - |  | - |  | 103,172 |  | - |  | 98,002 |  | - |  | 572,845 |  | - |  | $(774,019)$ |  |  |
| 585 | Street Lighting |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  |  |
| 586 | Meter Expense |  | 12,526 |  | 7,227 |  | 638,846 |  | - |  | 635,104 |  | $(1,161)$ |  | 876,057 |  | - |  | $(2,143,547)$ |  |  |
| 587 | Customer Installation |  | - |  | - |  | 32,630 |  | - |  | 16,145 |  | - |  | 6,786 |  | - |  | $(55,561)$ |  |  |
| 588 | Miscellaneous Distribution |  | 44,562 |  | - |  | 919,696 |  | - |  | 665,557 |  | - |  | 493,453 |  | - |  | $(2,034,144)$ |  |  |
| 589 | Rents |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  |  |
| Line 6 | Distribution Expense - Operation |  | 121,896 |  | 40,414 |  | 2,985,569 |  | - |  | 2,199,490 |  | $(34,348)$ |  | 2,207,955 |  | - |  | $(7,277,184)$ |  | $(7,277,184)$ |
| 590 | Maintenance Supervision \& Eng |  | 319,682 |  | 268,863 |  | 2,164,624 |  | - |  | 1,489,221 |  | $(174,802)$ |  | 800,051 |  | - |  | $(4,228,275)$ |  |  |
| 592 | Maintenance of Station Equip |  | 19,320 |  | - |  | 73,519 |  | - |  | 35,194 |  | - |  | 36,776 |  | - |  | $(126,169)$ |  |  |
| 593 | Maint of OH Lines (inc tree trimming) |  | 114,529 |  | - |  | 354,967 |  | - |  | 176,937 |  | - |  | 872,417 |  | - |  | $(1,289,792)$ |  |  |
| 594 | Maint Underground Lines |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  |  |
| 595 | Maint Line Transformers |  | - |  | - |  | 6,667 |  | - |  | 3,238 |  | - |  | 3,000 |  | - |  | $(12,905)$ |  |  |
| 596 | Maint Street Light / Signal Sys |  | - |  | - |  | 241,868 |  | - |  | 118,044 |  | - |  | 134,285 |  | - |  | $(494,197)$ |  |  |
| 597 | Maintenance of Meters |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  |  |
| 598 | Miscellaneous Maint (inc sml auto) |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  |  |
| Line 7 | Distribution Expense - Maintenance |  | 453,531 |  | 268,863 |  | 2,841,645 |  | - |  | 1,822,634 |  | $(174,802)$ |  | 1,846,529 |  | - |  | $(6,151,338)$ |  | (6,151,338) |
| 902 | Meter Reading |  | - |  | - |  | 392,032 |  | - |  | 193,756 |  | - |  | 287,067 |  | - |  | $(872,855)$ |  |  |
| 903 | Customer Records \& Collections |  | - |  | - |  | 1,721,119 |  | - |  | 996,992 |  | - |  | 1,348,993 |  | - |  | $(4,067,104)$ |  |  |
| 904 | Uncollectible Accounts |  | - |  | - |  | - |  | - |  | - |  | - |  | 372,996 |  | - |  | $(372,996)$ |  |  |
| Line 8 | Consumer Accounts Expense |  | - |  | - |  | 2,113,151 |  | - |  | 1,190,748 |  | - |  | 2,009,056 |  | - |  | $(5,312,955)$ |  | $(5,312,955)$ |
| 907 | Supervision |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  |  |
| 908 | Customer Assistance \& DSM Programs |  | - |  | - |  | 699,002 |  | - |  | 465,620 |  | $(1,190,732)$ |  | 2,393,097 |  | - |  | $(2,366,987)$ |  |  |
| 909 | Info,Advertising,\&Instr (inc Circuits \& MAC) |  | 24,300 |  | 12,790 |  | 173,079 |  | - |  | 128,808 |  | $(29,221)$ |  | 660,912 |  | - |  | $(922,068)$ |  |  |
| 910 | Economic Development |  | - |  | - |  | 129,384 |  | - |  | 84,604 |  | - |  | 82,717 |  | - |  | $(296,705)$ |  |  |
| Line 9 | Customer Service \& Info Expense |  | 24,300 |  | 12,790 |  | 1,001,465 |  | - |  | 679,032 |  | $(1,219,953)$ |  | 3,136,726 |  | - |  | $(3,585,760)$ |  | (3,585,760) |
| 920 | Admin \& General (inc vehicles) |  | - |  | - |  | 4,888,395 |  | 2,223,364 |  | 5,832 |  | - |  | 151 |  | - |  | $(7,117,742)$ |  |  |
| 921 | Office Supplies, Postage \& Software |  | 51,465 |  | 48,900 |  | - |  | - |  | - |  | $(47,379)$ |  | 1,475,321 |  | - |  | $(1,425,377)$ |  |  |
| 923 | Outside services employed. |  | - |  | - |  | - |  | - |  | - |  | - |  | 476,314 |  | - |  | $(476,314)$ |  |  |
| 924 | Property Insurance |  | - |  | - |  | - |  | - |  | - |  | - |  | 73,875 |  | - |  | $(73,875)$ |  |  |
| 925 | Injuries and damages |  | - |  | - |  | 4,940 |  | - |  | 2,432 |  | - |  | $(3,871)$ |  | - |  | $(3,501)$ |  |  |
| 926 | Employee Benefits \& Education |  | - |  | - |  | - |  | - |  | 1,694,587 |  | - |  | - |  | - |  | $(1,694,587)$ |  |  |
| 927 | Franchise Requirements |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  |  |
| 928 | Regulatory Commission Expense |  | - |  | - |  | - |  | - |  | - |  | - |  | 426,961 |  | - |  | $(426,961)$ |  |  |
| 930 | Misc General Exp |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  |  |
| 930.2 | Misc General Exp - Annual Mtg, Directors Fees |  | - |  | - |  | - |  | - |  | - |  | - |  | 689,481 |  | - |  | $(689,481)$ |  |  |
| 935 | Maintenance Office Bldg \& Equip |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  |  |
| Line 11 | Administrative \& General Expense |  | 51,465 |  | 48,900 |  | 4,893,335 |  | 2,223,364 |  | 1,702,851 |  | $(47,379)$ |  | 3,138,232 |  | - |  | (11,907,838) |  | $(11,907,838)$ |
| Line 12 | Total Operation \& Maintenance Ln2-10 |  | 651,192 |  | 149,701,001 |  | 13,835,165 |  | 2,223,364 |  | 7,594,755 |  | $(1,476,482)$ |  | 12,338,498 |  | - |  | (183,565,109) |  | (183,565,109) |
| 403 | Depreciation \& Amort - Line 13 |  | - |  | - |  | - |  | - |  | - |  | - |  | 10,281,975 |  | - |  | $(10,281,975)$ |  | $(10,281,975)$ |

Dakota Electric Association（Co\＃100）

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# DAKOTA ELECTRIC ASSOCIATION <br> CONSOLIDATED FINANCIAL STATEMENTS 

DECEMBER 31, 2018 AND 2017
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INDEPENDENT AUDITORS' REPORT ..... 1
CONSOLIDATED FINANCIAL STATEMENTS
CONSOLIDATED BALANCE SHEETS ..... 3
CONSOLIDATED STATEMENTS OF OPERATIONS ..... 5
CONSOLIDATED STATEMENTS OF CHANGES IN MEMBERS' EQUITY ..... 6
CONSOLIDATED STATEMENTS OF CASH FLOWS ..... 7
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS ..... 8

CPAs \& BUSINESS ADVISORS

The Board of Directors
Dakota Electric Association
Farmington, Minnesota

## Report on the Consolidated Financial Statements

We have audited the accompanying consolidated financial statements of Dakota Electric Association which comprise the consolidated balance sheets as of December 31, 2018 and 2017, and the related consolidated statements of operations, changes in members' equity, and cash flows for the years then ended, and the related notes to the consolidated financial statements.

## Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

## Auditor's Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

## Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Dakota Electric Association as of December 31, 2018 and 2017, and the consolidated results of its operations and cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.


Sioux Falls, South Dakota
March 22, 2019
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DAKOTA ELECTRIC ASSOCIATION CONSOLIDATED BALANCE SHEETS

DECEMBER 31, 2018 AND 2017 (DOLLARS IN THOUSANDS)



DAKOTA ELECTRIC ASSOCIATION CONSOLIDATED STATEMENTS OF OPERATIONS YEARS ENDED DECEMBER 31, 2018 AND 2017 (DOLLARS IN THOUSANDS)

|  | 2018 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: |
| NET SALES | \$ | 204,037 | \$ | 202,277 |
| COST OF SALES |  | 149,909 |  | 148,448 |
| GROSS MARGIN |  | 54,128 |  | 53,829 |
| OPERATING EXPENSES |  |  |  |  |
| Labor and Related Benefits |  | 25,362 |  | 23,960 |
| Professional Fees and Services |  | 4,584 |  | 3,803 |
| Rebates and Marketing |  | 1,275 |  | 1,806 |
| Office Expense |  | 2,402 |  | 2,234 |
| Operations and Maintenance |  | 767 |  | 907 |
| Depreciation and Amortization |  | 10,336 |  | 9,775 |
| Property and Real Estate Taxes |  | 3,372 |  | 3,609 |
| Net Interest Expense |  | 4,182 |  | 4,068 |
| Other Expenses (Reimbursements) |  | 209 |  | (88) |
| Total Operating Expenses |  | 52,489 |  | 50,074 |
| NET OPERATING MARGIN |  | 1,639 |  | 3,755 |
| OTHER INCOME (EXPENSE) |  |  |  |  |
| Interest Income |  | 221 |  | 215 |
| Capital Credits from GRE, CFC, CoBank, \& Others |  | 5,111 |  | 7,166 |
| Other Income (Expense) |  | 39 |  | (72) |
| Total Other Income |  | 5,371 |  | 7,309 |
| NET OPERATING MARGIN AND OTHER INCOME |  | 7,010 |  | 11,064 |
| Income Tax Credit on Nonregulated Operations |  | (17) |  | (80) |
| NET INCOME | \$ | 7,027 | \$ | 11,144 |

Patronage
Capital and
Other Equity
BALANCE, DECEMBER 31, 2016
\$ 161,294
Net Income 2017
11,144
Capital Credits Retired - Net
$(3,239)$
BALANCE, DECEMBER 31, 2017
169,199
Net Income 2018
7,027
Capital Credits Retired - Net
BALANCE, DECEMBER 31, 2018
\$ 173,151

DAKOTA ELECTRIC ASSOCIATION CONSOLIDATED STATEMENTS OF CASH FLOWS YEARS ENDED DECEMBER 31, 2018 AND 2017 (DOLLARS IN THOUSANDS)

|  | 2018 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: |
| OPERATING ACTIVITIES |  |  |  |  |
| Net Income | \$ | 7,027 | \$ | 11,144 |
| Adjustments: |  |  |  |  |
| Depreciation and Amortization |  | 10,336 |  | 9,775 |
| GRE, CFC, CoBank, and Other Capital Credit Allocations |  | $(5,111)$ |  | $(7,166)$ |
| CFC, CoBank and Other Capital Credits Refunded |  | 555 |  | 492 |
| Increase in Current Assets |  | $(3,635)$ |  | $(3,298)$ |
| Decrease in Other Assets |  | 4 |  | 4 |
| (Decrease) Increase in Current Liabilities |  | $(2,993)$ |  | 1,766 |
| Increase in Other Liabilities |  | 295 |  | 66 |
| Net Cash from Operating Activities |  | 6,478 |  | 12,783 |
| INVESTING ACTIVITIES |  |  |  |  |
| Plant Additions, Net |  | $(13,097)$ |  | $(14,219)$ |
| Funds Received from Maturity of CFC Investment Certificates |  | 509 |  | 58 |
| Net Cash Used for Investing Activities |  | $(12,588)$ |  | $(14,161)$ |
| FINANCING ACTIVITIES |  |  |  |  |
| Loan Advances Received |  | 10,000 |  | 10,000 |
| Principal Payments on Long-Term Debt |  | $(7,686)$ |  | $(7,250)$ |
| Increase in Notes Payable |  | 4,334 |  | 1,100 |
| Patronage Capital Retirements Paid |  | $(3,075)$ |  | $(3,239)$ |
| Net Cash from Financing Activities |  | 3,573 |  | 611 |
| Net Change in Cash and Cash Equivalents |  | $(2,537)$ |  | (767) |
| Cash and Cash Equivalents, Beginning of Year |  | 3,081 |  | 3,848 |
| Cash and Cash Equivalents, End of Year | \$ | 544 | \$ | 3,081 |
| SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION |  |  |  |  |
| Cash Paid for |  |  |  |  |
| Interest | \$ | 4,297 | \$ | 4,142 |
| Income Taxes |  | 1 |  | 2 |
| SUPPLEMENTAL DISCLOSURE OF NON-CASH FINANCING ACTIVITIES |  |  |  |  |
| Equipment Acquired Through Capital Leases | \$ | 1,073 | \$ | 777 |

# DAKOTA ELECTRIC ASSOCIATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS DECEMBER 31, 2018 AND 2017 

## NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

## General

Dakota Electric Association (Dakota Electric) is a 108,000 member not-for-profit, memberowned electric distribution cooperative serving homes and businesses primarily in Dakota County, Minnesota. Dakota Electric also has a for-profit wholly-owned subsidiary, Midwest Energy Services (MES), which wholly-owns Energy Alternatives Parent (EA). EA whollyowns Energy Alternatives Solar L.L.C. (EAS). EAS leased non-member customer-sited solar photovoltaic generation and divested or exited the leases in 2018.

As a rate-regulated cooperative, Dakota Electric applies Accounting Standards Codification (ASC) 980 Regulated Operations. The application of generally accepted accounting principles by Dakota Electric differs in certain respects from the application by nonregulated businesses as a result of applying ASC 980. Such differences generally relate to the time at which certain items enter into the determination of net margins in order to follow the principle of matching costs and revenues.

## Consolidation Policy and Preparation of Financial Statements

The accompanying consolidated financial statements include the accounts of Dakota Electric and its wholly-owned subsidiary. All significant intercompany transactions and balances have been eliminated.

## Regulation

Dakota Electric is subject to regulation by the Minnesota Public Utilities Commission (MPUC). Dakota Electric's accounting policies and the accompanying consolidated financial statements conform to generally accepted accounting principles applicable to rate-regulated enterprises and reflect the effects of the ratemaking process.

## Revenue Recognition

Rates charged to members are established by the board of directors and are subject to approval by the MPUC before becoming effective. Billings are rendered on a cycle basis and revenue is accrued for service provided but not yet billed. Electric rates include adjustment clauses, which bill or credit members for purchased power, conservation, and property tax costs above or below the base levels in rate schedules.

## Receivables and Credit Policies

Trade receivables are uncollateralized member obligations due under normal trade terms requiring payment within 25 days from the billing date. Unpaid trade receivables with dates over 30 days old are assessed a $\$ 1$ late fee or interest at $1.5 \%$ of the unpaid balance, whichever is greater. Payments on trade and notes receivable are allocated to the earliest unpaid billings. The carrying amounts of trade and notes receivable are reduced by a valuation allowance that reflects management's best estimate of the amount that will not be collected. Management reviews all trade and notes receivable balances periodically and adjusts the allowance accounts based on current economic conditions and past experience.

## NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

## Property and Depreciation

Plant is recorded at original cost. The cost of additions to utility plant and replacement of retirement units of property are capitalized. Maintenance costs and replacements of minor items of property are charged to expense as incurred. Costs of depreciable units of utility plant retired are eliminated from the plant accounts. Such costs plus removal expenses less salvage are charged to accumulated depreciation.

Depreciation of Dakota Electric utility plant is computed using rates approved by the MPUC based on estimated useful lives of the various classes of property. In 2018 and 2017, provisions for depreciation approximated $3.5 \%$ and $3.4 \%$, respectively, of the average original cost of depreciable property.

## Cash and Cash Equivalents

Dakota Electric considers all highly liquid investments with an original maturity of three months or less to be cash equivalents. Cash equivalents are stated at cost, which approximates market value.

## Materials and Supplies

Materials and supplies are stated at average cost.

## Investments in Associated Companies

Investments principally represent undistributed allocated margins of other cooperatives and investment certificates in the Cooperative Finance Corporation (CFC). These investments are recorded at cost.

## Patronage Capital

Dakota Electric operates on a nonprofit basis. Amounts received from the furnishing of electric energy in excess of operating costs and expenses are assigned to members on a patronage basis. Other amounts received by Dakota Electric from its operations in excess of costs and expenses are either allocated to members on a patronage basis or included in other equities in accordance with the bylaws.

## Sales Taxes

Dakota Electric has members in municipalities in which those governmental units impose a sales tax on certain sales. Dakota Electric collects those sales taxes from its members and remits the entire amount to the various governmental units. Dakota Electric's accounting policy is to exclude the tax collected and remitted from revenue and cost of sales.

## Income Taxes

Dakota Electric is exempt from income taxes under Section 501 (c) (12) of the Internal Revenue Code and the State of Minnesota. MES provides for deferred taxes on temporary differences arising from assets and liabilities whose basis is different for financial reporting and income tax purposes.

## NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

## Income Taxes (Continued)

Dakota Electric will recognize future accrued interest and penalties related to unrecognized tax benefits in income tax expense if such penalties and interest are incurred. Under normal circumstances, Dakota Electric, MES and its subsidiaries are no longer subject to federal or state tax examinations by tax authorities for years before 2016.

Dakota Electric and subsidiaries undergo an annual analysis of various tax positions, assessing the likelihood of those positions being upheld upon examination with relevant tax authorities, as defined by ASC 740-10. The unrecognized tax benefit accrual was zero as of December 31, 2018 and December 31, 2017.

## Deferred Gain on RUS Buyout

In 1994 and 1995, Dakota Electric refinanced long-term debt payable to the Rural Utilities Service (RUS) with CFC. The early extinguishments resulted in gains of $\$ 11.3$ million, which are being amortized over the lives of the related CFC debt ( 24 and 32 years, respectively) using the sum of the year's digits method. Interest expense is net of amortization of \$76,000 and $\$ 110,000$ in 2018 and 2017, respectively.

## Accounting Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

## Concentrations of Credit Risk

Financial instruments, which potentially subject Dakota Electric to concentrations of credit risk, consist primarily of temporary cash investments and trade receivables. Dakota Electric invests excess cash with various high-quality financial institutions and, by policy, generally limits the amount of credit exposure to any one financial institution. Concentrations of credit risk with respect to trade receivables are limited due to Dakota Electric's large number of members and their dispersion across many industries. Dakota Electric does not obtain collateral to support trade receivables. Dakota Electric has not incurred and does not expect to incur significant credit losses.

Dakota Electric maintains its cash accounts in area financial institutions. The balances are insured by the Federal Deposit Insurance Corporation up to $\$ 250,000$. At various times during the year, Dakota Electric's cash balances exceed insurance.

## Concentration of Sources of Labor

At December 31, 2018, Dakota Electric had collective bargaining agreements covering 107 employees which represented $57 \%$ of total full-time employees. The collective bargaining agreements expire on December 31, 2020.

## NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

## Reclassifications

Certain reclassifications of amounts previously reported have been made to the accompanying consolidated financial statements to maintain consistency between periods presented. The reclassifications had no impact on net margin or members' equity.

## Subsequent Events

Dakota Electric has evaluated subsequent events through March 22, 2019 the date which the financial statements were available to be issued.

## NOTE 2 SUBSIDIARY OPERATING RESULTS

MES operating results for the years ended December 31, 2018 and 2017 are summarized below.

| 2018 |  | 2017 |  |
| :---: | :---: | :---: | :---: |
| (in thousands) |  |  |  |
| \$ | 12 | \$ | 63 |
|  | 21 |  | 302 |
|  | (9) |  | (239) |
|  | (17) |  | (80) |
| \$ | 8 | \$ | (159) |

At December 31, 2017, MES deferred tax liability totaled \$30,000. MES significant temporary differences resulted from differences in depreciation for financial reporting and income tax reporting. At December 31, 2018, MES had no depreciable assets and therefore, no deferred tax liability. Net current deferred tax assets relate to the difference in timing of deferred lease revenue and state net operating loss carryforwards. An offsetting valuation allowance is recorded as the certainty of realizing the future tax benefits of the state operating loss carryforward is uncertain at this time. The deferred tax asset balance was $\$ 2,000$ at December 31, 2017. At December 31, 2018, MES had no deferred lease revenue and therefore, no deferred tax asset.

## NOTE 3 INVESTMENTS IN ASSOCIATED COMPANIES AND OTHER INVESTMENTS

|  | 2018 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | (in thousands) |  |  |  |
| Great River Energy |  |  |  |  |
| Patronage Capital | \$ | 110,753 | \$ | 106,442 |
| Cooperative Finance Corporation |  |  |  |  |
| Capital Term Certificates - |  |  |  |  |
| Maturities 2070-2080, Interest Rate 5.0\% |  | 1,419 |  | 1,419 |
| Loan Term Certificates - |  |  |  |  |
| Maturities 2020-2030, Interest Rate 3.0\% |  | 532 |  | 532 |
| Loan Term Certificates - |  |  |  |  |
| Maturities 2019-2044, Interest Rate 0.0\% |  | 1,017 |  | 1,564 |
| Member Capital Securities - |  |  |  |  |
| Maturity 2044, Interest Rate 5.0\% |  | 1,000 |  | 1,000 |
| Patronage Capital |  | 4,260 |  | 4,155 |
|  |  | 8,228 |  | 8,670 |
| Other Investments |  | 2,075 |  | 1,897 |
| Total Investments in Associated Companies and Other Investments | \$ | 121,056 | \$ | 117,009 |

Investment in Great River Energy (GRE) represents undistributed allocated margins. Dakota Electric's share of annual GRE margins is generally based on the percentage of GRE's total power generation purchased by Dakota Electric. Under its wholesale power purchase agreement, Dakota Electric is committed to purchase at least 95\% of its electric power requirements from GRE until December 31, 2045. The rates paid are subject to change annually.

Investments in CFC represent undistributed patronage capital allocated to Dakota Electric as well as loan and capital term certificates, and member capital securities. The certificates represent investments made pursuant to CFC borrowing requirements.

## NOTE 4 PATRONAGE CAPITAL AND OTHER EQUITY

Dakota Electric has covenants with its lenders that restrict the retirement of patronage capital. After retirement, the capital of Dakota Electric must equal at least $30 \%$ of its total assets. No distributions can be made if there is unpaid, when due, any installments of principal or interest on the notes.

Capital credit retirements for estates, members reaching age 65, and members moving offline after July 1, 1998 are made upon request. Patronage capital credits arising from prior years' margins are retired as determined annually by the board of directors. As of December 31, 2018, capital credits through 1990 and $65 \%$ of 1991 have substantially been retired.

## NOTE 5 LONG-TERM DEBT

$\frac{2018}{\text { (in thousands) }}$

Cooperative Finance Corporation (CFC) mortgage notes $2.50 \%$ to $4.50 \%$, due in quarterly installments through

| 2048. | \$ | 67,415 | \$ | 61,776 |
| :---: | :---: | :---: | :---: | :---: |
| CoBank mortgage notes $1.91 \%$ to $4.56 \%$, due in monthly installments through 2043. |  | 32,433 |  | 35,292 |
| Capital Lease Provision (Note 6) |  | 1,892 |  | 1,285 |
|  |  | 101,740 |  | 98,353 |
| Less Current Portion |  | $(6,900)$ |  | $(7,695)$ |
| Long-Term Debt | \$ | 94,840 | \$ | 90,658 |

Substantially all assets are pledged as security on the mortgage notes. There are certain notes that contain provisions for changing interest rates at specified future dates.

Dakota Electric's debt agreements contain various restrictive covenants. Management believes Dakota Electric was in compliance with all restrictive covenants as of December 31, 2018 and 2017.

It is estimated that principal repayments on the above debt for the next five years, and thereafter, will be as follows:

Years Ending December 31,

| Total |  |
| :--- | ---: |
| (in thousands) |  |
| $\$$ | 6,900 |
|  | 6,677 |
|  | 6,299 |
|  | 6,550 |
|  | 6,242 |
|  | 69,072 |
|  |  |

## NOTE 6 CAPITAL LEASE PROVISION

Dakota Electric leases computer equipment and heavy vehicles under various long-term lease agreements. The leases expire at various dates through 2023.

Future minimum lease payments are as follows:

| Years Ending December 31, | Capital Leases |  |
| :---: | :---: | :---: |
|  | (in thousands) |  |
| 2019 | \$ | 595 |
| 2020 |  | 422 |
| 2021 |  | 295 |
| 2022 |  | 426 |
| 2023 |  | 382 |
| Total minimum lease payments |  | 2,120 |
| Less portion representing interest |  | (228) |
| Present value of minimum lease payments - Note 5 | \$ | 1,892 |

Leased property under capital leases at December 31, 2018 and 2017 includes:

| 2018 |  | 2017 |  |
| :---: | :---: | :---: | :---: |
|  | (in tho | an |  |
| \$ | 406 | \$ | 349 |
|  | 2,133 |  | 3,279 |
|  | 2,539 |  | 3,628 |
|  | (701) |  | $(1,019)$ |
| \$ | 1,838 | \$ | 2,609 |

## NOTE 7 NOTES PAYABLE (LINES OF CREDIT)

Dakota Electric has executed an as-offered uncommitted perpetual line of credit agreement providing Dakota Electric with short term loans of up to $\$ 30$ million on a revolving basis with CFC. Interest on unpaid principal is payable quarterly at rates established by CFC; this rate was $3.35 \%$ at December 31, 2018. There were outstanding balances of $\$ 16,334,000$ and $\$ 1,100,000$ on this line of credit at December 31, 2018 and 2017, respectively.

## NOTE 7 NOTES PAYABLE (LINES OF CREDIT) (CONTINUED)

Dakota Electric has a $\$ 30$ million line of credit agreement with CoBank, which expires September 30, 2019 and will subsequently be renewed. This agreement imposes a maximum of $\$ 30$ million outstanding unsecured debt at any one time to all lenders. Interest on unpaid principal is payable monthly at rates established by CoBank on a weekly basis ( $4.46 \%$ at December 31, 2018). There were outstanding balances of $\$ 0$ and $\$ 10,900,000$ on this line of credit at December 31, 2018 and 2017, respectively.

## NOTE 8 OTHER CURRENT LIABILITIES

|  | 2018 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | (in thousands) |  |  |  |
| Accrued Interest | \$ | 584 | \$ | 626 |
| Accrued Payroll |  | 611 |  | 463 |
| Accrued Sick Leave |  | 1,261 |  | 1,284 |
| Accrued Vacation |  | 1,468 |  | 1,473 |
| Unclaimed Capital Credits |  | 4,053 |  | 3,835 |
| Other |  | 198 |  | 104 |
|  | \$ | 8,175 | \$ | 7,785 |

## NOTE 9 PENSION PLANS

The majority of employees of Dakota Electric participate in the National Rural Electric Cooperative Association (NRECA) Retirement \& Security Plan (RS Plan), a defined benefit pension plan qualified under section 401 and tax exempt under section 501(a) of the Internal Revenue Code. It is considered a multiemployer plan under the accounting standards. The plan sponsor's Employer Identification Number is 53-0116145 and the Plan Number is 333.

A unique characteristic of a multi-employer plan compared to a single employer plan is that all plan assets are available to pay benefits of any plan participant. Separate asset accounts are not maintained for participating employers. This means that assets contributed by one employer may be used to provide benefits to employees of other participating employers.

## NOTE 9 PENSION PLANS (CONTINUED)

Dakota Electric makes contributions to the RS Plan equal to the amounts accrued for pension expense except for the periods when a moratorium on contributions has been in effect due to the plan reaching full funding limitations. Dakota Electric's contributions to the RS Plan in 2018 and in 2017 represented less than 5 percent of the total contributions made to the plan by all participating employers. Contributions to the plan for the years ended December 31, 2018 and 2017, were approximately $\$ 3,092,000$ and $\$ 3,085,000$, respectively. There have been no significant changes that affect the comparability of 2018 and 2017 contributions.

For the RS Plan, a "zone status" determination is not required, and therefore not determined, under the Pension Protection Act (PPA) of 2006. In addition, the accumulated benefit obligations and plan assets are not determined or allocated separately by individual employer. In total, the RS Plan was over 80\% funded on January 1, 2018 and over 80\% funded on January 1, 2017, based on the PPA funding target and PPA actuarial value of assets on those dates.

Because the provisions of the PPA do not apply to the RS Plan, funding improvement plans and surcharges are not applicable. Future contribution requirements are determined each year as part of the actuarial valuation of the plan and may change as a result of plan experience.

Dakota Electric has defined contribution savings plans for employees who meet certain age and service requirements. Dakota Electric contributed between $4.0 \%$ and $10.0 \%$ in 2018 and 2017 of eligible employees' compensation. Savings plan company contributions for the years ended December 31, 2018 and 2017, were approximately $\$ 1,061,000$ and $\$ 992,000$, respectively.

## NOTE 10 POST-RETIREMENT BENEFITS OTHER THAN PENSIONS

Dakota Electric provides certain health care benefits for salaried and hourly retired employees. Employees may become eligible for these health care benefits after attaining specified age and service requirements prior to retiring from Dakota Electric.

Dakota Electric is required to disclose the following information according to Accounting Standards Codification (ASC) 715 Compensation-Retirement Benefits in the notes to the financial statements.

## NOTE 10 POST-RETIREMENT BENEFITS OTHER THAN PENSIONS (CONTINUED)

The following table sets forth the plan's funded status reconciled with the obligation recognized in the accompanying balance sheet at December 31:

|  | 2018 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | (in thousands) |  |  |  |
| Change in Post-retirement Benefit Obligation |  |  |  |  |
| Benefit Obligation at Beginning of Year | \$ | 4,207 | \$ | 3,925 |
| Interest and Service Cost |  | 540 |  | 414 |
| Benefits Paid-Net of Retiree Contributions |  | (138) |  | (132) |
| Accumulated Post-retirement |  |  |  |  |
| Benefit Obligation at End of Year |  | 4,609 |  | 4,207 |
| Change in Plan Assets |  |  |  |  |
| Plan Assets at Beginning of Year |  | - |  | - |
| Employer Contributions |  | 138 |  | 132 |
| Benefits Paid-Net of Retiree Contributions |  | (138) |  | (132) |
| Plan Assets at End of Year |  | - |  | - |
| Funded Status |  | $(4,609)$ |  | $(4,207)$ |
| Net Post-retirement Benefit Obligation Recognized | \$ | $(4,609)$ | \$ | $(4,207)$ |
| Weighted Average Assumptions at December 31: |  |  |  |  |
| Discount Rate |  | 4.87\% |  | 4.87\% |

For measurement purposes, a $4.88 \%$ and $4.96 \%$ annual rate of increase in per capita cost of health care benefits was assumed for 2018 and 2017, respectively. Accelerating the rate of assumed health care costs by $1 \%$ each year would increase the benefit obligation as of December 31, 2018 and 2017 by $\$ 385,000$ and $\$ 360,000$, respectively.

Post-retirement benefit payments over the next 10 years are estimated to be as follows:

| Years ending December 31, | Estimated <br> Payments |
| :---: | :---: |
| 2019 | $\$$ |
| 2020 | 138 |
| 2021 | 144 |
| 2022 | 151 |
| 2023 | 159 |
| $2024-2028$ | 167 |

## NOTE 11 RELATED PARTY TRANSACTIONS

Dakota Electric is a member of and purchases its wholesale power from Great River Energy. The following is a summary of material transactions with Great River Energy for the years ended December 31, 2018 and 2017:

|  | 2018 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | (in thousands) |  |  |  |
| Purchase of Wholesale Power | \$ | 149,330 | \$ | 147,875 |
| Account Receivable | \$ | 13 | \$ | - |
| Accounts Payable for Purchased Power | \$ | 19,325 | \$ | 21,957 |
| Capital Credit Allocation | \$ | 4,311 | \$ | 6,404 |
| Accumulated Investment in Patronage Capital | \$ | 110,753 | \$ | 106,442 |

## NOTE 12 FAIR VALUE OF FINANCIAL INSTRUMENTS

The estimated fair values of financial instruments have been derived, in part, by management's assumptions, the estimated amount and timing of future cash flows and estimated discount rates. Different assumptions could significantly affect these estimated fair values. Accordingly, the net realizable value could be materially different from the estimates. In addition, the estimates are only indicative of the value of individual financial instruments and should not be considered an indication of the fair value of the Association. The following disclosures represent financial instruments in which the ending balances at December 31, 2018 and 2017 are not carried at fair value in their entirety on the Consolidated Balance Sheets.

The following methods and assumptions were used to estimate the fair value of a class of financial instruments at December 31, 2018 and 2017 for which it is practicable to estimate that value:

## Cash and Cash Equivalents

The carrying amount approximates fair value because of the short-term maturity of these instruments.

## Investment in Associated Companies

The investments are not actively traded and fair value is not readily estimable.

## Notes Payable and Long-Term Debt

The carrying amount approximates fair value based on current rates available to Dakota Electric for debt of similar maturities.

## Consolidated Balance Sheets

| ASSETS | $\underline{2018}$ | $\frac{2017}{\text { ousands) }}$ |
| :---: | :---: | :---: |
| CURRENT ASSETS |  |  |
| Cash and cash equivalents | \$544 | \$3,081 |
| Accounts receivable, less allowance for uncollectible accounts (2018-\$711; 2017-\$676) | 29,892 | 25,541 |
| Conservation cost and property tax recovery | 247 | 1,009 |
| Inventories, materials and supplies | 4,184 | 4,473 |
| Prepayments and interest receivable | 1,349 | 1,012 |
| Deferred charges | - | 2 |
| Total current assets | 36,216 | 35,118 |
| Investments in associated companies and other investments | 121,056 | 117,009 |
| UTILITY PLANT |  |  |
| Distribution system | 267,355 | 261,606 |
| General plant | 32,987 | 30,581 |
| Construction work in progress | 4,222 | 5,114 |
| Less accumulated depreciation | $(126,122)$ | $(122,693)$ |
| Net utility plant and work in progress | 178,442 | 174,608 |
| Deferred charges and other assets | 88 | 92 |

TOTAL ASSETS \$335,802

## LIABILITIES AND EQUITY

| CURRENT LIABILITIES |  |  |
| :---: | :---: | :---: |
| Accounts payable | \$26,204 | \$29,492 |
| Notes payable | 16,334 | 12,000 |
| Current portion of long-term debt | 6,900 | 7,695 |
| Property tax over-recovery | 24 | 0 |
| Customer security deposits | 505 | 529 |
| Accrued property and other taxes | 4,830 | 4,925 |
| Other current liabilities | 8,175 | 7,785 |
| Total current liabilities | 62,972 | 62,426 |
| Long-term debt | 94,840 | 90,658 |
| Post-retirement benefit obligation | 4,609 | 4,207 |
| Deferred credits and other liabilities | 230 | 337 |
| Total liabilities | 162,651 | 157,628 |
| MEMBERS' EQUITY |  |  |
| Patronage capital and other equity | 173,151 | 169,199 |
| TOTAL LIABILITIES AND MEMBERS' EQUITY | \$335,802 | \$326,827 |

## Consolidated Statements of Operations

2018
$\underline{2017}$
(in thousands)
OPERATING REVENUES

| Net sales | \$204,037 | \$202,277 |
| :---: | :---: | :---: |
| Cost of power / Cost of sales | 149,909 | 148,448 |
| Gross margin | 54,128 | 53,829 |
| OPERATING EXPENSES <br> Total operating expenses | 52,489 | 50,074 |
| Net operating margin | 1,639 | 3,755 |
| OTHER INCOME Total other income | 5,371 | 7,309 |
| Income before taxes | 7,010 | 11,064 |
| Income tax (credit) on non-regulated operations | (17) | (80) |
| NET INCOME | \$7,027 | \$11,144 |

## Consolidated Statements of Cash Flows

| Net cash provided by operations | $\$ 5,923$ | $\$ 12,291$ |
| :--- | ---: | ---: |
| Net cash used for investing activities | $(13,106)$ | $(14,446)$ |
| Net cash from financing activities | 4,646 |  |
| Net change in cash and cash equivalents | $(2,537)$ |  |
| Cash and cash equivalents at beginning of year | $(767)$ |  |
| CASH AND CASH EQUIVALENTS AT END OF YEAR | 3,081 |  |

Financial information presented in this report is summarized. Members may request a copy of the complete audited financial statements or view them online at dakotaelectric.com.


2018 Sources of Electric Revenue
Residential - 59\%
Large Commercial - 37\%
Small Commercial - 3\%
Streetlights \& Irrigation - 1\%


2018 Uses of Revenue
Cost of Power/Cost of Sales - 73\%
Labor \& Related Benefits - 12\%
Depreciation - 5\%
Operations Expense - 5\%
Net Operating Margin - 1\%
Net Interest Expense - 2\%
Property \& Other Tax - 2\%




| NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION FINANCIAL AND STATISTICAL REPORT |  |  |  |  |  |  | BORROWER NAME |  |  | Dakota Electric |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | BORROWER DESIGNATION |  |  | MN065 |
|  |  |  |  |  |  |  | ENDING DATE |  |  | 12/31/2014 |
| PART E. CHANGES IN UTILITY PLANT |  |  |  |  |  |  |  |  |  |  |
|  | PLANT ITEM |  | BALANCE BEGINNING OF YEAR <br> (a) |  | ADDITIONS <br> (b) | $\begin{aligned} & \text { RETIREMENTS } \\ & \text { (c) } \end{aligned}$ |  | ADJUSTMENTS AND TRANSFER <br> (d) | balance end of year <br> (e) |  |
| 1 | Distribution Plant Subtotal |  |  | 233,534,423 | 8,830,417 |  | 3,922,185 | 0 | 238,442,655 |  |
| 2 | General Plant Subtotal |  |  | 17,772,792 | 1,150,408 |  | 756,772 | 0 | 18,166,428 |  |
| 3 | Headquarters Plant |  |  | 7,861,521 | 209,431 |  | 107,374 | 0 | 7,963,578 |  |
| 4 | Intangibles |  |  | 0 | 0 |  | 0 | 0 | 0 |  |
| 5 | Transmission Plant Subtotal |  |  | 0 | 0 |  | 0 | 0 | 0 |  |
| 6 | Regional Transmission and Market Operation Plant |  |  | 0 | 0 |  | 0 | 0 | 0 |  |
| 7 | Production Plant-Steam |  |  | 0 | 0 |  | 0 | 0 | 0 |  |
| 8 | Production Plant - Nuclear |  |  | 0 | 0 |  | 0 | 0 | 0 |  |
| 9 | Production Plant - Hydro |  |  | 0 | 0 |  | 0 | 0 | 0 |  |
| 10 | Production Plant - Other |  |  | 0 | 0 |  | 0 | 0 | 0 |  |
| 11 | All Other Utility Plant |  |  | 0 | 0 | 0 |  | 0 |  |  |
| 12 | SUBTOTAL: (1 thru 11) |  |  | 259,168,736 | 10,190,256 |  | 4,786,331 | 0 | 264,572,661 |  |
| 13 | Construction Work in Progress |  |  | 5,053,958 | 356,493 |  |  |  | 5,410,451 |  |
| 14 | TOTAL UTILITY PLANT (12+13) |  |  | 264,222,694 | 10,546,749 |  | 4,786,331 | 0 | 269,983,112 |  |
|  | CFC NO LONGER REQUIRES SECTIONS "F", "G", AND "N" DATA <br> Those sections refer to data on "Analysis of Accumulated Provision for Depreciation" (F), "Materials and Supplies" (G), "Annual Meeting and Board Data" (N), and "Conservation Data" (P). |  |  |  |  |  |  |  |  |  |
| PART H. SERVICE INTERRUPTIONS |  |  |  |  |  |  |  |  |  |  |
|  | ITEM | Avg. Minutes per Consumer by Cause |  | Avg. Minutes per Consumer by Cause |  | Avg. Minutes per Consumer by Cause |  | Avg. Minutes per Consumer by Cause |  | TOTAL <br> (e) |
|  |  | Power Supplier <br> (a) |  | Major Event <br> (b) |  | Planned (c) |  | All Other <br> (d) |  |  |
| 1. | Present Year |  | 1.27 | 2.30 |  | 1.42 |  | 25.55 |  | 30.54 <br> 49.66 |
| 2. | Five-Year Average |  | 7.13 |  | 17.68 |  | 1.30 |  | 23.55 |  |
| PART 1. EMPLLOYEE - HOUR AND PAYROLL STATISTICS |  |  |  |  |  |  |  |  |  |  |
| 1. | Number of Full Time Employees |  |  | 195 |  | 4. Payroll - Expensed |  |  | 12,070,171 |  |
| 2. | Employee - Hours Worked - Regular Time |  |  |  | 414,835 | 5. Payroll - Capitalized |  |  | 2.077.570 |  |
| 3. | Employee - Hours Worked - Overtime |  |  | 7,650 |  | 6. Payroll - Other |  |  |  | 2,091,401 |
| PART J. PATRONAGE CAPITAL |  |  |  |  |  |  | PART K. DUE FROM CONSUMERS FOR ELECTRIC SERVICE |  |  |  |
|  | ITEM |  |  |  | $\begin{aligned} & \text { THIS YEAR } \\ & \text { (a) } \end{aligned}$ | CUMULATIVE <br> (b) | 1. Amount Due Over 60 Days: |  |  |  |
| 1. | General Retirement |  |  |  | 1,991,203 | 21,441,461 | 2. Amount Written Off During Year: |  |  |  |
| 2. | Special Retirements |  |  |  | 863,318 | 12,483,626 | 584,856 |  |  |  |
| 3. | Total Retirements ( $1+2$ ) |  |  |  | 2,854,521 | 33,925,087 |  |  |  |  |
| 4. | Cash Received from Retirement of Patronage Capital by Suppliers of Electric Power |  |  |  | 0 |  |  |  |  |  |
| 5. | Cash Received from Retirement of Patronage Capital by Lenders for Credit Extended to the Electric Syster |  |  |  | 347,308 |  |  |  |  |  |  |  |  |
| 6. |  |  |  |  | 347,308 |  |  |  |  |  |  |  |  |


| NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION FINANCIAL AND STATISTICAL REPORT |  |  |  |  |  |  | BORROWER NAME |  |  | Dakota Electric |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | BORROWER DESIGNATION |  |  | MN065 |
|  |  |  |  |  |  |  | ENDING DATE |  |  | 12/31/2014 |
| PART L. KWH PURCHASED AND TOTAL COST |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | INCLU | ded in total | OST |
|  | NAME OF SUPPLIER <br> (a) | CFC USE ONLY SUPPLIER CODE (b) | RENEWABLE ENERGY PROGRAM NAME <br> (c) | renewable FUEL TYPE <br> (d) | KWH PURCHASED (e) | $\begin{array}{\|c} \substack{\text { TOTAL } \\ \text { (f) }} \\ \hline \end{array}$ | AVERAGE COST PER KWH (cents) <br> (g) | FUEL COST ADJUSTMENT <br> (h) | WheEling \& OTHER CAARGE (or Credits) (i) | COMMENTS <br> (j) |
| 1 | Great River Energy |  |  | 0 None | 1,878,103,341 | 145,694,142 | 7.76 | 0 | 0 | Comments |
| 2 | Great River Energy |  |  | 1 Wind | 9,258,300 | 755,247 | 8.16 | 0 | 0 | Comments |
| 3 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 4 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 5 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 6 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 7 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 8 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 9 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 10 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 11 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 12 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 13 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 14 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 15 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 16 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 17 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 18 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 19 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 20 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 21 | TOTALS |  |  |  | 1,887,361,641 | 146,449,389 | 7.76 | 0 | 0 |  |


|  | NATIONAL RURAL UTILITIES | BORROWER NAME | Dakota Electric |
| :---: | :---: | :---: | :---: |
|  | COOPERATIVE FINANCE CORPORATION | BORROWER DESIGNATION | MN065 |
|  | FINANCIAL AND STATISTICAL REPORT | ENDING DATE | 12/31/2014 |
| PARI | URCHASED AND TOTAL COST (Continued) |  |  |
|  |  |  |  |
| 1 |  |  |  |
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| NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION FINANCIAL AND STATISTICAL REPORT |  |  |  | BORROWER NAME |  |  | Dakota Electric |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | BORROWER DESIGNATION |  |  | MN065 |
|  |  |  |  | ENDING DATE |  |  | 12/31/2014 |
| PART S. ENERGY EFFICIENCY PROGRAMS |  |  |  |  |  |  |  |
| Line \# | Classification | Added This Year |  |  | Total To Date |  |  |
|  |  | Number of Consumers <br> (a) | Amount Invested <br> (b) | ESTIMATED <br> MMBTU Savings <br> (c) | Number of Consumers <br> (d) | Amount Invested (e) | ESTIMATED MMBTU Savings <br> (f) |
| 1. | Residential Sales (excluding seasonal) | 0 | 0 | 0 | 0 | 0 | 0 |
| 2. | Residential Sales - Seasonal | 0 | 0 | 0 | 0 | 0 | 0 |
| 3. | Irrigation Sales | 0 | 0 | 0 | 0 | 0 | 0 |
| 4. | Comm. and Ind. 1000 KVA or Less | 0 | 0 | 0 | 0 | 0 | 0 |
| 5. | Comm. and Ind. Over 1000 KVA | 0 | 0 | 0 | 0 | 0 | 0 |
| 6. | Public Street and Highway Lighting | 0 | 0 | 0 | 0 | 0 | 0 |
| 7. | Other Sales to Public Authorities | 0 | 0 | 0 | 0 | 0 | 0 |
| 8. | Sales for Resales - RUS Borrowers | 0 | 0 | 0 | 0 | 0 | 0 |
| 9. | Sales for Resales - Other | 0 | 0 | 0 | 0 | 0 | 0 |
| 10. | TOTAL | 0 | 0 | 0 | 0 | 0 | 0 |


| NATIONAL RURAL UTILITIES <br> COOPERATIVE FINANCE CORPORATION FINANCIAL AND STATISTICAL REPORT |  | BORROWER NAME |  | Dakota Electric |
| :---: | :---: | :---: | :---: | :---: |
|  |  | BORROWER DESIGNATIO | ON | MN065 |
|  |  | ENDING DATE |  | 12/31/2014 |
| (All investments refer to your most recent CFC Loan Agreement) |  |  |  |  |
| 7a-PART 1 - INVESTMENTS |  |  |  |  |
|  | DESCRIPTION <br> (a) | INCLUDED (\$) <br> (b) | EXCLUDED (\$) <br> (c) | INCOME OR LOSS <br> (d) |
| 2. INVESTMENTS IN ASSOCIATED ORGANIZATIONS |  |  |  |  |
| 5 | Capital Term Certificates and Member Capital Securities | 0 | 4,900,548 |  |
| 6 | Patronage Capital GRE | 0 | 90,360,875 |  |
| 7 | Patronage Capital NRUCFC | 0 | 3,772,793 |  |
| 8 | Other | 6,361,712 |  |  |
| Subtotal (Line 5 thru 8) |  | 6,361,712 | 99,034,216 | 0 |
| 3. INVESTMENTS IN ECONOMIC DEVELOPMENT PROJECTS |  |  |  |  |
| 9 |  |  |  |  |
| 10 |  |  |  |  |
| 11 |  |  |  |  |
| 12 |  |  |  |  |
|  | Subtotal (Line 9 thru 12) | 0 | 0 | 0 |
| 4. OTHER INVESTMENTS |  |  |  | - |
| 13 |  |  |  |  |
| 14 |  |  |  |  |
| 15 |  |  |  |  |
| 16 |  |  |  |  |
| Subtotal (Line 13 thru 16) |  | 0 | 0 | 0 |
| 5. SPECIAL FUNDS |  |  |  | \% |
| 17 |  |  |  |  |
| 18 |  |  |  |  |
| 19 |  |  |  |  |
| 20 |  |  |  |  |
| Subtotal (Line 17 thru 20) |  | 0 | 0 | 0 |
| 6. CASH-GENERAL |  |  |  | 4 H |
| 21 | Anchor Bank-Farmington | 93,483 | 250,000 |  |
| 22 | Wells Fargo |  | 103,800 |  |
| 23 | Petty Cash | 508 |  |  |
| 24 |  |  |  |  |
| Subtotal (Line 21 thru 24) |  | 93,991 | 年 353,800 | 0 |
| 7. SPECIAL DEPOSITS |  |  |  |  |
| 25 |  |  |  |  |
| 26 |  |  |  |  |
| 27 |  |  |  |  |
| 28 |  |  |  |  |
|  | Subtotal (Line 25 thru 28) | 0 | 0 | 0 |
| 8. TEMPORARY INVESTMENTS |  |  |  |  |
| 29 |  |  |  |  |
| 30 |  |  |  |  |
| 31 |  |  |  |  |
| 32 |  |  |  |  |
|  | Subtotal (Line 29 thru 32) | 0 | 0 | 0 |
| 9. ACCOUNT \& NOTES RECEIVABLE - NET |  |  |  |  |
| 33 | Accounts Receivable - Non Electric Billing | 552,829 |  |  |
| 34 | Accounts Receivable - Other | 55,210 |  |  |
| 35 |  |  |  |  |
| 36 |  |  |  |  |
| Subtotal (Line 33 thru 36) |  | 608,039 | $\underline{0}$ | 0 |
| 10. COMMITMENTS TO INVEST WITHIN 12 MONTHS BUT NOT ACTUALLY PURCHASED |  |  |  |  |
| 37 |  |  |  |  |
| 38 |  |  |  |  |
| 39 |  |  |  |  |
| 40 |  |  |  |  |
| Subtotal (Line 37 thru 40) |  | 0 | $0 \square 0$ | 0 |
| Total |  | 7 7,063,742 | 2 99,388,016 | 0 |


| NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION FINANCIAL AND STATISTICAL REPORT |  |  | BORROWER NAM |  | Dakota Electric |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | BORROWER DESI | GNATION | MN065 |
|  |  |  | ENDING DATE |  | 12/31/2014 |
| (All investments refer to your most recent CFC Loan Agreement) |  |  |  |  |  |
| 7a - PART II. LOAN GUARANTEES |  |  |  |  |  |
| $\begin{aligned} & \text { Line } \\ & \text { No. } \\ & \hline \end{aligned}$ | Organization \& Guarantee Beneficiary <br> (a) | Maturity Date of Guarantee Obligation (b) | $\begin{aligned} & \text { Original Amount (\$) } \\ & \text { (c) } \end{aligned}$ | Performance Guarantee Exposure or Loan Balance (\$) (d) | Available Loans (Covered by Guarantees) (e) |
| 1 |  |  | 0 | 0 | 0 |
| 2 |  |  | 0 | 0 | 0 |
| 3 |  |  | 0 | 0 | 0 |
| 4 |  |  | 0 | 0 | 0 |
| 5 |  |  | 0 | 0 | 0 |
| TOTALS (Line 1 thru 5) |  | \% | 0 | 0 | 0 |
| 7a-PART III. LOANS |  |  |  |  |  |
| Line <br> No. | Name of Organization <br> (a) | Maturity Date $\qquad$ <br> (b) | $\begin{aligned} & \text { Original Amount (\$) } \\ & \text { (c) } \\ & \hline \end{aligned}$ | Loan Balance (\$) <br> (d) | Available Loans (e) |
| 1 |  |  | 0 | 0 | 0 |
| 2 |  |  | 0 | 0 | 0 |
| 3 |  |  | 0 | 0 | 0 |
| 4 |  |  | 0 | 0 | 0 |
| 5 |  |  | 0 | 0 | 0 |
| TOTALS (Line 1 thru 5) |  |  | 0 | 0 | 0 |
| 7a - PART IV. TOTAL INVESTMENTS AND LOANS GUARANTEES |  |  |  |  |  |
| 1 | TOTAL (Part I, Total - Column b + Part II, Totals - Column d + Column e + Part III, Totals - Column d + Column e) |  |  |  | 7,063,742 |
| 2 | LARGER OF (a) OR (b) |  |  |  | 73,704,558 |
|  | a. 15 percent of Total Utility Plant (CFC Form 7, Part C, Line 3) |  |  | 40,497,467 |  |
|  | b. 50 percent of Total Equity (CFC Form 7, Part C, Line 35) |  |  | 73,704,558 | +18 |


| NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION FINANCIAL AND STATISTICAL REPORT |  | BORROWER NAME |  | Dakota Electric Association |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | BORROWER DESIGNATION |  |  | MN065 |
|  |  | ENDING DATE |  |  | 12/31/2015 |
| Submit one electronic copy and one signed hard copy to CFC. Round all numbers to the nearest dollar. |  |  |  |  |  |
| CERTIFICATION | BALANCE CHECK RESULTS |  |  |  |  |
| We hereby certify that the entries in this report are in accordance with the accounts and other records of the system and reflect the status of the system to the best of our knowledge and belief. | 0 <br> 21 |  | AUTHORIZATION CHOICES |  |  |
| \% $3 / 58 / 16$ |  | Needs Aftention | A. NRECA uses rural electric system data for legislative, regulatory and other purposes. May we provide this report from your system to NRECA? |  |  |
| Signature of Office Manager or Accountant |  |  |  |  |  |
| H, |  | Mathes | B. Will you authorize CFC to share your data with other cooperatives? |  |  |
| Signature of Manager <br> Date |  |  |  | Wix |  |
| PART A. STATEMENT OF OPERATIONS |  |  |  |  |  |
| ITEM |  | YEAR-TO-DATE |  |  | THIS MONTH <br> (d) |
|  |  | LAST YEAR <br> (a) | THIS YEAR <br> (b) | BUDGET <br> (c) |  |
| 1. Operating Revenue and Patronage Capital |  | 195,879,147 | 192,551,946 | 0 | 0 |
| 2. Power Production Expense |  |  | 0 | 0 | 0 |
| 3. Cost of Purchased Power |  | 146,449,389 | 141,565,239 | 0 | 0 |
| 4. Transmission Expense |  |  | 0 | 0 | 0 |
| 5. Regional Market Operations Expense |  |  | 0 | 0 | 0 |
| 6. Distribution Expense - Operation |  | 6,788,118 | 6,871,777 | 0 | 0 |
| 7. Distribution Expense - Maintenance |  | 5,811,128 | 5,653,587 | 0 | 0 |
| 8. Consumer Accounts Expense |  | 4,252,599 | 4,743,770 | 0 | 0 |
| 9. Customer Service and Informational Expense |  | 3,053,562 | 3,347,544 | 0 | 0 |
| 10. Sales Expense |  | 0 |  | 0 | 0 |
| 11. Administrative and General Expense |  | 9,997,478 | 10,428,717 | 0 | 0 |
| 12. Total Operation \& Maintenance Expense (2 thru 11) |  | 176,352,274 | 172,610,634 | 0 | 0 |
| 13. Depreciation \& Amortization Expense |  | 8,574,817 | 8,716,070 | 0 | 0 |
| 14. Tax Expense - Property \& Gross Receipts |  | 3,325,897 | 3,443,074 | 0 | 0 |
| 15. Tax Expense - Other |  | 0 | 0 | 0 | 0 |
| 16. Interest on Long-Term Debt |  | 5,112,567 | 4,524,806 | 0 | 0 |
| 17. Interest Charged to Construction (Credit) |  |  |  | 0 | 0 |
| 18. Interest Expense - Other |  | 293,365 | 279,391 | 0 | 0 |
| 19. Other Deductions |  | $(80,874)$ | $(80,262)$ | 0 | 0 |
| 20. Total Cost of Electric Service (12 thru 19) |  | 193,578,046 | 189,493,713 | 0 | 0 |
| 21. Patronage Capital \& Operating Margins (1 minus 20) |  | 2,301,101 | 3,058,233 | 0 | 0 |
| 22. Non Operating Margins - Interest |  | 160,823 | 141,935 | 0 | 0 |
| 23. Allowance for Funds Used During Construction |  |  |  | 0 | 0 |
| 24. Income (Loss) from Equity Investments |  | $(123,548)$ | (119,289) | 0 | 0 |
| 25. Non Operating Margins - Other |  | 54,213 | 7,118 | 0 | 0 |
| 26. Generation \& Transmission Capital Credits |  | 9,989,099 | 2,329,871 | 0 | 0 |
| 27. Other Capital Credits \& Patronage Dividends |  | 753,619 | 811,469 | 0 | 0 |
| 28. Extraordinary Items |  |  |  | 0 | 0 |
| 29. Patronage Capital or Margins (21 thru 28) |  | 13,135,307 | 6,229,337 | 0 | 0 |
|  |  |  |  |  |  |
| PART B. DATA ON TRANSMISSION AND DISTRIBUTION PLANT |  |  |  |  |  |
| ITEM | YEAR-TO-DATE |  | ITEM | YEAR-TO-DATE |  |
|  | LAST YEAR <br> (a) | THIS YEAR <br> (b) |  | LAST YEAR <br> (a) | THIS YEAR <br> (b) |
| 1. New Services Connected | 722 | 835 | 5. Miles Transmission | 0 | 0 |
| 2. Services Retired | 94 | 80 | 6. Miles Distribution Overhead | 1,215 | 1,205 |
| 3. Total Services In Place | 104,066 | 104,821 | 7. Miles Distribution Underground | 2,819 | 2,858 |
| 4. Idle Services (Exclude Seasonal) | 457 | 441 | 8. Total Miles Energized ( $5+6+7$ ) | 4,034 | 4,063 |

CFC Form 7 (1/2016) - Version 1.05



| NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION FINANCIAL AND STATISTICAL REPORT |  |  |  |  |  |  | BORROWER NAME |  |  | Dakota Electric |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | BORROWER DESIGNATION |  |  | MN065 |
|  |  |  |  |  |  |  | ending date |  |  | 12/31/2015 |
| PARTL. KWH PURCHASED AND TOTAL COST |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | INCL | ded in total | OST |
|  | $\underset{\text { (a) }}{\text { NAME OF SUPLIER }}$ | CFC USE ONLY SUPPLIER CODE (b) | RENEWABLE ENERGY PROGRAM NAME <br> (c) | RENEWABLE FUEL TYPE <br> (d) | $\underset{\substack{\text { KWH } \\ \text { PURCHASED } \\ \text { (e) }}}{ }$ | $\underset{(f)}{\substack{\text { rotal } \\ \hline}}$ | average COST PER KWH (cents) <br> (g) | FUEL COST ADJUSTMENT <br> (h) | WHEELING \& OTHER CHARGES (or Credits) (i) | Comments <br> (j) |
| 1 | Great River Energy |  |  | 0 None | 1,841,522,585 | 140,894,344 | 7.65 | 0 | 0 | Comments |
| 2 | Great River Energy |  | Wellspring | 1 Wind | 8,333,100 | 670,895 | 8.05 | 0 | 0 | Cominents |
| 3 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 4 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 5 |  |  |  | O None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 6 |  |  |  | ONone | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 7 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 8 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 9 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 10 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 11 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 12 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 13 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 14 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 15 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 16 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 17 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 18 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 19 |  |  |  | O None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 20 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 21 | rotals |  |  |  | 1,849,855,685 | 141,565,239 | 7.65 | 0 | 0 |  |


| NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION FINANCIAL AND STATISTICAL REPORT |  | BORROWER NAME | Dakota Electric |
| :---: | :---: | :---: | :---: |
|  |  | BORROWER DESIGNATION | MN065 |
|  |  | ENDING DATE | 12/31/2015 |
| PART L. KWH PURCHASED AND TOTAL COST (Continued) |  |  |  |
| COMMMENTS |  |  |  |
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| NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION FINANCIAL AND STATISTICAL REPORT |  |  | BORROWER NAME |  |  | Dakota Electric |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | BORROWER DESIGNATION |  |  | MN065 |
|  |  |  | ENDING DATE |  |  | 12/31/2015 |
| PART M. LONG-TERM LEASES (If additional space is needed, use separate sheet) |  |  |  |  |  |  |
| LIST BELOW ALL "RESTRICTED PROPERTY" ** HELD UNDER "LONG TERM" LEASE. (If none, State "NONE") |  |  |  |  |  |  |
| NAME Of Lessor |  |  |  | RENTAL THIS YEAR |  |  |
| 1. |  | TYPE OF PROPERTY |  | \$0 |  |  |
| 2. |  |  |  | total |  | \$0 |
| 3. |  |  |  |  |  | so |
| ** "RESTRICTED PROPERTY" means all properties other than automobiles, trucks, tractors, other vehicles (including without limitation aircraft and ships), office and warehouse space and office equipment (including without limitation computers). "LONG TERM" means leases having unexpired terms in excess of 3 years and covering property having an intial cost in excess of $\$ 250,000$ ). |  |  |  |  |  |  |
| PART O. LONG-TERM DEBT SERVICE REQUREMENTS |  |  |  |  |  |  |
| NAME Of Lender |  | balance end of YEAR | BiLLED THIS YEAR |  |  |  |
|  |  | INTEREST $\qquad$ <br> (a) | PRINCIPAL <br> (b) | total <br> (c) | CFC USE ONLY <br> (d) |
| 1 | National Rural Utilities Cooperative Finance Corporation |  | 54,129,539 | 3,091,138 | 3,214,842 | 6,305,980 |  |
| 2 | NCSC | 0 | 0 | 0 | 0 |  |
| 3 | Farmer Mac | 6,866,692 | 290,686 | 439,107 | 729,793 |  |
| 4 | CoBank | 33,987,848 | 1,137,708 | 2,056,356 | 3,194,064 |  |
| 5 |  | 0 | 0 | 0 | 0 |  |
| 6 |  | 0 | 0 | 0 | 0 |  |
| 7 |  | 0 | 0 | 0 | 0 |  |
| 8 |  | 0 | 0 | 0 | 0 |  |
| 9 |  | 0 | 0 | 0 | 0 |  |
| 10 | Principal Payments Received from Ultimate Recipients of IRP Loans |  |  | 0 |  |  |
| 11 | Principal Payments Received from Ultimate Recipients of REDL Loans |  |  | 0 |  |  |
| 12 | TOTAL (Sum of 1 thru 9) | \$94,984,079 | \$4,519,532 | \$5,710,305 | \$10,229,837 |  |



| NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION FINANCIAL AND STATISTICAL REPORT |  |  |  | BORROWER NAME |  |  | Dakota Electric |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | BORROWER DESIGNATION |  |  | MN065 |
|  |  |  |  | ENDING DATE |  |  | 12/31/2015 |
| PART S. ENERGY EFFICIENCY PROGRAMS |  |  |  |  |  |  |  |
| Line \# | Classification | Added This Year |  |  | Total To Date |  |  |
|  |  | Number of Consumers <br> (a) | Amount Invested <br> (b) | ESTIMATED MMBTU Savings <br> (c) | Number of Consumers <br> (d) | Amount Invested <br> (e) | ESTIMATED MMBTU Savings <br> (f) |
| 1. | Residential Sales (excluding seasonal) | 0 | 0 | 0 | 0 | 0 | 0 |
| 2. | Residential Sales - Seasonal | 0 | 0 | 0 | 0 | 0 | 0 |
| 3. | Irrigation Sales | 0 | 0 | 0 | 0 | 0 | 0 |
| 4. | Comm. and Ind. 1000 KVA or Less | 0 | 0 | 0 | 0 | 0 | 0 |
| 5. | Comm. and Ind. Over 1000 KVA | 0 | 0 | 0 | 0 | 0 | 0 |
| 6. | Public Street and Highway Lighting | 0 | 0 | 0 | 0 | 0 | 0 |
| 7. | Other Sales to Public Authorities | 0 | 0 | 0 | 0 | 0 | 0 |
| 8. | Sales for Resales - RUS Borrowers | 0 | 0 | 0 | 0 | 0 | 0 |
| 9. | Sales for Resales - Other | 0 | 0 | 0 | 0 | 0 | 0 |
| 10. | TOTAL | 0 | 0 | 0 | 0 | 0 | 0 |


| NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION FINANCIAL AND STATISTICAL REPORT |  | BORROWER NAME |  | Dakota Electric |
| :---: | :---: | :---: | :---: | :---: |
|  |  | BORROWER DESIGNATI | ION | MN065 |
|  |  | ENDING DATE |  | 12/31/2015 |
| (All investments refer to your most recent CFC Loan Agreement) |  |  |  |  |
| 7a - PART 1 - INYESTMENTS |  |  |  |  |
|  | DESCRIPTION <br> (a) | INCLUDED (\$) <br> (b) | EXCLUDED (\$) <br> (c) | INCOME OR LOSS <br> (d) |
| 2. INVESTMENTS IN ASSOCIATED ORGANIZATIONS |  |  |  |  |
| 5 | Capital Term Certificates and Member Capital Securities |  | 4,838,374 |  |
| 6 | Patronage Capital GRE |  | 92,690,746 |  |
| 7 | Patronage Capital NRUCFC |  | 3,930,487 |  |
| 8 | Other | 6,396,584 |  |  |
| Subtotal (Line 5 thru 8) |  | 6,396,584 | - 101,459,607 | 0 |
| 3. INVESTMIENTS IN ECONOMIC DEVELOPMENT PROJECTS |  |  |  |  |
| 9 |  |  |  |  |
| 10 |  |  |  |  |
| 11 |  |  |  |  |
| 12 |  |  |  |  |
| Subtotal (Line 9 thru 12) |  | 0 | 0 | 0 |
| 4. OTHER INVESTMENTS |  |  |  |  |
| 13 |  |  |  |  |
| 14 |  |  |  |  |
| 15 |  |  |  |  |
| 16 |  |  |  |  |
| Subtotal (Line 13 thru 16) |  | 0 | $0 \quad 0$ | 0 |
| 5. SPECIAL FUNDS |  |  |  |  |
| 17 |  |  |  |  |
| 18 |  |  |  |  |
| 19 |  |  |  |  |
| 20 |  |  |  |  |
| Subtotal (Line 17 thru 20) |  | 0 | 0 | 0 |
| 6. CASH-GENERAL |  |  |  |  |
| 21 | Anchor Bank-Farmington | 110,872 | 2 250,000 |  |
| 22 | Wells Fargo | 0 | - 175,445 |  |
| 23 | Petty Cash | 508 | - 0 |  |
| 24 |  |  |  |  |
| Subtotal (Line 21 thru 24) |  | 111,380 | 425,445 | 0 |
| 7. SPECIAL DEPOSITS |  |  |  |  |
| 25 |  |  |  |  |
| 26 |  |  |  |  |
| 27 |  |  |  |  |
| 28 |  |  |  |  |
| Subtotal (Line 25 thru 28) |  | 0 | 0 | 0 |
| 8. TEMPORARY INVESTMENTS |  |  |  |  |
| 29 |  |  |  |  |
| 30 |  |  |  |  |
| 31 |  |  |  |  |
| 32 |  |  |  | . |
| Subtotal (Line 29 thru 32) |  | 0 | 0 | 0 |
| 9. ACCOUNT \& NOTES RECEIVABLE - NET |  |  |  |  |
| 33 | Accounts Receivable - Non Electric Billing | 346,850 |  |  |
| 34 | Accounts Receivable - Other | 71,180 |  |  |
| 35 |  |  |  |  |
| 36 |  |  |  |  |
| Subtotal (Line 33 thru 36) |  | 418,030 | 0 | 0 |
| 10. COMMITMENTS TO INVEST WITHIN 12 MONIHS BUT NOT ACTUALLY PURCHASED |  |  |  |  |
| 37 |  |  |  |  |
| 38 |  |  |  |  |
| 39 |  |  |  |  |
| 40 |  |  |  |  |
| Subtotal (Line 37 thru 40) |  | 0 | 0 | 0 |
|  |  | 6,925,994 | 101,885,052 | 0 |




CFC Form 7 (2/2017) - Version 2.07

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|  | NATIONAL RURAL UTILITIES | BORROWER NAME | Dakota Electric |
| :---: | :---: | :---: | :---: |
|  | COOPERATIVE FINANCE CORPORATION | BORROWER DESIGNATION | MN065 |
|  | FINANCIAL AND STATISTICAL REPORT | ENDING DATE | 12/31/2016 |
| PAR | RCHASED AND TOTAL, COST (Continued) |  |  |
|  |  |  |  |
| 1 |  |  |  |
| 2 |  |  |  |
| 3 |  |  |  |
| 4 |  |  |  |
| 5 |  |  |  |
| 6 |  |  |  |
| 7 |  |  |  |
| 8 |  |  |  |
| 9 |  |  |  |
| 10 |  |  |  |
| 11 |  |  |  |
| 12 |  |  |  |
| 13 |  |  |  |
| 14 |  |  |  |
| 15 |  |  |  |
| 16 |  |  |  |
| 17 |  |  |  |
| 18 |  |  |  |
| 19 |  |  |  |
| 20 |  |  |  |


|  |  |  | BORROWER NAME |  |  | Dakota Electric |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| COOPERATIVE FINANCE CORPORATION <br> FINANCIAL AND STATISTICAL REPORT |  |  | BORROWER DESIGNATION |  |  | MN065 |
|  |  |  | ENDING DATE |  |  | 12/31/2016 |
| PART M. LONG-TERM LEASES (If additional space is needed, use separate sheet) |  |  |  |  |  |  |
| LIST BELOW ALL "RESTRICTED PROPERTY" ** HELD UNDER "LONG TERM" LEASE. (If none, State "NONE") |  |  |  |  |  |  |
| NAME OF LESSOR |  | TYPE OF PROPERTY |  | RENTAL THIS YEAR |  |  |
| 1. |  |  |  | \$0 |  |  |
| 2. |  |  |  |  |  | \$0 |
| 3. |  |  |  | TOTAL |  | \$0 |
| ** "RESTRICTED PROPERTY" means all properties other than automobiles, trucks, tractors, other vehicles (including without limitation aircraft and ships), office and warehouse space and office equipment (including without limitation computers). "LONG TERM" means leases having unexpired terms in excess of 3 years and covering property having an intial cost in excess of $\$ 250,000$ ). |  |  |  |  |  |  |
| PART O. LONG-TERM DEBI SERVICE REQUIREMENTS |  |  |  |  |  |  |
|  | NAME OF LENDER |  | BILLED THIS YEAR |  |  |  |
|  |  | BALANCE END OF YEAR | INTEREST <br> (a) | PRINCIPAL <br> (b) | TOTAL <br> (c) | CFC USE ONLY <br> (d) |
| 1 | National Rural Utilities Cooperative Finance Corporation | 49,413,388 | 2,459,897 | 3,100,546 | 5,560,443 |  |
| 2 | NCSC | 0 | 0 | 0 | 0 |  |
| 3 | Farmer Mac | 6,410,144 | 273,245 | 456,548 | 729,793 |  |
| 4 | CoBank | 38,055,309 | 1,451,952 | 2,632,539 | 4,084,491 |  |
| 5 |  | 0 | 0 | 0 | 0 |  |
| 6 |  | 0 | 0 | 0 | 0 |  |
| 7 |  | 0 | 0 | 0 | 0 |  |
| 8 |  | 0 | 0 | 0 | 0 |  |
| 9 |  | 0 | 0 | 0 | 0 |  |
| 10 | Principal Payments Received from Ultimate Recipients of IRP Loans |  |  | 0 |  |  |
| 11 | Principal Payments Received from Ultimate Recipients of REDL Loans |  |  | 0 |  |  |
| 12 | TOTAL (Sum of 1 thru 9) | \$93,878,841 | \$4,185,094 | \$6,189,633 | \$10,374,727 |  |



| NATIONAL RURAL UTILITIES |  |  |  | BORROWER NAME |  |  | Dakota Electric |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| COOPERATIVE FINANCE CORPORATION FINANCIAL AND STATISTICAL REPORT |  |  |  | BORROWER DESIGNATION |  |  | MN065 |
|  |  |  |  | ENDING DATE |  |  | 12/31/2016 |
| PART S. ENERGY EFFICIENCY PROGRAMIS |  |  |  |  |  |  |  |
| Line \# | Classification | Added This Year |  |  | Total To Date |  |  |
|  |  | Number of Consumers <br> (a) | Amount Invested <br> (b) | ESTIMATED MMBTU Savings (c) | Number of Consumers <br> (d) | Amount Invested <br> (e) | ESTIMATED MMBTU Savings (f) |
| 1. | Residential Sales (excluding seasonal) | 0 | 0 | 0 | 0 | 0 | 0 |
| 2. | Residential Sales - Seasonal | 0 | 0 | 0 | 0 | 0 | 0 |
| 3. | Irrigation Sales | 0 | 0 | 0 | 0 | 0 | 0 |
| 4. | Comm, and Ind. 1000 KVA or Less | 0 | 0 | 0 | 0 | 0 | 0 |
| 5. | Comm. and Ind. Over 1000 KVA | 0 | 0 | 0 | 0 | 0 | 0 |
| 6. | Public Street and Highway Lighting | 0 | 0 | 0 | 0 | 0 | 0 |
| 7. | Other Sales to Public Authorities | 0 | 0 | 0 | 0 | 0 | 0 |
| 8. | Sales for Resales - RUS Borrowers | 0 | 0 | 0 | 0 | 0 | 0 |
| 9. | Sales for Resales - Other | 0 | 0 | 0 | 0 | 0 | 0 |
| 10. | TOTAL | 0 | 0 | 0 | 0 | 0 | 0 |



| NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION FINANCIAL AND STATISTICAL REPORT |  |  | BORROWER NAM |  | Dakota Electric |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | BORROWER DESI | GNATION | MN065 |
|  |  |  | ENDING DATE |  | 12/31/2016 |
| (All investments refer to your most recent CFC Loan Agreement) |  |  |  |  |  |
| 7a PART II. LOAN GUARANTEES |  |  |  |  |  |
| Line <br> No. | Organization \& Guarantee Beneficiary <br> (a) | Maturity Date of Guarantee Obligation (b) | Original Amount (\$) <br> (c) | Performance Guarantee Exposure or Loan Balance (\$) <br> (d) | Available Loans (Covered by Guarantees) <br> (e) |
| 1 |  |  | 0 | 0 | 0 |
| 2 |  |  | 0 | 0 | 0 |
| 3 |  |  | 0 | 0 | 0 |
| 4 |  |  | 0 | 0 | 0 |
| 5 |  |  | 0 | 0 | 0 |
| TOTALS (Line 1 thru 5) |  |  | 0 | 0 | 0 |
| 7a - PART III. LOANS |  |  |  |  |  |
| Line No. | Name of Organization <br> (a) | Maturity Date <br> (b) | $\begin{aligned} & \text { Original Amount (\$) } \\ & \text { (c) } \\ & \hline \end{aligned}$ | Loan Balance (\$) <br> (d) | Available Loans <br> (e) |
| 1 |  |  | 0 | 0 | 0 |
| 2 |  |  | 0 | 0 | 0 |
| 3 |  |  | 0 | 0 | 0 |
| 4 |  |  | 0 | 0 | 0 |
| 5 |  |  | 0 | 0 | 0 |
| TOTALS (Line 1 thru 5) |  |  | 0 | 0 | 0 |
| 7a - PART IV. TOTAL INYESTMENTS AND LOANS GUARANTEES |  |  |  |  |  |
| 1 | TOTAL (Part I, Total - Column b + Part II, Totals - Column d + Column e + Part III, Totals - Column d + Column e) |  |  |  | 7,641,812 |
| 2 | LARGER OF (a) OR (b) |  |  |  | 80,647,096 |
|  | a. 15 percent of Total Utility Plant (CFC Form 7, Part C, Line 3) |  |  | 42,898,551 |  |
|  | b. 50 percent of Total Equity (CFC Form 7, Part C, Line 35) |  |  | 80,647,096 |  |


| NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION FINANCIAL AND STATISTICAL REPORT |  | BORROWER NAME |  | Dakota Electric Association |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | BORROWER DESIGNATION |  |  | MN065 |
|  |  | ENDING DATE |  |  | 12/31/2017 |
| Submit one electronic copy and one signed hard copy to CFC. Round all numbers to the nearest dollar. |  |  |  |  |  |
| CERTIFICATION | BAILANCE CHECK RESUITS |  |  |  |  |
| We hereby certify that the entries in this report are in accordance with the accounts and other records of the system and reflect the status of the system to the best of our knowledge and belief. | 0 <br> 21 |  | AUTHORIZATION CHOICES |  |  |
| $3 / 14 / 18$ |  | Needs Attention | A. NRECA uses rural electric system data for legislative, regulatory and other purposes. May we provide this report from your system to NRECA? |  |  |
| Signature of Office Manager or Accountant Date |  |  | $0$ | NO |  |
|  |  | Warches | B. Will you authorize CFC to share | our data with other <br> w | operatives? |
| PART A. STATEMENT OF OPERATIONS |  |  |  |  |  |
| ITEM |  | YEAR-TO-DATE |  |  | THIS MONTH <br> (d) |
|  |  | LAST YEAR <br> (a) | THIS YEAR | BUDGET <br> (c) |  |
| 1. Operating Revenue and Patronage Capital |  | 201,585,762 | 201,226,992 | 0 | 0 |
| 2. Power Production Expense |  |  |  | 0 | 0 |
| 3. Cost of Purchased Power |  | 148,623,624 | 147,874,758 | 0 | 0 |
| 4. Transmission Expense |  |  |  | 0 | 0 |
| 5. Regional Market Operations Expense |  |  |  | 0 | 0 |
| 6. Distribution Expense - Operation |  | 6,720,766 | 6,584,595 | 0 | 0 |
| 7. Distribution Expense - Maintenance |  | 5,742,935 | 5,812,250 | 0 | 0 |
| 8. Consumer Accounts Expense |  | 3,977,008 | 4,360,768 | 0 | 0 |
| 9. Customer Service and Informational Expense |  | 3,919,789 | 4,099,386 | 0 | 0 |
| 10. Sales Expense |  |  |  | 0 | 0 |
| 11. Administrative and General Expense |  | 10,503,325 | 11,341,864 | 0 | 0 |
| 12. Total Operation \& Maintenance Expense (2 thru 11) |  | 179,487,447 | 180,073,621 | 0 | 0 |
| 13. Depreciation \& Amortization Expense |  | 8,850,603 | 9,491,587 | 0 | 0 |
| 14. Tax Expense - Property \& Gross Receipts |  | 3,597,538 | 3,609,198 | 0 | 0 |
| 15. Tax Expense - Other |  |  |  | 0 | 0 |
| 16. Interest on Long-Term Debt |  | 4,169,404 | 3,747,120 | 0 | 0 |
| 17. Interest Charged to Construction (Credit) |  | 0 | 0 | 0 | 0 |
| 18. Interest Expense - Other |  | 259,115 | 447,606 | 0 | 0 |
| 19. Other Deductions |  | $(37,218)$ | (22,241) | 0 | 0 |
| 20. Total Cost of Electric Service (12 thru 19) |  | 196,326,889 | 197,346,891 | 0 | 0 |
| 21. Patronage Capital \& Operating Margins (1 minus 20) |  | 5,258,873 | 3,880,101 | 0 | 0 |
| 22. Non Operating Margins - Interest |  | 166,539 | 189,286 | 0 | 0 |
| 23. Allowance for Funds Used During Construction |  | 0 | 0 | 0 | 0 |
| 24. Incoine (Loss) from Equity Investments |  | $(114,978)$ | (158,851) | 0 | 0 |
| 25. Non Operating Margins - Other |  | $(38,499)$ | 67,576 | 0 | 0 |
| 26. Generation \& Transmission Capital Credits |  | 7,347,424 | 6,403,850 | 0 | 0 |
| 27. Other Capital Credits \& Patronage Dividends |  | 869,880 | 761,693 | 0 | 0 |
| 28. Extraordinary Items |  | 0 | 0 | 0 | 0 |
| 29. Patronage Capital or Margins (21 thru 28) |  | 13,489,239 | 11,143,655 | 0 | 0 |
|  |  |  |  |  |  |
| PART B. DATA ON TRANSMISSION AND DISTRIBUTION PLANT |  |  |  |  |  |
| ITEM | YEAR-TO-DATE |  | ITEM | YEAR-TO-DATE |  |
|  | LAST YEAR <br> (a) | THIS YEAR <br> (b) |  | LAST YEAR <br> (a) | THIS YEAR <br> (b) |
| 1. New Services Connected | 1,159 | 1,407 | 5. Miles Transmission | 0 | 0 |
| 2. Services Retired | 113 | 73 | 6. Miles Distribution Overhead | 1,197 | 1,195 |
| 3. Total Services In Place | 105,867 | 107,201 | 7. Miles Distribution Underground | 2,898 | 2,937 |
| 4. Idle Services (Exclude Seasonal) | 386 | 366 | 8. Total Miles Energized (5+6+7) | 4,095 | 4,132 |

CFC Form 7 (2/2018) - Version 2.14







| NATIONAL RURAL UTILITIES |  |  |  | BORROWER NAME |  |  | Dakota Electric |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| COOPERATIVE FINANCE CORPORATION FINANCIAL AND STATISTICAL REPORT |  |  |  | BORROWER DESIGNATION |  |  | MN065 |
|  |  |  |  | ENDING DATE |  |  | 12/31/2017 |
| PART S. ENERGY EFFICIENCY PROGRAMS |  |  |  |  |  |  |  |
| Line \# | Classification | Added This Year |  |  | Total To Date |  |  |
|  |  | Number of Consumers <br> (a) | Amount Invested <br> (b) | ESTIMATED MMBTU Savings <br> (c) | Number of Consumers <br> (d) | Amount Invested <br> (e) | ESTIMATED MMBTU Savings <br> (f) |
| 1. | Residential Sales (excluding seasonal) | 0 | 0 | 0 | 0 | 0 | 0 |
| 2. | Residential Sales - Seasonal | 0 | 0 | 0 | 0 | 0 | 0 |
| 3. | Irrigation Sales | 0 | 0 | 0 | 0 | 0 | 0 |
| 4. | Comm. and Ind. 1000 KVA or Less | 0 | 0 | 0 | 0 | 0 | 0 |
| 5. | Comm. and Ind. Over 1000 KVA | 0 | 0 | 0 | 0 | 0 | 0 |
| 6. | Public Street and Highway Lighting | 0 | 0 | 0 | 0 | 0 | 0 |
| 7. | Other Sales to Public Authorities | 0 | 0 | 0 | 0 | 0 | 0 |
| 8. | Sales for Resales - RUS Borrowers | 0 | 0 | 0 | 0 | 0 | 0 |
| 9. | Sales for Resales - Other | 0 | 0 | 0 | 0 | 0 | 0 |
| 10. | TOTAL | 0 | 0 | 0 | 0 | 0 | 0 |



| NATIONAL RURAL UTILITIES <br> COOPERATIVE FINANCE CORPORATION FINANCIAL AND STATISTICAL REPORT |  |  | BORROWER NAM |  | Dakota Electric |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | BORROWER DESI | GNATION | MN065 |
|  |  |  | ENDING DATE |  | 12/31/2017 |
| (All investments refer to your most recent CFC Loan Agreement) |  |  |  |  |  |
| 7a - PART II. IOAN GUARANTEES |  |  |  |  |  |
| $\begin{aligned} & \text { Line } \\ & \text { No. } \\ & \hline \end{aligned}$ | Organization \& Guarantee Beneficiary <br> (a) | Maturity Date of Guarantee Obligation (b) | Original Amount (\$) (c) | Performance Guarantee Exposure or Loan Balance (\$) <br> (d) | Available Loans (Covered by Guarantees) (e) |
| 1 |  |  | 0 | 0 | 0 |
| 2 |  |  | 0 | 0 | 0 |
| 3 |  |  | 0 | 0 | 0 |
| 4 |  |  | 0 | 0 | 0 |
| 5 |  |  | 0 | 0 | 0 |
| TOTALS (Line 1 thru 5) |  |  | 0 | 0 | 0 |
| 7a - PART III. LOANS |  |  |  |  |  |
| Line <br> No. | Name of Organization <br> (a) | Maturity Date <br> (b) | Original Amount (\$) <br> (c) | Loan Balance (\$) <br> (d) | Available Loans (e) |
| 1 |  |  | 0 | 0 | 0 |
| 2 |  |  | 0 | 0 | 0 |
| 3 |  |  | 0 | 0 | 0 |
| 4 |  |  | 0 | 0 | 0 |
| 5 |  |  | 0 | 0 | 0 |
| TOTALS (Line 1 thru 5) |  |  | 0 | 0 | 0 |
| 7a - PART IV. TOTAL INVISSTMUENLS AND LOANS GUARANTEES |  |  |  |  |  |
|  | TOTAL (Part I, Total - Column b + Part II, Totals - Column d + Column e + Part III, Totals - Column d + Column e) |  |  |  | 6,938,771 |
| 2 | LARGER OF (a) OR (b) |  |  |  | 84,599,529 |
|  | a. 15 percent of Total Utility Plant (CFC Form 7, Part C, Line 3) |  |  | 44,450,073 |  |
|  | b. 50 percent of Total Equity (CFC Form 7, Part C, Line 35) |  |  | 84,599,529 | S |



CFC Form 7 (12/2018) - Version 3.05.1



| NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION FINANCIAL AND STATISTICAL REPORT |  |  |  |  |  |  | BORROWER NAME |  |  | Dakota Electric |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | BORROWER DESIGNATION |  |  | MN065 |
|  |  |  |  |  |  |  | ENDING DATE |  |  | 12/31/2018 |
| PART L. KWH PURCHASED AND TOTAL COST |  |  |  |  |  |  |  |  |  |  |
|  | NAME OF SUPPLIER(a) | CFC USE ONLY <br> SUPPLIER <br> CODE <br> (b) | RENEWABLE <br> ENERGY <br> PROGRAM <br> NAME <br> (c) | RENEWABLE FUEL TYPE <br> (d) | KWH <br> PURCHASED <br> (e) | TOTAL COST(f) | AVERAGE COST PER KWH (cents) (g) | INCLUDED IN TOTAL COST |  |  |
|  |  |  |  |  |  |  |  | FUEL COST ADJUSTMENT <br> (h) | WHEELING \& OTHER CHARGES (or Credits) $\qquad$ (i) | COMMENTS <br> (j) |
| 1 | Great River Energy |  |  | 0 None | 1,892,226,617 | 149,290,724 | 7.89 | 0 | 0 | Comments |
| 2 | Great River Energy |  | Wellspring | 1 Wind | 8,954,600 | 35,818 | 0.40 | 0 | 0 | Comments |
| 3 | Great River Energy |  | Wellspring | 2 Sun | 174,600 | 3,492 | 2.00 | 0 | 0 | Comments |
| 4 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 5 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 6 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 7 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 8 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 9 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 10 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 11 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 12 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 13 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 14 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 15 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 16 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 17 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 18 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 19 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 20 |  |  |  | 0 None | 0 | 0 | 0.00 | 0 | 0 | Comments |
| 21 | TOTALS |  |  |  | 1,901,355,817 | 149,330,034 | 7.85 | 0 | 0 |  |


|  | NATIONAL RURAL UTILITIES | BORROWER NAME | Dakota Electric |
| :---: | :---: | :---: | :---: |
|  | COOPERATIVE FINANCE CORPORATION | BORROWER DESIGNATION | MN065 |
|  | FINANCIAL AND STATISTICAL REPORT | ENDING DATE | 12/31/2018 |
| PAI | RCHASED AND TOTAL COST (Continued) |  |  |
|  |  |  |  |
| 1 |  |  |  |
| 2 |  |  |  |
| 3 |  |  |  |
| 4 |  |  |  |
| 5 |  |  |  |
| 6 |  |  |  |
| 7 |  |  |  |
| 8 |  |  |  |
| 9 |  |  |  |
| 10 |  |  |  |
| 11 |  |  |  |
| 12 |  |  |  |
| 13 |  |  |  |
| 14 |  |  |  |
| 15 |  |  |  |
| 16 |  |  |  |
| 17 |  |  |  |
| 18 |  |  |  |
| 19 |  |  |  |
| 20 |  |  |  |




| NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION FINANCIAL AND STATISTICAL REPORT |  |  |  | BORROWER NAME |  |  | Dakota Electric |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | BORROWER DESIGNATION |  |  | MN065 |
|  |  |  |  | ENDING DATE |  |  | 12/31/2018 |
| PART S. ENERGY EFIICIENCY PROGRAMS |  |  |  |  |  |  |  |
| Line \# | Classification | Added This Year |  |  | Total To Date |  |  |
|  |  | Number of Consumers <br> (a) | Amount Invested <br> (b) | ESTIMATED MMBTU Savings (c) | Number of Consumers <br> (d) | Amount Invested <br> (e) | ESTIMATED MMBTU Savings <br> (f) |
| 1. | Residential Sales (excluding seasonal) | 0 | 0 | 0 | 0 | 0 | 0 |
| 2. | Residential Sales - Seasonal | 0 | 0 | 0 | 0 | 0 | 0 |
| 3. | Irrigation Sales | 0 | 0 | 0 | 0 | 0 | 0 |
| 4. | Comm, and Ind, 1000 KVA or Less | 0 | 0 | 0 | 0 | 0 | 0 |
| 5. | Comm. and Ind. Over 1000 KVA | 0 | 0 | 0 | 0 | 0 | 0 |
| 6. | Public Street and Highway Lighting | 0 | 0 | 0 | 0 | 0 | 0 |
| 7. | Other Sales to Public Authorities | 0 | 0 | 0 | 0 | 0 | 0 |
| 8. | Sales for Resales - RUS Borrowers | 0 | 0 | 0 | 0 | 0 | 0 |
| 9. | Sales for Resales - Other | 0 | 0 | 0 | 0 | 0 | 0 |
| 10. | TOTAL | 0 | 0 | 0 | 0 | 0 | 0 |



| NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION FINANCIAL AND STATISTICAL REPORT |  |  | BORROWER NAM |  | Dakota Electric |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | BORROWER DES | GNATION | MN065 |
|  |  |  | ENDING DATE |  | 12/31/2018 |
| (All investments refer to your most recent CFC Loan Agreement) |  |  |  |  |  |
| 7a - PART II. LOAN GUARANTEES |  |  |  |  |  |
| Line <br> No. | Organization \& Guarantee Beneficiary <br> (a) | Maturity Date of Guarantee Obligation (b) | Original Amount (\$) <br> (c) | Performance Guarantee Exposure or Loan Balance (\$) (d) | Available Loans (Covered by Guarantees) <br> (e) |
| 1 |  |  | 0 | 0 | 0 |
| 2 |  |  | 0 | 0 | 0 |
| 3 |  |  | 0 | 0 | 0 |
| 4 |  |  | 0 | 0 | 0 |
| 5 |  |  | 0 | 0 | 0 |
| TOTALS (Line 1 thru 5) |  |  | 0 | 0 | 0 |
| 7a - PART II. LOANS |  |  |  |  |  |
| Line <br> No. | Name of Organization <br> (a) | Maturity Date <br> (b) | Original Amount (\$) <br> (c) | Loan Balance (\$) <br> (d) | Available Loans <br> (e) |
| 1 |  |  | 0 | 0 | 0 |
| 2 |  |  | 0 | 0 | 0 |
| 3 |  |  | 0 | 0 | 0 |
| 4 |  |  | 0 | 0 | 0 |
| 5 |  |  | 0 | 0 | 0 |
| TOTALS (Line 1 thru 5) |  |  | 0 | 0 | 0 |
| 7a - PART IV. TOTAL INVESTMENTS AND LOANS GUARANTEES |  |  |  |  |  |
| 1 | TOTAL (Part I, Total - Column b + Part II, Totals - Column d + Column e + Part III, Totals - Column d + Column e) |  |  |  | 7,608,720 |
| 2 | LARGER OF (a) OR (b) |  |  |  | 86,575,584 |
|  | a. 15 percent of Total Utility Plant (CFC Form 7, Part C, Line 3) |  |  | 45,684,651 |  |
|  | b. 50 percent of Total Equity (CFC Form 7, Part C, Line 35) |  |  | 86,575,584 |  |



## DAKOTA ELECTRIC ASSOCIATION

$4300220^{\text {th }}$ Street West
Farmington, MN 55024
(651) 463-6212


#### Abstract

GREG MILLER. PRESIDENT/CEO MIKE FOSSE . . . . . . . . . . . . . . . . . . . . . . . . . VICE PRESIDENT ENERGY \& MEMBER SERVICES COREY HINTZ. . . . . . . . . . . . . . . . . . . . . . . . . . . VICE PRESIDENT FINANCIAL SERVICES / CFO

BETTY JO KIESOW $\qquad$ VICE PRESIDENT ENGINEERING SERVICES

JEFF SCHOENECKER VICE PRESIDENT UTILITY SERVICES MJYKE NELSON $\qquad$ VICE PRESIDENT INFORMATION SERVICES / CIO

DOUG LARSON VICE PRESIDENT REGULATORY SERVICES


For an emergency, after office hours, call 651-463-6201 or 1-800-430-9722.

## DAKOTA ELECTRIC ASSOCIATION <br> ELECTRIC RATE BOOK

| RATE | CLASSIFICATION | SHEET |
| :---: | :---: | :---: |
| 31 | RESIDENTIAL AND FARM SERVICE | 3 |
| 32 | RESIDENTIAL AND FARM DEMAND CONTROL RATE | 3.5 |
| 33 (EV-1) | PILOT - RESIDENTIAL ELECTRIC VEHICLE SERVICE | 4.0 |
| 36 | IRRIGATION SERVICE | 5.0 |
| 41 | SMALL GENERAL SERVICE | 6.0 |
|  | VOLUNTEER FIRE DEPARTMENT RIDER | 6.5 |
| 44 | SECURITY LIGHTING SERVICE | 11 |
| 44-1 | STREET LIGHTING SERVICE (MEMBER-OWNED) | 11.1 |
| 44-2 | STREET LIGHTING SERVICE (DEA-OWNED EQUIPMENT) | 11.3 |
| 44-3 | CUSTOM RESIDENTIAL STREET LIGHTING (DEA-OWNED CONTRIBUTION BY MEMBER) | 11.5 |
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| 45 | LOW WATTAGE UNMETERED SERVICE | 15 |
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| 47 | MUNICIPAL CIVIL DEFENSE SIRENS | 18 |
| 49 | GEOTHERMAL HEAT PUMP RIDER | 19.0 |
| 51 | CONTROLLED ENERGY STORAGE | 21 |
| 52 | CONTROLLED INTERRUPTIBLE SERVICE | 22 |
| 53 | RESIDENTIAL AND FARM SERVICE TIME-OF-DAY RATE | 23.0 |
| 54 | GENERAL SERVICE OPTIONAL TIME-OF-DAY RATE | 24.0 |
| 56 | RESIDENTIAL AND FARM SERVICE TIME-OF-DAY RATE | 25.0 |
| 60 | RIDER FOR STANDBY SERVICE | 31.0 |
| 61 | RIDER FOR DISTRIBUTED GENERATION | 32.0 |
| 62 | MEMBER SPECIFIC DISCOUNT RIDER | 58.0 |
| 63 | LARGE LOAD HIGH LOAD FACTOR RIDER | 58.2 |
| 70 | INTERRUPTIBLE SERVICE (FULL INTERRUPTIBLE OPTION) | 41.0 |
| 71 | INTERRUPTIBLE SERVICE (PARTIAL INTERRUPTIBLE OPTION) | 42.0 |
| 72 | CONTRACT RATE SERVICE | 58.4 |
| 80 | CYCLED AIR CONDITIONING SERVICE | 43 |
| 90 | OPTIONAL RENEWABLE ENERGY RIDER | 44 |
|  | SPECIAL FEES OR CHARGES | 45 |
|  | RESOURCE ADJUSTMENT RIDER | 51 |
|  | ENERGY COST ADJUSTMENT RIDER | 52 |
|  | PROPERTY TAX ADJUSTMENT RIDER | 53 |
|  | FRANCHISE FEE SURCHARGE RIDER | 54.0 |
|  | COMPETITIVE SERVICE RIDER | 55.0 |
|  | MEMBER ENERGY EXCHANGE RIDER | 56.0 |
|  | VOLUNTARY ENERGY REDUCTION RIDER | 57 |
|  | ADVANCED GRID INFRASTRUCTURE RIDER | 59 |
|  | ADVANCED METER OPT-OUT (AMO) RIDER | 60.0 |

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## SCHEDULE 31 <br> RESIDENTIAL AND FARM SERVICE

Availability
Available to individual residential and farm members for all domestic and farm use except irrigation.
This includes service to individually metered apartment units and master-metered multi-tenant residential facilities. Service is subject to the established rules and regulations of the Association.
Type of Service
Single phase or three phase, when economically feasible, 60 hertz, at available secondary voltages.
Monthly Rate

| Fixed Charge |  | $\$ 10.00$ per month |
| :--- | :--- | :--- |
| Energy Charge |  |  |
| Summer (June-Aug) | @ | $\$ 0.1379$ per kWh |
| Other | $@$ | $\$ 0.1239$ per kWh |
| Plus Applicable Taxes |  |  |

## Minimum Monthly Charge

The minimum monthly charge under the above rate shall be the Fixed Charge.
Resource and Tax Adjustment (RTA)
The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53 ). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Billing for Master-Metered Multi-Tenant Residential Facilities

The monthly bill for master-metered multi-tenant residential facilities will be determined by multiplying the number of residential living units per master meter times the Fixed Charge and include the metered energy consumption times the applicable energy charge plus the Resource and Tax Adjustment.

## Taxes

The rates set forth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.
$\qquad$ /20

## SCHEDULE 32

## RESIDENTIAL AND FARM DEMAND CONTROL RATE

## Availability

Available to residential and farm members with at least 5 kW of qualifying off-peak loads as determined by the Association. This rate is subject to the rules and regulations of the Association. Members requesting service under this rate schedule must remain on this rate schedule for a minimum of twelve (12) months.

Type of Service
Single phase, 60 Hertz, at available secondary voltages.

## Monthly Rate

| Fixed Charge |  | $\$ 13.00$ per month |
| :--- | :--- | :--- |
| Energy Charge |  | $\$ 0.0810$ per kWh |
| Demand Charge | @ | $\$ 15.50$ per kW |
| $\quad$ Summer (June-Aug) | $@$ | $\$ 11.90$ per kW |
| Other |  |  |

## Billing Demand Determination

The demand will be determined based on the peak 15-minute demand reading during control periods for the month the bill was rendered. An estimated demand will be used for new customers until the actual controlled demand is established.

## Minimum Monthly Charge

The minimum monthly charge under the above rate shall be the $\$ 12.00$ Fixed Charge plus a minimum billing demand of 3 kW .

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be increased or decreased by $\$ 0.0001$ per kilowatt-hour for each 0.1 mill or major fraction by which the energy component in the Association's purchased power cost per kilowatt-hour purchased from its power supplier exceeds, or is less than $\$ 0.0939$ per kilowatt-hour purchased. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set fourth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.
$\qquad$

## SCHEDULE EV-1

RESIDENTIAL ELECTRIC VEHICLE SERVICE

## Availability

Available on voluntary basis as a pilot program for residential consumers taking service under Schedule 31 who also desire metered service for the sole purpose of electrically charging a licensed automobile or light truck. Service on this tariff is limited to electric vehicles that are SAE J1772 compliant and registered and operable on public highways in the State of Minnesota. Low-speed electric vehicles, including golf carts, are ineligible to take service under this tariff even if licensed to operate on public streets. The consumer may be required to provide the Association with proof of registration of the electric vehicle prior to taking service under this tariff. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages.

## Rate

Energy Charges:
Off-Peak: $\quad \$ 0.0756$ per kWh
On-Peak: $\quad \$ 0.4421$ per kWh
Other: $\quad$ Schedule 31 energy charges apply
Plus RTA and applicable sales tax
Definition of Periods
Energy Charge time periods are defined as follows:
Off-Peak $\quad$ 9:00 pm to 8:00 am Mon. - Fri., and all day Weekends and Holidays
On-Peak $\quad$ 4:00 pm to 9:00 pm Mon. - Fri., excluding Holidays
Other $\quad$ 8:00 am to 4:00 pm Mon. - Fri., excluding Holidays
Holidays shall be: New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.
$\qquad$

DAKOTA ELECTRIC ASSOCIATION
$4300220^{\text {th }}$ Street West
Farmington, MN 55024

SECTION: V
SHEET: 4.1
REVISION: 2

# SCHEDULE EV-1 <br> RESIDENTIAL ELECTRIC VEHICLE SERVICE CONTINUED 

## Metering

Electric service under this rate must be supplied through a sub-metered circuit (installed at the consumer's expense) and approved electric vehicle charging equipment. Installations must conform to the Association's specifications. The consumer shall supply, at no expense to Dakota Electric, a suitable location for meters and associated equipment used for billing and for load research. For purposes of monitoring consumer load under this pilot program, the Association may install load research metering at its expense.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Data Privacy

Participation in any load research effort as part of this schedule will be strictly voluntary. The Cooperative's use of such load research data will be strictly limited to the provision of electric service. The Cooperative will not disclose, share, rent, lease, or sell such data to any third party or affiliate for any other purpose, without the consumer's express, affirmative written informed consent.

## Taxes

The rates set fourth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 36

IRRIGATION SERVICE

## Availability

Available to any member for service to irrigation pumps. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages.

## Monthly Rate

Firm Service
Fixed Charge $\quad \$ 30.00$ per month
Demand Charge
Summer (June-Aug) @ \$26.60 per kW
Winter (Dec-Feb)
Other
Energy Charge
@ $\quad \$ 21.20$ per kW
@ $\quad \$ 15.67$ per kW
Plus Applicable Taxes
Interruptible

| Fixed Charge |  | $\$ 30.00$ per month |
| :--- | :--- | :--- |
| Demand Charge | @ | $\$ 4.55$ per kW |
| Energy Charge | @ | $\$ 0.0521$ per kWh |

Determination of Metered Demand
The Metered Demand in kilowatts shall be the greatest 15 -minute demand (subject to power factor adjustment) during the month for which the bill is rendered. Demand will be read to the nearest 0.01 kilowatt.

## Power Factor Adjustment

The member agrees to maintain as near unity (100 percent) power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent, the demand for billing purposes shall be the demand as recorded by the demand meter multiplied by 90 percent and divided by the percent power factor.

Minimum Monthly Charge
The Minimum Monthly Charge under the above rate shall be the Fixed Charge.
$\qquad$

## SCHEDULE 36

IRRIGATION SERVICE
(Continued)

## Interruptible Requirements

Members that switch from Interruptible to Firm service during the calendar year will be billed the Firm service rate during the month the change was made. The member must remain on the Firm service rate for the remainder of the calendar year. This includes members that intentionally bypass the load control equipment.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor applicable to firm irrigation shall be adjusted by $\$ 0.0001$ per kilowatt-hour, or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0939$ per kilowatt-hour sold. The energy cost factor shall be adjusted by $\$ 0.0001$ per kWh , or major fraction thereof, of which the Association's total projected power cost per kWh applicable to interruptible irrigation exceeds, or is less than, $\$ 0.0521$ per kWh sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.
$\qquad$

DAKOTA ELECTRIC ASSOCIATION<br>$4300220^{\text {th }}$ Street West<br>Farmington, MN 55024

SECTION
V
SHEET:
6.0

REVISION:
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## SCHEDULE 41 <br> SMALL GENERAL SERVICE

## Availability

Available to any commercial member for all uses, except irrigation pumps, where the Metered Demand is 15 kW or less. If the Metered Demand exceeds 15 kW for three consecutive months, the member will be transferred to the General Service Rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages.
Monthly Rate

| Fixed Charge | $\$ 15.00$ per month |  |
| :--- | :--- | :--- |
| Energy Charge |  |  |
| $\quad$ Summer (June-Aug) | @ | $\$ 0.1375$ per kWh |
| Other | @ | $\$ 0.1235$ per kWh |

Plus Applicable Taxes
Determination of Metered Demand
The Metered Demand in kilowatts shall be the greatest 15 -minute demand during the month for which the bill is rendered. Demand will be read to the nearest 0.01 kilowatt.

Minimum Monthly Charge
The Minimum Monthly Charge under the above rate shall be the Fixed Charge.

## Non-metered Option

This option has limited availability. It may be available for: devices that are located at individual points of delivery and are operated with a continuous or predetermined load level that exceeds the threshold determined for Schedule 45. The monthly energy consumption will be determined by the Association based on equipment documentation provided by the member. The maximum monthly energy allowed under this option will be 500 kWh .

Resource and Tax Adjustment (RTA)
The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.
$\qquad$ /20

## SCHEDULE 44

SECURITY LIGHTING SERVICE

## Availability

Available for year-around illumination for private residential, farm, or commercial lighting on existing Association service poles where service poles and service wires can be connected on the line side of member's meter. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

The Association shall own, operate, and maintain the security lighting system using the Association's standard security lighting equipment. The energy used by these lights is unmetered.

## Monthly Rate

Designation of Lamp
100 Watt High Pressure Sodium (Closed to new)
Monthly Rate Per Luminaire

150 Watt High Pressure Sodium (Closed to new) \$12.01

250 Watt High Pressure Sodium (Closed to new) \$14.26

Plus Applicable Taxes
Optional - For residential or farm installation requiring any extra equipment, or in the event the consumer requests the changeout of an existing light to a different size and/or type, a contribution to construction will be required to cover the extra costs incurred. Commercial installations on existing service poles only.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.
$\qquad$

## SCHEDULE 44-1 <br> STREET LIGHTING SERVICE <br> (MEMBER - OWNED)

## Availability

Available for year-round illumination of public streets, parkways, highways, and other public ways by electric lamps mounted on standards where member owns the lighting system complete with standards, luminaries, globes, lamps, and other appurtenances, together will all necessary cables extending between standards and to point of connection to the Association's facilities as designated by the Association.

## Type of Service

The street lighting system shall be built and owned by the member. All controls will be provided by the member. The member shall also provide all easements and right-of-way to permit access to feed points. The Association shall operate and provide limited maintenance (periodic cleaning of lens, refractor, and bulb replacement) on street lighting systems.

## Monthly Rate

| Designation of Lamp | Monthly Rate Per Luminaire |
| :--- | :---: |
| 175 Watt Mercury (Closed to new) | $\$ 13.25$ |
| 250 Watt Mercury (Closed to new) | $\$ 16.74$ |
| 400 Watt Mercury (Closed to new) | $\$ 22.71$ |
|  |  |
| 100 Watt High Pressure Sodium | $\$ 9.61$ |
| 150 Watt High Pressure Sodium | $\$ 11.78$ |
| 200 Watt High Pressure Sodium | $\$ 14.18$ |
| 250 Watt High Pressure Sodium | $\$ 16.35$ |
| 400 Watt High Pressure Sodium | $\$ 21.24$ |
| Plus Applicable Taxes |  |

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## SCHEDULE 44-1

STREET LIGHTING SERVICE (MEMBER-OWNED) (Continued)

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.
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## SCHEDULE 44-2

STREET LIGHTING SERVICE
(DEA - OWNED EQUIPMENT)

## Availability

Available for governmental or private year-around illumination of public or private streets, parkways, highways, and other public ways by electric lamps in luminaires supported on existing poles where secondary voltage is available and the facilities for this service are furnished by the Association.

## Type of Service

The Association shall own, operate, and maintain the overhead street lighting system using the Association's standard street lighting equipment. The energy used by these lights is unmetered.

## Monthly Rate

Designation of Lamp
175 Watt Mercury (Closed to new)
250 Watt Mercury (Closed to new)
400 Watt Mercury (Closed to new)
100 Watt High Pressure Sodium (Closed to new)
150 Watt High Pressure Sodium (Closed to new)
250 Watt High Pressure Sodium (Closed to new)
400 Watt High Pressure Sodium (Closed to new) Plus Applicable Taxes

Monthly Rate Per Luminaire
\$17.44
\$20.93
\$26.89
\$13.80
\$15.97
\$20.54
\$25.42

The above rates cover only an installation where the pole with secondary voltage is existing at the light location. Contributions to construction costs will be required if additional equipment is needed or if a member requests a change to a different lamp size and/or type when costs exceed $\$ 500$.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53 ). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.
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## SCHEDULE 44-2

STREET LIGHTING SERVICE
(DEA - OWNED EQUIPMENT)
(Continued)

## Taxes

The rates set forth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent of $\$ 1.00$, whichever is greater, added to the balance.
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## SCHEDULE 44-3 <br> CUSTOM RESIDENTIAL STREET LIGHTING (DEA-OWNED - CONTRIBUTION BY MEMBER)

## Availability

Available for year-round illumination of public streets, parkways, highways, and other public ways by electric lamps mounted on standards and served through underground circuits, where the facilities for this service are furnished by the Association. Street lighting service under this schedule is limited to residential areas having an underground distribution area.

## Type of Service

The Association shall own, operate, and maintain the lighting system using the Association's standard street lighting equipment which includes one lamp per standard. Member shall be required to contribute an amount equal to the installation cost of the lighting system. The energy used by these lights is unmetered.

## Monthly Rate

Designation of Lamp
175 Watt Mercury (Closed to new)
50 Watt High Pressure Sodium (Closed to new)
100 Watt High Pressure Sodium (Closed to new)
150 Watt High Pressure Sodium (Closed to new)
250 Watt High Pressure Sodium (Closed to new) Plus Applicable Taxes

Monthly Rate Per Luminaire
\$14.03
\$8.45
\$10.39
\$12.63
\$17.21

Optional - For installations requiring any extra equipment or in the event the member requests the changeout of an existing light to be a different size and/or type, the member will be required to pay all construction fees or extra charges incurred.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.
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## Taxes

The rates set forth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent of $\$ 1.00$, whichever is greater, added to the balance.
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# SCHEDULE 44-4 <br> LED SECURITY LIGHTING <br> SERVICE 

## Availability

Available for year-around illumination for private residential, farm, or commercial lighting by Light Emitting Diode (LED) electric lamps on existing Association service poles where service poles and service wires can be connected on the utility side of the meter. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

The Association shall own, operate, and maintain the LED security lighting system using the Association's standard LED security lighting equipment. Fixtures on this rate will only be attached to an existing DEA service pole. The energy used by these lights is unmetered.
Monthly Rate
Light Emitting Diode Security Light (LED, > 4,500 lumens) $\$ 7.75$ per month

## Plus Applicable Taxes

Optional - For installations requiring any extra equipment (excluding poles), a contribution to construction will be required to cover the extra costs incurred. In the event the member requests the change out of an existing light, the member will be required to pay all construction fees and material costs for the new installation or upgrade as well as payment for the undepreciated cost of the existing light, less any salvage value.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

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SCHEDULE 44-5
LED STREET LIGHTING
(MEMBER-OWNED)

## Availability

Available for year-round illumination of public streets, parkways, highways, and other public ways by Light Emitting Diode (LED) electric lamps served through underground or overhead circuits, where the facilities for this service are furnished and owned by the Member. Service is subject to the established rules and regulations of the Association.

## Type of Service

The member shall own, operate, and maintain the LED lighting system.
The preferred service option is metered LED lighting. Such service will be billed to the Member under the rate schedule associated with the meter.

Unmetered service will be allowed if the Association determines it is not practical for the lights to be metered. For such unmetered use:

1. Billing will be according to specified consumption groups. Dakota Electric will determine if a member qualifies for the unmetered rate and which consumption group.
2. The Member will be required to provide Dakota Electric with a notice prior to any change in equipment.
3. No other use is allowed from the fixture. (e.g. Wi-Fi attachments, holiday lights, etc.)
4. The Association will periodically inspect the unmetered fixtures to ensure compliance with requirements.
5. The Member must provide proof of lighting system rating. (i.e. data sheet or model number)

No maintenance will be included in the monthly rate from the Association for any member-owned LED street light. At the request of a Member, Dakota Electric may enter into individual contracts with a Member for the type and frequency of maintenance they may desire from the Association.

## Monthly Rate

Metered Service: According to applicable rate schedule

| Unmetered Service: |  |
| :--- | :---: |
| Consumption Group | Monthly Rate per Fixture |
| A (40 to 80 watts) | $\$ 5.50$ |
| B (81 to 150 watts) | $\$ 7.75$ |
| C $(151$ to $250 w a t t s)$ | $\$ 11.16$ |
| D $(251$ to 350 watts) | $\$ 15.04$ |
| E $(351$ to 450 watts) | $\$ 19.07$ |

Plus Applicable Taxes
The range of watt ratings for the Unmetered Consumption Groups will be adjusted periodically to reflect the predominant size of lights receiving such Unmetered Service.
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SCHEDULE 44-5<br>LED STREET LIGHTING (MEMBER-OWNED)<br>(Continued)

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent of $\$ 1.00$, whichever is greater, added to the balance.
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# SCHEDULE 44-6 <br> LED STREET LIGHTING <br> (DEA-OWNED - CONTRIBUTION BY MEMBER) 

## Availability

Available for year-round illumination of public streets, parkways, highways, and other public ways by Light Emitting Diode (LED) electric lamps served through underground or overhead circuits, where the facilities for this service are furnished by the Association. Conversion of existing lighting to LED lighting may be limited to accommodate workload scheduling. Street lighting service under this schedule is limited to designated LED lighting fixtures offered by the Association in its distribution area. Service is subject to the established rules and regulations of the Association.

## Type of Service

The Association shall own, operate, and maintain the LED lighting system using the Association's standard street lighting equipment which includes one fixture per pole. Member shall be required to contribute an amount equal to the initial installation or upgrade cost of the lighting system. The energy used by these lights is unmetered.

## Monthly Rate

|  | Monthly Rate per Fixture |  |
| :--- | :--- | :--- |
| Designation of Fixture | $\underline{\text { Standard }}$ | $\underline{\text { Basic }}$ |
| Light Emitting Diode (LED, > 5,200 lumens) Coach Light (Post) | $\$ 9.30$ | $\$ 6.36$ |
| Light Emitting Diode (LED, > 5,200 lumens) Acorn Light (Post) | $\$ 10.85$ | $\$ 6.12$ |
| Light Emitting Diode (LED, > 7,000 lumens) Cobra Light (Mast) | $\$ 8.60$ | $\$ 6.98$ |
| Light Emitting Diode (LED, > 11,500 lumens) Shoebox Light (Mast) | $\$ 10.70$ | $\$ 8.68$ |
| Plus Applicable Taxes |  |  |

The Coach and Acorn fixtures will be mounted on a street light post. The Cobra and Shoebox fixtures will be fastened to a mast arm on existing service poles. In the event the member requests the change out of an existing light, the member will be required to pay all construction fees and material costs for the new installation or upgrade as well as payment for the undepreciated cost of the existing light, less any salvage value.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.
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SCHEDULE 44-6<br>LED STREET LIGHTING<br>(DEA-OWNED - CONTRIBUTION BY MEMBER)<br>(Continued)

## Service Included in Rate

For Standard Service, Dakota Electric will furnish all electric energy necessary to operate the street lighting system, will make all lamp and glassware renewals, clean the glassware, make all ballast and starter renewals, repair all damaged equipment, and furnish all the materials and labor necessary for these services.

For Basic Service, Dakota Electric will furnish all electric energy necessary to operate the street lighting system, clean the glassware, and repair all damaged equipment. The Member will be responsible for material and labor costs to replace failed components and fixtures not covered by manufacturers warranties. Selection of Basic Service is a "life of fixture" designation.

## Taxes

The rates set forth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent of $\$ 1.00$, whichever is greater, added to the balance.
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SCHEDULE 45
LOW WATTAGE UNMETERED SERVICE

## Availability

This rate is available for low-wattage electronic devices that are: 1) Individually located at each point of delivery, 2) Rated at less than 150 watts, and 3) A determinable load level. Each individual electronic device must not in any way interfere with Association operations and service to adjacent members. This rate is also available to equipment connected to the supply side of the service disconnect such as fire and sprinkler alarms, and emergency lighting systems, if such equipment is used only during times of emergency. This will require verification from a licensed electrical contractor/electrician in the form of an affidavit.

This Low Wattage Unmetered Service is not applicable to electric service for traffic signals, civil defense, or lighting. Association reserves the right to evaluate member requests for this service to determine eligibility.

## Type of Service

Either single phase or three phase, depending on feasibility, 60 hertz, at available secondary voltages.

## Installation Charges

The member shall pay the total estimated installation charges involved to provide service.

## Monthly Rate

$\$ 10.50$ per month per service location, plus applicable sales tax.

## Taxes

The rates set forth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance
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SCHEDULE 46 GENERAL SERVICE

## Availability

Available to any non-residential member for general service uses except irrigation. Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages.

## Monthly Rate

Fixed Charge
Demand Charge
Summer (June-Aug)
Other (Sept - May)
Energy Charge
First 200 kWh per kW
Next 200 kWh per kW
Over 400 kWh per kW
Plus Applicable Taxes
$\$ 34.00$
@ $\quad \$ 13.70$ per kW
@ $\quad \$ 10.60$ per kW
@ $\quad \$ 0.0776$ per kWh
@ $\quad \$ 0.0676$ per kWh
@ $\quad \$ 0.0576$ per kWh

## Determination of Demand

The Metered Demand in kilowatts shall be the greatest 15-minute demand (subject to power factor adjustment) during the month for which the bill is rendered. Demand will be read to the nearest 0.01 kilowatt. In no month shall the Billing Demand be greater than the value in kW determined by dividing the kWh sales for the billing month by the product of 24 hours x 0.1 load factor x days in the billing month.

## Determination of Energy Charge

The energy ( kWh ) billed in each rate block is determined in relation to the monthly demand ( kW ). The energy in the first block includes the first 200 kWh multiplied by the monthly metered demand. The second block includes the next 200 kWh multiplied by the monthly metered demand. All energy in excess of 400 kWh multiplied by the monthly metered demand is billed under the third block.

## Power Factor Adjustment

The member agrees to maintain as near unity (100 percent) power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent, the demand for billing purposes shall be the demand as recorded by the demand meter multiplied by 90 percent and divided by the percent power factor.

## Minimum Monthly Charge

The Minimum Monthly Charge under the above rate shall be the Fixed Charge plus $\$ 1.00$ per kW of the highest billing demand during the preceding 11 months.

## Primary Voltage Service

A discount of $\$ 0.15 / \mathrm{kW}$ of Billing Demand will be applied to the bill when service is taken by the member at the available primary voltage. If primary metering is used, an additional discount of 2.0 percent shall be applied to the bill. The 2.0 percent discount shall be applied after the $\$ 0.15 / \mathrm{kW}$ discount.
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## SCHEDULE 46

GENERAL SERVICE

## (Continued)

## Billing for Multi-Use Facilities

Multi-use facilities are defined as buildings or complexes that include a combination of commercial or institutional load along with some portion of residential domestic consumption. (For combined billing, commercial use does not include consumption in common areas of multitenant residential facilities.) Where service and metering are separated between residential and commercial consumption, such electrical service will be billed under the terms of Schedule 31, Schedule 41, and Schedules 46 or 54 as applicable. Where such service is combined, such electrical service will be billed under the terms of Schedules 46 or 54 as applicable.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.
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## SEASONAL MEMBER RIDER

## Availability

Available to members receiving service under rate schedules $46,54,70$ or 71 and determined by the Association to be seasonal. Seasonal members qualifying for the Seasonal Member Rider are defined as businesses (service or production) that are closed or shut down for at least three consecutive months during the year. Service is subject to the established rules and regulations of the Association.

## Rider

If an account is determined to be seasonal in nature by the Association, the minimum monthly charge shall be the fixed charge for each month of the 12 month period. Minimum monthly demand provisions will not be applied. Members who elect to be disconnected during a portion of the year and then reconnected will be charged a reconnect fee as well as the monthly fixed charge for all 12 months.
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## SCHEDULE 47

MUNICIPAL CIVIL DEFENSE SIRENS

## Availability

This rate will be available to governmental bodies for civil defense siren services where energy consumption is negligible.

Type of Service
Either single phase or three phase, depending on feasibility, 60 hertz, at available secondary voltages.

## Installation Charges

The member shall pay the total estimated installation charges involved to provide service when additional transformers are required. No initial charge will be made to run an overhead service wire from an existing transformer or for making connections to an existing underground feedpoint.

## Monthly Rate

\$5.00/Month per Installation
Plus Applicable Taxes

## Taxes

The rates set forth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.
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# SCHEDULE 49 <br> GEOTHERMAL HEAT PUMP RIDER <br> (Closed to new consumers.) 

## Availability

Available to any commercial member for energy used by a geothermal heat pump system.
Members requesting service under this rate schedule must be taking service concurrently under Rate Schedule 41 or 46 . Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available primary or secondary voltages.

## Rate

Energy Charge $\quad \$ 0.1030$ per kWh
Plus applicable taxes

## Metering

The geothermal heat pump system must be separately, parallel metered from all other loads at the premise. Service will not be sub-metered.

## Power Factor

The member agrees to maintain as near unity (100 percent) power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent, the energy for billing purposes shall be adjusted accordingly.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kWh , or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour for this service annually exceeds, or is less than, $\$ 0.0813$ per kWh sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted as necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

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## SCHEDULE 49

GEOTHERMAL HEAT PUMP RIDER
(Continued)

## Conditions of Service

If service is furnished at secondary voltage, the delivery point shall be the metering point unless otherwise specified in the contract for service. All wiring, poles, lines and other electric equipment on the load side of the delivery point shall be owned and maintained by the member.

If service is furnished at the Cooperative's primary line voltage, the delivery point shall be the point of attachment of the cooperative's primary line to member's transformer structure unless otherwise specified in the contract for service. All wiring, poles, lines and other electric equipment (except metering equipment) on the low side of the delivery point shall be owned and maintained by the member.

## Taxes

The rates set forth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution or sales of electricity are allocable to sales here under, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 51

CONTROLLED ENERGY STORAGE

## Availability

Available to members taking service concurrently under rate schedules 31,41 and 46 . This rate is for interruptible service to energy storage loads which are remotely controlled by the Association. Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages. Service under this schedule will be available for approximately eight hours per day, normally 11:00 p.m. to 7:00 a.m., or as established by the Association.

## Monthly Rate

Energy Charge @ \$0.0487 per kWh
Plus Applicable Taxes.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The energy cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected weighted average power cost per kilowatt-hour for this service exceeds, or is less than $\$ 0.0204$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Demand

The metered demand of loads on this rate will be subtracted from the metered demand for members receiving service under Schedule 41 and 46 when the storage load is coincident with the member's other loads. When feasible, new controlled energy storage loads should be on a separate service from Schedule 41 and 46 load.

## Taxes

The rates set fourth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## Availability

Available to member taking service concurrently under rate schedules 31,41 and 46 . This rate is for interruptible service to qualifying loads which are remotely controlled by the Association. Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages. Service under this schedule will be available at all times except when interrupted by the Association during times of peak system demand or system emergencies.

## Monthly Rate

Energy Charge @ \$0.0631 per kWh
Plus Applicable Taxes.

## Alternate Monthly Rate for Controlled Water Heaters

Where separate metering of controlled water heaters is not possible or for members on Rate 53, a direct credit of $\$ 1.50$ per 100 kWh used up to a maximum of $\$ 6.00$ per month will be applied against the monthly bill.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The energy cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected weighted average power cost per kilowatt-hour for this service exceeds, or is less than $\$ 0.0352$ per kilowatthour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Demand

The metered demand of loads on this rate will be subtracted from the metered demand for members receiving service under Schedule 41 and 46 when the interruptible load is coincident with the member's other loads. When feasible, new controlled interruptible services loads should be on a separate service from Schedule 41 and 46 load.

## Taxes

The rates set fourth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 53 <br> RESIDENTIAL AND FARM SERVICE TIME-OF-DAY RATE

## Availability

Available to residential and farm members for all domestic and farm use, except irrigation pumps. Members participating in this service are not eligible for either Schedule 51 or Schedule 52.
Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

Type of Service
Single phase or three phase, when economically feasible, 60 hertz, at available secondary voltages.

## Monthly Rate

Fixed Charge
Energy Charge
Summer - (June-Aug) Peak Period @ $\$ 0.21263$ per kWh Other - Peak Period @ $\$ 0.19863$ per kWh Off-Peak Period @ \$0.09450 per kWh
Plus Applicable Taxes

## Definition of Periods

Peak Period 4:00 p.m. to 11:00 p.m., excluding holidays and weekends Off-Peak Period $\quad 11: 00 \mathrm{p} . \mathrm{m}$. to 4:00 p.m., plus all day on holidays and weekends

Holidays include New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

## Minimum Monthly Charge

The minimum monthly charge under the above rate shall be the Fixed Charge.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceed, or is less than $\$ 0.0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.
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SCHEDULE 53<br>RESIDENTIAL AND FARM SERVICE<br>TIME-OF-DAY RATE<br>(Continued)

## Taxes

The rates set forth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.
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## SCHEDULE 54 <br> GENERAL SERVICE <br> OPTIONAL TIME-OF-DAY RATE

## Availability

Available to any member for general service electrical loads. Members participating in this service are not eligible for either Schedule 51 or Schedule 52. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available primary or secondary voltages.

## Monthly Rate

Fixed Charge $\quad \$ 36.00$ per month
Peak Period Demand Charge Summer (June-Aug) @ \$26.14 per kW
Winter (Dec-Feb)
@ $\$ 19.91$ per kW
Other
@ $\$ 13.67$ per kW
Plus
Maximum Demand Charge
@ $\$ 5.25$ per kW
Energy Charge @ \$0.0521 per kWh
Plus Applicable Taxes

## Definition of Periods

Peak Period 4:00 p.m. to 11:00 p.m., excluding holidays and weekends
Off-Peak Period
11:00 p.m. to 4:00 p.m., plus all day on holidays and weekends
Holidays include New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

## Determination of Billing Demand

1. Peak Period - The Peak Period Billing Demand shall be the greatest 15 minute demand (subject to power factor adjustment) between $4 \mathrm{p} . \mathrm{m}$. and $11 \mathrm{p} . \mathrm{m}$. during the month for which the bill is rendered, as indicated or recorded by a demand meter. Demand will be read to the nearest 0.01 kilowatt.
2. Maximum Demand - The Maximum Billing Demand shall be the greatest 15 minute demand (subject to power factor adjustment) during the month for which the bill is rendered, as indicated or recorded by a demand meter. Demand will be read to the nearest 0.01 kilowatt.

## Minimum Monthly Charge

The minimum monthly charge under the above rate shall be the Fixed Charge plus $\$ 1.00$ per kW of the highest Maximum Billing Demand during the preceding 11 months.
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SCHEDULE 54<br>GENERAL SERVICE<br>OPTIONAL TIME-OF-DAY RATE<br>(Continued)

## Power Factor Adjustment

The member agrees to maintain as near unity (100 percent) power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent, the demand for billing purposes shall be the demand as recorded by the demand meter multiplied by 90 percent and divided by the percent power factor.

## Primary Voltage Service

A discount of $\$ 0.15 / \mathrm{kW}$ will be applied to the Maximum Billing Demand when the service is taken by the member at the available primary voltage. If primary metering is used, an additional discount of 2.0 percent shall be applied to the bill. The 2.0 percent discount shall be applied after the $\$ 0.15 / \mathrm{kW}$ discount.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.
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## SCHEDULE 56

RESIDENTIAL AND FARM SERVICE TIME-OF-DAY RATE

## Availability

Available to residential and farm members for all domestic and farm use, except irrigation pumps. Members participating in this service are not eligible for either Schedule 51 or Schedule 52.
Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, when economically feasible, 60 hertz, at available secondary voltages.

## Monthly Rate

Fixed Charge
$\$ 13.00$ per month
Energy Charges
Peak Periods:
Summer - (June-Aug) @ $\$ 0.2890$ per kWh
Winter - (Dec-Feb) @ $\$ 0.2320$ per kWh
Spring/Fall @ $\$ 0.1880$ per kWh
Intermediate Period @ $\$ 0.1060$ per kWh
Off-Peak Period
Plus Applicable Taxes

## Definition of Periods

Peak Periods 4:00 p.m. to 11:00 p.m., excluding holidays and weekends
Intermediate Period 8:00 a.m. to 4:00 p.m., excluding holidays and weekends
Off-Peak Period 11:00 p.m. to 8:00 a.m. Mon-Fri and all day weekends and holidays
Holidays include New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

## Minimum Monthly Charge

The minimum monthly charge under the above rate shall be the Fixed Charge.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceed, or is less than $\$ 0.0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.
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# SCHEDULE 56 <br> RESIDENTIAL AND FARM SERVICE <br> TIME-OF-DAY RATE <br> (Continued) 

## Taxes

The rates set forth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.
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## SCHEDULE 60 <br> RIDER FOR STANDBY SERVICE CONTINUED

## Definitions

Contracted Standby Demand is the quantity specified in the member's Electric Service Agreement as the maximum amount of firm or non-firm standby service the Cooperative is obligated to supply and will not exceed the capacity of the member's distributed generation system.

Firm Service refers to a utility's most reliable, constant electric service. A utility would interrupt the supply of electricity to a firm service customer only as a last resort.
Non-Firm Service, also called interruptible service, refers to electric service that a utility provides only to the extent that it has capacity not being used to meet the needs of firm-service members at the moment.
All other definitions shall be as described in Cooperative's Distributed Generation Interconnection Requirements and Interconnection Process for Distributed Generation Systems.

## Charges for Service

The following Reservation Fees, Communication Fee, Usage Fees, and Wheeling Fees will be assessed as applicable in addition to all charges for service being taken under Cooperative's base rate schedule:

## Reservation Fees

Charges as specified below for the reservation of either Firm or Non-Firm generation, transmission and distribution service per Month per kW will each be applied to the member's Contracted Standby Demand as specified in member's Electric Service Agreement with Cooperative:

|  | Firm Service <br> $(\$$ per kW $)$ | Non-Firm Service <br> $(\$$ per kW $)$ |
| :--- | :---: | :---: |
| Generation | $*$ | $* *$ |
| Transmission | $\$ 4.02$ | $\$ *$ |
| Distribution - Secondary Service | $\$ 3.89$ | $\$ 3.89$ |
| Distribution - Primary Service | $\$ 0.81$ | $\$ 0.81$ |

* Firm Standby Service generation and transmission Reservation Fees will be billed under the rates, terms and conditions of the Cooperative's wholesale power supplier (Great River Energy), which is available on GRE's Web site; greatriverenergy.com and DEA's Web site; dakotaelectric.com.
**Generation and transmission Reservation Fees are not applied for Non-Firm Service. However, members will be responsible for all costs associated with wholesale power supply during any times of usage.


## Communication Fee

A monthly Communication Fee will be applied to cover the cost of transmitting data through the use of digital cellular equipment. The monthly Communication Fee is applied to each required meter with cellular data capabilities.

Communication Fee $\$ 8.70$ per meter

## Usage Fees

## Demand Charge

If the member registers electrical usage from Cooperative during a billing month then such usage will result in demand charges which may vary between members contracting for Firm Standby Service or Non-Firm Standby Service.

## SCHEDULE 70 <br> INTERRUPTIBLE SERVICE (FULL INTERRUPTIBLE OPTION)

Availability
Available to any member with a minimum controllable demand of 50 kW . Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Members participating in this service are not eligible for concurrent service under any other rate schedule. Service is subject to the established rules and regulations of the Association.

Under the full interruptible control option, members agree to interrupt their entire electrical energy usage. Members may attain this full interruption through curtailment or with the use of on-site generation back-up. During the interruption, the member's load must go to zero.

Type of Service
Single phase or three phase, 60 hertz, at available primary or secondary voltages.

## Monthly Rate

| Fixed Charge |  | \$130.00 per month |
| :---: | :---: | :---: |
| Communication Fee (meters w/ digital cellular) |  | \$8.70 per month |
| Coincidental Demand |  |  |
| Summer (June-Aug) | @ | \$26.14 per kW |
| Winter (Dec-Feb) | @ | \$19.91 per kW |
| Other | @ | \$13.67 per kW |
| Non-Coincidental Demand | @ | \$ 5.25 per kW |
| Energy Charge | @ | \$0.0521 per kWh |
| Failure to Control Charge | @ | \$ 5.00 per kW |
| Plus Applicable Taxes |  |  |

## Control Period

The control period shall be defined as the period of time during which the Association is controlling these loads with the intent of minimizing demand on the Association's system.

## Coincidental Demand

The monthly Coincidental Demand under the full interruptible control option shall be defined as the member's actual hourly demand (subject to power factor adjustment) that is coincident with the wholesale power supplier (i.e. average of the four fifteen minute demand readings for the hour ending of the wholesale billing peak) when the load is directed to be controlled during the wholesale billing peak.

## Non-Coincidental Demand

The Non-Coincidental Demand shall be the maximum kilowatt demand (subject to power factor adjustment) established by the member for any period of 15 consecutive minutes during the month for which the bill is rendered, as indicated or recorded by a demand meter.

## Failure to Control

The Failure to Control Charge will be applied to the highest kilowatt demand during any one monthly control period when the member does not fully interrupt demand. The Failure to Control Charge is applied to the highest demand recorded during any one of the monthly control periods. The control period shall be defined as the period of time during which the Association is controlling these loads with the intent of minimizing demand on the Association's system. Failure to control or being unavailable for control for more than one calendar month may require the member to be removed from Schedule 70 for the remainder of the year.

## Scheduled Maintenance

Members are encouraged to schedule required periodic maintenance during the spring and fall months and coordinate such maintenance with the Association.
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## SCHEDULE 70

INTERRUPTIBLE SERVICE
(FULL INTERRUPTIBLE OPTION)
(Continued)

## Minimum Billing Demand

The Minimum Billing Demand for any billing period shall be no less than 50 percent of the highest noncoincidental demand during the preceding 11 months.

## Power Factor Adjustment

The member agrees to maintain as near unity power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent; the demand for billing purposes shall be the demand as recorded by the demand meter multiplied by 90 percent and divided by the percent power factor.

## Primary Voltage Service

A discount of $\$ 0.15$ per kW of billing demand will be applied to the bill when service is taken by the member at the available primary voltage. If primary metering is used, an additional discount of 2.0 percent shall be applied to the bill. The 2.0 percent discount shall be applied after the $\$ 0.15$ per kW discount.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in wholesale power costs, Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The energy cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour applicable to this service exceeds, or is less than $\$ 0.0521$ per kilowatt-hour sold as described in the Energy Cost Adjustment Rider (ECA) (Sheet 52). The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

SCHEDULE 71
INTERRUPTIBLE SERVICE
(PARTIAL INTERRUPTIBLE OPTION)

## Availability

Available to any member with a minimum controllable demand of 50 kW . Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Members participating in this service are not eligible for concurrent service under any other rate schedule. Service is subject to the established rules and regulations of the Association.

Under the partial interruptible control option, members agree to reduce a portion of their electrical energy usage. Members may attain this partial interruption through curtailment or with the use of on-site generation back-up. During the interruption, the member's load goes to a Predetermined Demand Level (PDL). If a partial interruptible member fails to control demand to the PDL, then the PDL will be adjusted to the demand occurring during such control period.

Type of Service
Single phase or three phase, 60 hertz, at available primary or secondary voltages.

## Monthly Rate

| Fixed Charge |  | \$130.00 per month |
| :---: | :---: | :---: |
|  |  |  |
|  |  |  |
| Summer (June - Aug) | @ | \$26.14 per kW |
| Winter (Dec - Feb) | @ | \$19.91 per kW |
| Other | @ | \$13.67 per kW |
| Non-Coincidental Demand | @ | \$ 5.25 per kW |
| Energy Charge | @ | \$0.0521 per kWh |
| Excess Demand Charge | @ | \$ 5.00 per kW |

## Control Period

The control period shall be defined as the period of time during which the Association is controlling these loads with the intent of minimizing demand on the Association's system.

## Coincidental Demand

The monthly Coincidental Demand under the partial interruptible control option shall be defined as:

- During a month with no control period, the monthly Coincidental Demand under the partial interruptible control option will be the lesser of the member's actual hourly demand (subject to power factor adjustment) that is coincident with the wholesale power supplier (i.e. average of the four fifteen minute demand readings for the hour ending of the wholesale billing peak) or the Predetermined Demand Level.
During a month with a control period, the monthly Coincidental Demand under the partial interruptible control option will be the member's actual hourly demand (subject to power factor adjustment) that is coincident with the wholesale power supplier (i.e. average of the four fifteen minute demand readings for the hour ending of the wholesale billing peak).
The partial interruptible PDL will be adjusted to any higher actual demand of the member occurring during a curtailable event for the remainder of the calendar year. In the case of members using on-site generation, the PDL may be adjusted to reflect the rated capacity of such generation that was not operational during the control period. Only one such adjustment per year will be allowed.


## Non-Coincidental Demand

The Non-Coincidental Demand shall be the maximum kilowatt demand (subject to power factor adjustment) established by the member for any period of 15 consecutive minutes during the month for which the bill is rendered, as indicated or recorded by a demand meter.

## Excess Demand Charge

The Excess Demand Charge will be applied to the Coincidental Demand that exceeds the Predetermined Demand Level (PDL) for a member using the partial interruptible control option when the member does not reduce demand to the PDL during a control period. The Excess Demand Charge is applied per month.

## Minimum Billing Demand

The Minimum Billing Demand for any billing period shall be no less than 50 percent of the highest noncoincidental demand during the preceding 11 months.

## Power Factor Adjustment

The member agrees to maintain as near unity power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent; the demand for billing purposes shall be the demand as recorded by the demand meter multiplied by 90 percent and divided by the percent power factor.

## Primary Voltage Service

A discount of $\$ 0.15$ per kW of billing demand will be applied to the bill when service is taken by the member at the available primary voltage. If primary metering is used, an additional discount of 2.0 percent shall be applied to the bill. The 2.0 percent discount shall be applied after the $\$ 0.15$ per kW discount.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in wholesale power costs, Dakota Electric's conservation tracker account balance, and real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The energy cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour applicable to this service exceeds, or is less than $\$ 0.0521$ per kilowatt-hour sold as described in the Energy Cost Adjustment Rider (ECA) (Sheet 52). The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

Taxes
The rates set forth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 80 <br> CYCLED AIR CONDITIONING SERVICE

## Availability

Available to members taking service concurrently under another rate schedule. This rate is for interruptible service to central air conditioners which are remotely controlled by the Association. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages. Service under this schedule will be available at all times except when interrupted by the Association during times of peak system demand or system emergencies.

## Monthly Rate

Option No. 1 - Available to members who also take service under Schedules 51 and 52 where an existing meter and control unit may be utilized for the controlled air conditioning load.

Energy Charge per applicable Schedule 51 or 52
Option No. 2 - Available to members where a new meter and control unit must be installed to control the air conditioning load.

Energy Charge Credit @ $\$ 0.0320$ per kWh
Option No. 3-Available to members where a control unit must be installed to control the air conditioning load.

A credit will be applied to the first $\$ 13.00$ of the member's net energy consumption charges in the months of June, July, and August (prorated based on the number of qualifying calendar days in the billing month). In no case will the credit exceed the sum of the monthly Energy Charge and Resource and Tax Adjustment.

Option No. 4 - Available to non-residential members where a new meter and control unit must be installed but where it is not feasible or designed to meter the air conditioning load separately. The maximum capacity of any individual air conditioning compressor is 7.5 tons. A $\$ 6.50$ per ton per month credit will be applied to member's bill in the months of June, July, and August. The aggregate monthly credit per account will not exceed $1 / 3$ of the net charges for energy and demand in each month.

## Plus Applicable Taxes

## Taxes

The rates set forth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.
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## SPECIAL FEES OR CHARGES

1. Meter Test at Member's RequestSingle Phase$\$ 95.00$
Three Phase .....  $\$ 110.00$
2. Bad Check ..... $\$ 11.50$
3. Reconnection Charge (after disconnect, same consumer)
a. Self-contained Metering (one person, one vehicle)
1) Working hours .....  $\$ 55.00$
2) Outside normal working hours. ..... \$145.00
b. Current Transformer-rated Metering (two-person crew, one truck)
3) Working hours .....  $\$ 185.00$
4) Outside normal working hours. .....  $\$ 340.00$
4. Service Charge
(outside normal working hours when problem is not with Association's equipment) Two-person crew, one truck. ..... $\$ 340.00$
5. Load Management Service Charge
(when problem is not with Association's equipment)
1) Working hours ..... $\$ 80.00$
2) Outside normal working hours .....  $\$ 160.00$
6. Pulse Meter (materials and installation) .....  7750.00
7. Transfer/Connection Charge .....  $\$ 17.50$
8. Member Contracted Hourly Work
Dakota Electric is periodically asked to perform on-site service work. Such services will be provided at a pre-arranged hourly rate.
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## MEMBER SERVICE INFORMATION EXTENSION OF SERVICE

## General Policies Applicable to All Extensions of Service

1. It shall be the policy of Dakota Electric Association (DEA) to provide and extend electric service to any member within its service area in accordance with the rate schedules and policies established by the Association.
2. Dakota Electric Association requires that, on overhead services, the member or developer provide all necessary tree clearing of the power line route outside the public right-of-way. Clearing includes any removal of debris as a result of tree cutting as may be required. The normal width of the right-of-way corridor to be cleared is 30 feet with no less than 10 feet of clearance to any open or bare wire.

Dakota Electric Association will provide all necessary tree trimming on new overhead service extensions within the public right-of-way.

It is the goal of Dakota Electric Association to cooperate with the member to save as many trees as possible without jeopardizing the power line operation.
3. The member shall pay the cost of any subsequent relocation or rearrangement of any portion of the Association's system made to accommodate his/her needs or to accommodate alterations in grade.
4. Equipment, such as motors and generators that are operated interconnected with the Association, shall not cause objectionable voltage flicker on the distribution system and for other Association members. The member shall apply starters/controllers to the motors, as required, to limit the starting currents to levels acceptable to the Association. For generation, the member shall design and operate the generation system and the load transfer to and from the generation system so as not to cause objectionable voltage flicker.
5. Meters on all new installations shall meet the requirements of the Association's Technical Standards for Metering which are consistent with industry practices.
6. All member wiring must meet the requirements of the National Electric Code, National Electric Safety Code, State and local jurisdictions.

## Continuity of Service

Dakota Electric Association will endeavor to provide continuous service but does not guarantee an uninterrupted or undisturbed supply of electric service. The Cooperative will not be responsible for any loss or damage resulting from the interruption or disturbance of service for any cause other than gross negligence of the Cooperative. The Cooperative reserves the right, without previously notifying the member, to temporarily interrupt service for construction, inspection, repairs, emergency operations, shortages in power supply, safety, and State or National emergencies. The Cooperative will not be liable in any event for any loss of profits or other consequential damages resulting from the use of service or any interruption or disturbance of service.
$\qquad$ _20

# MEMBER SERVICE INFORMATION EXTENSION OF SERVICE CONTINUED 

## Individual Residential Extensions

1. Dakota Electric Association will serve a year-round, principle residence of an individual residential member with overhead or underground single-phase electric service at the rates and minimum charges established in applicable rate schedules. In order to ensure that the cost of the new facilities will not cause an undue burden on other members, the member will be assessed a contribution in aid of construction. The member will be charged a flat fee of $\$ 1,000.00$ plus $\$ 11.00$ per foot of line extension. The member will be assessed additional charges if above normal costs are incurred by DEA to accommodate member installation preferences or the member requests a nonstandard installation. In no event will the member be charged more than the actual costs for the extension.
2. Dakota Electric Association will furnish the overhead service triplex wire between the overhead system and the member-owned service mast. If a member desires underground service, DEA will install underground primary or secondary wire between the right-of-way and a point of connection located no closer than fifty (50) feet from the building, measured from the closest point of the building to the existing DEA facilities. The consumer will be charged the line extension costs outlined in paragraph one (1) of this section.
3. The member must install and own the underground secondary wire run between the point of connection and the meter. Dakota Electric Association will make the connection required at the point of connection.
4. For underground service, the member shall provide a right-of-way strip that is within four (4) inches, plus or minus, of the finished grade, free from obstructions and completely accessible to the Cooperative's equipment.
5. The member will be required to obtain and/or grant easements to the Cooperative for any portion of the extension that is outside a public right-of-way or easement, at no cost to the Cooperative. The Cooperative will prepare the necessary easement documents and will be reimbursed by the member for costs incurred for property title search, surveying, and recording fees.
6. The member will pay any additional installation costs incurred by the Cooperative because of:
a. delays caused by member:
b. installation of underground facilities after the ground is frozen;
c. surface and subsurface conditions that impede the installation of underground facilities, such as rock formations;
d. paving of streets, alleys or other areas prior to the installation of the underground facility;
e. above-average permit costs; or
f. DNR crossing fees.
7. The member will also be responsible for costs incurred for any relocation or rearrangement of any portion of the system made to accommodate the member after construction is underway or complete. The normal service capacity provided for overhead service will be 10 KVA per residential member and 15 KVA for underground service. Residential members requesting greater transformer capacity will be considered on an individual basis to determine if anticipated revenue justifies the additional expenditure without any further contribution in aid of construction.
$\qquad$

## MEMBER SERVICE INFORMATION EXTENSION OF SERVICE CONTINUED

## Commercial and Industrial Members, Apartment Facilities, and Seasonal Accounts

1. Dakota Electric Association will provide single-phase or three-phase electric service to commercial (including commercial developments) and industrial members and multi-tenant residential facilities in accordance with established applicable rates and charges when the anticipated revenue justifies the expenditure. Dakota Electric Association will install, own, and maintain the primary service to a point of connection designated as either a single-phase or threephase transformer. An economic analysis will be made for any service that involves abnormally high investments, and/or those with low anticipated revenue. A contribution in the aid of construction will be required if the estimated investment is not justified by the anticipated revenue, calculated as follows for service provided under the applicable rate schedule:

|  | $\underline{\text { Sched. 31 }}$ | Sched. 41 <br> Factor | Sched. 46 <br> Factors | Sched. 70/71 <br> Factors |
| :--- | :--- | :--- | :--- | :--- | :--- |
| -Estimated Extension Costs <br> Annual Sum of Monthly Non-Coincident Billing <br> Demand (kW) times applicable rate schedule factor | NA | NA | $\$ 10.09$ | $\$ 10.61$ |
| $-\quad$Annual Sum of Monthly billed energy (kWh) <br> times applicable rate schedule factor | NA | $\$ 0.15958$ | $\$ 0.03157$ | $\$ .02529$ |
| $-\quad$Credit per Residential Unit times number of <br> residential units in the complex | $\$ 1,282$ | NA | NA | NA |
| $=\quad$Required Contribution in Aid of Construction |  |  |  |  |

When underground service is requested, the member shall provide a right-of-way strip that is within four (4) inches, plus or minus, of the finished grade. The right-of-way must be free from obstructions and completely accessible to the Association's equipment.

The member shall furnish the pad for the padmounted transformer on underground systems in accordance with specifications provided by Dakota Electric Association.

The member will pay any additional installation costs incurred by the Association because of:

1. delays caused by member;
2. installation of underground facilities after ground is frozen;
3. soil conditions that impair the installation of underground facilities, such as rock formations;
4. paving of streets, alleys or other areas prior to the installation of the underground facility;
5. above-average permit costs; or
6. DNR crossing fees.

There may be situations where the member shall be required to install sections of conduit, such as underground entrance to a pad, which shall be at no cost to the Association.


## DAKOTA ELECTRIC ASSOCIATION

$4300220^{\text {th }}$ Street West<br>Farmington, MN 55024<br>(651) 463-6212

GREG MILLER. PRESIDENT/CEO
MIKE FOSSE VICE PRESIDENT ENERGY \& MEMBER SERVICESLOU ANN WEFLENCOREY HINTZ. . . . . . . . . . . VICE PRESIDENT FINANCIAL-\& INFORMATIONSERVICES / CFORANDY POULSONBETTY JO KIESOWVICE PRESIDENTENGINEERING SERVICES
DIRK ROTTYJEFF SCHOENECKER VICE PRESIDENTUTILITY SERVICESMJYKE NELSON.VICE PRESIDENT INFORMATION SERVICES / CIO
DOUG LARSON ..... VICE PRESIDENT REGULATORY SERVICES

For an emergency, after office hours, call 651-463-6201 or 1-800-430-9722.

## DAKOTA ELECTRIC ASSOCIATION <br> ELECTRIC RATE BOOK

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## SCHEDULE 31 <br> RESIDENTIAL AND FARM SERVICE

Availability
Available to individual residential and farm members for all domestic and farm use except irrigation.
This includes service to individually metered apartment units and master-metered multi-tenant residential facilities. Service is subject to the established rules and regulations of the Association.

Type of Service
Single phase or three phase, when economically feasible, 60 hertz, at available secondary voltages.
Monthly Rate

| Fixed Charge |  | \$109.00 per month |
| :---: | :---: | :---: |
| Energy Charge |  |  |
| Summer (June-Aug) | @ | \$0.137908 per kWh |
| Other | @ | \$0.1239168 per kWh |
| Plus Applicable Taxes |  |  |

## Minimum Monthly Charge

The minimum monthly charge under the above rate shall be the Fixed Charge.
Resource and Tax Adjustment (RTA)
The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903-0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Billing for Master-Metered Multi-Tenant Residential Facilities

The monthly bill for master-metered multi-tenant residential facilities will be determined by multiplying the number of residential living units per master meter times the Fixed Charge and include the metered energy consumption times the applicable energy charge plus the Resource and Tax Adjustment.

Taxes
The rates set forth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 32

RESIDENTIAL AND FARM DEMAND CONTROL RATE

## Availability

Available to residential and farm members with at least 5 kW of qualifying off-peak loads as determined by the Association. This rate is subject to the rules and regulations of the Association. Members requesting service under this rate schedule must remain on this rate schedule for a minimum of twelve (12) months.

Type of Service
Single phase, 60 Hertz, at available secondary voltages.

## Monthly Rate

Fixed Charge
Energy Charge
Demand Charge
Summer (June-Aug)
Other
Plus Applicable Taxes

```
    $132.00 per month
    $0.081760 per kWh
@ $15.504.70 per kW
@ $11.9010 per kW
```


## Billing Demand Determination

The demand will be determined based on the peak 15-minute demand reading during control periods for the month the bill was rendered. An estimated demand will be used for new customers until the actual controlled demand is established.

## Minimum Monthly Charge

The minimum monthly charge under the above rate shall be the $\$ 12.00$ Fixed Charge plus a minimum billing demand of 3 kW .

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be increased or decreased by $\$ 0.0001$ per kilowatt-hour for each 0.1 mill or major fraction by which the energy component in the Association's purchased power cost per kilowatt-hour purchased from its power supplier exceeds, or is less than $\$ 0.09030939$ per kilowatt-hour purchased. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set fourth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

# SCHEDULE EV-1 PHOT -RESIDENTIAL ELECTRIC VEHICLE SERVICE 

## Availability

Available on voluntary basis as a pilot program for residential consumers taking service under Schedule 31 who also desire metered service for the sole purpose of electrically charging a licensed automobile or light truck. Service on this tariff is limited to electric vehicles that are SAE J1772 compliant and registered and operable on public highways in the State of Minnesota. Low-speed electric vehicles, including golf carts, are ineligible to take service under this tariff even if licensed to operate on public streets. The consumer may be required to provide the Association with proof of registration of the electric vehicle prior to taking service under this tariff. Service is subject to the established rules and regulations of the Association.

## Term

The pilot program will be offered for a minimum of a two year period. At the end of the initial two year pilot period, the Association will determine if this program will be contintled, modified, or eliminated. If it is eliminated, the consumers participating in the pilot program will revert back to the appropriate retail rate tariff for their class of service.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages.

## Rate

Energy Charges:
Off-Peak: $\quad 6.74 £ \$ 0.0756$ per kWh
On-Peak: $\quad 41.44 £ \$ 0.4421$ per kWh
Other: $\quad$ Schedule 31 energy charges apply
Plus RTA and applicable sales tax
Definition of Periods
Energy Charge time periods are defined as follows:
Off-Peak 9:00 pm to 8:00 am Mon. - Fri., and all day Weekends and Holidays
On-Peak $\quad$ 4:00 pm to 9:00 pm Mon. - Fri., excluding Holidays
Other $\quad$ 8:00 am to 4:00 pm Mon. - Fri., excluding Holidays
Holidays shall be: New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

# SCHEDULE EV-1 <br> PHOT -RESIDENTIAL ELECTRIC VEHICLE SERVICE <br> CONTINUED 

## Metering

Electric service under this rate must be supplied through a sub-metered circuit (installed at the consumer's expense) and approved electric vehicle charging equipment. Installations must conform to the Association's specifications. The consumer shall supply, at no expense to Dakota Electric, a suitable location for meters and associated equipment used for billing and for load research. For purposes of monitoring consumer load under this pilot program, the Association may install load research metering at its expense.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903-0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Data Privacy

Participation in any load research effort as part of this schedule will be strictly voluntary. The Cooperative's use of such load research data will be strictly limited to the provision of electric service. The Cooperative will not disclose, share, rent, lease, or sell such data to any third party or affiliate for any other purpose, without the consumer's express, affirmative written informed consent.

## Taxes

The rates set fourth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 36

IRRIGATION SERVICE

## Availability

Available to any member for service to irrigation pumps. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages.

## Monthly Rate

Firm Service

Fixed Charge
Demand Charge
Summer (June-Aug)
Winter (Dec-Feb)
Other
Energy Charge
Plus Applicable Taxes
Interruptible

| Fixed Charge |  | $\$ 30.00$ per month |
| :--- | :--- | :--- |
| Demand Charge | $@$ | $\$ 4.55$ per kW |
| Energy Charge | $@$ | $\$ 0.0521499$ per kWh |
| Plus Applicable Taxes |  |  |

$\$ 0.0521499$ per kWh
$\$ 30.00$ per month
$\$ 26.6035$ per kW
@ $\quad \$ 21.200 .95$ per kW
@ $\quad \$ 15.6750$ per kW
@ $\quad \$ 0.0521499$ per kWh
@ $\quad \$ 26.6035$ per kW

## Determination of Metered Demand

The Metered Demand in kilowatts shall be the greatest 15 -minute demand (subject to power factor adjustment) during the month for which the bill is rendered. Demand will be read to the nearest 0.01 kilowatt.

## Power Factor Adjustment

The member agrees to maintain as near unity (100 percent) power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent, the demand for billing purposes shall be the demand as recorded by the demand meter multiplied by 90 percent and divided by the percent power factor.

Minimum Monthly Charge
The Minimum Monthly Charge under the above rate shall be the Fixed Charge.

## SCHEDULE 36

IRRIGATION SERVICE
(Continued)

## Interruptible Requirements

Members that switch from Interruptible to Firm service during the calendar year will be billed the Firm service rate during the month the change was made. The member must remain on the Firm service rate for the remainder of the calendar year. This includes members that intentionally bypass the load control equipment.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor applicable to firm irrigation shall be adjusted by $\$ 0.0001$ per kilowatt-hour, or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903-0939$ per kilowatt-hour sold. The energy cost factor shall be adjusted by $\$ 0.0001$ per kWh , or major fraction thereof, of which the Association's total projected power cost per kWh applicable to interruptible irrigation exceeds, or is less than, $\$ 0.0497 \underline{0521}$ per kWh sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

Terms of Payment
The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

DAKOTA ELECTRIC ASSOCIATION
$4300220^{\text {th }}$ Street West
Farmington, MN 55024

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## SCHEDULE 41 <br> SMALL GENERAL SERVICE

## Availability

Available to any commercial member for all uses, except irrigation pumps, where the Metered Demand is 15 kW or less. If the Metered Demand exceeds 15 kW for three consecutive months, the member will be transferred to the General Service Rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages.
Monthly Rate

| Fixed Charge | $\$ 154.00$ per month |  |
| :--- | :--- | :--- |
| Energy Charge |  |  |
| $\quad$ Summer (June-Aug) | @ $\$ 0.1 \underline{375} 269$ per kWh |  |
| $\quad$ Other | @ | $\$ 0.1 \underline{235} 129$ per kWh |

Plus Applicable Taxes
Determination of Metered Demand
The Metered Demand in kilowatts shall be the greatest 15 -minute demand during the month for which the bill is rendered. Demand will be read to the nearest 0.01 kilowatt.

## Minimum Monthly Charge

The Minimum Monthly Charge under the above rate shall be the Fixed Charge.

## Non-metered Option

This option has limited availability. It may be available for: devices that are located at individual points of delivery and are operated with a continuous or predetermined load level that exceeds the threshold determined for Schedule 45. The monthly energy consumption will be determined by the Association based on equipment documentation provided by the member. The maximum monthly energy allowed under this option will be 500 kWh .

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903-0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 44

## SECURITY LIGHTING SERVICE

## Availability

Available for year-around illumination for private residential, farm, or commercial lighting on existing Association service poles where service poles and service wires can be connected on the line side of member's meter. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

The Association shall own, operate, and maintain the security lighting system using the Association's standard security lighting equipment. The energy used by these lights is unmetered.

## Monthly Rate

Designation of Lamp
Monthly Rate Per Luminaire
100 Watt High Pressure Sodium (Closed to new)
\$12.010.10
150 Watt High Pressure Sodium (Closed to new)
\$14.261.99
250 Watt High Pressure Sodium (Closed to new)
\$18.835.79
Plus Applicable Taxes
Optional - For residential or farm installation requiring any extra equipment, or in the event the consumer requests the changeout of an existing light to a different size and/or type, a contribution to construction will be required to cover the extra costs incurred. Commercial installations on existing service poles only.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903-0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

# SCHEDULE 44-1 <br> STREET LIGHTING SERVICE <br> (MEMBER - OWNED) 

## Availability

Available for year-round illumination of public streets, parkways, highways, and other public ways by electric lamps mounted on standards where member owns the lighting system complete with standards, luminaries, globes, lamps, and other appurtenances, together will all necessary cables extending between standards and to point of connection to the Association's facilities as designated by the Association.

## Type of Service

The street lighting system shall be built and owned by the member. All controls will be provided by the member. The member shall also provide all easements and right-of-way to permit access to feed points. The Association shall operate and provide limited maintenance (periodic cleaning of lens, refractor, and bulb replacement) on street lighting systems.

## Monthly Rate

Designation of Lamp<br>175 Watt Mercury (Closed to new)<br>250 Watt Mercury (Closed to new)<br>400 Watt Mercury (Closed to new)<br>100 Watt High Pressure Sodium<br>150 Watt High Pressure Sodium<br>200 Watt High Pressure Sodium<br>250 Watt High Pressure Sodium<br>400 Watt High Pressure Sodium<br>Plus Applicable Taxes

Monthly Rate Per Luminaire
\$13.250.52
\$16.743.46
$\$ \underline{22.7118 .54}$
$\$ 9.617 .56$
$\$ 11.789 .46$
\$14.181.44
\$16.353.25
$\$ 21.2417 .67$

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## SCHEDULE 44-1

STREET LIGHTING SERVICE (MEMBER-OWNED) (Continued)

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903-0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 44-2

STREET LIGHTING SERVICE
(DEA - OWNED EQUIPMENT)

## Availability

Available for governmental or private year-around illumination of public or private streets, parkways, highways, and other public ways by electric lamps in luminaires supported on existing poles where secondary voltage is available and the facilities for this service are furnished by the Association.

Type of Service
The Association shall own, operate, and maintain the overhead street lighting system using the Association's standard street lighting equipment. The energy used by these lights is unmetered.

## Monthly Rate

Designation of Lamp
175 Watt Mercury (Closed to new)
Monthly Rate Per Luminaire
$\$ 1 \underline{7.445 .23}$
$\$ \underline{0.93} 18.16$
$\$ 2 \underline{6.89} 3.25$
400 Watt Mercury (Closed to new)
100 Watt High Pressure Sodium (Closed to new)
$\$ 13.802 .27$
150 Watt High Pressure Sodium (Closed to new)
$\$ 15.974 .16$
250 Watt High Pressure Sodium (Closed to new)
\$20.5417.95
400 Watt High Pressure Sodium (Closed to new) \$25.422.38 Plus Applicable Taxes

The above rates cover only an installation where the pole with secondary voltage is existing at the light location. Contributions to construction costs will be required if additional equipment is needed or if a member requests a change to a different lamp size and/or type when costs exceed $\$ 500$.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903-0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## SCHEDULE 44-2

STREET LIGHTING SERVICE
(DEA - OWNED EQUIPMENT)
(Continued)

## Taxes

The rates set forth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent of $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 44-3

## CUSTOM RESIDENTIAL STREET LIGHTING (DEA-OWNED - CONTRIBUTION BY MEMBER)

## Availability

Available for year-round illumination of public streets, parkways, highways, and other public ways by electric lamps mounted on standards and served through underground circuits, where the facilities for this service are furnished by the Association. Street lighting service under this schedule is limited to residential areas having an underground distribution area.

## Type of Service

The Association shall own, operate, and maintain the lighting system using the Association's standard street lighting equipment which includes one lamp per standard. Member shall be required to contribute an amount equal to the installation cost of the lighting system. The energy used by these lights is unmetered.

## Monthly Rate

Designation of Lamp
175 Watt Mercury (Closed to new)
50 Watt High Pressure Sodium (Closed to new)
100 Watt High Pressure Sodium (Closed to new)
150 Watt High Pressure Sodium (Closed to new)
250 Watt High Pressure Sodium (Closed to new) Plus Applicable Taxes

Monthly Rate Per Luminaire
\$14.031.37
$\$ 8.456 .70$
$\$ 10.398 .41$
\$12.630.30
\$17.214.09

Optional - For installations requiring any extra equipment or in the event the member requests the changeout of an existing light to be a different size and/or type, the member will be required to pay all construction fees or extra charges incurred.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903-0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent of $\$ 1.00$, whichever is greater, added to the balance.

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## SCHEDULE 44-4 <br> LED SECURITY LIGHTING <br> SERVICE

## Availability

Available for year-around illumination for private residential, farm, or commercial lighting by Light Emitting Diode (LED) electric lamps on existing Association service poles where service poles and service wires can be connected on the utility side of the meter. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

The Association shall own, operate, and maintain the LED security lighting system using the Association's standard LED security lighting equipment. Fixtures on this rate will only be attached to an existing DEA service pole. The energy used by these lights is unmetered.
Monthly Rate

## Light Emitting Diode Security Light (LED, > 4,500 lumens) <br> $\$ 7.7563$ per month Plus Applicable Taxes

Optional - For installations requiring any extra equipment (excluding poles), a contribution to construction will be required to cover the extra costs incurred. In the event the member requests the change out of an existing light, the member will be required to pay all construction fees and material costs for the new installation or upgrade as well as payment for the undepreciated cost of the existing light, less any salvage value.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903-0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

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SCHEDULE 44-5
LED STREET LIGHTING
(MEMBER-OWNED)

## Availability

Available for year-round illumination of public streets, parkways, highways, and other public ways by Light Emitting Diode (LED) electric lamps served through underground or overhead circuits, where the facilities for this service are furnished and owned by the Member. Service is subject to the established rules and regulations of the Association.

## Type of Service

The member shall own, operate, and maintain the LED lighting system.
The preferred service option is metered LED lighting. Such service will be billed to the Member under the rate schedule associated with the meter.

Unmetered service will be allowed if the Association determines it is not practical for the lights to be metered. For such unmetered use:

1. Billing will be according to specified consumption groups. Dakota Electric will determine if a member qualifies for the unmetered rate and which consumption group.
2. The Member will be required to provide Dakota Electric with a notice prior to any change in equipment.
3. No other use is allowed from the fixture. (e.g. Wi-Fi attachments, holiday lights, etc.)
4. The Association will periodically inspect the unmetered fixtures to ensure compliance with requirements.
5. The Member must provide proof of lighting system rating. (i.e. data sheet or model number)

No maintenance will be included in the monthly rate from the Association for any member-owned LED street light. At the request of a Member, Dakota Electric may enter into individual contracts with a Member for the type and frequency of maintenance they may desire from the Association.

## Monthly Rate

Metered Service:
According to applicable rate schedule
Unmetered Service:
Consumption Group
A ( 40 to 80 watts)
B (81 to 150 watts)
C (151 to 250 watts)
D (251 to 350 watts)
E (351 to 450 watts)
Monthly Rate per Fixture
$\$ 5.504 .81$
$\$ \underline{7.756 .71}$
$\$ \underline{11.169 .66}$
$\$ 15.043 .05$
$\$ 1 \underline{9.076 .52}$

Plus Applicable Taxes
The range of watt ratings for the Unmetered Consumption Groups will be adjusted periodically to reflect the predominant size of lights receiving such Unmetered Service.

# SCHEDULE 44-5 <br> LED STREET LIGHTING (MEMBER-OWNED) <br> (Continued) 

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903-0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent of $\$ 1.00$, whichever is greater, added to the balance.

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## SCHEDULE 44-6 <br> LED STREET LIGHTING <br> (DEA-OWNED - CONTRIBUTION BY MEMBER)

## Availability

Available for year-round illumination of public streets, parkways, highways, and other public ways by Light Emitting Diode (LED) electric lamps served through underground or overhead circuits, where the facilities for this service are furnished by the Association. Conversion of existing lighting to LED lighting may be limited to accommodate workload scheduling. Street lighting service under this schedule is limited to designated LED lighting fixtures offered by the Association in its distribution area. Service is subject to the established rules and regulations of the Association.

## Type of Service

The Association shall own, operate, and maintain the LED lighting system using the Association's standard street lighting equipment which includes one fixture per pole. Member shall be required to contribute an amount equal to the initial installation or upgrade cost of the lighting system. The energy used by these lights is unmetered.

## Monthly Rate

|  | Monthly Rate per Fixture |  |
| :--- | :--- | :--- |
| Designation of Fixture | $\underline{\text { Standard }}$ | $\underline{\text { Basic }}$ |
| Light Emitting Diode (LED, > 5,200 lumens) Coach Light (Post) | $\$ \underline{9.3010 .60}$ | $\$ 6.3683$ |
| Light Emitting Diode (LED, > 5,200 lumens) Acorn Light (Post) | $\$ 1 \underline{0.851 .24}$ | $\$ 6 . \underline{1230}$ |
| Light Emitting Diode (LED, > 7,000 lumens) Cobra Light (Mast) | $\$ 8.6031$ | $\$ 6.9851$ |
| Light Emitting Diode (LED, > 11,500 lumens) Shoebox Light (Mast) | $\$ 10.7 \underline{01}$ | $\$ \underline{8.687 .98}$ |
| Plus Applicable Taxes |  |  |

The Coach and Acorn fixtures will be mounted on a street light post. The Cobra and Shoebox fixtures will be fastened to a mast arm on existing service poles. In the event the member requests the change out of an existing light, the member will be required to pay all construction fees and material costs for the new installation or upgrade as well as payment for the undepreciated cost of the existing light, less any salvage value.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903-0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

SCHEDULE 44-6<br>LED STREET LIGHTING<br>(DEA-OWNED - CONTRIBUTION BY MEMBER)<br>(Continued)

## Service Included in Rate

For Standard Service, Dakota Electric will furnish all electric energy necessary to operate the street lighting system, will make all lamp and glassware renewals, clean the glassware, make all ballast and starter renewals, repair all damaged equipment, and furnish all the materials and labor necessary for these services.

For Basic Service, Dakota Electric will furnish all electric energy necessary to operate the street lighting system, clean the glassware, and repair all damaged equipment. The Member will be responsible for material and labor costs to replace failed components and fixtures not covered by manufacturers warranties. Selection of Basic Service is a "life of fixture" designation.

## Taxes

The rates set forth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent of $\$ 1.00$, whichever is greater, added to the balance.

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SCHEDULE 45
LOW WATTAGE UNMETERED SERVICE

## Availability

This rate is available for low-wattage electronic devices that are: 1) Individually located at each point of delivery, 2) Rated at less than 150 watts, and 3) A determinable load level. Each individual electronic device must not in any way interfere with Association operations and service to adjacent members. This rate is also available to equipment connected to the supply side of the service disconnect such as fire and sprinkler alarms, and emergency lighting systems, if such equipment is used only during times of emergency. This will require verification from a licensed electrical contractor/electrician in the form of an affidavit.

This Low Wattage Unmetered Service is not applicable to electric service for traffic signals, civil defense, or lighting. Association reserves the right to evaluate member requests for this service to determine eligibility.

## Type of Service

Either single phase or three phase, depending on feasibility, 60 hertz, at available secondary voltages.

## Installation Charges

The member shall pay the total estimated installation charges involved to provide service.

## Monthly Rate

$\$ 10.5000$ per month per service location, plus applicable sales tax.

## Taxes

The rates set forth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance

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## Availability

Available to any eommereial-non-residential member for all general service uses except irrigation. Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

Type of Service
Single phase or three phase, 60 hertz, at available secondary voltages.

## Monthly Rate

Fixed Charge
Demand Charge
Summer (June-Aug)
Other (Sept - May)
Energy Charge
First 200 kWh per kW
Next 200 kWh per kW
Over 400 kWh per kW
Plus Applicable Taxes
$\$ 34.00$
@ $\quad \$ 13.702 .26$ per kW
@ $\quad \$ 10.609 .16$ per kW
@ $\quad \$ 0.0776$ per kWh
@ $\quad \$ 0.0676$ per kWh
@ $\quad \$ 0.0576$ per kWh

Determination of Metered-Demand
The Metered Demand in kilowatts shall be the greatest 15-minute demand (subject to power factor adjustment) during the month for which the bill is rendered. Demand will be read to the nearest 0.01 kilowatt. In no month shall the Billing Demand be greater than the value in kW determined by dividing the kWh sales for the billing month by the product of 24 hours x 0.1 load factor x days in the billing month.

## Determination of Energy Charge

The energy ( kWh ) billed in each rate block is determined in relation to the monthly demand ( kW ). The energy in the first block includes the first 200 kWh multiplied by the monthly metered demand. The second block includes the next 200 kWh multiplied by the monthly metered demand. All energy in excess of 400 kWh multiplied by the monthly metered demand is billed under the third block.

## Power Factor Adjustment

The member agrees to maintain as near unity (100 percent) power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent, the demand for billing purposes shall be the demand as recorded by the demand meter multiplied by 90 percent and divided by the percent power factor.

## Minimum Monthly Charge

The Minimum Monthly Charge under the above rate shall be the Fixed Charge plus $\$ 1.00$ per kW of the highest billing demand during the preceding 11 months.

## Primary Voltage Service

A discount of $\$ 0.15 / \mathrm{kW}$ of Billing Demand will be applied to the bill when service is taken by the member at the available primary voltage. If primary metering is used, an additional discount of 2.0 percent shall be applied to the bill. The 2.0 percent discount shall be applied after the $\$ 0.15 / \mathrm{kW}$ discount.

## SCHEDULE 46

GENERAL SERVICE
(Continued)

Billing for Multi-Use Facilities
Multi-use facilities are defined as buildings or complexes that include a combination of commercial or institutional load along with some portion of residential domestic consumption. (For combined billing, commercial use does not include consumption in common areas of multitenant residential facilities.) Where service and metering are separated between residential and commercial consumption, such electrical service will be billed under the terms of Schedule 31, Schedule 41, and Schedules 46 or 54 as applicable. Where such service is combined, such electrical service will be billed under the terms of Schedules 46 or 54 as applicable.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903-0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SEASONAL MEMBER RIDER

## Availability

Available to members receiving service under rate schedules $46,54,70$ or 71 and determined by the Association to be seasonal. Seasonal members qualifying for the Seasonal Member Rider are defined as businesses (service or production) that are closed or shut down for at least three consecutive months during the year. Service is subject to the established rules and regulations of the Association.

## Rider

If an account is determined to be seasonal in nature by the Association, the minimum monthly charge shall be the fixed charge for each month of the 12 month period. Minimum monthly demand provisions will not be applied. Members who elect to be disconnected during a portion of the year and then reconnected will be charged adiseonnect and-a reconnect fee as well as the monthly fixed charge for all 12 months.

## SCHEDULE 47

MUNICIPAL CIVIL DEFENSE SIRENS

## Availability

This rate will be available to governmental bodies for civil defense siren services where energy consumption is negligible.

Type of Service
Either single phase or three phase, depending on feasibility, 60 hertz, at available secondary voltages.

## Installation Charges

The member shall pay the total estimated installation charges involved to provide service when additional transformers are required. No initial charge will be made to run an overhead service wire from an existing transformer or for making connections to an existing underground feedpoint.

## Monthly Rate

\$5.00/Month per Installation
Plus Applicable Taxes

## Taxes

The rates set forth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 49 <br> GEOTHERMAL HEAT PUMP RIDER <br> (Closed to new consumers.)

## Availability

Available to any commercial member for energy used by a geothermal heat pump system.
Members requesting service under this rate schedule must be taking service concurrently under Rate Schedule 41 or 46 . Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available primary or secondary voltages.

## Rate

Energy Charge
$\$ 0.1030940$ per kWh
Plus applicable taxes

## Metering

The geothermal heat pump system must be separately, parallel metered from all other loads at the premise. Service will not be sub-metered.

## Power Factor

The member agrees to maintain as near unity (100 percent) power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent, the energy for billing purposes shall be adjusted accordingly.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kWh , or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour for this service annually exceeds, or is less than, $\$ 0.0775-0813 \mathrm{per} \mathrm{kWh}$ sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted as necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

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## SCHEDULE 49

GEOTHERMAL HEAT PUMP RIDER
(Continued)

## Conditions of Service

If service is furnished at secondary voltage, the delivery point shall be the metering point unless otherwise specified in the contract for service. All wiring, poles, lines and other electric equipment on the load side of the delivery point shall be owned and maintained by the member.

If service is furnished at the Cooperative's primary line voltage, the delivery point shall be the point of attachment of the cooperative's primary line to member's transformer structure unless otherwise specified in the contract for service. All wiring, poles, lines and other electric equipment (except metering equipment) on the low side of the delivery point shall be owned and maintained by the member.

## Taxes

The rates set forth are based on taxes as of January 1, 20124. The amount of any increase in existing or new taxes on the transmission, distribution or sales of electricity are allocable to sales here under, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.
$\qquad$

## SCHEDULE 51

CONTROLLED ENERGY STORAGE

## Availability

Available to members taking service concurrently under rate schedules 31,41 and 46. This rate is for interruptible service to energy storage loads which are remotely controlled by the Association. Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages. Service under this schedule will be available for approximately eight hours per day, normally 11:00 p.m. to 7:00 a.m., or as established by the Association.

## Monthly Rate

Energy Charge @ $\$ 0.04 \underline{8740}$ per kWh
Plus Applicable Taxes.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53 ). The energy cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected weighted average power cost per kilowatt-hour for this service exceeds, or is less than $\$ 0.0200-0204$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Demand

The metered demand of loads on this rate will be subtracted from the metered demand for members receiving service under Schedule 41 and 46 when the storage load is coincident with the member's other loads. When feasible, new controlled energy storage loads should be on a separate service from Schedule 41 and 46 load.

## Taxes

The rates set fourth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

Availability
Available to member taking service concurrently under rate schedules 31, 41 and 46. This rate is for interruptible service to qualifying loads which are remotely controlled by the Association. Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages. Service under this schedule will be available at all times except when interrupted by the Association during times of peak system demand or system emergencies.

## Monthly Rate

Energy Charge
Plus Applicable Taxes.

## Alternate Monthly Rate for Controlled Water Heaters

Where separate metering of controlled water heaters is not possible or for members on Rate 53, a direct credit of $\$ 1.50$ per 100 kWh used up to a maximum of $\$ 6.00$ per month will be applied against the monthly bill.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The energy cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected weighted average power cost per kilowatt-hour for this service exceeds, or is less than $\$ 0.03050352$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Demand

The metered demand of loads on this rate will be subtracted from the metered demand for members receiving service under Schedule 41 and 46 when the interruptible load is coincident with the member's other loads. When feasible, new controlled interruptible services loads should be on a separate service from Schedule 41 and 46 load.

## Taxes

The rates set fourth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 53 <br> RESIDENTIAL AND FARM SERVICE TIME-OF-DAY RATE

## Availability

Available to residential and farm members for all domestic and farm use, except irrigation pumps. Members participating in this service are not eligible for either Schedule 51 or Schedule 52. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

Type of Service
Single phase or three phase, when economically feasible, 60 hertz, at available secondary voltages.
Monthly Rate
Fixed Charge
Energy Charge

| Summer $-($ June-Aug $)$ Peak Period | $@$ | $\$ 0.212631880$ per kWh |
| :--- | :--- | :--- |
| Other - Peak Period | $@$ | $\$ 0.198631740$ per kWh |
| Off-Peak Period | $@$ | $\$ 0.094540$ per kWh |

Plus Applicable Taxes

## Definition of Periods

Peak Period 4:00 p.m. to 11:00 p.m., excluding holidays and weekends
Off-Peak Period 11:00 p.m. to 4:00 p.m., plus all day on holidays and weekends
Holidays include New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

## Minimum Monthly Charge

The minimum monthly charge under the above rate shall be the Fixed Charge.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceed, or is less than $\$ 0.0903-0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

# SCHEDULE 53 <br> RESIDENTIAL AND FARM SERVICE <br> TIME-OF-DAY RATE <br> (Continued) 

Taxes
The rates set forth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 54 <br> GENERAL SERVICE OPTIONAL TIME-OF-DAY RATE

## Availability

Available to any member for general service electrical loads. Members participating in this service are not eligible for either Schedule 51 or Schedule 52. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available primary or secondary voltages.

## Monthly Rate

Fixed Charge $\$ 36.00$ per month
Peak Period Demand Charge Summer (June-Aug) @ $\$ 26.144 .85$ per kW
Winter (Dec-Feb)
@ $\$ 19.918 .95$ per kW
Other
@ $\$ 13 . \underline{67} \theta 0$ per kW
Plus
Maximum Demand Charge
@ $\$ 5.254 .75$ per kW
Energy Charge @ $\$ 0.0521499$ per kWh
Plus Applicable Taxes

## Definition of Periods

Peak Period 4:00 p.m. to 11:00 p.m., excluding holidays and weekends
Off-Peak Period
11:00 p.m. to 4:00 p.m., plus all day on holidays and weekends
Holidays include New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

## Determination of Billing Demand

1. Peak Period - The Peak Period Billing Demand shall be the greatest 15 minute demand (subject to power factor adjustment) between $4 \mathrm{p} . \mathrm{m}$. and $11 \mathrm{p} . \mathrm{m}$. during the month for which the bill is rendered, as indicated or recorded by a demand meter. Demand will be read to the nearest 0.01 kilowatt.
2. Maximum Demand - The Maximum Billing Demand shall be the greatest 15 minute demand (subject to power factor adjustment) during the month for which the bill is rendered, as indicated or recorded by a demand meter. Demand will be read to the nearest 0.01 kilowatt.

## Minimum Monthly Charge

The minimum monthly charge under the above rate shall be the Fixed Charge plus $\$ 1.00$ per kW of the highest Maximum Billing Demand during the preceding 11 months.

# SCHEDULE 54 <br> GENERAL SERVICE <br> OPTIONAL TIME-OF-DAY RATE <br> (Continued) 

## Power Factor Adjustment

The member agrees to maintain as near unity (100 percent) power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent, the demand for billing purposes shall be the demand as recorded by the demand meter multiplied by 90 percent and divided by the percent power factor.

## Primary Voltage Service

A discount of $\$ 0.15 / \mathrm{kW}$ will be applied to the Maximum Billing Demand when the service is taken by the member at the available primary voltage. If primary metering is used, an additional discount of 2.0 percent shall be applied to the bill. The 2.0 percent discount shall be applied after the $\$ 0.15 / \mathrm{kW}$ discount.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903-0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

Terms of Payment
The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 56 <br> RESIDENTIAL AND FARM SERVICE TIME-OF-DAY RATE

## Availability

Available to residential and farm members for all domestic and farm use, except irrigation pumps. Members participating in this service are not eligible for either Schedule 51 or Schedule 52. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, when economically feasible, 60 hertz, at available secondary voltages.

## Monthly Rate

Fixed Charge
Energy Charges
Peak Periods: Summer - (June-Aug) @ $\$ 0.2890710$ per kWh
Winter - (Dec-Feb) @ \$0.2320210 per kWh
Spring/Fall
Intermediate Period
Off-Peak Period
Plus Applicable Taxes

## Definition of Periods

Peak Periods 4:00 p.m. to 11:00 p.m., excluding holidays and weekends
Intermediate Period
Off-Peak Period
\$132.00 per month
@ $\$ 0.1880750$ per kWh
@ $\$ 0.10600970$ per kWh
@ $\$ 0.0 \underline{820760}$ per kWh

Holidays include New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.
Minimum Monthly Charge
The minimum monthly charge under the above rate shall be the Fixed Charge.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceed, or is less than $\$ 0.0903-0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

SCHEDULE 56<br>RESIDENTIAL AND FARM SERVICE<br>TIME-OF-DAY RATE<br>(Continued)

Taxes
The rates set forth are based on taxes as of January 1, 20124. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 60 <br> RIDER FOR STANDBY SERVICE CONTINUED

## Definitions

Contracted Standby Demand is the quantity specified in the member's Electric Service Agreement as the maximum amount of firm or non-firm standby service the Cooperative is obligated to supply and will not exceed the capacity of the member's distributed generation system.

Firm Service refers to a utility's most reliable, constant electric service. A utility would interrupt the supply of electricity to a firm service customer only as a last resort.
Non-Firm Service, also called interruptible service, refers to electric service that a utility provides only to the extent that it has capacity not being used to meet the needs of firm-service members at the moment.
All other definitions shall be as described in Cooperative's Distributed Generation Interconnection Requirements and Interconnection Process for Distributed Generation Systems.

## Charges for Service

The following Reservation Fees, Communication Fee, Usage Fees, and Wheeling Fees will be assessed as applicable in addition to all charges for service being taken under Cooperative's base rate schedule:

## Reservation Fees

Charges as specified below for the reservation of either Firm or Non-Firm generation, transmission and distribution service per Month per kW will each be applied to the member's Contracted Standby Demand as specified in member's Electric Service Agreement with Cooperative:

|  | Firm Service (\$ per kW) | Non-Firm Service (\$ per kW) |
| :---: | :---: | :---: |
| Generation | * | ** |
| Transmission | * | ** |
| Distribution - Secondary Service | \$4.023.51 | \$4.023.51 |
| Distribution - Primary Service | \$3.8928 | \$3.8928 |
| Distribution - Substation Service | \$0.8190 | \$0.8190 |

* Firm Standby Service generation and transmission Reservation Fees will be billed under the rates, terms and conditions of the Cooperative's wholesale power supplier (Great River Energy), which is available on GRE's Web site; greatriverenergy.com and DEA's Web site; dakotaelectric.com.
**Generation and transmission Reservation Fees are not applied for Non-Firm Service. However, members will be responsible for all costs associated with wholesale power supply during any times of usage.


## Communication Fee

A monthly Communication Fee will be applied to cover the cost of transmitting data through the use of digital cellular equipment. The monthly Communication Fee is applied to each required meter with cellular data capabilities.

Communication Fee $\$ 8.70$ per meter

## Usage Fees

## Demand Charge

If the member registers electrical usage from Cooperative during a billing month then such usage will result in demand charges which may vary between members contracting for Firm Standby Service or Non-Firm Standby Service.

## SCHEDULE 70 <br> INTERRUPTIBLE SERVICE (FULL INTERRUPTIBLE OPTION)

Availability
Available to any member with a minimum controllable demand of 50 kW . Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Members participating in this service are not eligible for concurrent service under any other rate schedule. Service is subject to the established rules and regulations of the Association.

Under the full interruptible control option, members agree to interrupt their entire electrical energy usage. Members may attain this full interruption through curtailment or with the use of on-site generation back-up. During the interruption, the member's load must go to zero.

Type of Service
Single phase or three phase, 60 hertz, at available primary or secondary voltages.

## Monthly Rate

Fixed Charge
Communication Fee (meters w/ digital cellular)
Coincidental Demand
Summer (June-Aug)
Winter (Dec-Feb)
Other
Non-Coincidental Demand
Energy Charge
Failure to Control Charge
Plus Applicable Taxes
$\$ 1 \underline{3010.00}$ per month
$\$ 8.70$ per month
Coincidental Demand
Summer (June-Aug) @ \$26.144.85 per kW
Winter (Dec-Feb)
\$19.918.95 per kW
$\$ 13.6700$ per kW
Non-Coincidental Demand
\$ 5.254.75 per kW
$\$ 0.0521499$ per kWh
Failure to Control Charge
\$ 5.00 per kW
Plus Applicable Taxes

## Control Period

The control period shall be defined as the period of time during which the Association is controlling these loads with the intent of minimizing demand on the Association's system.

## Coincidental Demand

The monthly Coincidental Demand under the full interruptible control option shall be defined as the member's actual hourly demand (subject to power factor adjustment) that is coincident with the wholesale power supplier (i.e. average of the four fifteen minute demand readings for the hour ending of the wholesale billing peak) when the load is directed to be controlled during the wholesale billing peak.

## Non-Coincidental Demand

The Non-Coincidental Demand shall be the maximum kilowatt demand (subject to power factor adjustment) established by the member for any period of 15 consecutive minutes during the month for which the bill is rendered, as indicated or recorded by a demand meter.

## Failure to Control

The Failure to Control Charge will be applied to the highest kilowatt demand during any one monthly control period when the member does not fully interrupt demand. The Failure to Control Charge is applied to the highest demand recorded during any one of the monthly control periods. The control period shall be defined as the period of time during which the Association is controlling these loads with the intent of minimizing demand on the Association's system. Failure to control or being unavailable for control for more than one calendar month may require the member to be removed from Schedule 70 for the remainder of the year.

## Scheduled Maintenance

Members are encouraged to schedule required periodic maintenance during the spring and fall months and coordinate such maintenance with the Association.

## SCHEDULE 70

INTERRUPTIBLE SERVICE
(FULL INTERRUPTIBLE OPTION)
(Continued)

## Minimum Billing Demand

The Minimum Billing Demand for any billing period shall be no less than 50 percent of the highest noncoincidental demand during the preceding 11 months.

## Power Factor Adjustment

The member agrees to maintain as near unity power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent; the demand for billing purposes shall be the demand as recorded by the demand meter multiplied by 90 percent and divided by the percent power factor.

## Primary Voltage Service

A discount of $\$ 0.15$ per kW of billing demand will be applied to the bill when service is taken by the member at the available primary voltage. If primary metering is used, an additional discount of 2.0 percent shall be applied to the bill. The 2.0 percent discount shall be applied after the $\$ 0.15$ per kW discount.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in wholesale power costs, Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The energy cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour applicable to this service exceeds, or is less than $\$ 0.0497 \underline{0521}$ per kilowatt-hour sold as described in the Energy Cost Adjustment Rider (ECA) (Sheet 52). The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

SCHEDULE 71
INTERRUPTIBLE SERVICE
(PARTIAL INTERRUPTIBLE OPTION)

## Availability

Available to any member with a minimum controllable demand of 50 kW . Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Members participating in this service are not eligible for concurrent service under any other rate schedule. Service is subject to the established rules and regulations of the Association.

Under the partial interruptible control option, members agree to reduce a portion of their electrical energy usage. Members may attain this partial interruption through curtailment or with the use of on-site generation back-up. During the interruption, the member's load goes to a Predetermined Demand Level (PDL). If a partial interruptible member fails to control demand to the PDL, then the PDL will be adjusted to the demand occurring during such control period.

Type of Service
Single phase or three phase, 60 hertz, at available primary or secondary voltages.
Monthly Rate
Fixed Charge
Communication Fee (meters w/ digital cellular)
Coincidental Demand
Summer (June - Aug)
Winter (Dec - Feb)
Other
Non-Coincidental Demand
Energy Charge
Excess Demand Charge
Plus Applicable Taxes
$\$ 13010.00$ per month
$\$ 8.70$ per month
$\$ 2 \underline{1} .144 .85$ per kW
$\$ 19.918 .95$ per kW
$\$ 13 . \underline{67} \theta 0$ per kW
$\$ \underline{5.254 .75}$ per kW
00.0521499 per kWh
$\$ 5.00$ per kW

## Control Period

The control period shall be-shall be defined as the period of time during which the Association is controlling these loads with the intent of minimizing demand on the Association's system.

## Coincidental Demand

The monthly Coincidental Demand under the partial interruptible control option shall be defined as:

- During a month with no control period, the monthly Coincidental Demand under the partial interruptible control option will be the lesser of the member's actual hourly demand (subject to power factor adjustment) that is coincident with the wholesale power supplier (i.e. average of the four fifteen minute demand readings for the hour ending of the wholesale billing peak) or the Predetermined Demand Level.
During a month with a control period, the monthly Coincidental Demand under the partial interruptible control option will be the member's actual hourly demand (subject to power factor adjustment) that is coincident with the wholesale power supplier (i.e. average of the four fifteen minute demand readings for the hour ending of the wholesale billing peak).
The partial interruptible PDL will be adjusted to any higher actual demand of the member occurring during a curtailable event for the remainder of the calendar year. In the case of members using on-site generation, the PDL may be adjusted to reflect the rated capacity of such generation that was not operational during the control period. Only one such adjustment per year will be allowed.


## Non-Coincidental Demand

The Non-Coincidental Demand shall be the maximum kilowatt demand (subject to power factor adjustment) established by the member for any period of 15 consecutive minutes during the month for which the bill is rendered, as indicated or recorded by a demand meter.

SCHEDULE 71
INTERRUPTIBLE SERVICE (PARTIAL INTERRUPTIBLE OPTION) (Continued)

## Excess Demand Charge

The Excess Demand Charge will be applied to the Coincidental Demand that exceeds the Predetermined Demand Level (PDL) for a member using the partial interruptible control option when the member does not reduce demand to the PDL during a control period. The Excess Demand Charge is applied per month.

## Minimum Billing Demand

The Minimum Billing Demand for any billing period shall be no less than 50 percent of the highest noncoincidental demand during the preceding 11 months.

## Power Factor Adjustment

The member agrees to maintain as near unity power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent; the demand for billing purposes shall be the demand as recorded by the demand meter multiplied by 90 percent and divided by the percent power factor.

## Primary Voltage Service

A discount of $\$ 0.15$ per kW of billing demand will be applied to the bill when service is taken by the member at the available primary voltage. If primary metering is used, an additional discount of 2.0 percent shall be applied to the bill. The 2.0 percent discount shall be applied after the $\$ 0.15$ per kW discount.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in wholesale power costs, Dakota Electric's conservation tracker account balance, and real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The energy cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour applicable to this service exceeds, or is less than $\$ 0.0497 \underline{0521}$ per kilowatt-hour sold as described in the Energy Cost Adjustment Rider (ECA) (Sheet 52). The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

Taxes
The rates set forth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 80 <br> CYCLED AIR CONDITIONING SERVICE

## Availability

Available to members taking service concurrently under another rate schedule. This rate is for interruptible service to central air conditioners which are remotely controlled by the Association. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages. Service under this schedule will be available at all times except when interrupted by the Association during times of peak system demand or system emergencies.

## Monthly Rate

Option No. 1 - Available to members who also take service under Schedules 51 and 52 where an existing meter and control unit may be utilized for the controlled air conditioning load.

Energy Charge per applicable Schedule 51 or 52
Option No. 2 - Available to members where a new meter and control unit must be installed to control the air conditioning load.

Energy Charge Credit @ $\$ 0.0320$ per kWh
Option No. 3-Available to members where a control unit must be installed to control the air conditioning load.

A credit will be applied to the first $\$ 13.00$ of the member's net energy consumption charges in the months of June, July, and August (prorated based on the number of qualifying calendar days in the billing month). In no case will the credit exceed the sum of the monthly Energy Charge and Resource and Tax Adjustment.

Option No. 4 - Available to non-residential members where a new meter and control unit must be installed but where it is not feasible or designed to meter the air conditioning load separately. The maximum capacity of any individual air conditioning compressor is 7.5 tons. A $\$ 6.50$ per ton per month credit will be applied to member's bill in the months of June, July, and August. The aggregate monthly credit per account will not exceed $1 / 3$ of the net charges for energy and demand in each month.
Plus Applicable Taxes

## $\underline{\text { Taxes }}$

The rates set forth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SPECIAL FEES OR CHARGES

1. Meter Test at Member's Request

Single Phase
. $\$ 8595.00$
Three Phase................................................................................................. $\$ 100110.00$
2. Bad Check ...................................................................................................\$15.0011.50
3. Reconnection Charge (after disconnect, same consumer)
a. Self-contained Metering (one person, one vehicle)

b. Current Transformer-rated Metering (two-person crew, one truck)

1) Working hours ................................................................................. $\$ 175185.00$
2) Outside normal working hours......................................................... $\$ 315340.00$
4. Service Charge
(outside normal working hours when problem is not with Association's equipment)
Two-person crew, one truck.
.$\$ 280340.00$
5. Load Management Service Charge
(when problem is not with Association's equipment)
1) Working hours.
.. $\$ 7080.00$
2) Outside normal working hours.
.$\$ 140 \underline{160.00}$
6. Pulse Meter (materials and installation)
.$\$ 500750.00$
7. Temperary Service
a. Non-Winter Menths..................................................................................... $\$ 205.00$
b. Winter Months (Oct 15_Apr 15) ............................................................... $\$ 340.00$
8. Transfer/Connection Charge ................................................................................ $\$ 17.50$
9. Member Contracted Hourly Work

Dakota Electric is periodically asked to perform on-site service work. Such services will be provided at a pre-arranged hourly rate.

## MEMBER SERVICE INFORMATION EXTENSION OF SERVICE

## General Policies Applicable to All Extensions of Service

1. It shall be the policy of Dakota Electric Association (DEA) to provide and extend electric service to any member within its service area in accordance with the rate schedules and policies established by the Association.
2. Dakota Electric Association requires that, on overhead services, the member or developer provide all necessary tree clearing of the power line route outside the public right-of-way. Clearing includes any removal of debris as a result of tree cutting as may be required. The normal width of the right-of-way is-corridor to be cleared 10 feet on each side of the power lineis 30 feet with no less than 10 feet of clearance to any open or bare wire.

Dakota Electric Association will provide all necessary tree trimming on new overhead service extensions within the public right-of-way.

It is the goal of Dakota Electric Association to cooperate with the member to save as many trees as possible without jeopardizing the power line operation.
3. The member shall pay the cost of any subsequent relocation or rearrangement of any portion of the Association's system made to accommodate his/her needs or to accommodate alterations in grade.
4. Equipment, such as motors and generators that are operated interconnected with the Association, shall not cause objectionable voltage flicker on the distribution system and for other Association members. The member shall apply starters/controllers to the motors, as required, to limit the starting currents to levels acceptable to the Association. For generation, the member shall design and operate the generation system and the load transfer to and from the generation system so as not to cause objectionable voltage flicker.
5. Meters on all new installations shall meet the requirements of the Association's Technical Standards for Metering which are consistent with industry practices.
6. All member wiring must meet the requirements of the National Electric Code, National Electric Safety Code, State and local jurisdictions.

## Continuity of Service

Dakota Electric Association will endeavor to provide continuous service but does not guarantee an uninterrupted or undisturbed supply of electric service. The Cooperative will not be responsible for any loss or damage resulting from the interruption or disturbance of service for any cause other than gross negligence of the Cooperative. The Cooperative reserves the right, without previously notifying the member, to temporarily interrupt service for construction, inspection, repairs, emergency operations, shortages in power supply, safety, and State or National emergencies. The Cooperative will not be liable in any event for any loss of profits or other consequential damages resulting from the use of service or any interruption or disturbance of service.

# MEMBER SERVICE INFORMATION EXTENSION OF SERVICE CONTINUED 

## Individual Residential Extensions

1. Dakota Electric Association will serve a year-round, principle residence of an individual residential member with overhead or underground single-phase electric service at the rates and minimum charges established in applicable rate schedules. In order to ensure that the cost of the new facilities will not cause an undue burden on other members, the member will be assessed a contribution in aid of construction. The member will be charged a minimum of $\$ 500.00$ for an extension of 75 feet or less. For extensions longer than 75 feet, the member will be chargedflat fee of $\$ 5001,000.00$ plus $\$ 8.3011 .00$ per foot for each foot that theof line extension-exceeds 75 feet. The member will be assessed additional charges if above normal costs are incurred by DEA to accommodate member installation preferences or the member requests a nonstandard installation. In no event will the member be charged more than the actual costs for the extension.
2. Dakota Electric Association will furnish the overhead service triplex wire between the overhead system and the member-owned service mast. If a member desires underground service, DEA will install underground primary or secondary wire between the right-of-way and a point of connection located no closer than fifty (50) feet from the building, measured from the closest point of the building to the existing DEA facilities. The consumer will be charged the line extension costs outlined in paragraph one (1) of this section.
3. The member must install and own the underground secondary wire run between the point of connection and the meter. Dakota Electric Association will make the connection required at the point of connection.
4. For underground service, the member shall provide a right-of-way strip that is within four (4) inches, plus or minus, of the finished grade, free from obstructions and completely accessible to the Cooperative's equipment.
5. The member will be required to obtain and/or grant easements to the Cooperative for any portion of the extension that is outside a public right-of-way or easement, at no cost to the Cooperative. The Cooperative will prepare the necessary easement documents and will be reimbursed by the member for costs incurred for property title search, surveying, and recording fees.
6. The member will pay any additional installation costs incurred by the Cooperative because of:
a. delays caused by member:
b. installation of underground facilities after the ground is frozen;
c. surface and subsurface conditions that impede the installation of underground facilities, such as rock formations;
d. paving of streets, alleys or other areas prior to the installation of the underground facility;
e. above-average permit costs; or
f. DNR crossing fees.
7. The member will also be responsible for costs incurred for any relocation or rearrangement of any portion of the system made to accommodate the member after construction is underway or complete. The normal service capacity provided for overhead service will be 10 KVA per residential member and 15 KVA for underground service. Residential members requesting greater transformer capacity will be considered on an individual basis to determine if anticipated revenue justifies the additional expenditure without any further contribution in aid of construction.

# MEMBER SERVICE INFORMATION EXTENSION OF SERVICE CONTINUED 

Commercial and Industrial Members, Apartment ComplexesFacilities, and Seasonal Accounts

1. Dakota Electric Association will provide overhead or underground,single-phase or three-phase electric service to commercial (including commercial developments) and industrial members and apartment complexesmulti-tenant residential facilities in accordance with established applicable rates and charges when the anticipated revenue justifies the expenditure. Dakota Electric Association will install, own, and maintain the underground-primary service to a point of connection designated as either a single-phase or three-phase padmounted-transformer. An economic analysis will be made for any service that involves abnormally high investments, and/or those with low anticipated revenue. A contribution in the aid of construction will be required if the estimated investment is not justified by the anticipated revenue, calculated as follows for service provided under the applicable rate schedule:


When underground service is requested, the member shall provide a right-of-way strip that is within four (4) inches, plus or minus, of the finished grade. The right-of-way must be free from obstructions and completely accessible to the Association's equipment.

The member shall furnish the pad for the padmounted transformer on underground systems in accordance with specifications provided by Dakota Electric Association.

The member will pay any additional installation costs incurred by the Association because of:

1. delays caused by member;
2. installation of underground facilities after ground is frozen;
3. soil conditions that impair the installation of underground facilities, such as rock formations;
4. paving of streets, alleys or other areas prior to the installation of the underground facility;
5. above-average permit costs; or
6. DNR crossing fees.

There may be situations where the member shall be required to install sections of conduit, such as underground entrance to a pad, which shall be at no cost to the Association.

Docket No. E-111/GR-19-478


DAKOTA ELECTRIC ASSOCIATION
SECTION:
$4300220^{\text {th }}$ Street West
SHEET:
REVISION:

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DAKOTA ELECTRIC ASSOCIATION
SECTION:
II
$4300220^{\text {th }}$ Street West
SHEET:
Farmington, MN 55024
REVISION:

CONTACT LIST

DAKOTA ELECTRIC ASSOCIATION
SECTION:

DAKOTA ELECTRIC ASSOCIATION<br>$4300220^{\text {th }}$ Street West<br>Farmington, MN 55024<br>(651) 463-6212


#### Abstract

GREG MILLER. PRESIDENT/CEO MIKE FOSSE VICE PRESIDENT ENERGY \& MEMBER SERVICES LOU ANN WEFLEN VICE PRESIDENT FINANCIAL \& INFORMATION SERVICES RANDY POULSON $\qquad$ VICE PRESIDENT ENGINEERING DIRK ROTTY. .VICE PRESIDENT UTILITY SERVICES

DOUG LARSON VICE PRESIDENT REGULATORY SERVICES


For an emergency, after office hours, call 651-463-6201 or 1-800-430-9722.

DAKOTA ELECTRIC ASSOCIATION
SECTION:
III
$4300220^{\text {th }}$ Street West
SHEET:
Farmington, MN 55024
REVISION:

INDEX OF SERVICE AREAS

DAKOTA ELECTRIC ASSOCIATION
SECTION: III
$4300220^{\text {th }}$ Street West
SHEET:
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Farmington, MN 55024
REVISION: 4

## INDEX OF SERVICE AREAS

## (All areas are in Dakota County unless otherwise indicated.)

## Incorporated Areas

## Apple Valley

Burnside - Goodhue County
Burnsville
Cannon Falls
Coates
Eagan
Farmington
Hastings
Inver Grove Heights
Lakeville
Miesville
New Trier
Rosemount
Vermillion

## Unincorporated Areas

Cannon Falls - Township - Goodhue County
Castle Rock Township
Credit River Township - Scott County
Douglas Township
Empire Township
Eureka Township
Greenvale Township
Hampton Township
Marshan Township
New Market Township - Scott County
Nininger Township
Randolph Township
Ravenna Township
Sciota Township
Stanton Township - Rice County
Vermillion Township
Waterford Township
Webster Township - Rice County
Welch Township - Goodhue County

DAKOTA ELECTRIC ASSOCIATION
SECTION:
$4300220^{\text {th }}$ Street West
SHEET:
Farmington, MN 55024
REVISION:

## DEFINITIONS

## TERMS AND ABBREVIATIONS

| Association | Dakota Electric Association |
| :---: | :---: |
| Billing Period | Time between two successive electric bills -- as near as practicable to 30 days |
| Commission | Minnesota Public Utilities Commission |
| Cooperative. | Dakota Electric Association |
| Member-Owner, Consumer, Consumer/Member Member-Owner/Consumer, Customer | Any person, firm, or corporation receiving electric service from Dakota Electric Association |
| Seasonal | Designated consumer/member who receives electric service part-time or only during certain months of the year |
| Year round | On a regular, daily basis, all months of the year |

Other terms used are standard throughout the electric industry.

## RATE SCHEDULES

## DAKOTA ELECTRIC ASSOCIATION <br> ELECTRIC RATE BOOK

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## SCHEDULE 31

RESIDENTIAL AND FARM SERVICE
Availability
Available to individual residential and farm members for all domestic and farm use except irrigation.
This includes service to apartment units. Service is subject to the established rules and regulations of the Association.

Type of Service
Single phase or three phase, when economically feasible, 60 hertz, at available secondary voltages.
Monthly Rate

| Fixed Charge <br> Energy Charge |  | $\$ 9.00$ per month |
| :--- | :--- | :--- |
| Summer (June-Aug) @ $\$ 0.1308$ per kWh <br> Other $@$ $\$ 0.1168$ per kWh |  |  |

## Minimum Monthly Charge

The minimum monthly charge under the above rate shall be the Fixed Charge.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 32

RESIDENTIAL AND FARM DEMAND CONTROL RATE

## Availability

Available to residential and farm members with at least 5 kW of qualifying off-peak loads as determined by the Association. This rate is subject to the rules and regulations of the Association. Members requesting service under this rate schedule must remain on this rate schedule for a minimum of twelve (12) months.

Type of Service
Single phase, 60 Hertz, at available secondary voltages.

## Monthly Rate

Fixed Charge
Energy Charge
Demand Charge

| Summer (June-Aug) | @ $\quad$$\$ 14.70$ per kW <br> Other | @ |
| :--- | :--- | :--- |
| $\$ 11.10$ per kW |  |  |

Plus Applicable Taxes

## Billing Demand Determination

The demand will be determined based on the peak 15-minute demand reading during control periods for the month the bill was rendered. An estimated demand will be used for new customers until the actual controlled demand is established.

## Minimum Monthly Charge

The minimum monthly charge under the above rate shall be the $\$ 12.00$ Fixed Charge plus a minimum billing demand of 3 kW .

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be increased or decreased by $\$ 0.0001$ per kilowatt-hour for each 0.1 mill or major fraction by which the energy component in the Association's purchased power cost per kilowatt-hour purchased from its power supplier exceeds, or is less than $\$ 0.0903$ per kilowatt-hour purchased. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set fourth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

```
SECTION: V

\title{
SCHEDULE EV-1 \\ PILOT - RESIDENTIAL ELECTRIC VEHICLE SERVICE
}

\section*{Availability}

Available on voluntary basis as a pilot program for residential consumers taking service under Schedule 31 who also desire metered service for the sole purpose of electrically charging a licensed automobile or light truck. Service on this tariff is limited to electric vehicles that are SAE J1772 compliant and registered and operable on public highways in the State of Minnesota. Low-speed electric vehicles, including golf carts, are ineligible to take service under this tariff even if licensed to operate on public streets. The consumer may be required to provide the Association with proof of registration of the electric vehicle prior to taking service under this tariff. Service is subject to the established rules and regulations of the Association.

\section*{Term}

The pilot program will be offered for a minimum of a two year period. At the end of the initial two year pilot period, the Association will determine if this program will be continued, modified, or eliminated. If it is eliminated, the consumers participating in the pilot program will revert back to the appropriate retail rate tariff for their class of service.

\section*{Type of Service}

Single phase or three phase, 60 hertz, at available secondary voltages.

\section*{Rate}

Energy Charges:
Off-Peak: \(\quad 6.74 \not \subset\) per kWh
On-Peak: \(\quad 41.44 \phi\) per kWh
Other: \(\quad\) Schedule 31 energy charges apply
Plus RTA and applicable sales tax
Definition of Periods
Energy Charge time periods are defined as follows:
Off-Peak \(\quad\) 9:00 pm to 8:00 am Mon. - Fri., and all day Weekends and Holidays
On-Peak \(\quad\) 4:00 pm to 9:00 pm Mon. - Fri., excluding Holidays
Other \(\quad 8: 00\) am to \(4: 00 \mathrm{pm}\) Mon. - Fri., excluding Holidays
Holidays shall be: New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

\title{
SCHEDULE EV-1 \\ PILOT - RESIDENTIAL ELECTRIC VEHICLE SERVICE \\ CONTINUED
}

\section*{Metering}

Electric service under this rate must be supplied through a sub-metered circuit (installed at the consumer's expense) and approved electric vehicle charging equipment. Installations must conform to the Association's specifications. The consumer shall supply, at no expense to Dakota Electric, a suitable location for meters and associated equipment used for billing and for load research. For purposes of monitoring consumer load under this pilot program, the Association may install load research metering at its expense.
Resource and Tax Adjustment (RTA)
The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by \(\$ 0.0001\) per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than \(\$ 0.0903\) per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

\section*{Data Privacy}

Participation in any load research effort as part of this schedule will be strictly voluntary. The Cooperative's use of such load research data will be strictly limited to the provision of electric service. The Cooperative will not disclose, share, rent, lease, or sell such data to any third party or affiliate for any other purpose, without the consumer's express, affirmative written informed consent.

\section*{Taxes}

The rates set fourth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

\section*{Terms of Payment}

The above charges are net. Balances over \(\$ 10.00\) not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or \(\$ 1.00\), whichever is greater, added to the balance.

\section*{SCHEDULE 36}

IRRIGATION SERVICE

\section*{Availability}

Available to any member for service to irrigation pumps. Service is subject to the established rules and regulations of the Association.

Type of Service
Single phase or three phase, 60 hertz, at available secondary voltages.

\section*{Monthly Rate}

Firm Service
Fixed Charge \(\quad \$ 30.00\) per month
Demand Charge
Summer (June-Aug) @ \$26.35 per kW
Winter (Dec-Feb)
Other
Energy Charge
@ \(\quad \$ 20.95\) per kW

Plus Applicable Taxes
Interruptible
\begin{tabular}{lll} 
Fixed Charge & & \(\$ 30.00\) per month \\
Demand Charge & @ & \(\$ 4.55\) per kW \\
Energy Charge & @ & \(\$ 0.0499\) per kWh
\end{tabular}

Plus Applicable Taxes
Determination of Metered Demand
The Metered Demand in kilowatts shall be the greatest 15 -minute demand (subject to power factor adjustment) during the month for which the bill is rendered. Demand will be read to the nearest 0.01 kilowatt.

\section*{Power Factor Adjustment}

The member agrees to maintain as near unity (100 percent) power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent, the demand for billing purposes shall be the demand as recorded by the demand meter multiplied by 90 percent and divided by the percent power factor.

Minimum Monthly Charge
The Minimum Monthly Charge under the above rate shall be the Fixed Charge.

\section*{SCHEDULE 36}

IRRIGATION SERVICE (Continued)

\section*{Interruptible Requirements}

Members that switch from Interruptible to Firm service during the calendar year will be billed the Firm service rate during the month the change was made. The member must remain on the Firm service rate for the remainder of the calendar year. This includes members that intentionally bypass the load control equipment.

\section*{Resource and Tax Adjustment (RTA)}

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor applicable to firm irrigation shall be adjusted by \(\$ 0.0001\) per kilowatt-hour, or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than \(\$ 0.0903\) per kilowatt-hour sold. The energy cost factor shall be adjusted by \(\$ 0.0001\) per kWh , or major fraction thereof, of which the Association's total projected power cost per kWh applicable to interruptible irrigation exceeds, or is less than, \(\$ 0.0497\) per kWh sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

\section*{Taxes}

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

Terms of Payment
The above charges are net. Balances over \(\$ 10.00\) not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or \(\$ 1.00\), whichever is greater, added to the balance.

\section*{SCHEDULE 41 \\ SMALL GENERAL SERVICE}

\section*{Availability}

Available to any commercial member for all uses, except irrigation pumps, where the Metered Demand is 15 kW or less. If the Metered Demand exceeds 15 kW for three consecutive months, the member will be transferred to the General Service Rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

\section*{Type of Service}

Single phase or three phase, 60 hertz, at available secondary voltages.

\section*{Monthly Rate}
\[
\begin{array}{lll}
\text { Fixed Charge } \\
\text { Energy Charge }
\end{array} \quad \text { \$14.00 per month }
\]

Plus Applicable Taxes
Determination of Metered Demand
The Metered Demand in kilowatts shall be the greatest 15-minute demand during the month for which the bill is rendered. Demand will be read to the nearest 0.01 kilowatt.

\section*{Minimum Monthly Charge}

The Minimum Monthly Charge under the above rate shall be the Fixed Charge.

\section*{Non-metered Option}

This option has limited availability. It may be available for: devices that are located at individual points of delivery and are operated with a continuous or predetermined load level that exceeds the threshold determined for Schedule 45. The monthly energy consumption will be determined by the Association based on equipment documentation provided by the member. The maximum monthly energy allowed under this option will be 500 kWh .

\section*{Resource and Tax Adjustment (RTA)}

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by \(\$ 0.0001\) per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than \(\$ 0.0903\) per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

\section*{Taxes}

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

\section*{Terms of Payment}

The above charges are net. Balances over \(\$ 10.00\) not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or \(\$ 1.00\), whichever is greater, added to the balance.

\title{
VOLUNTEER FIRE DEPARTMENT RIDER FOR \\ SMALL GENERAL SERVICE
}

\section*{Availability}

Available to a volunteer fire department located in a municipality that does not have a municipal water system and is required to operate a water pump for fire fighting purposes.

\section*{Rider}

The three consecutive month demand-threshold of 15 kW will be waived for service to qualifying water pumps that meet the above availability clause and all of the following terms and conditions. Qualifying members will be required to pay all applicable monthly fixed charges, energy charges, and taxes according to the terms of Schedule 41.

\section*{Terms and Conditions}
1. A qualifying volunteer fire department must use a single motor of 50 horsepower or less to operate the single qualifying water pump.
2. Service to any qualifying water pump must be used for the exclusive purpose of responding to fire emergency incidents and training of volunteer firefighters.
3. If the water pump is used for purposes other than responding to fire emergency incidents and training of volunteer firefighters and the monthly demand exceed 15 kW , then the customer will be subject to transfer to the General Service Rate Schedule 46, which includes a demand charge.

\section*{SCHEDULE 44}

SECURITY LIGHTING SERVICE

\section*{Availability}

Available for year-around illumination for private residential, farm, or commercial lighting on existing Association service poles where service poles and service wires can be connected on the line side of member's meter. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

\section*{Type of Service}

The Association shall own, operate, and maintain the security lighting system using the Association's standard security lighting equipment. The energy used by these lights is unmetered.

\section*{Monthly Rate}

Designation of Lamp
100 Watt High Pressure Sodium (Closed to new)
Monthly Rate Per Luminaire

150 Watt High Pressure Sodium (Closed to new)
\$10.10
250 Watt High Pressure Sodium (Closed to new) \$11.99

Plus Applicable Taxes
Optional - For residential or farm installation requiring any extra equipment, or in the event the consumer requests the changeout of an existing light to a different size and/or type, a contribution to construction will be required to cover the extra costs incurred. Commercial installations on existing service poles only.

\section*{Resource and Tax Adjustment (RTA)}

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by \(\$ 0.0001\) per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than \(\$ 0.0903\) per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

\section*{Taxes}

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

\section*{SCHEDULE 44-1}

\section*{STREET LIGHTING SERVICE \\ (MEMBER - OWNED)}

\section*{Availability}

Available for year-round illumination of public streets, parkways, highways, and other public ways by electric lamps mounted on standards where member owns the lighting system complete with standards, luminaries, globes, lamps, and other appurtenances, together will all necessary cables extending between standards and to point of connection to the Association's facilities as designated by the Association.

\section*{Type of Service}

The street lighting system shall be built and owned by the member. All controls will be provided by the member. The member shall also provide all easements and right-of-way to permit access to feed points. The Association shall operate and provide limited maintenance (periodic cleaning of lens, refractor, and bulb replacement) on street lighting systems.

\section*{Monthly Rate}
\begin{tabular}{lc} 
Designation of Lamp & Monthly Rate Per Luminaire \\
175 Watt Mercury (Closed to new) & \(\$ 10.52\) \\
250 Watt Mercury (Closed to new) & \(\$ 13.46\) \\
400 Watt Mercury (Closed to new) & \(\$ 18.54\) \\
& \\
100 Watt High Pressure Sodium & \(\$ 7.56\) \\
150 Watt High Pressure Sodium & \(\$ 9.46\) \\
200 Watt High Pressure Sodium & \(\$ 11.41\) \\
250 Watt High Pressure Sodium & \(\$ 13.25\) \\
400 Watt High Pressure Sodium & \(\$ 17.67\) \\
Plus Applicable Taxes &
\end{tabular}
\begin{tabular}{llr} 
DAKOTA ELECTRIC ASSOCIATION & SECTION: & V \\
\(4300220^{\text {th }}\) Street West & SHEET: & 11.2 \\
Farmington, MN 55024 & REVISION: & 14
\end{tabular}

\section*{SCHEDULE 44-1}

\section*{STREET LIGHTING SERVICE}
(MEMBER-OWNED) (Continued)

\section*{Resource and Tax Adjustment (RTA)}

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by \(\$ 0.0001\) per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than \(\$ 0.0903\) per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

\section*{Taxes}

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

\section*{Terms of Payment}

The above charges are net. Balances over \(\$ 10.00\) not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or \(\$ 1.00\), whichever is greater, added to the balance.

\section*{SCHEDULE 44-2}

STREET LIGHTING SERVICE
(DEA - OWNED EQUIPMENT)

\section*{Availability}

Available for governmental or private year-around illumination of public or private streets, parkways, highways, and other public ways by electric lamps in luminaires supported on existing poles where secondary voltage is available and the facilities for this service are furnished by the Association.

Type of Service
The Association shall own, operate, and maintain the overhead street lighting system using the Association's standard street lighting equipment. The energy used by these lights is unmetered.

\section*{Monthly Rate}

Designation of Lamp
175 Watt Mercury (Closed to new)
250 Watt Mercury (Closed to new)
400 Watt Mercury (Closed to new)
100 Watt High Pressure Sodium (Closed to new)
150 Watt High Pressure Sodium (Closed to new)
250 Watt High Pressure Sodium (Closed to new)
400 Watt High Pressure Sodium (Closed to new) Plus Applicable Taxes

Monthly Rate Per Luminaire
\$15.23
\$18.16
\$23.25
\(\$ 12.27\)
\$14.16
\$17.95
\$22.38

The above rates cover only an installation where the pole with secondary voltage is existing at the light location. Contributions to construction costs will be required if additional equipment is needed or if a member requests a change to a different lamp size and/or type when costs exceed \(\$ 500\).

\section*{Resource and Tax Adjustment (RTA)}

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by \(\$ 0.0001\) per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than \(\$ 0.0903\) per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

\section*{SCHEDULE 44-2}

STREET LIGHTING SERVICE
(DEA - OWNED EQUIPMENT)
(Continued)

\section*{Taxes}

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

\section*{Terms of Payment}

The above charges are net. Balances over \(\$ 10.00\) not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent of \(\$ 1.00\), whichever is greater, added to the balance.

\section*{SCHEDULE 44-3}

CUSTOM RESIDENTIAL STREET LIGHTING (DEA-OWNED - CONTRIBUTION BY MEMBER)

\section*{Availability}

Available for year-round illumination of public streets, parkways, highways, and other public ways by electric lamps mounted on standards and served through underground circuits, where the facilities for this service are furnished by the Association. Street lighting service under this schedule is limited to residential areas having an underground distribution area.

\section*{Type of Service}

The Association shall own, operate, and maintain the lighting system using the Association's standard street lighting equipment which includes one lamp per standard. Member shall be required to contribute an amount equal to the installation cost of the lighting system. The energy used by these lights is unmetered.

Monthly Rate
Designation of Lamp
Monthly Rate Per Luminaire

175 Watt Mercury (Closed to new)
50 Watt High Pressure Sodium (Closed to new)
100 Watt High Pressure Sodium
150 Watt High Pressure Sodium (Closed to new)
250 Watt High Pressure Sodium (Closed to new) Plus Applicable Taxes
\$11.37
\(\$ 6.70\)
\(\$ 8.41\)
\$10.30
\$14.09

Optional - For installations requiring any extra equipment or in the event the member requests the changeout of an existing light to be a different size and/or type, the member will be required to pay all construction fees or extra charges incurred.

\section*{Resource and Tax Adjustment (RTA)}

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by \(\$ 0.0001\) per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than \(\$ 0.0903\) per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.
\begin{tabular}{lr} 
SECTION: & V \\
SHEET: & 11.6 \\
REVISION. & 10
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\section*{SCHEDULE 44-3}

CUSTOM RESIDENTIAL STREET LIGHTING (DEA - OWNED CONTRIBUTION BYMEMBER)
(Continued)

\section*{Taxes}

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

\section*{Terms of Payment}

The above charges are net. Balances over \(\$ 10.00\) not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent of \(\$ 1.00\), whichever is greater, added to the balance.

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}
SECTION: V
SHEET: 12.0
REVISION: 1

\section*{SCHEDULE 44-4 \\ LED SECURITY LIGHTING \\ SERVICE}

\begin{abstract}
Availability
Available for year-around illumination for private residential, farm, or commercial lighting by Light Emitting Diode (LED) electric lamps on existing Association service poles where service poles and service wires can be connected on the utility side of the meter. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.
\end{abstract}

\section*{Type of Service}

The Association shall own, operate, and maintain the LED security lighting system using the Association's standard LED security lighting equipment. Fixtures on this rate will only be attached to an existing DEA service pole. The energy used by these lights is unmetered.
Monthly Rate
Light Emitting Diode Security Light (LED, > 4,500 lumens) \(\$ 7.63\) per month

\section*{Plus Applicable Taxes}

Optional - For installations requiring any extra equipment (excluding poles), a contribution to construction will be required to cover the extra costs incurred. In the event the member requests the change out of an existing light, the member will be required to pay all construction fees and material costs for the new installation or upgrade as well as payment for the undepreciated cost of the existing light, less any salvage value.

\section*{Resource and Tax Adjustment (RTA)}

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by \(\$ 0.0001\) per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than \(\$ 0.0903\) per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

\section*{Taxes}

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

SECTION: V
SHEET: 12.1
REVISION: Original

SCHEDULE 44-5
LED STREET LIGHTING
(MEMBER-OWNED)

\section*{Availability}

Available for year-round illumination of public streets, parkways, highways, and other public ways by Light Emitting Diode (LED) electric lamps served through underground or overhead circuits, where the facilities for this service are furnished and owned by the Member. Service is subject to the established rules and regulations of the Association.

\section*{Type of Service}

The member shall own, operate, and maintain the LED lighting system.
The preferred service option is metered LED lighting. Such service will be billed to the Member under the rate schedule associated with the meter.

Unmetered service will be allowed if the Association determines it is not practical for the lights to be metered. For such unmetered use:
1. Billing will be according to specified consumption groups. Dakota Electric will determine if a member qualifies for the unmetered rate and which consumption group.
2. The Member will be required to provide Dakota Electric with a notice prior to any change in equipment.
3. No other use is allowed from the fixture. (e.g. Wi-Fi attachments, holiday lights, etc.)
4. The Association will periodically inspect the unmetered fixtures to ensure compliance with requirements.
5. The Member must provide proof of lighting system rating. (i.e. data sheet or model number)

No maintenance will be included in the monthly rate from the Association for any member-owned LED street light. At the request of a Member, Dakota Electric may enter into individual contracts with a Member for the type and frequency of maintenance they may desire from the Association.

\section*{Monthly Rate}

Metered Service: \(\quad\) According to applicable rate schedule

Unmetered Service: Consumption Group
A ( 40 to 80 watts)
B (81 to 150 watts)
C (151 to 250 watts)
D (251 to 350 watts)
E (351 to 450 watts)

Monthly Rate per Fixture
\(\$ 4.81\)
\(\$ 6.71\)
\(\$ 9.66\)
\(\$ 13.05\)
\$16.52

\section*{Plus Applicable Taxes}

The range of watt ratings for the Unmetered Consumption Groups will be adjusted periodically to reflect the predominant size of lights receiving such Unmetered Service.

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SECTION: V
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REVISION: Original

\section*{SCHEDULE 44-5 \\ LED STREET LIGHTING (MEMBER-OWNED) \\ (Continued)}

\section*{Resource and Tax Adjustment (RTA)}

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by \(\$ 0.0001\) per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than \(\$ 0.0903\) per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

\section*{Taxes}

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

\section*{Terms of Payment}

The above charges are net. Balances over \(\$ 10.00\) not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent of \(\$ 1.00\), whichever is greater, added to the balance.

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SECTION: V
SHEET: 12.3
REVISION: 2

\author{
SCHEDULE 44-6 \\ LED STREET LIGHTING \\ (DEA-OWNED - CONTRIBUTION BY MEMBER)
}

\section*{Availability}

Available for year-round illumination of public streets, parkways, highways, and other public ways by Light Emitting Diode (LED) electric lamps served through underground or overhead circuits, where the facilities for this service are furnished by the Association. Conversion of existing lighting to LED lighting may be limited to accommodate workload scheduling. Street lighting service under this schedule is limited to designated LED lighting fixtures offered by the Association in its distribution area. Service is subject to the established rules and regulations of the Association.

\section*{Type of Service}

The Association shall own, operate, and maintain the LED lighting system using the Association's standard street lighting equipment which includes one fixture per pole. Member shall be required to contribute an amount equal to the initial installation or upgrade cost of the lighting system. The energy used by these lights is unmetered.

\section*{Monthly Rate}
\begin{tabular}{|c|c|c|}
\hline \multirow[b]{2}{*}{Designation of Fixture} & \multicolumn{2}{|l|}{Monthly Rate per Fixture} \\
\hline & Standard & Basic \\
\hline Light Emitting Diode (LED, > 5,200 lumens) Coach Light (Post) & \$ 10.60 & \$6.83 \\
\hline Light Emitting Diode (LED, > 5,200 lumens) Acorn Light (Post) & \$ 11.24 & \$6.30 \\
\hline Light Emitting Diode (LED, > 7,000 lumens) Cobra Light (Mast) & \$ 8.31 & \$6.51 \\
\hline Light Emitting Diode (LED, > 11,500 lumens) Shoebox Light (Mast) & \$ 10.71 & \$7.98 \\
\hline Plus Applicable Taxes & & \\
\hline
\end{tabular}

The Coach and Acorn fixtures will be mounted on a street light post. The Cobra and Shoebox fixtures will be fastened to a mast arm on existing service poles. In the event the member requests the change out of an existing light, the member will be required to pay all construction fees and material costs for the new installation or upgrade as well as payment for the undepreciated cost of the existing light, less any salvage value.

\section*{Resource and Tax Adjustment (RTA)}

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by \(\$ 0.0001\) per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than \(\$ 0.0903\) per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

SCHEDULE 44-6
LED STREET LIGHTING
(DEA-OWNED - CONTRIBUTION BY MEMBER)
(Continued)

\section*{Service Included in Rate}

For Standard Service, Dakota Electric will furnish all electric energy necessary to operate the street lighting system, will make all lamp and glassware renewals, clean the glassware, make all ballast and starter renewals, repair all damaged equipment, and furnish all the materials and labor necessary for these services.

For Basic Service, Dakota Electric will furnish all electric energy necessary to operate the street lighting system, clean the glassware, and repair all damaged equipment. The Member will be responsible for material and labor costs to replace failed components and fixtures not covered by manufacturers warranties. Selection of Basic Service is a "life of fixture" designation.

\section*{Taxes}

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

\section*{Terms of Payment}

The above charges are net. Balances over \(\$ 10.00\) not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent of \(\$ 1.00\), whichever is greater, added to the balance.

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SCHEDULE 45
LOW WATTAGE UNMETERED SERVICE

\section*{Availability}

This rate is available for low-wattage electronic devices that are: 1) Individually located at each point of delivery, 2) Rated at less than 150 watts, and 3) A determinable load level. Each individual electronic device must not in any way interfere with Association operations and service to adjacent members. This rate is also available to equipment connected to the supply side of the service disconnect such as fire and sprinkler alarms, and emergency lighting systems, if such equipment is used only during times of emergency. This will require verification from a licensed electrical contractor/electrician in the form of an affidavit.

This Low Wattage Unmetered Service is not applicable to electric service for traffic signals, civil defense, or lighting. Association reserves the right to evaluate member requests for this service to determine eligibility.

\section*{Type of Service}

Either single phase or three phase, depending on feasibility, 60 hertz, at available secondary voltages.

\section*{Installation Charges}

The member shall pay the total estimated installation charges involved to provide service.

\section*{Monthly Rate}
\(\$ 10.00\) per month per service location, plus applicable sales tax.

\section*{Taxes}

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder shall be added to the above rate as appropriate.

\section*{Terms of Payment}

The above charges are net. Balances over \(\$ 10.00\) not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or \(\$ 1.00\), whichever is greater, added to the balance
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REVISION:: & 3
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SCHEDULE 46 GENERAL SERVICE

\section*{Availability}

Available to any commercial member for all uses except irrigation. Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

\section*{Type of Service}

Single phase or three phase, 60 hertz, at available secondary voltages.

\section*{Monthly Rate}

Fixed Charge
Demand Charge Summer (June-Aug)
Other
Energy Charge
First 200 kWh per kW
Next 200 kWh per kW
Over 400 kWh per kW
Plus Applicable Taxes
\(\$ 34.00\)
(a) \(\$ 12.26\) per kW
@ \(\quad \$ 9.16\) per kW
(a) \(\$ 0.0776\) per kWh
(a) \(\$ 0.0676\) per kWh
(a) \(\quad \$ 0.0576\) per kWh

\section*{Determination of Metered Demand}

The Metered Demand in kilowatts shall be the greatest 15-minute demand (subject to power factor adjustment) during the month for which the bill is rendered. Demand will be read to the nearest 0.01 kilowatt.

\section*{Determination of Energy Charge}

The energy ( kWh ) billed in each rate block is determined in relation to the monthly demand ( kW ). The energy in the first block includes the first 200 kWh multiplied by the monthly metered demand. The second block includes the next 200 kWh multiplied by the monthly metered demand. All energy in excess of 400 kWh multiplied by the monthly metered demand is billed under the third block.

\section*{Power Factor Adjustment}

The member agrees to maintain as near unity (100 percent) power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent, the demand for billing purposes shall be the demand as recorded by the demand meter multiplied by 90 percent and divided by the percent power factor.

\section*{Minimum Monthly Charge}

The Minimum Monthly Charge under the above rate shall be the Fixed Charge plus \(\$ 1.00\) per kW of the highest billing demand during the preceding 11 months.

\section*{Primary Voltage Service}

A discount of \(\$ 0.15 / \mathrm{kW}\) of Billing Demand will be applied to the bill when service is taken by the member at the available primary voltage. If primary metering is used, an additional discount of 2.0 percent shall be applied to the bill. The 2.0 percent discount shall be applied after the \(\$ 0.15 / \mathrm{kW}\) discount.
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SCHEDULE 46
GENERAL SERVICE
(Continued)

\section*{Optional Communication Fee}

A monthly Communication Fee of \(\$ 8.70\) will be applied to accounts that participate in riders that require the collection and storage of energy and demand consumption data that is transmitted to the Association by means of digital cellular modem communication.

\section*{Resource and Tax Adjustment (RTA)}

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by \(\$ 0.0001\) per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than \(\$ 0.0903\) per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

\section*{Taxes}

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

\section*{Terms of Payment}

The above charges are net. Balances over \(\$ 10.00\) not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or \(\$ 1.00\), whichever is greater, added to the balance.

\section*{SEASONAL MEMBER RIDER}

\section*{Availability}

Available to members receiving service under rate schedules \(46,54,70\) or 71 and determined by the Association to be seasonal. Seasonal members qualifying for the Seasonal Member Rider are defined as businesses (service or production) that are closed or shut down for at least three consecutive months during the year. Service is subject to the established rules and regulations of the Association.

\section*{Rider}

If an account is determined to be seasonal in nature by the Association, the minimum monthly charge shall be the fixed charge for each month of the 12 month period. Minimum monthly demand provisions will not be applied. Members who elect to be disconnected during a portion of the year and then reconnected will be charged a disconnect and a reconnect fee as well as the monthly fixed charge for all 12 months.

\section*{SCHEDULE 47}

MUNICIPAL CIVIL DEFENSE SIRENS

\section*{Availability}

This rate will be available to governmental bodies for civil defense siren services where energy consumption is negligible.

\section*{Type of Service}

Either single phase or three phase, depending on feasibility, 60 hertz, at available secondary voltages.

\section*{Installation Charges}

The member shall pay the total estimated installation charges involved to provide service when additional transformers are required. No initial charge will be made to run an overhead service wire from an existing transformer or for making connections to an existing underground feedpoint.

\section*{Monthly Rate}
\$5.00/Month per Installation
Plus Applicable Taxes

\section*{Taxes}

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder shall be added to the above rate as appropriate.

\section*{Terms of Payment}

The above charges are net. Balances over \(\$ 10.00\) not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or \(\$ 1.00\), whichever is greater, added to the balance.

\title{
SCHEDULE 49 \\ GEOTHERMAL HEAT PUMP RIDER \\ (Closed to new consumers.)
}

\section*{Availability}

Available to any commercial member for energy used by a geothermal heat pump system.
Members requesting service under this rate schedule must be taking service concurrently under Rate Schedule 41 or 46 . Service is subject to the established rules and regulations of the Association.

\section*{Type of Service}

Single phase or three phase, 60 hertz, at available primary or secondary voltages.

\section*{Rate}

Energy Charge \(\quad \$ 0.0940\) per kWh
Plus applicable taxes

\section*{Metering}

The geothermal heat pump system must be separately, parallel metered from all other loads at the premise. Service will not be sub-metered.

\section*{Power Factor}

The member agrees to maintain as near unity ( 100 percent) power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent, the energy for billing purposes shall be adjusted accordingly.

\section*{Resource and Tax Adjustment (RTA)}

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by \(\$ 0.0001\) per kWh, or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour for this service annually exceeds, or is less than, \(\$ 0.0775\) per kWh sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted as necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

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SCHEDULE 49
GEOTHERMAL HEAT PUMP RIDER
(Continued)

\section*{Conditions of Service}

If service is furnished at secondary voltage, the delivery point shall be the metering point unless otherwise specified in the contract for service. All wiring, poles, lines and other electric equipment on the load side of the delivery point shall be owned and maintained by the member.

If service is furnished at the Cooperative's primary line voltage, the delivery point shall be the point of attachment of the cooperative's primary line to member's transformer structure unless otherwise specified in the contract for service. All wiring, poles, lines and other electric equipment (except metering equipment) on the low side of the delivery point shall be owned and maintained by the member.

\section*{Taxes}

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution or sales of electricity are allocable to sales here under, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

\section*{Terms of Payment}

The above charges are net. Balances over \(\$ 10.00\) not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or \(\$ 1.00\), whichever is greater, added to the balance.

\section*{SCHEDULE 51}

CONTROLLED ENERGY STORAGE

\section*{Availability}

Available to members taking service concurrently under rate schedules 31,41 and 46. This rate is for interruptible service to energy storage loads which are remotely controlled by the Association. Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

\section*{Type of Service}

Single phase or three phase, 60 hertz, at available secondary voltages. Service under this schedule will be available for approximately eight hours per day, normally 11:00 p.m. to 7:00 a.m., or as established by the Association.

\section*{Monthly Rate}

Energy Charge @ \(\$ 0.0440\) per kWh
Plus Applicable Taxes.

\section*{Resource and Tax Adjustment (RTA)}

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The energy cost factor shall be adjusted by \(\$ 0.0001\) per kilowatt-hour or major fraction thereof, of which the Association's total projected weighted average power cost per kilowatt-hour for this service exceeds, or is less than \(\$ 0.0200\) per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

\section*{Demand}

The metered demand of loads on this rate will be subtracted from the metered demand for members receiving service under Schedule 41 and 46 when the storage load is coincident with the member's other loads. When feasible, new controlled energy storage loads should be on a separate service from Schedule 41 and 46 load.

\section*{Taxes}

The rates set fourth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

\section*{Terms of Payment}

The above charges are net. Balances over \(\$ 10.00\) not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or \(\$ 1.00\), whichever is greater, added to the balance.

\section*{Availability}

Available to member taking service concurrently under rate schedules 31,41 and 46 . This rate is for interruptible service to qualifying loads which are remotely controlled by the Association. Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

\section*{Type of Service}

Single phase or three phase, 60 hertz, at available secondary voltages. Service under this schedule will be available at all times except when interrupted by the Association during times of peak system demand or system emergencies.

Monthly Rate
Energy Charge @ \(\$ 0.0550\) per kWh
Plus Applicable Taxes.
Alternate Monthly Rate for Controlled Water Heaters
Where separate metering of controlled water heaters is not possible or for members on Rate 53, a direct credit of \(\$ 1.50\) per 100 kWh used up to a maximum of \(\$ 6.00\) per month will be applied against the monthly bill.

\section*{Resource and Tax Adjustment (RTA)}

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The energy cost factor shall be adjusted by \(\$ 0.0001\) per kilowatt-hour or major fraction thereof, of which the Association's total projected weighted average power cost per kilowatt-hour for this service exceeds, or is less than \(\$ 0.0305\) per kilowatthour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

\section*{Demand}

The metered demand of loads on this rate will be subtracted from the metered demand for members receiving service under Schedule 41 and 46 when the interruptible load is coincident with the member's other loads. When feasible, new controlled interruptible services loads should be on a separate service from Schedule 41 and 46 load.

\section*{Taxes}

The rates set fourth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

\section*{Terms of Payment}

The above charges are net. Balances over \(\$ 10.00\) not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or \(\$ 1.00\), whichever is greater, added to the balance.

\section*{SCHEDULE 53 \\ RESIDENTIAL AND FARM SERVICE TIME-OF-DAY RATE}

\section*{Availability}

Available to residential and farm members for all domestic and farm use, except irrigation pumps. Members participating in this service are not eligible for either Schedule 51 or Schedule 52.
Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

\section*{Type of Service}

Single phase or three phase, when economically feasible, 60 hertz, at available secondary voltages.

\section*{Monthly Rate}

Fixed Charge \(\quad \$ 12.00\) per month
Energy Charge
Summer - (June-Aug) Peak Period @ \(\$ 0.1880\) per kWh
Other - Peak Period @ \(\$ 0.1740\) per kWh
Off-Peak Period @ \(\$ 0.0940\) per kWh

Plus Applicable Taxes

\section*{Definition of Periods}

Peak Period 4:00 p.m. to 11:00 p.m., excluding holidays and weekends
Off-Peak Period 11:00 p.m. to 4:00 p.m., plus all day on holidays and weekends
Holidays include New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

\section*{Minimum Monthly Charge}

The minimum monthly charge under the above rate shall be the Fixed Charge.

\section*{Resource and Tax Adjustment (RTA)}

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by \(\$ 0.0001\) per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceed, or is less than \(\$ 0.0903\) per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

\section*{SCHEDULE 53}

RESIDENTIAL AND FARM SERVICE
TIME-OF-DAY RATE
(Continued)

\section*{Taxes}

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

Terms of Payment
The above charges are net. Balances over \(\$ 10.00\) not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or \(\$ 1.00\), whichever is greater, added to the balance.

\section*{SCHEDULE 54 \\ GENERAL SERVICE OPTIONAL TIME-OF-DAY RATE}

\section*{Availability}

Available to any member for general service electrical loads. Members participating in this service are not eligible for either Schedule 51 or Schedule 52. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

\section*{Type of Service}

Single phase or three phase, 60 hertz, at available primary or secondary voltages.

\section*{Monthly Rate}

Fixed Charge \(\$ 36.00\) per month
Peak Period Demand Charge
Summer (June-Aug) @ \$24.85 per kW

Winter (Dec-Feb) @ \(\$ 18.95\) per kW
Other
(a) \(\$ 13.00\) per kW

Plus
Maximum Demand Charge
(a) \(\$ 4.75\) per kW

Energy Charge @ \$0.0499 per kWh
Plus Applicable Taxes

\section*{Definition of Periods}

Peak Period \(\quad 4: 00 \mathrm{p} . \mathrm{m}\). to 11:00 p.m., excluding holidays and weekends
Off-Peak Period 11:00 p.m. to 4:00 p.m., plus all day on holidays and weekends

Holidays include New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

\section*{Determination of Billing Demand}
1. Peak Period - The Peak Period Billing Demand shall be the greatest 15 minute demand (subject to power factor adjustment) between \(4 \mathrm{p} . \mathrm{m}\). and \(11 \mathrm{p} . \mathrm{m}\). during the month for which the bill is rendered, as indicated or recorded by a demand meter. Demand will be read to the nearest 0.01 kilowatt.
2. Maximum Demand - The Maximum Billing Demand shall be the greatest 15 minute demand (subject to power factor adjustment) during the month for which the bill is rendered, as indicated or recorded by a demand meter. Demand will be read to the nearest 0.01 kilowatt.

\section*{Minimum Monthly Charge}

The minimum monthly charge under the above rate shall be the Fixed Charge plus \(\$ 1.00\) per kW of the highest Maximum Billing Demand during the preceding 11 months.

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\title{
SCHEDULE 54 \\ GENERAL SERVICE \\ OPTIONAL TIME-OF-DAY RATE \\ (Continued)
}

Power Factor Adjustment
The member agrees to maintain as near unity ( 100 percent) power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent, the demand for billing purposes shall be the demand as recorded by the demand meter multiplied by 90 percent and divided by the percent power factor.

\section*{Primary Voltage Service}

A discount of \(\$ 0.15 / \mathrm{kW}\) will be applied to the Maximum Billing Demand when the service is taken by the member at the available primary voltage. If primary metering is used, an additional discount of 2.0 percent shall be applied to the bill. The 2.0 percent discount shall be applied after the \(\$ 0.15 / \mathrm{kW}\) discount.

\section*{Optional Communication Fee}

A monthly Communication Fee of \(\$ 8.70\) will be applied to accounts that participate in riders that require the collection and storage of energy and demand consumption data that is transmitted to the Association by means of digital cellular modem communication.

\section*{Resource and Tax Adjustment (RTA)}

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by \(\$ 0.0001\) per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than \(\$ 0.0903\) per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

\section*{Taxes}

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

\section*{Terms of Payment}

The above charges are net. Balances over \(\$ 10.00\) not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or \(\$ 1.00\), whichever is greater, added to the balance.

\section*{SCHEDULE 56}

RESIDENTIAL AND FARM SERVICE

\section*{Availability}

Available to residential and farm members for all domestic and farm use, except irrigation pumps. Members participating in this service are not eligible for either Schedule 51 or Schedule 52.
Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

\section*{Type of Service}

Single phase or three phase, when economically feasible, 60 hertz, at available secondary voltages.

\section*{Monthly Rate}

Fixed Charge
Energy Charges
Peak Periods:
Summer - (June-Aug) @ \(\$ 0.2710\) per kWh
Winter - (Dec-Feb) @ \(\$ 0.2210\) per kWh
Spring/Fall
Intermediate Period
Off-Peak Period
Plus Applicable Taxes

\section*{Definition of Periods}

Peak Periods 4:00 p.m. to 11:00 p.m., excluding holidays and weekends
Intermediate Period
Off-Peak Period
\(\$ 12.00\) per month
(a) \(\$ 0.1750\) per kWh
(a) \(\$ 0.0970\) per kWh
@ \(\$ 0.0760\) per kWh

8:00 a.m. to 4:00 p.m., excluding holidays and weekends
11:00 p.m. to 8:00 a.m. Mon-Fri and all day weekends and holidays

Holidays include New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

\section*{Minimum Monthly Charge}

The minimum monthly charge under the above rate shall be the Fixed Charge.

\section*{Resource and Tax Adjustment (RTA)}

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by \(\$ 0.0001\) per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceed, or is less than \(\$ 0.0903\) per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

SCHEDULE 56
RESIDENTIAL AND FARM SERVICE
TIME-OF-DAY RATE
(Continued)

\section*{Taxes}

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

Terms of Payment
The above charges are net. Balances over \(\$ 10.00\) not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or \(\$ 1.00\), whichever is greater, added to the balance.

\section*{SCHEDULE 60}

RIDER FOR STANDBY SERVICE

\section*{Application}

The Rider for Standby Service is applicable to any member who uses a distributed generation system that serves all or a portion of the member's electric energy requirements and where the member chooses to use the Cooperative's electric system to serve that load when the distributed generation system is either partly or wholly unavailable. When the member uses electric service from the Cooperative, such service will be provided under one of the Cooperative's firm retail electric rate schedules to which this Rider is attached.

The member must enter into a contract with Cooperative for the interconnection and operation of an on-site distributed generation system. The distributed generation system at the member site shall not operate in parallel with the Cooperative's system until the installation has been inspected by an authorized Cooperative representative and final written approval is received from the Cooperative to commence parallel operation.

The minimum term of service taken under this Rider shall be one (1) year or such longer period as may be required under an Electric Service Agreement. Following this initial minimum term, a member receiving standby service may terminate standby service and establish service under a firm service tariff schedule within the same time frame as would be required of a new member with a similar firm service load.

Exceptions to this Application include:
A. Any member taking service under Cooperative's Rider for Parallel Generation as established under Minnesota Rules 7835 shall not be required to take service under this Rider for standby services required to temporarily back up distributed generation systems rated at less than 40 kW ;
B. Any member taking service under Cooperative's Rider for Distributed Generation Service shall not be required to pay for service under this Rider for standby services required to temporarily back up distributed generation systems rated at 60 kW or less. For any member with distributed generation systems rated at 60 kW or less, standby service will be available to members through their base rates;
C. Any member, in lieu of service under this Rider, may provide physical assurance to ensure that standby service is not taken. A member requesting physical assurance shall agree to furnish and install an approved load limiting device which shall be set and sealed by Cooperative so that member's use of service will not exceed member's contracted demand. The installed cost of the load limiting device shall be paid by member.
D. Any member using on-site distributed generation to participate in Interruptible Service (Schedules 70 and 71) and generation installed for emergency backup during utility outages.

\section*{SCHEDULE 60 \\ RIDER FOR STANDBY SERVICE CONTINUED}

\section*{Definitions}

Contracted Standby Demand is the quantity specified in the member's Electric Service Agreement as the maximum amount of firm or non-firm standby service the Cooperative is obligated to supply and will not exceed the capacity of the member's distributed generation system.

Firm Service refers to a utility's most reliable, constant electric service. A utility would interrupt the supply of electricity to a firm service customer only as a last resort.
Non-Firm Service, also called interruptible service, refers to electric service that a utility provides only to the extent that it has capacity not being used to meet the needs of firm-service members at the moment.
All other definitions shall be as described in Cooperative's Distributed Generation Interconnection Requirements and Interconnection Process for Distributed Generation Systems.

\section*{Charges for Service}

The following Reservation Fees, Communication Fee, Usage Fees, and Wheeling Fees will be assessed as applicable in addition to all charges for service being taken under Cooperative's base rate schedule:

\section*{Reservation Fees}

Charges as specified below for the reservation of either Firm or Non-Firm generation, transmission and distribution service per Month per kW will each be applied to the member's Contracted Standby Demand as specified in member's Electric Service Agreement with Cooperative:
\begin{tabular}{lcc} 
& \begin{tabular}{c} 
Firm Service \\
\((\$\) per kW\()\)
\end{tabular} & \begin{tabular}{c} 
Non-Firm Service \\
\((\$\) per kW\()\)
\end{tabular} \\
Generation & \(*\) & \(* *\) \\
Transmission & \(* * 51\) & \(\$ 3.51\) \\
Distribution - Secondary Service & \(\$ 3.51\) \\
Distribution - Primary Service & \(\$ 3.28\) & \(\$ 3.28\) \\
Distribution - Substation Service & \(\$ 0.90\) & \(\$ 0.90\)
\end{tabular}
* Firm Standby Service generation and transmission Reservation Fees will be billed under the rates, terms and conditions of the Cooperative's wholesale power supplier (Great River Energy), which is available on GRE's Web site; greatriverenergy.com and DEA's Web site; dakotaelectric.com.
**Generation and transmission Reservation Fees are not applied for Non-Firm Service. However, members will be responsible for all costs associated with wholesale power supply during any times of usage.

\section*{Communication Fee}

A monthly Communication Fee will be applied to cover the cost of transmitting data through the use of digital cellular equipment. The monthly Communication Fee is applied to each required meter with cellular data capabilities.

Communication Fee \(\$ 8.70\) per meter

\section*{Usage Fees}

\section*{Demand Charge}

If the member registers electrical usage from Cooperative during a billing month then such usage will result in demand charges which may vary between members contracting for Firm Standby Service or Non-Firm Standby Service.
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SCHEDULE 60
RIDER FOR STANDBY SERVICE
CONTINUED

If a firm standby member has usage in a billing month, then the demand of such usage will be charged at the demand rate as contained in the base tariff to which this Rider is attached. If the usage demand exceeds the Contracted Standby Demand level, the member's Contracted Standby Demand will be adjusted upward as specified in the Billing Demand clause of this Rider. If the member registers electrical usage that coincides with the Cooperative's wholesale power supplier's applicable billing peak, then additional demand charges may be applied by Cooperative to ensure that the member fully compensates Cooperative for such wholesale power costs.

If there is usage by a non-firm standby member, then the demand of such usage will be charged at no less than the demand rate as contained in the base tariff to which this Rider is attached. (Any higher demand charges for non-firm demand use will reflect higher wholesale demand costs incurred to provide such service.) If the usage demand exceeds the Contracted Standby Demand level, the member's Contracted Standby Demand will be adjusted upward as specified in the Billing Demand clause of this Rider. If the member registers electric use that coincides with the Cooperative's wholesale power supplier's applicable billing peak, then additional demand charges may be applied by Cooperative to ensure that the member fully compensates Cooperative for such wholesale power costs. If additional costs are incurred to provide wholesale power during any time of usage by a non-firm standby member, then the nonfirm standby member will be responsible for all such costs.

\section*{Energy Charge}

Energy consumed by a standby member under this Rider will be charged at the same energy rate contained in the base tariff to which this Rider is attached.

\section*{Wheeling Fee}

Members requiring delivery of energy over the Cooperative's distribution system to a third party will be charged each month, when such distribution wheeling service is available and provided, at a rate equal to the applicable distribution standby reservation fee specified in this rider. If firm wheeling service is required, then arrangements will be made to ensure that distribution system facilities are adequate to provide such firm wheeling service. The cost of any required system modifications will be the responsibility of the entity requesting the firm wheeling service.

\section*{Rate Adjustments}

Bills shall be subject to all adjustments applicable to consumption under the base schedule to which this Rider is attached.

\section*{Billing Demand}

The member shall contract for a specific kilowatt demand of standby service with the maximum being the amount of load served by the member's distributed generation system. In the event the Contracted Standby Demand is exceeded in any month, such higher demand shall be considered the new Contracted Standby Demand. Such adjustment of the Contracted Standby Demand applicable to Reservation Fees will recognize circumstances where on-going utility firm service is being provided in addition to standby service.
The billing demand for applying Distribution Reservation Fees for standby service to on-site distributed generation will be determined by subtracting the billing demand for usage supplied by the Cooperative during the same time period as the highest total member electrical demand in the billing month (supplied by the Cooperative and the member's distributed generation system). The billing demand for applying Distribution Reservation Fees for standby service to wholesale generation will be determined by subtracting the billing demand for usage supplied by the Cooperative from the Contracted Standby Demand. The billing demand for applying Generation and Transmission Reservation Fees will be determined according to the terms and conditions of the Cooperative's wholesale power supplier.
The billing demand(s) for usage will be determined and applied as specified in the base tariff to which this rider is attached.
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Farmington, Minnesota 55024 & REVISION:
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SCHEDULE 60
RIDER FOR STANDBY SERVICE CONTINUED

\section*{Stranded Investment}

Any member who installs load limiting equipment to ensure that standby service is not taken (physical assurance) and does not intend to deliver power into the distribution system will have the option of making a lump sum payment to Cooperative for stranded distribution investment. Dakota Electric shall provide support for the one-time charge to recover stranded distribution investments to physical assurance members before it begins collecting the charge. If such lump sum payment is not made, then the member will be subject to distribution standby charges based on the member's typical demands incurred prior to requesting physical assurance status.

\section*{Billing and Terms of Payment}

Billing and terms of payment shall be governed as set forth in the Cooperative's applicable base rate schedule.

\section*{Terms and Conditions of Service}
1. The member shall execute an Electric Service Agreement with the Cooperative which shall specify:
a. Standard rate schedule (to which this Rider is attached);
b. Contracted Standby Demand;
c. Generator Nameplate Rating; and
d. Type of Standby Service (firm or non-firm).
2. Service hereunder is subject to Cooperative's Interconnection Process for Distributed Generation Systems and Distributed Generation Interconnection Requirements as may be modified from time-to-time. Current documents are available on DEA's Web site at dakotaelectric.com.
3. Cooperative will install all metering equipment necessary to monitor services provided to ensure adequate measurements are obtained to support necessary application of charges. The member will be charged an up-front lump sum for the installed cost of such metering equipment.
4. The member shall make provision for on-site metering. All energy received from and delivered to the Cooperative shall be separately metered. The Cooperative may require metering of the generation output.
5. The member shall pay for all interconnection costs incurred by the Cooperative made necessary by the installation of the distributed generation system.
6. The Cooperative reserves the right to disconnect the member's generator from the distribution system if it interferes with the operation of the Cooperative's equipment or with the equipment of other Cooperative members.
7. The Cooperative shall not be obligated to supply standby service for a member's load in excess of the capacity for which the member has contracted.
8. The member shall be liable for all damages or costs caused by member's use of power in excess of contracted for capacity.
9. Cooperative may require the member to furnish and install an approved load limiting device which shall be set and sealed by Cooperative so that the member's use of service will not exceed the number of kilowatts contracted for by member.
10. The member shall furnish updated documentation to the Cooperative if there are changes to the maximum capacity and reliability of the power source for which the member requires Standby Service.
11. Cooperative and the member will coordinate the planning and determining of a schedule for performance of periodic maintenance of the member's facilities, such maintenance shall be scheduled to avoid wholesale power billing peaks or as agreed upon in the contract. Cooperative will require the member to provide reasonable notice of its proposed schedule for maintenance. The duration of the agreed maintenance schedule may thereafter be extended only with the consent of the Cooperative in response to the member's request received prior to the end of the maintenance period.

\section*{SCHEDULE 60 \\ RIDER FOR STANDBY SERVICE CONTINUED}
12. The Cooperative reserves the right to establish a minimum charge in order to recover the costs of facilities required to serve such load. Said charge shall be specified in the Electric Service Agreement.
13. Cooperative may be reimbursed by the member for costs which are incurred, or which have been previously incurred, in providing facilities which are used principally or exclusively in supplying service for any portion of the member's requirements which are to be normally supplied from a source of power other than the Cooperative's electric system.
14. All electricity delivered shall be for the exclusive use of the member and shall not be resold.
15. Member shall indemnify Cooperative against all liability which may result from any and all claims for damages to property and injury or death to persons which may arise out of or be caused by the erection, maintenance, presence, or operation of the co-generation facility or by any related act or omission of the member, its employees, agents, contractors or subcontractors.

\section*{SCHEDULE 61 RIDER FOR DISTRIBUTED GENERATION}

\section*{Application}

The Rider for Distributed Generation is applicable as follows to any member taking service under one of the Cooperative's standard electric rate schedules and who has entered into an Electric Service Agreement with Cooperative for the interconnection and operation of an on-site extended parallel distributed generation system:
1. The distributed generation system must be an operable, permanently installed or mobile generation facility connected in parallel to the utility distribution system serving the member receiving retail electric service at the same site.
2. The distributed generation system must be fueled by either natural gas, a renewable fuel, or another similarly clean fuel or combination of fuels.
3. The distributed generation system can not have more than 10 MW of interconnected capacity at a point of common coupling to Cooperative's distribution system.
4. The interconnection and operation of the distributed generation system at each point of common coupling shall be considered as a separate application of the Rider.
5. All provisions of the applicable standard service schedule shall apply to distributed generation service under this Rider except as noted below.

In lieu of service under this Rider, the member and Cooperative may pursue reasonable transactions outside the Rider; or member may take service, as applicable, under Cooperative's Rider for Parallel Generation as established under Minnesota Rules 7835 - Cogeneration and Small Power Production.

\section*{Definitions}

Member is an entity receiving retail electric service from Cooperative at the same site as the distributed generation system.

Extended Parallel means the distributed generation system is designed to remain connected with the Cooperative's distribution system for an extended period of time.

Scheduled Maintenance service is energy, or energy and capacity, supplied by the Cooperative during scheduled maintenance of the member's non-utility source of electric energy supply (distributed generation system).

SCHEDULE 61
RIDER FOR DISTRIBUTED GENERATION CONTINUED

Supplemental service is electric energy, or energy and capacity, supplied by the Cooperative to the member when the member's non-utility source of electricity (distributed generation system) is insufficient to meet the member's own load. Supplemental Service can take two forms: residual retail service and load-following service. Residual Retail Service is intended for a Dakota Electric member who has an alternate source of electric energy supply which normally supplies only a portion of the member's electrical load requirements and who requires firm service for the remaining portion of the member's electrical requirements. Such Residual Retail Service is available under the Cooperative's firm retail electric rate schedule to which this rider is attached. Load Following Service is intended for a Dakota Electric retail member who has an alternate source of electric energy supply which has an output that is variable and dependent on the thermal load characteristics of the retail member and therefore, serves all or a portion of the member's electrical load requirements for a portion of the time and requires use of utility service for supply of energy at all other times. This load following service will be evaluated and contracted for on an individual basis with a member based on the specific variable load requirements of the member. Since a member may have control over the thermal load characteristics that affect the output of distributed generation facilities in this situation, we believe the best way of providing service is on an individual contracted basis. This will recognize that some members may rely on utility service during high cost on-peak periods while other members may require such utility service only during lower cost off-peak periods.

Unscheduled Outage service is energy, or energy and capacity, supplied by the Cooperative during unscheduled outages of the member's non-utility source of electric energy supply (distributed generation system).

All other definitions shall be as described in Cooperative's Distributed Generation Interconnection Requirements and Interconnection Process for Distributed Generation Systems.

\section*{Services}

Services provided under this Rider may include services from the Cooperative to member and from member to Cooperative. The following rates, charges, credits and payments are applicable for such services in addition to all applicable charges for service being taken under Cooperative's standard rate schedule:

\section*{Services from Cooperative to Member}

A monthly service charge to recover incremental metering, operation, and maintenance costs may be applied upon Commission approval.

\section*{Services from Cooperative to Member}

Interconnection Services
Interconnection services include services such as engineering/design studies, Cooperative system upgrades and testing as further described in Cooperative's Distributed Generation Interconnection Requirements and Interconnection Process for Distributed Generation Systems. Charges for such interconnection services shall be as described in the Cooperative's Distributed Generation Interconnection Requirements and Interconnection Process for Distributed Generation Systems.

\section*{Supply Services}

Supply services include standby services such as scheduled maintenance and unscheduled outages as provided under Cooperative's Rider for Standby Service. Supplemental service is available under the Cooperative's firm retail electric rate schedule to which this Rider is attached.

\section*{Transmission Services}

Transmission services include reservation and delivery of capacity and energy on either a firm or non-firm basis and those ancillary services that are necessary to support the transmission of capacity and energy from resources to loads while maintaining reliable operation over Transmission Providers' Transmission System. These ancillary services include services such as Scheduling, System Control and Dispatch Service, Reactive Supply and Voltage Control from Generation Sources, Regulation and Frequency Response, Generator Imbalance, Operating Reserve - Spinning Reserve and Operating Reserve - Supplemental Reserve. Transmission Services are provided as applicable under Cooperative's wholesale power supplier's approved Open Access Transmission Tariff (OATT).

\section*{Distribution Services}

Distribution services include reservation and delivery of capacity and energy and those indirect services that are necessary to support the delivery of capacity and energy over Cooperative's distribution system. These indirect services include allocated support services or expenses such as operation and maintenance, member accounts, member service and information, administrative and general, depreciation, interest and taxes. Members requiring contracted distribution standby service of more than 60 kW and/or delivery of energy and capacity over Cooperative's distribution system to a third party will be charged for such distribution services at a rate equal to the distribution charge specified in the Cooperative's Rider for Standby and Supplemental Service.

SCHEDULE 61
RIDER FOR DISTRIBUTED GENERATION CONTINUED

\section*{Services from Member to Cooperative}

\section*{Capacity/Energy}

Member may sell all of the energy produced by the distributed generation system to the Cooperative, use all the distributed generation energy to meet its own electrical requirements, or use a portion of the energy from the distributed generation system to meet its own electrical needs and sell the remaining energy to the Cooperative.

If the member offers to sell energy to the Cooperative, then such energy and capacity shall be purchased by the Cooperative's wholesale power supplier under the rates, terms and conditions for such purchases as established by the wholesale power supplier. Great River Energy Rate Rider T is available on GRE's Web site; greatriverenergy.com, and on DEA's Web site; dakotaelectric.com.

\section*{Distribution Credits}

A distribution credit may be given if the distributed generation system allows the Cooperative to defer or avoid distribution system upgrades. Distribution credits to the member should equal the Cooperative's avoided distribution costs resulting from the installation and operation of the distributed generation system. The Cooperative shall provide, upon member's written request, areas of the distribution system that could be likely candidates for distribution credits as determined through the Cooperative's normal planning process. The Cooperative shall also provide to the member the minimum size distributed generation system required in each of the areas to qualify for the distribution credit along with general operational requirements necessary for the distributed generation system to meet, so as to be able to receive distribution credits.

Upon receiving an interconnection application from the member for a distributed generation interconnection, along with a written request for distribution credits, the Cooperative will complete an initial screening study to determine if the project has the potential to receive distribution credits. The member shall be responsible for the cost of the screening study. If the Cooperative's study shows that there exists potential for distribution credit, the Cooperative shall, at its own expense, pursue further study to determine the distribution credit, as part of its annual distribution planning study. If distribution credits are identified, then such credits will be paid in conjunction with an agreement with the member to supply distribution support utilizing the member's generation system.

\section*{Line Loss Credits}

If the member requests the Cooperative to provide a specific line loss study, at the member's expense regardless of the study's outcome, the member may be eligible for additional line loss credits if the study supports such credits.
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Farmington, Minnesota 55024 & REVISION:
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SCHEDULE 61
RIDER FOR DISTRIBUTED GENERATION
CONTINUED

\section*{Renewable Credits}

If the member installs a renewable distributed generation system and the Cooperative's wholesale power supplier's purchase of energy and capacity from such facility allows the wholesale power supplier to avoid the need to purchase renewable energy elsewhere, then the purchase of such renewable energy and capacity will equal the avoided cost of renewable purchases as provided under the wholesale power supplier's applicable rates, terms and conditions for such purchases In the event that the member producing the power receives renewable energy credits - that is, the member is paid by the purchasing company the avoided cost of renewable energy purchases then this transaction will constitute a transfer from the member to the purchasing company of the property rights for those renewable attributes specific to the renewable energy generated by the member and for which the purchasing company paid renewable energy credits. The member may receive renewable credits or tradable emission credits but not both.

\section*{Tradable Emissions Credits}

If the purchase of energy and capacity by the Cooperative's wholesale power supplier under the "must buy" provision described above results in the wholesale power supplier receiving an economic value associated with tradable emissions, then tradable emissions credits will be provided to the member under terms established by the wholesale power supplier that equal the credit revenues associated with the DG facilities of such emission credits received by the wholesale power supplier. The member may receive either renewable credits or tradable emissions credits but not both.

\section*{Terms and Conditions of Service}

The following terms and conditions apply to this Rider:
1. Service hereunder is subject to Cooperative's Interconnection Process for Distributed Generation Systems and Distributed Generation Interconnection Requirements as may be modified from time-to-time. Current documents are available on DEA's Web site: dakotaelectric.com.
2. Cooperative will install all metering equipment necessary to monitor services provided to ensure adequate measurements are obtained to support necessary application of rates, charges, credits and payments. The member will be charged an up-front lump sum for the installed cost of such metering equipment.
3. The member will be compensated monthly for all energy delivered to Cooperative's wholesale power supplier. The timing for these payments is subject to annual review.
4. The member shall make provision for on-site metering. All energy received from and delivered to the Cooperative shall be separately metered. The Cooperative may require metering of the generation output.

SCHEDULE 61
RIDER FOR DISTRIBUTED GENERATION CONTINUED
5. The member shall pay for all interconnection costs incurred by the Cooperative made necessary by the installation of the distributed generation system.
6. Power and energy purchased by the member from the Cooperative shall be under the applicable retail rates for the purchase of electricity.
7. The Cooperative reserves the right to disconnect the member's generator from its system if it interferes with the operation of the Cooperative's equipment or with the equipment of other Cooperative members.
8. The member shall execute an Electric Service Agreement with the Cooperative which may include, among other provisions, a minimum term of service.

\section*{Billing and Terms of Payment}

Billing and terms of payment shall be governed as set forth in the Cooperative's applicable base rate schedule.

To the extent that Cooperative receives service from a member under this Rider, payment for such services shall be netted against any charges for Cooperative-supplied services hereunder.

\section*{Availability}

Available to any member with a minimum controllable demand of 50 kW . Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Members participating in this service are not eligible for concurrent service under any other rate schedule. Service is subject to the established rules and regulations of the Association.

Under the full interruptible control option, members agree to interrupt their entire electrical energy usage. Members may attain this full interruption through curtailment or with the use of on-site generation back-up. During the interruption, the member's load must go to zero.

\section*{Type of Service}

Single phase or three phase, 60 hertz, at available primary or secondary voltages.
Monthly Rate

Fixed Charge
Communication Fee (meters w/ digital cellular)
Coincidental Demand
Summer (June-Aug)
Winter (Dec-Feb)
Other
Non-Coincidental Demand
Energy Charge
Failure to Control Charge
Plus Applicable Taxes
\(\$ 110.00\) per month \(\$ 8.70\) per month
\$24.85 per kW
\(\$ 18.95\) per kW
\(\$ 13.00\) per kW
\$ 4.75 per kW
\$ 0.0499 per kWh
\$ 5.00 per kW

Control Period
The control period shall be defined as the period of time during which the Association is controlling these loads with the intent of minimizing demand on the Association's system.

\section*{Coincidental Demand}

The monthly Coincidental Demand under the full interruptible control option shall be defined as the member's actual hourly demand (subject to power factor adjustment) that is coincident with the wholesale power supplier (i.e. average of the four fifteen minute demand readings for the hour ending of the wholesale billing peak) when the load is directed to be controlled during the wholesale billing peak.

\section*{Non-Coincidental Demand}

The Non-Coincidental Demand shall be the maximum kilowatt demand (subject to power factor adjustment) established by the member for any period of 15 consecutive minutes during the month for which the bill is rendered, as indicated or recorded by a demand meter.

\section*{Failure to Control}

The Failure to Control Charge will be applied to the highest kilowatt demand during any one monthly control period when the member does not fully interrupt demand. The Failure to Control Charge is applied to the highest demand recorded during any one of the monthly control periods. The control period shall be defined as the period of time during which the Association is controlling these loads with the intent of minimizing demand on the Association's system. Failure to control or being unavailable for control for more than one calendar month may require the member to be removed from Schedule 70 for the remainder of the year.

\section*{Scheduled Maintenance}

Members are encouraged to schedule required periodic maintenance during the spring and fall months and coordinate such maintenance with the Association.

SCHEDULE 70
INTERRUPTIBLE SERVICE
(FULL INTERRUPTIBLE OPTION)
(Continued)

\section*{Minimum Billing Demand}

The Minimum Billing Demand for any billing period shall be no less than 50 percent of the highest noncoincidental demand during the preceding 11 months.

\section*{Power Factor Adjustment}

The member agrees to maintain as near unity power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent; the demand for billing purposes shall be the demand as recorded by the demand meter multiplied by 90 percent and divided by the percent power factor.

\section*{Primary Voltage Service}

A discount of \(\$ 0.15\) per kW of billing demand will be applied to the bill when service is taken by the member at the available primary voltage. If primary metering is used, an additional discount of 2.0 percent shall be applied to the bill. The 2.0 percent discount shall be applied after the \(\$ 0.15\) per kW discount.

\section*{Resource and Tax Adjustment (RTA)}

The Energy Charge shall be adjusted for incremental changes in wholesale power costs, Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The energy cost factor shall be adjusted by \(\$ 0.0001\) per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour applicable to this service exceeds, or is less than \(\$ 0.0497\) per kilowatt-hour sold as described in the Energy Cost Adjustment Rider (ECA) (Sheet 52). The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

\section*{Taxes}

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

\section*{Terms of Payment}

The above charges are net. Balances over \(\$ 10.00\) not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or \(\$ 1.00\), whichever is greater, added to the balance.
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SCHEDULE 71
INTERRUPTIBLE SERVICE
(PARTIAL INTERRUPTIBLE OPTION)
Availability
Available to any member with a minimum controllable demand of 50 kW . Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Members participating in this service are not eligible for concurrent service under any other rate schedule. Service is subject to the established rules and regulations of the Association.

Under the partial interruptible control option, members agree to reduce a portion of their electrical energy usage. Members may attain this partial interruption through curtailment or with the use of on-site generation back-up. During the interruption, the member's load goes to a Predetermined Demand Level (PDL). If a partial interruptible member fails to control demand to the PDL, then the PDL will be adjusted to the demand occurring during such control period.

\section*{Type of Service}

Single phase or three phase, 60 hertz, at available primary or secondary voltages.

\section*{Monthly Rate}
Fixed Charge
Communication Fee (meters w/ digital cellular)
Coincidental Demand
Summer (June - Aug)
Winter (Dec - Feb)
Other
Non-Coincidental Demand
Energy Charge
Excess Demand Charge
Plus Applicable Taxes
\(\$ 110.00\) per month \(\$ 8.70\) per month
\$24.85 per kW
\$18.95 per kW
\$13.00 per kW
\$ 4.75 per kW
\$ 0.0499 per kWh
\$ 5.00 per kW

\section*{Control Period}

The control period shall be shall be defined as the period of time during which the Association is controlling these loads with the intent of minimizing demand on the Association's system.

\section*{Coincidental Demand}

The monthly Coincidental Demand under the partial interruptible control option shall be defined as:
- During a month with no control period, the monthly Coincidental Demand under the partial
interruptible control option will be the lesser of the member's actual hourly demand (subject to power factor adjustment) that is coincident with the wholesale power supplier (i.e. average of the four fifteen minute demand readings for the hour ending of the wholesale billing peak) or the Predetermined Demand Level.
During a month with a control period, the monthly Coincidental Demand under the partial interruptible control option will be the member's actual hourly demand (subject to power factor adjustment) that is coincident with the wholesale power supplier (i.e. average of the four fifteen minute demand readings for the hour ending of the wholesale billing peak).
The partial interruptible PDL will be adjusted to any higher actual demand of the member occurring during a curtailable event for the remainder of the calendar year. In the case of members using on-site generation, the PDL may be adjusted to reflect the rated capacity of such generation that was not operational during the control period. Only one such adjustment per year will be allowed.

\section*{Non-Coincidental Demand}

The Non-Coincidental Demand shall be the maximum kilowatt demand (subject to power factor adjustment) established by the member for any period of 15 consecutive minutes during the month for which the bill is rendered, as indicated or recorded by a demand meter.

SCHEDULE 71
INTERRUPTIBLE SERVICE (PARTIAL INTERRUPTIBLE OPTION) (Continued)

\section*{Excess Demand Charge}

The Excess Demand Charge will be applied to the Coincidental Demand that exceeds the Predetermined Demand Level (PDL) for a member using the partial interruptible control option when the member does not reduce demand to the PDL during a control period. The Excess Demand Charge is applied per month.

\section*{Minimum Billing Demand}

The Minimum Billing Demand for any billing period shall be no less than 50 percent of the highest noncoincidental demand during the preceding 11 months.

\section*{Power Factor Adjustment}

The member agrees to maintain as near unity power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent; the demand for billing purposes shall be the demand as recorded by the demand meter multiplied by 90 percent and divided by the percent power factor.

\section*{Primary Voltage Service}

A discount of \(\$ 0.15\) per kW of billing demand will be applied to the bill when service is taken by the member at the available primary voltage. If primary metering is used, an additional discount of 2.0 percent shall be applied to the bill. The 2.0 percent discount shall be applied after the \(\$ 0.15\) per kW discount.

\section*{Resource and Tax Adjustment (RTA)}

The Energy Charge shall be adjusted for incremental changes in wholesale power costs, Dakota Electric's conservation tracker account balance, and real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The energy cost factor shall be adjusted by \(\$ 0.0001\) per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour applicable to this service exceeds, or is less than \(\$ 0.0497\) per kilowatt-hour sold as described in the Energy Cost Adjustment Rider (ECA) (Sheet 52). The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

\section*{Taxes}

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

\section*{Terms of Payment}

The above charges are net. Balances over \(\$ 10.00\) not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or \(\$ 1.00\), whichever is greater, added to the balance.

\section*{SCHEDULE 80 \\ CYCLED AIR CONDITIONING SERVICE}

\section*{Availability}

Available to members taking service concurrently under another rate schedule. This rate is for interruptible service to central air conditioners which are remotely controlled by the Association. Service is subject to the established rules and regulations of the Association.

\section*{Type of Service}

Single phase or three phase, 60 hertz, at available secondary voltages. Service under this schedule will be available at all times except when interrupted by the Association during times of peak system demand or system emergencies.

\section*{Monthly Rate}

Option No. 1 - Available to members who also take service under Schedules 51 and 52 where an existing meter and control unit may be utilized for the controlled air conditioning load.

Energy Charge per applicable Schedule 51 or 52
Option No. 2-Available to members where a new meter and control unit must be installed to control the air conditioning load.

Energy Charge Credit @ \(\$ 0.0320\) per kWh
Option No. 3-Available to members where a control unit must be installed to control the air conditioning load.

A credit will be applied to the first \(\$ 13.00\) of the member's net energy consumption charges in the months of June, July, and August. In no case will the credit exceed the sum of the monthly Energy Charge and Resource and Tax Adjustment.
Option No. 4 - Available to non-residential members where a new meter and control unit must be installed but where it is not feasible or designed to meter the air conditioning load separately. The maximum capacity of any individual air conditioning compressor is 7.5 tons. A \(\$ 6.50\) per ton per month credit will be applied to member's bill in the months of June, July, and August. The aggregate monthly credit per account will not exceed \(1 / 3\) of the net charges for energy and demand in each month.

\section*{Plus Applicable Taxes}

\section*{Taxes}

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder shall be added to the above rate as appropriate.

\section*{Terms of Payment}

The above charges are net. Balances over \(\$ 10.00\) not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or \(\$ 1.00\), whichever is greater, added to the balance.

SCHEDULE 90
OPTIONAL RENEWABLE ENERGY RIDER
(Wellspring Wind and Wellspring Solar)

\section*{Availability}

Available to any member taking service concurrently under another rate schedule. This rate is for the purchase of energy from wind and solar renewable sources. Members requesting service under this optional rider must remain on the rider for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

Subscription Requirement
Members desiring to participate in the Optional Renewable Energy Rider will specify the type of resource and either a fixed or a variable monthly amount of renewable energy (in one or more 100 kWh blocks) that they will purchase. The fixed monthly subscription level may not exceed a member's lowest actual or estimated monthly consumption level. Under the variable monthly subscription, the member will automatically purchase the maximum number of 100 kWh blocks or renewable energy each month that does not exceed the member's actual consumption level for that month.

\section*{Monthly Rate}
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Wind Renewable Energy (per 100 kWh) \$0.20
Solar Renewable Energy (per 100 kWh)

The monthly renewable energy rate will consist of the wholesale power cost for this service plus any over- or under-recovery balance from the prior year. This monthly renewable energy rate will be shown as a separate line item on a member's bill. This charge per 100 kWh is in addition to the applicable rate schedule currently serving the member.

## Rate Adjustments

The monthly rate will be adjusted under the following two circumstances. First, the rate will change to reflect changes in wholesale power costs associated with this service. Dakota Electric will file such wholesale rate adjustment calculations with the Minnesota Public Utilities Commission prior to implementing the rate revision. Second, the monthly rate will include any over- or under-recovery of renewable energy costs approved for recovery under this rider. In early January each year, Dakota Electric will submit a filing to the PUC documenting any change in wholesale power costs and any overor under-recovery of renewable energy costs for the prior calendar year.

## Taxes

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

SCHEDULE 90
OPTIONAL RENEWABLE ENERGY RIDER
(Wellspring C\&I)

## Availability

Wellspring C\&I is available to commercial and industrial member-consumers receiving service under Schedules $46,54,70$, or 71 . Participating members may purchase the retirement of any quantity of Renewable Energy Certificates (RECs) by Dakota Electric's wholesale power supplier, specified in kWh , in relation to either a designated annual percentage of load (\%), or monthly energy amount ( kWh ) up to their total annual energy usage supplied by Dakota Electric. Service is subject to the established rules and regulations of the Association.

## Subscription Requirements

A retail agreement between Dakota Electric and the member-consumer is required that reflects a five (5) to ten (10) year commitment and conforms to specifications set forth in the annual program guide of Dakota Electric's wholesale power supplier. C\&I member-consumer purchases must meet one of the following minimum thresholds:
a) $1,500,000 \mathrm{kWh}$ annually per participant; or
b) corporate aggregation level at $5,000,000 \mathrm{kWh}$ annually.

Any retail sale to an individual member-consumer or multi-site entity that is expected to exceed $10,000,000$ kWh annually, anytime during the term, requires Dakota Electric to receive prior approval from our wholesale power supplier.
To be eligible for Wellspring C\&I, retail and wholesale agreements must:
a) be executed prior to September $1^{\text {st }}$,
b) be for full calendar year terms,
c) commence on either the preceding, or next occurring, January $1^{\text {st }}$, and
d) have a copy provided to the wholesale power supplier within fifteen (15) days of execution.

## Monthly Rate

Wellspring C\&I will be billed as a specified rate per kWh for the entire five (5) to ten (10) year term of the agreement between Dakota Electric and the individual member-consumer. The rate per kWh for Wellspring C\&I reflects a pass-through of charges from the wholesale power supplier. The rate for each agreement is established at the time the agreement is signed. This monthly renewable energy rate will be shown as a separate line item on a member's bill. This charge is in addition to the applicable charges for the rate schedule currently serving the member.

## Termination Penalties

Early termination penalties will apply to agreements that are terminated early for convenience or otherwise voluntary reasons. Early termination penalty shall equal the last 12 months purchase amount multiplied times the purchase rate as specified in the agreement. Early termination penalties may be waived for agreements that are terminated early for involuntary reasons such as facility closings, ownership change, bankruptcy, etc.

## Taxes

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

Terms of Payment
The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SPECIAL FEES OR CHARGES

1. Meter Test at Member's RequestSingle Phase $\$ 85.00$
Three Phase ..... \$100.00
2. Bad Check ..... $\$ 15.00$
3. Reconnection Charge (after disconnect, same consumer)
a. Self-contained Metering (one person, one vehicle)
1) Working hours ..... $\$ 50.00$
2) Outside normal working hours ..... $\$ 130.00$
b. Current Transformer-rated Metering (two-person crew, one truck)
3) Working hours ..... $\$ 175.00$
4) Outside normal working hours .....  $\$ 315.00$
4. Service Charge
(outside normal working hours when problem is not with Association's equipment) Two-person crew, one truck ..... $\$ 280.00$
5. Load Management Service Charge
(when problem is not with Association's equipment)
1) Working hours .....  $\$ 70.00$
2) Outside normal working hours ..... \$140.00
6. Pulse Meter (materials and installation) ..... $\$ 500.00$
7. Temporary Service
a. Non-Winter Months ..... \$205.00
b. Winter Months (Oct 15 - Apr 15) ..... $\$ 340.00$
8. Transfer/Connection Charge .....  $\$ 17.50$9. Member Contracted Hourly WorkDakota Electric is periodically asked to perform on-site service work. Such services will beprovided at a pre-arranged hourly rate.

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## RESOURCE ADJUSTMENT RIDER

## Application

Applicable to all bills for retail electric service that include a purchased power cost adjustment clause.

## Resource Adjustment (RA)

Monthly member energy charges shall be adjusted for changes in purchased power costs and changes in Dakota Electric's Tracker Account balance. These two changes shall be reflected on member bills through a Resource Adjustment. The applicable RA factor shall be determined annually as described below.

## Determination of the Resource Adjustment Factor

The Resource Adjustment factor shall be determined by adding the annualized power cost adjustment factor to the most recent year-ending Tracker Account factor. The Tracker Account factor shall be the quotient of the recoverable Tracker balance, divided by projected retail energy sales that are applied in the power cost adjustment factor
The year used for the annualized Resource Adjustment will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RA shall be filed with the Public Utilities Commission each year before implementation.

All costs appropriately charged to Dakota Electric's Tracker Account shall be eligible for recovery through this adjustment. Revenues received from the application of the RA shall be applied toward power costs and the Tracker Account in a manner consistent with the determination of the RA factor.

## ENERGY COST ADJUSTMENT RIDER

## Application

Applicable to service provided under Interruptible Service Schedule 70, Schedule 71 and Interruptible Irrigation (Schedule 36).

## Determination

The Energy Cost Adjustment (ECA) will increase/decrease by $\$ 0.0001$ per kilowatt-hour for every corresponding $\$ 0.0001$ increase/decrease in Dakota Electric's projected wholesale cost per kilowatt-hour sold applicable to Schedule 70, Schedule 71, and Interruptible Irrigation. Total projected energy costs for this service will include all energy costs for energy supply excluding costs for load management programs and including applicable wholesale energy cost adjustments. This adjustment will be calculated annually and applied monthly on member bills.

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## PROPERTY TAX ADJUSTMENT RIDER

## Application

Applicable to all bills for retail electric service under Dakota Electric's retail rate schedules.

## Rider

There shall be included on each member's bill a Property Tax Adjustment which shall be the applicable Property Tax Adjustment factor multiplied by the member's energy usage before any applicable city surcharge or sales tax. The Property Tax Adjustment factor shall be reflected on member bills through a "Resource and Tax Adjustment" line item on member bills. The applicable Property Tax Adjustment factor shall be determined annually as described below.

## Determination of the Property Tax Adjustment Factor

The Property Tax Adjustment factor shall be determined by first allocating the incremental annual property tax expense to each class according to each class' relative responsibility for property taxes as determined in the most recent general rate case class cost of service study. Each class allocation will then be divided by projected retail energy sales applicable to each class to determine the property tax adjustment factor for each class.

Calendar-year property tax adjustment factors will be recovered during the period from January 1 through December 31. The property tax adjustment factor shall be filed with the Public Utilities Commission each year before implementation.

## Recoverable Property Tax Expenses

Recoverable Property Tax expenses shall be the incremental property tax expense not recovered through base rates as estimated for the designated projected twelve month recovery period, plus unrecovered or less over-recovered Recoverable Property Tax expenses for a prior designated twelve month recovery period.

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## FRANCHISE FEE SURCHARGE RIDER

## Application

A surcharge will be included in the monthly bills computed under the indicated rate schedules effective in the following Minnesota Communities.
The Cooperative remits $100 \%$ of the franchise fees collected to the local government.

| Rate Schedules |  | Apple Valley ${ }^{\text {a }}$ (2.0\%) | Burnsville ${ }^{\text {b }}$ | Inver <br> Grove <br> Heights ${ }^{\text {c }}$ |
| :---: | :---: | :---: | :---: | :---: |
| Residential and Farm Service | (Schedule 31) | X | \$1.00 | \$2.75 |
| Residential and Farm Demand Control Rate | (Schedule 32) | X | \$1.00 | \$2.75 |
| Residential Electric Vehicle Service | (Schedule 33) | X | NA | NA |
| Irrigation Service | (Schedule 36) | X | \$3.00 | \$3.00 |
| Small General Service | (Schedule 41) | X | \$3.00 | \$3.00 |
| Security Lighting Service | (Schedule 44) | X | NA | NA |
| Street Lighting Service | (Schedule 44-1) | X | NA | NA |
| Street Lighting Service | (Schedule 44-2) | X | NA | NA |
| Custom Residential Street Lighting | (Schedule 44-3) | X | NA | NA |
| Low Wattage Unmetered Service | (Schedule 45) | X | NA | NA |
| General Service $<75 \mathrm{~kW}$ | (Schedule 46) | X | \$10.00 | \$25.00 |
| General Service $\geq 75 \mathrm{~kW}$ | (Schedule 46) | X | \$45.00 | \$25.00 |
| Municipal Civil Defense Sirens | (Schedule 47) | X | NA | NA |
| Geothermal Heat Pump | (Schedule 49) | X | NA | NA |
| Controlled Energy Storage | (Schedule 51) | X | NA | NA |
| Controlled Interruptible Service | (Schedule 52) | X | NA | NA |
| Residential and Farm Time-of-Day Service | (Schedule 53) | X | \$1.00 | \$2.75 |
| General Service Optional TOD $<75 \mathrm{~kW}$ | (Schedule 54) | X | \$10.00 | \$25.00 |
| General Service Optional TOD $\geq 75 \mathrm{~kW}$ | (Schedule 54) | X | \$45.00 | \$25.00 |
| Residential and Farm Time-of-Day Service | (Schedule 56) | X | \$1.00 | \$2.75 |
| Standby Service Rider | (Schedule 60) | X | NA | NA |
| Distributed Generation Rider | (Schedule 61) | X | NA | NA |
| Interruptible Service (Full Interruptible) | (Schedule 70) | X | \$45.00 | \$25.00 |
| Interruptible Service (Partial Interruptible) | (Schedule 71) | X | \$45.00 | \$25.00 |
| Cycled Air Conditioning Service | (Schedule 80) | X | NA | NA |
| Renewable Energy Rider | (Schedule 90) | X | NA | NA |

a. The maximum fee that will be applied to any account will not exceed $\$ 25.00$ per month.
b. Effective July 2016.
c. Effective with the January 2018 billing month.

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## FRANCHISE FEE SURCHARGE RIDER (Continued)

## Notification

The Cooperative will notify the Minnesota Public Utilities Commission of any new, renewed, expired, or changed fee, authorized by Minn. Stat. § 216B. 36 to raise revenue, at least 60 days prior to its implementation. If the Cooperative receives less than 60 days' notice of a repealed or reduced fee from a city, the Cooperative will notify the Minnesota Public Utilities Commission within 10 business days of receiving notice. Notification to the Minnesota Public Utilities Commission will include a copy of the relevant franchise fee ordinance, or other operative document authorizing imposition of, or change in, the fee.

When a new franchise fee is implemented, the Cooperative will notify affected consumers through a joint letter mailed on behalf of the Cooperative and local government entity imposing the franchise fee. Such joint letters will be submitted to the Commission along with other relevant documentation referenced above and will at least include the following statement:

The Cooperative provides electric service within the City limits under the terms of a Franchise Agreement with MUNICIPALITY. An electric Franchise Fee of X\% OF GROSS REVENUES/\$X PER METER/\$ PER KWH will be imposed on consumers effective MM/DD/YYYY. The line item will appear on your bill as "City Fee." The Cooperative remits $100 \%$ of this fee to the MUNICIPALITY."

The franchise fee will be labeled as "City Fee" on monthly bills.

## COMPETITIVE SERVICE RIDER

## Availability

Available at Association's discretion to Commercial and Industrial members that have electric service requirements which are subject to effective competition. Effective competition exists if a member is located in Association's service territory and has the ability to obtain its energy requirements from an energy supplier not rate-regulated by the Minnesota Public Utilities Commission.

## Rate

Standard service rate provisions apply except the level of the demand and/or energy charges may be decreased for each member based on a consideration of member's load characteristics and lowest cost competitive energy supply.

## Terms and Conditions of Service

1. Members must provide Association with information which documents that member is not likely to take service provided by any other electric tariff available from Association.
2. Minimum load served under this Rider is 500 kW .
3. Member must execute an electric service agreement with Association which will include:
a. The minimum rate under this Rider, which will recover at least the incremental cost of providing service, including the cost of incremental capacity that is to be added while the rate is in effect and any applicable on-peak or off-peak differential.
b. The maximum rate reduction possible under this Rider, which will not exceed the difference between the standard tariff and the cost to the member of the lowest cost competitive energy supply.
c. The term of service under this Rider, which must be no less than one year and no longer than five years.
d. The size of the load served under this Rider
e. Verification that member has been fully informed of the availability of an electric energy review. If no electric energy review is performed for member, an explanation of why an electric energy review was not necessary will be included.

## COMPETITIVE SERVICE RIDER (Continued)

4. The Association within a general rate case is allowed to seek recovery of the difference between the standard tariff and this Rider times the usage level during the test year period.
5. A rate under this Rider shall meet the conditions of Minnesota Statutes, Section 216B.03, Reasonable Rate, for other members in this same member class.
6. Unless the Commission determines that it would be in the public interest, a rate under this Rider shall not compete with district heating and cooling provided by a district utility defined by Minnesota Statutes, Section 216B.166, Subdivision 2, paragraph (c).
7. A rate offered under this Rider may not be offered to a member in which the Association has a financial interest greater than 50 percent.

## Regulatory Review

This rate offered under this Rider will be effective on an interim basis after filing by Association of the proposed rate with the Commission and upon the date specified in the electric service agreement. If the Commission does not approve the rate, Association may seek to recover the difference in revenues between the interim competitive rate and the standard tariff from the member who was offered the competitive rate.

The Commission has the authority to approve, modify or reject a rate under this Rider. If the Commission approves the competitive rate, it becomes effective as agreed to by the Association and member. If the competitive rate is modified by the Commission, the Commission shall issue an order modifying the competitive rate subject to the approval of the Association and the member. Each party has ten days in which to reject the proposed modification. If no party rejects the proposed modifications, the Commission's order becomes final. If either party rejects the Commission's proposed modifications, the Association on its behalf or on the behalf of the member, may submit to the Commission a modified version of the Commission's proposal. The Commission shall accept or reject the modified version within 30 days. If the Commission rejects the competitive rate, it shall issue an order indicating the reasons for the rejection.

## MEMBER ENERGY EXCHANGE RIDER

## Availability

The Member Energy Exchange Program is available to any general service member with 100 kW minimum demand reduction capability taking service concurrently under either rate schedule 46, 70 or 71. This rider provides Dakota Electric and its power supplier(s) with the opportunity to pay members for reducing their energy needs during certain peak periods. Member participation during each individual exchange period is strictly voluntary. Members may elect to participate in an individual exchange period or decline without explanation. This rider is available at the Cooperative's discretion.

## Participation Requirements

The following participation requirements apply:

1. Member must provide a minimum electrical demand reduction of 100 kW ;
2. Member loads covered by a load management program or rate are not eligible;
3. Member must reduce energy requirements for a minimum of two hours; and
4. Member may be required to reduce energy requirements for a maximum of six hours in any 24-hour period.

## Notification and Pricing

Two options are available for customers participating in the Member Energy Exchange Program
Option A - This option is for a member requiring a 24-hour advance notice. Option A notification and pricing is as follows:

1. Member receives a day-ahead posted price;
2. Member indicates intended action plans for the next day;
3. Member receives a two-hour notification prior to the beginning of the energy reduction period;
4. Member curtails energy usage; and
5. Member receives a separate payment or a credit on the electric bill.

# MEMBER ENERGY EXCHANGE RIDER 

(Continued)

## Notification and Pricing (continued)

Option B - This option is for a member that can respond to a maximum two-hour notice. Option B notification and pricing is as follows:

1. Member receives a two-hour notification that includes the posted price prior to the beginning of the energy reduction period (Option B will be valued higher than Option A);
2. Member curtails energy usage; and
3. Member receives a separate payment or a credit on the electric bill.

## Validation

The following metering and validation provisions will apply for participation in this program:

1. Member must have electronic 15 -minute interval metering, interrogation software and telephone line;
2. An assessment of the verifiable energy reduction capability will be performed before a member may participate; and
3. The member's ability to reduce demand to the agreed-upon level will be tested and verified.

## VOLUNTARY ENERGY REDUCTION RIDER

## Availability

The Voluntary Energy Reduction Rider is available to any General Service member that is demand metered. This rider provides Dakota Electric and its power supplier(s) with the opportunity to pay members for reducing their energy needs during certain peak periods. Member participation is strictly voluntary. This rider is available at the Cooperative's discretion.

## Participation Requirements

The following participation requirements apply:

1. Member must be demand metered by Dakota Electric;
2. Member loads covered by a load management program or rate are not eligible; and
3. Member must reduce energy requirements for a minimum of two hours.

## Notification and Pricing

Dakota Electric will contact members and determine their interest in participating in the Voluntary Energy Reduction Program. The offer to participate in this rider will include:

1. An estimate of the member's demand reduction based on historical patterns;
2. Indication of duration of voluntary reduction;
3. Identification of beginning hour and ending hour of voluntary reduction; and
4. Offer price per kWh .

Participating members will curtail specified energy usage during identified voluntary reduction periods. Members will then receive compensation through a separate payment or a credit on the electric bill.

## MEMBER SPECIFIC DISCOUNT RIDER

## Availability

Available to Commercial and Industrial members receiving service under Schedules 46 and 54 that have electric load that qualifies for a targeted wholesale capacity rate discount from the Association's wholesale power supplier. Service will be provided under the terms of a memberspecific contract.

## Rate

Standard rate provisions for Schedules 46 and 54 apply, except that a discount will be applied to the monthly bill based on the member's demand during the wholesale coincident billing peak and the qualifying discount level. The monthly billing discount is available for up to five (5) consecutive years measured from the date electric service is first provided to the qualifying new retail load, or under other terms as offered by the Association's wholesale power supplier.
A monthly Communication Fee of $\$ 8.70$ per meter will be charged for digital cellular modem communication.

## Terms and Conditions of Service

1. Available to new retail load with monthly coincident billing peak demand greater than or equal to 750 kW .
2. Monthly non-coincident load factor must be greater than or equal to $40 \%$.
3. Dakota Electric must supply all $(100 \%)$ of the retail load's electric requirements. On-site generation is not allowed.
4. Load will be ineligible for Interruptible Commercial and Industrial Service (Schedules 70 and 71) during the term of the agreement and, upon expiration, for an additional three years.
5. Each month that the metered coincident billing peak demand of the qualifying load is greater than or equal to 750 kW , a discount will be applied to the demand of the qualifying load as specified by Dakota Electric's wholesale power supplier.
6. No discount will be applied to the demand of the member's load in a month where the metered coincident billing peak demand of the load is less than 750 kW .
7. A Member Specific Rate may not be offered to a member in whom the Association has a financial interest greater than 50 percent.
8. Member must provide Association with information which documents that the member electrical load from the Association will qualify for the targeted wholesale capacity rate discount from Dakota Electric's power supplier.

## MEMBER SPECIFIC DISCOUNT RIDER (Continued)

9. Member must execute an electric service agreement with Association which will at least include:
a. The billing rate components, specified as credits or charges as applicable.
b. The term in years for firm service.
c. The size of the load served under this Rider.
d. Verification that member has been fully informed of the availability of an electric energy review. If no electric energy review is performed for member, an explanation of why an electric energy review was not necessary will be included.
10. The Association will track the wholesale power cost credits associated with each Member Specific Discount and exclude them from both the calculation of the base cost of power in future rate cases and the calculation of the Power Cost Adjustment Charges in the Resource and Tax Adjustment filings to the Minnesota Public Utilities Commission. This will ensure that the credits Dakota Electric receives from its wholesale power supplier are not double-counted.

## Regulatory Review

Each Member Specific Discount will be filed with the Public Utilities Commission (as a confidential information filing) before implementation. These confidential information filings will provide an overview of the discount being provided and confirm that the discount is a passthrough from Dakota Electric's wholesale power supplier.

## LARGE LOAD HIGH LOAD FACTOR RIDER

## Availability

Available to Commercial and Industrial members receiving service under Schedules 46 and 54 that have electric load at an individual site that meets the qualifying demand and load factor thresholds of the Association's wholesale power supplier.

## Rate

Standard service rate provisions for Schedules 46 and 54 apply, except that a discount will be applied to the member's monthly bill based on the member's calculated load factor. Qualifying loads may move between load factor tiers monthly based on a changing ANCLF (or PNCLF). Credits will be issued monthly for the following load factor tiers:

| Tier | ANCLF $/$ PNCLF |
| :---: | :---: |
| 1 | $62.00 \%$ to $74.99 \%$ |
| 2 | $75.00 \%$ to $89.99 \%$ |
| 3 | $90.00 \%$ to $100.00 \%$ |

A monthly Communication Fee of $\$ 8.70$ per meter will be charged for digital cellular modem communication.

## Terms and Conditions of Service

1. Dakota Electric must supply all (100\%) of the member's electric requirements. On-site generation is not allowed.
2. The member will not receive a credit under both the LLHLF rate and any other load management program.
3. The member's qualifying load at an individual site must achieve a Non-Coincident Peak Demand (NCPD) of at least $1,000 \mathrm{~kW}$ in any period of sixty (60) consecutive minutes at least one time in the preceding $12-$ month period.
a. NCPD shall be the highest actual metered demand and not an estimated, average or calculated value.
4. The member's qualifying load at an individual site must have an Annual Non-Coincident Load Factor (ANCLF) in the preceding 12-month period that is greater than or equal to 62\%.
a. All Load Factor calculations will be based only on the individual member's actual demand and energy recorded during the preceding twelve (12) months at an individual site.
b. No adjustments will be made for any load management programs, abnormal weather, member load anomaly, or member growth (expected or actual).

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## LARGE LOAD HIGH LOAD FACTOR RIDER (Continued)

5. New metered loads with less than twelve (12) months of actual load data may substitute a Partial-Year Non-Coincident Load Factor (PNCLF) for the ANCLF qualification requirement, only during the first eleven (11) months of electric service.
a. If a member has a significant expansion of load at the site and the member's NCPD increases by more than $50 \%$ over the previous year's average monthly Peak Demand, then the member shall have the ability to use the PNCLF as the basis for the credit that applies to the entire member load.
b. Once a member "resets" the load factor calculation and begins using the PNCLF, the member may not revert to the historical ANCLF for the next 11 months.
c. Transfer of ownership alone does not qualify load to be considered "new".
6. No loads will qualify for the LLHLF credit retroactively. Monthly calculations will be made for qualification in the previous month.
7. Dakota Electric will automatically adjust the LLHLF credit provided to members to pass through any future changes made by its wholesale power supplier.
8. The Association will track the wholesale power costs associated with all Large Load High Load Factor credits and exclude them from both the calculation of the base cost of power in future rate cases and the calculation of the Power Cost Adjustment Charges in the Resource and Tax Adjustment filings to the Minnesota Public Utilities Commission. This will ensure that the credits Dakota Electric receives from its wholesale power supplier are not double-counted.

## SCHEDULE 72 <br> CONTRACT RATE SERVICE

## Availability

Available at Association's discretion, within its assigned service territory, to large Commercial and Industrial members that are subject to effective competition and have electric service requirements as described in the Terms and Conditions of Service clause. Effective competition exists if the member has the ability to obtain its energy requirements from an energy supplier not rate-regulated by the Minnesota Public Utilities Commission (Commission). Service will be provided under the terms of a memberspecific electric service agreement.

## Rate

Applicable charges will be detailed in an electric service agreement.

## Terms and Conditions of Service

1. Individual contract rates will only be offered in coordination with Dakota Electric's wholesale power supplier.
2. Minimum load served under this Contract Service is 10 MW.
3. Distribution and/or transmission facilities to serve the Contract Service load will be provided as specified in the electric service agreement with the member. A contribution in aid of construction (CIAC) will be required if the estimated investment in distribution and/or transmission facilities is not justified by the anticipated revenue.
4. Member must execute an electric service agreement with Association which will at a minimum include:
a. Location of the consumer site within the Cooperative's service territory.
b. Affirmation that 1 ) the consumer is able to locate the load/facility at another site and obtain energy requirements from an energy supplier that is not regulated by the Commission and 2) that the consumer is not likely to take service from the Cooperative if the consumer was charged the Cooperative's standard tariffed rate.
c. Identification of billing components and rates to be applied to each component.
d. The term of service under this Contract Service.
e. The size of the load (in MW) served under this Contract Service.
f. Identification of any distribution and/or transmission facilities that must be installed to serve the Contract Rate Service load and the responsibility for installation and future maintenance costs.
g. Verification that member has been fully informed of the availability of an electric energy review. If no electric energy review is performed for the member, an explanation of why an electric energy review was not necessary will be included.

## SCHEDULE 72

CONTRACT RATE SERVICE
(Continued)

1. Each member receiving service under the Contract Rate Service will be responsible for all wholesale power costs associated with their electric service. The Association will track the wholesale power costs associated with all contract rates and exclude them from both the calculation of the base cost of power in future rate cases and the calculation of the Power Cost Adjustment Charges in the Resource and Tax Adjustment filings to the Commission.
2. A rate under this Contract Service will meet the conditions of Minnesota Statutes, Section 216B.03, Reasonable Rate, for other members in this same member class.
3. A rate under this Contract Service will not compete with district heating and cooling provided by a district utility defined by Minnesota Statutes, Section 216B.166, Subdivision 2, paragraph (c).
4. A rate offered under this Contract Service will not be offered to a member in whom the Association has a financial interest greater than 50 percent.
5. Contract rates must be approved by the Commission before becoming effective.

## Regulatory Review

Dakota Electric must file any proposed contract rates for individual members with the Commission. Such filings will clearly identify all confidential information as trade secret with designations as specified in Minnesota Rules. The Association will at a minimum include the following information in Contract Rate filings:

1. Information required in "Miscellaneous Filings" to the Commission as specified in applicable Minnesota Rules.
2. Information included in the electric service agreement.
3. Identification of wholesale power costs and responsibility of the member for all such costs.
4. Documentation of incremental cost recovery for service to the contract rate consumer and evaluation of impact on other Cooperative members.

The Commission will approve, modify, or reject the contract rate filing under this Contract Rate Service within 90 days. If the Commission approves the contract rate, it becomes effective as agreed to by the Association and member. If the contract rate is modified by the Commission, the Commission shall issue an order modifying the contract rate subject to the approval of the Association and the member. Each party has ten days in which to reject the proposed modification. If no party rejects the proposed modifications, the Commission's order becomes final. If either party rejects the Commission's proposed modifications, the Association on its behalf or on behalf of the member, may submit to the Commission a modified version of the Commission's proposal. The Commission shall accept or reject the modified version within 30 days. If the Commission rejects the contract rate, it shall issue an order indicating the reasons for the rejection.

## ADVANCED GRID INFRASTRUCTURE RIDER

## Application

Applicable to bills for electric service provided under the Association's metered retail rate schedules.

Rider
There shall be included on each member's monthly bill an Advanced Grid Infrastructure (AGi) Rider adjustment. The AGi Adjustment shall be applied on a per-meter basis before any city surcharge and sales tax.

## Determination of AGi Adjustment

The AGi Adjustment shall be the quotient obtained by dividing the forecasted balance of the AGi Tracker Account for each member class by the applicable meters in each member class. The AGi Adjustment may be changed annually upon a filing with the Minnesota Public Utilities Commission (Commission). The AGi Adjustment shall apply to bills rendered on and after January $1^{\text {st }}$ of the year.

The AGi Adjustment for each metered retail rate schedule is:

| Member Class | Monthly Fixed Charge <br> per Meter |
| :--- | :---: |
| Residential (Schedules 31, 32, 53, 56) | $\$ 0.00$ |
| Irrigation (Schedule 36) | $\$ 0.00$ |
| Lighting (Schedule 44-5) | $\$ 0.00$ |
| Small General (Schedule 41) | $\$ 0.00$ |
| General (Schedules 46, 54) | $\$ 0.00$ |
| C\&I Interruptible (Schedules 70, 71) | $\$ 0.00$ |

Opt-Out Members will not be subject to charges under the Advanced Grid Infrastructure (AGi) Rider, See Section V, Sheet 60.0-6 0.1 for the Advanced Meter Opt-Out (AMO) Rider.

Recoverable AGi Costs shall be the annual revenue requirements associated with AGi capital costs (a) not recovered through base rates, (b) recorded in the AGi Tracker Account for the designated period, and (c) determined by the Commission to be eligible for recovery under this Rider. A standard model will be used to calculate the total forecasted revenue requirements for eligible projects for the designated period. All costs appropriately charged to the AGi Tracker Account shall be eligible for recovery through this Rider, and all revenues recovered from the AGi Adjustment shall be credited to the AGi Tracker Account.

## True-Up

For each 12-month period ending December 31, a true-up adjustment to the AGi Tracker Account will be calculated reflecting the difference between the AGi Adjustment recoveries and the revenue requirements for such period. The true-up adjustment shall be calculated and included in the AGi recovery filing submitted to the Commission for the following calendar year. No carrying cost shall be applied to the AGi Tracker.

## ADVANCED METER OPT-OUT (AMO) RIDER

## Applicability

Applicable for residential electric service provided under the Association's metered retail rate schedules for residential members who do not want an advanced, wireless, communicating meter installed at their residence ("Opt-Out Members").

## Rate

Advanced Meter Opt-Out Members are subject to a recurring monthly fee after enrollment, regardless of the quantity of meters per premise. The applicable fees for participating in Advanced Meter Opt-Out will be shown as separate line items on the Member's bill as follows:

## Monthly Charge $\quad \$ 11.45$ per month

The Monthly Charge will be applied following the meter exchange. Where a meter exchange is not required, charges will be applied following affirmative Opt-Out option election or action by the Member as described in the Terms and Conditions.

Opt-Out Members will not be subject to charges under the Advanced Grid Infrastructure (AGi) Rider, See Section V, Sheet 59 for the Advanced Grid Infrastructure Rider.

## Terms and Conditions

1. The Cooperative shall have the right to refuse to provide advanced meter opt-out service in either of the following circumstances:
a) If such a service creates a safety hazard to Members or their premises, the public, or the electric utility's personnel or facilities.
b) If a Member does not allow the Cooperative's employees or agents access to the meter at the Member's premises.
c) If the Member has a history of meter tampering.
2. Opt-Out Provisions:
a) Opt-Out Election: A Member must affirmatively elect to opt-out of having electric consumption metered through an advanced meter to obtain service under this AMO Rider. Members shall default to an advanced meter absent such an election. Members who do not provide reasonable access to their meter or affirmatively prevent the installation of an advanced meter shall be deemed to have elected this AMO Rider.
b) Frequency of Election: A Member may only enroll in this AMO Rider once per twelvemonth period at the same residence.
c) Opt-In Election: At any time, Opt-Out Members may opt back into electric service with an advanced meter.
d) Local governments and entities such as condominiums and other multi-unit dwellings are not allowed to exercise the Opt-Out option on behalf of individually metered residents.

## ADVANCED METER OPT-OUT (AMO) RIDER (Continued)

3. Metering Equipment: A non-communicating meter will be used to provide electric service for Members who elect this option.
4. Members enrolled in a load management program or other service requiring an advanced meter will be notified that the Member must discontinue participation in the load management program.
5. Estimated Meter Reading: Opt-Out Members may receive bills based on estimated meter reads if circumstances prevent reading a meter in a given month.
6. Billing: Members will be billed for charges incurred for electric consumption under the applicable metered retail rate schedule, plus the Monthly Charge described in this AMO Rider.

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GENERAL RULES AND REGULATIONS

SECTION: V1
SHEET: 2
REVISION: 7

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## MEMBER SERVICE INFORMATION EXTENSION OF SERVICE

General Policies Applicable to All Extensions of Service

1. It shall be the policy of Dakota Electric Association (DEA) to provide and extend electric service to any member within its service area in accordance with the rate schedules and policies established by the Association.
2. Dakota Electric Association requires that, on overhead services, the member or developer provide all necessary tree clearing of the power line route outside the public right-of-way. Clearing includes any removal of debris as a result of tree cutting as may be required. The normal width of the right-of-way is to be cleared 10 feet on each side of the power line.

Dakota Electric Association will provide all necessary tree trimming on new overhead service extensions within the public right-of-way.

It is the goal of Dakota Electric Association to cooperate with the member to save as many trees as possible without jeopardizing the power line operation.
3. The member shall pay the cost of any subsequent relocation or rearrangement of any portion of the Association's system made to accommodate his/her needs or to accommodate alterations in grade.
4. Equipment, such as motors and generators that are operated interconnected with the Association, shall not cause objectionable voltage flicker on the distribution system and for other Association members. The member shall apply starters/controllers to the motors, as required, to limit the starting currents to levels acceptable to the Association. For generation, the member shall design and operate the generation system and the load transfer to and from the generation system so as not to cause objectionable voltage flicker.
5. Meters on all new installations shall meet the requirements of the Association's Technical Standards for Metering which are consistent with industry practices.
6. All member wiring must meet the requirements of the National Electric Code, National Electric Safety Code, State and local jurisdictions.

## Continuity of Service

Dakota Electric Association will endeavor to provide continuous service but does not guarantee an uninterrupted or undisturbed supply of electric service. The Cooperative will not be responsible for any loss or damage resulting from the interruption or disturbance of service for any cause other than gross negligence of the Cooperative. The Cooperative reserves the right, without previously notifying the member, to temporarily interrupt service for construction, inspection, repairs, emergency operations, shortages in power supply, safety, and State or National emergencies. The Cooperative will not be liable in any event for any loss of profits or other consequential damages resulting from the use of service or any interruption or disturbance of service.

# MEMBER SERVICE INFORMATION EXTENSION OF SERVICE CONTINUED 

## Individual Residential Extensions

1. Dakota Electric Association will serve a year-round, principle residence of an individual residential member with overhead or underground single-phase electric service at the rates and minimum charges established in applicable rate schedules. In order to ensure that the cost of the new facilities will not cause an undue burden on other members, the member will be assessed a contribution in aid of construction. The member will be charged a minimum of $\$ 500.00$ for an extension of 75 feet or less. For extensions longer than 75 feet, the member will be charged $\$ 500.00$ plus $\$ 8.30$ per foot for each foot that the extension exceeds 75 feet. The member will be assessed additional charges if above normal costs are incurred by DEA to accommodate member installation preferences or the member requests a nonstandard installation.
2. Dakota Electric Association will furnish the overhead service triplex wire between the overhead system and the member-owned service mast. If a member desires underground service, DEA will install underground primary or secondary wire between the right-of-way and a point of connection located no closer than fifty (50) feet from the building, measured from the closest point of the building to the existing DEA facilities. The consumer will be charged the line extension costs outlined in paragraph one (1) of this section.
3. The member must install and own the underground secondary wire run between the point of connection and the meter. Dakota Electric Association will make the connection required at the point of connection.
4. For underground service, the member shall provide a right-of-way strip that is within four (4) inches, plus or minus, of the finished grade, free from obstructions and completely accessible to the Cooperative's equipment.
5. The member will be required to obtain and/or grant easements to the Cooperative for any portion of the extension that is outside a public right-of-way or easement, at no cost to the Cooperative. The Cooperative will prepare the necessary easement documents and will be reimbursed by the member for costs incurred for property title search, surveying, and recording fees.
6. The member will pay any additional installation costs incurred by the Cooperative because of:
a. delays caused by member:
b. installation of underground facilities after the ground is frozen;
c. surface and subsurface conditions that impede the installation of underground facilities, such as rock formations;
d. paving of streets, alleys or other areas prior to the installation of the underground facility;
e. above-average permit costs; or
f. DNR crossing fees.
7. The member will also be responsible for costs incurred for any relocation or rearrangement of any portion of the system made to accommodate the member after construction is underway or complete. The normal service capacity provided for overhead service will be 10 KVA per residential member and 15 KVA for underground service. Residential members requesting greater transformer capacity will be considered on an individual basis to determine if anticipated revenue justifies the additional expenditure without any further contribution in aid of construction.

## MEMBER SERVICE INFORMATION <br> EXTENSION OF SERVICE CONTINUED

8. If a member requests an individual residential service extension to a location with no permanent residence, the member will pay the full cost of installation. If a permanent residence is constructed within five (5) years, the member will be refunded the amount less the normal line extension charge at the time the permanent residence is constructed.
9. Dakota Electric Association will not install a transformer within 50 feet of the house. If the closest point of the member's house is within 150 feet of the distribution system in the public right-of-way, the member must install their own secondaries.

## Residential Developments (Multiple Lot Plats)

1. To encourage orderly development and to avoid investment in idle facilities, it shall be Dakota Electric Association's policy to examine all residential developments whether served overhead or underground for justification to install electric distribution facilities. When the anticipated revenue justifies the expenditure, Dakota Electric Association will install the facilities at its expense. When the anticipated revenue does not justify the expenditure, the installation will be made only if the developer pays Dakota Electric Association that portion of the facility cost not justified by the anticipated revenue prior to commencement of the electric utility installation.
2. For developments of small lots, one acre or smaller, when underground electric service is desired by a developer or required by a regulatory body or by local ordinance, Dakota Electric Association requires the developer to sign and follow the provisions of the "Residential Underground Distribution Agreement" (RUDA-1).
3. Underground service shall be made available to platted areas with large lots by employing individual transformers for each home. Large lots are defined as being larger than one acre or any lot requiring an individual transformer.

The developer shall also be subject to a payment in accordance with the provisions of paragraph 1 (Residential Developments) of this policy and as outlined in the Residential Underground Distribution Agreement (RUDA-1) for standard-sized lots.

Developers of large lot plats must sign and follow the provisions of the Residential Underground Distribution Agreement for Large Lot Developments (RUDA-2).
4. The normal transformer capacity provided for large lot plats will be 15 KVA with additional capacity considered on an individual basis as outlined under paragraph 1, "Individual Overhead Service."

## Lighting

The member will be charged for installation costs that exceed allowances specified in the applicable lighting rate schedule.

## MEMBER SERVICE INFORMATION <br> EXTENSION OF SERVICE CONTINUED

## Commercial and Industrial Members, Apartment Complexes, and Seasonal Accounts

1. Dakota Electric Association will provide overhead or underground, single-phase or threephase electric service to commercial (including commercial developments) and industrial members and apartment complexes in accordance with established applicable rates and charges when the anticipated revenue justifies the expenditure. Dakota Electric Association will install, own, and maintain the underground primary service to a point of connection designated as either a single-phase or three-phase padmounted transformer. An economic analysis will be made for any service that involves abnormally high investments, and/or those with low anticipated revenue. A contribution in the aid of construction will be required if the estimated investment is not justified by the anticipated revenue, calculated as follows:


When underground service is requested, the member shall provide a right-of-way strip that is within four (4) inches, plus or minus, of the finished grade. The right-of-way must be free from obstructions and completely accessible to the Association's equipment.

The member shall furnish the pad for the padmounted transformer on underground systems in accordance with specifications provided by Dakota Electric Association.

The member will pay any additional installation costs incurred by the Association because of:

1. delays caused by member;
2. installation of underground facilities after ground is frozen;
3. soil conditions that impair the installation of underground facilities, such as rock formations;
4. paving of streets, alleys or other areas prior to the installation of the underground facility;
5. above-average permit costs; or
6. DNR crossing fees.

There may be situations where the member shall be required to install sections of conduit, such as underground entrance to a pad, which shall be at no cost to the Association.

SECTION: VI

# MEMBER SERVICE INFORMATION <br> EXTENSION OF SERVICE CONTINUED 

The 2000 KVA distribution transformer is the largest size that Dakota Electric Association will install. Multiple transformers and service entrances will be required when service capacity requirements exceed 2000 KVA . The member cannot parallel multiple transformer services without written Dakota Electric approval of the design.
2. Irrigation Members

Dakota Electric Association will provide service to irrigation members in accordance with established applicable irrigation rates and in the "Agreement for Electric Service (Irrigation and Other Seasonal Loads). An economic analysis will be made for extensions to irrigation service. A contribution in aid of construction will be required if the estimated investment is not justified by the anticipated revenue.

The member shall furnish the pad for the padmounted transformer on underground systems in accordance with specifications provided by Dakota Electric Association.
3. Primary Metered Installations

Depending on the configuration of the Dakota Electric primary system, the member may have the option of installing primary metering on the 12.5 kV system. Credits for primary service may be available as specified in applicable rate schedules. Many times this option is not available without the installation of additional 12.5 kV facilities so as to allow for proper metering and so as not to negatively impact the reliability of other Dakota Electric member loads interconnected with the Dakota Electric distribution system.
A. The member is responsible for all integration and installation costs for the primary metering system.
B. The member is responsible for purchasing, owning and operating, all 12.5 kV electrical facilities on the member's side of the primary metering installation(s). This includes responsibility for routine and emergency maintenance of those purchased primary facilities, which includes emergency transformer replacement and emergency primary facility repairs.
C. Primary Metering is required for all primary wires feeding the facilities/complex.
D. Dakota Electric, the National Electric Code, or both may require special protection for the member's primary system. The member is required to provide any necessary protection. This protection is required to be coordinated with the DEA distribution system's protection.

# MEMBER SERVICE INFORMATION <br> EXTENSION OF SERVICE SPECIAL FACILITIES 

## A. Definitions

1. Municipality is defined as any one of the following entities: a county, a city, a township or any other unit of local government.
2. City is defined as either a statutory city or home rule charter city consistent with Minn. Stat. sections 410.015 and 216B.02, subd. 9.
3. Special facilities are defined as non-standard facilities, non-standard design or nonstandard location of facilities.
4. Special facilities are the type of services that results in costs in excess of the Association designated service installation. Common examples are duplicate service facilities, special switching equipment, special service voltage, three phase service where single phase service is adequate, excess capacity, underground installations to wood poles, conversion from overhead to underground service, specific area undergrounding, other special undergrounding, and relocation or replacement of existing Association facilities.

## B. General Rule

When requested by the member, group of members, developer, or municipality to provide types of service that result in an expenditure in excess of the Association designated service installation the requesting member, group of members, developer, or municipality will be responsible for such excess expenditure. Common examples of these requests are duplicate service facilities, special switching equipment, special service voltage, three phase service where single phase service is adequate, excess capacity, capacity for intermittent equipment, trailer park distribution systems, underground installations to wood poles, conversion from overhead to underground, urban renewal undergrounding, other special undergrounding, and relocation or replacement of existing Association facilities.

## C. Public Right-of-Way

1. Replacement, Modification or Relocation Due to Construction.

Whenever a governing body that manages a public right-of-way orders the Association to replace, modify or relocate its existing distribution facilities due to construction on said public right-of-way, such facilities will be relocated at Association expense, provided the construction is the most economical, industry accepted installation designated by the Association. If the governing body or municipality requests a type of construction with

# MEMBER SERVICE INFORMATION EXTENSION OF SERVICE SPECIAL FACILITIES (Continued) 

costs in excess of the Association designated construction, such excess expenditures will be the responsibility of the municipality or the Association's members residing within the municipality. However, if the governing body issuing the order requiring construction on the public right-of-way does not pay the excess cost, the Association may seek Commission approval to recover such excess expenditures from the ratepayers residing in the governing body's territory.

## 2. Replacement, Modification or Relocation Due to Vacation of Public Right-of-Way.

Whenever a governing body of public right-of-way orders the Association to replace, modify or relocate its existing distribution facilities due to a vacation of a public right-ofway, the Association will be responsible for such expenditure. The Association may request that the governing body pay for the aforementioned expenditure. However, if the governing body chooses not to pay, the Association may seek approval from the Commission to recover this expenditure from the ratepayers residing in the governing body's territory.

## D. Construction Requirements for Special Facilities

The Association will initially install special distribution facilities (which may include installation of standard facilities at a location/route deemed non-standard by the company) or the Association will replace, modify or relocate to an Association-approved location/route its existing distribution facilities upon a request of a member, group of members, developer, or upon order or request of a municipality. The benefited member, group of members, developer or municipality will be responsible for all costs in excess of standard installation for new facilities plus the value of the undepreciated life of existing facilities being removed minus the salvage value. However, if the municipality does not pay for the excess expenditure, the Association may seek Commission approval to recover such expenditure from the requesting municipality.

## E. Underground Facilities Requirements

The following provisions apply when replacing overhead facilities with underground facilities:

1. The member, at their expense, must engage an electrician to adapt their electrical facilities to accept service from Association underground facilities.

# MEMBER SERVICE INFORMATION EXTENSION OF SERVICE SPECIAL FACILITIES (Continued) 

2. The Association will allow reasonable time for the member to make the necessary alterations to their facilities, before removal of the existing overhead facilities.
3. Perpetual easements will be granted to Association at no cost to the Association whenever any portion of the underground distribution system is located on private land. Said private easements also will allow the Association access for inspection, maintenance, and repair of Association facilities.
4. The Association will have full access to its facilities installed underground for the purpose of inspection, maintenance, and repair of such facilities, such right of access to include the right to open streets and alleys.
5. When undergrounding is the result of a municipal project, the municipality will designate and reserve a definite area within the public ways for the installation and location of Association underground facilities. Once the Association facilities have been installed in such designated and reserved areas, if the municipality requires removal or relocation of such facilities for any reason, the municipality will reimburse the Association for the cost of such removal or relocation. However, if the municipality does not pay for the aforementioned expenditure, the Association may seek approval from the Commission to recover this expenditure from the ratepayers residing in the municipality's territory.
6. The municipality will give sufficient notice and will allow the Association sufficient time to place its facilities beneath public ways while the same are torn up for resurfacing. The municipality shall provide Association with access to the torn up public ways during such period so that Association will have unobstructed use of sufficiently large sections of the public ways to allow installation of the underground facilities in an economic manner.
7. Secondary voltage service supplied from an underground distribution lateral installation will require that the member install, own, and maintain necessary conduits and secondary service conductors or bus duct to a point designated by Association within or adjacent to the secondary compartment of the transformer or vault. Association will make final connection of member's secondary service conductors or bus duct to Association's facilities.
8. Secondary voltage service supplied from underground secondary service conductors may require that the member install, own, or maintain necessary conduits on private property to a point designated by the Association at or near the property line. The secondary service conductors usually will be installed by the member in his conduit,

# MEMBER SERVICE INFORMATION EXTENSION OF SERVICE SPECIAL FACILITIES <br> (Continued) 

However, in some installations it may be preferred to have Association provide a continuous installation from the Association facilities through the member conduit to his service equipment. In these installations the member must pay the total installed cost of the Association's cable installed on private property. The Association will make the final connection of member's secondary service connectors to Association's facilities.

## F. Special Facilities Payments

The requesting party shall execute an agreement or service form pertaining to the installation, operation and maintenance, and payment of the facilities. Payments required will be made on a non-refundable basis and may be required in advance of construction unless other arrangements are agreed to in writing by the Association. The facilities installed by the Association shall be the property of the Association. Any payment by a member, group of members, developer or municipality shall not entitle him to any ownership interest or rights therein.

Payment for special facilities may be required by either, or a combination, of the following methods as prescribed by the Association: a single charge for the costs incurred or to be incurred by the Association due to such a special installation or a monthly charge being one-twelfth of Association's annual fixed costs necessary to provide such a special installation. The monthly charge will be discontinued if the special facilities are removed. When special distribution facilities are requested by a municipality and payment is not made by the municipality, the Association may seek approval from the Commission to recover its excess expenditure from the municipality's ratepayers.

# MEMBER SERVICE INFORMATION TEMPORARY SERVICE 

Temporary service installation will be permitted during the period of construction, remodeling, maintenance, repair, or demolition of buildings, structures, equipment, or similar activities. When installing temporary service to a member, Dakota Electric Association will require that the member bear the cost of the installation and removal of service in excess of any salvage realized.

The member receiving temporary service will be charged the regular rates applicable to the service rendered.

Dakota Electric Association may require that advance payment be made to cover the estimated cost of the temporary service.

MEMBER SERVICE INFORMATION
BILLING AND PAYMENT OF ELECTRIC BILLS

## Meter Reading and Billing Periods

The reading of all meters used for determining charges to members shall be made each month unless otherwise specified by Dakota Electric Association.

The term "month" for meter reading and billing purposes is the period between successive meter readings, which shall be as near as practicable to 30 days.

Dakota Electric Association requires access to meters monthly unless other arrangements are made to obtain monthly meter readings.

If a billing period is longer or shorter than a normal billing period by five (5) days, the billings shall be prorated on a daily basis.

## Estimated Billings

When access to a meter cannot be gained, an estimated bill may be rendered. In cases of emergency, the Dakota Electric Association may render estimated bills without reading meters. Estimated bills shall be based on the member's normal consumption for a corresponding period during the preceding months.

Only in unusual cases, or when approval is obtained from the member, shall more than two (2) consecutive estimated bills be rendered.

If an estimated bill seems to be abnormal when a subsequent reading is obtained, the bill, or bills, for the entire estimated period shall be recalculated and a corrected bill generated. If there is reasonable evidence that the use occurred during only one (1) billing period, the bill shall be so computed.

# MEMBER SERVICE INFORMATION BILLING AND PAYMENT OF ELECTRIC BILLS <br> (Continued) 

## Payment of Electric Bills

Residential Members. Residential bills shall be due not less than 25 days from the current billing date. The current billing date shall be no more than three working days before the date of mailing. Balances over $\$ 10.00$ not received by Dakota Electric by the due date will have a monthly late fee of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

All Other Members. Bills for all other members shall be rendered monthly and shall be due not less than 15 days from the billing date. The current billing date shall be no more than three (3) working days before the date of mailing. Balances over $\$ 10.00$ not received by Dakota Electric by the due date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## Payment of Bills by Check

It will be the policy of the Association to accept checks in payment of the electric bill. When a question arises as to the validity of a personal check, cash or money order may be required. No second party or postdated checks will be accepted.

If a check is not honored because of "insufficient funds" or for any other reason, a service charge will be assessed, and the status of the account will be the same as if no payment had been made.

When a payment is made by personal check in order to avoid termination of service, and the check is not honored, service may be disconnected without further notice.

Payment by check or debit card will not be honored for reconnection after disconnection for nonpayment. Payment for reconnection after disconnection for non-payment must be made by cash, credit card, or money order.

# MEMBER SERVICE INFORMATION BILLING AND PAYMENT OF ELECTRIC BILLS (Continued) 

## Budget Payment Plan

Dakota Electric Association shall have a budget payment plan available to residential and farm members designed to level monthly billings. The Association will establish a fixed monthly billing based on previous usage. Each monthly bill will show the relationship of budget payments made to the amount due based on actual usage.

Late charges will be assessed to the lesser of the outstanding account balance or the scheduled monthly payment.

Dakota Electric Association will review all budget payment accounts at least annually.

## Electronic Funds Transfer

Dakota Electric Association has an Electronic Funds Transfer program (EFT) available to all members. Members may authorize monthly withdrawals for their electric bills directly from their designated financial institutions.

If a presented payment is not honored, late fees and service charges will be billed in accordance with existing policies. EFT can be terminated in writing by either the Association or the member at any time.

## Credit Card Payment

Through a third-party vendor, Dakota Electric Association offers all members the option to pay their electric bill by credit card. The member opts to pay a transaction fee based on the amount of the payment. The transaction fee is collected and retained entirely by the third-party vendor.

If a presented payment is not honored, late fees and service charges will be billed to the member in accordance with existing policies.

## QuikPay Online Payment

Dakota Electric offers members the option of making either a one-time online payment or regular online monthly payments through "QuikPay". QuikPay provides multiple payment options. Members may manually enter payments online each month from a checking, savings, or credit card (credit card payments subject to a convenience fee). Members may also have funds automatically deducted from checking or savings accounts.

## MEMBER SERVICE INFORMATION <br> SERVICE CHARGE

When Dakota Electric Association sends a two-man crew or larger to a consumer's premise on a service call outside normal working hours, and they find the trouble is not with Dakota Electric's equipment, a service charge may be assessed.

Every effort to clarify the trouble by telephone shall be made by Dakota Electric Association personnel before they make the trip out to the consumer's premise.

# MEMBER SERVICE INFORMATION 

## Meter Testing

The Cooperative will maintain and test its metering equipment in accordance with the Public Utilities Commission's rules. In the event the Cooperative's test shows a meter to have an average error of more than $2 \%$ fast or slow, the Cooperative shall make an adjustment of the bills for service during the period of registration error if known, but not longer than a period of one year. If the period of registration error is not known, the refund or charge for both fast and slow meters shall be based on corrected meter readings for a period equal to one-half the time elapsed since the last test but not to exceed six months. If the amount of the average meter error cannot be determined because of failure of part or all of the metering equipment, the consumer shall pay an amount based upon registration of check metering equipment or an estimated amount based upon the consumer's consumption for comparable operations over a similar period.

If a consumer has called to the Cooperative's attention doubts as to the meter's accuracy and the Cooperative has failed within a reasonable time to check it, there shall be no back billing for the period between the date of the consumer's notification and the date the meter was checked.

## Billing Corrections

When a consumer has been overcharged/undercharged as a result of an incorrect reading of the meter, incorrect application of the rate schedule, incorrect connection of the meter, application of an incorrect multiplier or constant, or other similar reasons, the amount of the overcharge/undercharge shall be adjusted, refunded, or credited to the consumer as follows:

Remedy for Overcharge:
Dakota Electric shall calculate the difference between the amount collected for service and the amount the Cooperative should have collected for service, plus interest, for the period beginning three years before the date of discovery. Interest will be calculated as prescribed by Minnesota Statutes $\S 325$ E.02(b). If the recalculated bills indicate that more than $\$ 1$ is due an existing consumer, or $\$ 2$ is due a person no longer a consumer of the Cooperative, the full amount of the calculated difference between the amount paid and the recalculated amount shall be refunded to the consumer. Refunds to an existing consumer may be in cash or credit on a bill. Credits shall be shown separately and identified. If a refund is due a person no longer a consumer of the Cooperative, the Cooperative shall mail to the consumer's last known address either the refund or a notice that the consumer has three months in which to request a refund from the Cooperative.

Remedy for Undercharge:
Dakota Electric shall calculate the difference between the amount collected for service and the amount the Cooperative should have collected for service for the period beginning one year before the date of discovery. If the recalculated bills indicate that the amount due the Cooperative exceeds $\$ 10$, the Cooperative may bill the consumer for the amount due. Dakota Electric must not bill for any undercharge incurred after the date of a consumer inquiry or complaint if the Cooperative failed to begin investigating the matter within a reasonable time and the inquiry or complaint ultimately resulted in the discovery of the undercharge. The billing for undercharges shall be separated from the regular bill and the charges explained in detail.

Exception if error date is known:
If the date the error occurred can be fixed with reasonable certainty, the remedy shall be calculated on the basis of payments for service after that date, but in no event for a period beginning more than three years before the discovery of an overcharge or one year before the discovery of an undercharge.

# MEMBER SERVICE INFORMATION 

## General Payment Arrangements

In compliance with Minn. Stat. §216B.098, the Cooperative shall offer a payment agreement for the payment of arrears. Payment agreements will consider a consumer's financial circumstances and any extenuating circumstances of the household. No additional service deposit may be charged as a consideration to continue service to a consumer who has entered and is reasonably on time under an accepted payment agreement.

Undercharges:
a. In compliance with Minn. Stat. §216B.098, the Cooperative shall offer a payment arrangement to consumers who have been undercharged if no culpable conduct by the consumer or resident of the consumer's household caused the undercharge. The agreement may cover a period equal to the time over which the undercharge occurred, or a different time period that is mutually agreeable to the consumer and the Cooperative, except that the duration of a payment agreement offered by the Cooperative to a consumer whose household income is at or below 50 percent of state median household income must consider the financial circumstances of the consumer's household. b. No interest or delinquency fee will be charged for payment arrangements resulting from under charges.
c. If a consumer inquiry or complaint results in the Cooperative's discovery of the undercharge, the Cooperative may bill for undercharges incurred after the date of the inquiry or complaint only if the Cooperative began investigating the inquiry or complaint within a reasonable time after when it was made.

## Medically Necessary Equipment

The Cooperative shall reconnect or continue service to a consumer's residence where a medical emergency exists, or where medical equipment requiring electricity necessary to sustain life is in use, provided that the Cooperative receives: (1) written certification, or initial certification by telephone and written certification within five business days, from a medical doctor that failure to reconnect or continue service will impair or threaten the health or safety of a resident of the consumer's household; and (2) the consumer's consent to a payment arrangement for the amount in arrears. Certification must be renewed annually. Because some interruptions in service are unavoidable and in some cases may last longer than some members can be without power, we urge members with special medical needs to make necessary arrangements for auxiliary power for any vital life-support equipment.

## MEMBER SERVICE INFORMATION DISCONNECTION OF SERVICE

## Disconnection Without Notice

Without notice Dakota Electric may disconnect service to any consumer:
A. in the event of an unauthorized use of or tampering with the Association's equipment; or
B. in the event of a condition determined to be hazardous to the consumer, to other members of the Association, to the Association's equipment, or to the public.

## Unlawful Use of Service

In any case of tampering with meter installation or interfering with the proper functioning thereof or any other unlawful use or diversion of service by any person, or evidence of any such tampering, interfering, unlawful use or service diversion, consumer is liable to immediate discontinuance of service, without notice, and to prosecution under applicable laws, and Association shall be entitled to collect from consumer at the appropriate rate for all power and energy not recorded on the meter by reason of such tampering, interfering, or other unlawful use or service diversion (the amount of which may be estimated by Association from the best available data), and also for all expenses incurred by the Association on account of such unauthorized act or acts.

## Disconnection for Nonpayment

All Accounts
Dakota Electric shall credit all payments received against the oldest outstanding account balance before the application of any late charge.

## Residential Accounts

In the case of a resident on either a budget billing plan or a payment schedule, delinquent amount means the lesser of the outstanding account balance or the outstanding scheduled payments. To avoid disconnecting residential accounts as much as possible, Dakota Electric will advise delinquent residential members of the various alternatives available to them, such as protection of the Cold Weather Rule when applicable (see below) and the various assistance programs available through state and local agencies. When no satisfactory payment schedule can be agreed to or maintained, Dakota Electric will proceed with disconnection. The schedule will be as follows:

Balances over $\$ 10.00$ not received by Dakota Electric at the time of the next scheduled billing date (approximately 30 days after initial billing and never less than 25 days later) will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance. A disconnect notice may be sent shortly after the second bill is mailed. Disconnection will be scheduled for not less than five (5) days after the date of the disconnect notice. At the time of disconnection, the residential account will have unpaid use of electricity for not less than 50 days.

## Commercial and Irrigation Accounts

Balances over \$10.00 not received by Dakota Electric at the time of the next scheduled billing date (approximately 30 days after initial billing and never less than 25 days later) will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance. A disconnect notice will be sent shortly after the second bill is mailed. Disconnection will be scheduled for five (5) days after the date of the disconnect notice. At the time of disconnection, the commercial account will have unpaid use of electricity for approximately 50 days.

## MEMBER SERVICE INFORMATION DISCONNECTION OF SERVICE

## Notice of Disconnection

Dakota Electric Association shall send notices to disconnect service by first class mail. A specific date will be given for the time when a payment must be received or service may be disconnected.

If Dakota Electric Association is not contacted by the consumer, at least one attempt will be made to contact the consumer by telephone. If no contact is made, an Association employee will make a final attempt to contact the consumer at the place of service, and if no contact is made, or if contact is made but no payment agreement can be reached, service may be disconnected.

## Reconnection of Service

In the event that service has been disconnected because of nonpayment of the electric bill, service charges, based on the cost to restore service will be assessed before service is restored. This cost will necessarily be higher during an overtime period.

If service has been disconnected, payment must be in the office before the order will be given to restore service. Cash or money order may be required at any time. Dakota Electric will not restore service until all arrears are paid in full and a deposit is made by cash, credit card, or money order according to the Association's deposit requirements, or until other satisfactory credit arrangement is made.

In the event the order has been issued to disconnect service, and the collector arrives at the premises, he/she must accept cash, credit card, or money order payment of the delinquent bill. This payment will avoid the necessity of terminating service.

## Notice to Cities of Utility Disconnection

Upon written request from a statutory or home rule charter city and consistent with Minnesota Statute 216B.0976, the Cooperative will provide reports of currently disconnected properties or newly disconnected properties for consumers located within the city's boundaries.

# DISCONNECTION DURING COLD WEATHER (Page 1 of 6) 

## 1. Scope

This section applies only to residential consumers of the Cooperative.

## 2. Definitions

The following definitions apply in this section:

1. "Cold weather period" means the period from October 15 through April 15 of the following year.
2. "Consumer" means a residential consumer of the Cooperative.
3. "Disconnection" means the involuntary loss of utility heating service as a result of a physical act by the Cooperative to discontinue service. Disconnection includes installation of a service or load limiter or any device that limits or interrupts utility service in any way.
4. "Household income" means the combined income, as defined in section 290A.03, subdivision 3 , of all residents of the consumer's household, computed on an annual basis. Household income does not include any amount received for energy assistance.
5. "Reasonably timely payment" means payment within five working days of agreed-upon due dates.
6. "Reconnection" means the restoration of utility heating service after it has been disconnected.
7. "Summary of rights and responsibilities" means a notice approved by the Minnesota Public Utilities Commission that contains, at a minimum, the following:
a) an explanation of the provisions of Section 5 and Minn. Stat. 216B.096, subd. 5;
b) an explanation of no-cost and low-cost methods to reduce the consumption of energy;
c) a third-party notice;
d) ways to avoid disconnection;
e) information regarding payment agreements;
f) an explanation of the consumer's right to appeal a determination of income by the Cooperative and the right to appeal if the Cooperative and the consumer cannot arrive at a mutually acceptable payment agreement; and
g) a list of names and telephone numbers for county and local energy assistance and weatherization providers in each county served by the Cooperative.

## DISCONNECTION DURING COLD WEATHER (Page 2 of 6)

1. "Third-party notice" means a Minnesota Public Utilities Commission-approved notice containing, at a minimum, the following information:
a) a statement that the Cooperative will send a copy of any future notice of proposed disconnection of Cooperative service to a third party designated by the residential consumer;
a) instructions on how to request this service; and
b) a statement that the residential consumer should contact the person the consumer intends to designate as the third-party contact before providing the Cooperative with the party's name.
2. "Cooperative" means Dakota Electric Association.
3. "Utility heating service" means natural gas or electricity used as a primary heating source, including electricity service necessary to operate gas heating equipment, for the consumer's primary residence.
4. "Working days" means Mondays through Fridays, excluding legal holidays. The day of receipt of a personally served notice and the day of mailing of a notice shall not be counted in calculating working days.

## 3. Cooperative obligations before cold weather period

Each year, between September 1 and October 15, the Cooperative must provide all consumers, personally or by first class mail, a summary of rights and responsibilities. The summary must also be provided to all new residential consumers when service is initiated.

## 4. Notice before disconnection during cold weather period

Before disconnecting utility heating service during the cold weather period, the Cooperative must provide, personally or by first class mail, a Minnesota Public Utilities Commission-approved notice to a consumer, in easy-to-understand language, that contains, at a minimum, the date of the scheduled disconnection, the amount due, and a summary of rights and responsibilities.

# DISCONNECTION DURING COLD WEATHER (Page 3 of 6) 

## 5. Cold weather rule

During the cold weather period, the Cooperative may not disconnect and must reconnect utility heating service of a consumer whose household income is at or below 50 percent of the state median income if the consumer enters into and makes reasonably timely payments under a mutually acceptable payment agreement with the Cooperative that is based on the financial resources and circumstances of the household; provided that, the Cooperative may not require a consumer to pay more than ten percent of the household income toward current and past utility bills for utility heating service.

The Cooperative may accept more than ten percent of the household income as the payment arrangement amount if agreed to by the consumer.

The consumer or a designated third party may request a modification of the terms of a payment agreement previously entered into if the consumer's financial circumstances have changed or the consumer is unable to make reasonably timely payments.

The payment agreement terminates at the expiration of the cold weather period unless a longer period is mutually agreed to by the consumer and the Cooperative.

The Cooperative shall use reasonable efforts to restore service within 24 hours of an accepted payment agreement, taking into consideration consumer availability, employee availability, and construction-related activity.

## 6. Verification of income

In verifying a consumer's household income, the Cooperative may:
(1) accept the signed statement of a consumer that the consumer is income eligible;
(2) obtain income verification from a local energy assistance provider or a government agency;
(3) consider one or more of the following:
a) the most recent income tax return filed by members of the consumer's household;
b) for each employed member of the consumer's household, paycheck stubs for the last two months or a written statement from the employer reporting wages earned during the preceding two months;

## DISCONNECTION DURING COLD WEATHER (Page 4 of 6)

a) documentation that the consumer receives a pension from the Department of Human Services, the Social Security Administration, the Veteran's Administration, or other pension provider;
b) a letter showing the consumer's dismissal from a job or other documentation of unemployment; or
c) other documentation that supports the consumer's declaration of income eligibility.

A consumer who receives energy assistance benefits under any federal, state, or county government programs in which eligibility is defined as household income at or below 50 percent of state median income is deemed to be automatically eligible for protection under this section and no other verification of income may be required.

## 7. Prohibitions and requirements

This section applies during the cold weather period.
The Cooperative may not charge a deposit or delinquency charge to a consumer who has entered into a payment agreement or a consumer who has appealed to the Minnesota Public Utilities Commission under Section 8 and Minn. Stat. 216B.096, subd. 8.

The Cooperative may not disconnect service during the following periods:
(1) during the pendency of any appeal under Section 8 and Minn. Stat. 216B.096, subd. 8;
(2) earlier than ten working days after the Cooperative has deposited in first class mail, or seven working days after the Cooperative has personally served, the notice required under Section 4 to a consumer in an occupied dwelling;
(3) earlier than ten working days after the Cooperative has deposited in first class mail the notice required under Section 4 and Minn. Stat. 216B.096, subd. 4 to the recorded billing address of the consumer, if the Cooperative has reasonably determined from an on-site inspection that the dwelling is unoccupied;
(4) on a Friday, unless the Cooperative makes personal contact with, and offers a payment agreement consistent with this section to the consumer;
(5) on a Saturday, Sunday, holiday, or the day before a holiday;
(6) when Cooperative offices are closed;

## DISCONNECTION DURING COLD WEATHER <br> (Page 5 of 6)

(7) when no Cooperative personnel are available to resolve disputes, enter into payment agreements, accept payments, and reconnect service; or
(8) when the Minnesota Public Utilities Commission offices are closed.

The Cooperative may not discontinue service until the Cooperative investigates whether the dwelling is actually occupied. At a minimum, the investigation must include one visit by the Cooperative to the dwelling during normal working hours. If no contact is made and there is reason to believe that the dwelling is occupied, the Cooperative must attempt a second contact during nonbusiness hours. If personal contact is made, the Cooperative representative must provide notice required under Section 4 and Minn. Stat. 216B.096, subd. 4 and, if the Cooperative representative is not authorized to enter into a payment agreement, the telephone number the consumer can call to establish a payment agreement.

The Cooperative must reconnect utility service if, following disconnection, the dwelling is found to be occupied and the consumer agrees to enter into a payment agreement or appeals to the Minnesota Public Utilities Commission because the consumer and the Cooperative are unable to agree on a payment agreement.

## 8. Disputes; consumer appeals

The Cooperative must provide the consumer and any designated third party with a Minnesota Public Utilities Commission-approved written notice of the right to appeal:
(1) a Cooperative determination that the consumer's household income is more than 50 percent of state median household income; or
(2) when the Cooperative and consumer are unable to agree on the establishment or modification of a payment agreement.

A consumer's appeal must be filed with the Minnesota Public Utilities Commission no later than seven working days after the consumer's receipt of a personally served appeal notice, or within ten working days after the Cooperative has deposited a first class mail appeal notice.

# DISCONNECTION DURING COLD WEATHER (Page 6 of 6) 

Notwithstanding any other law, following an appeals decision adverse to the consumer, the Cooperative may not disconnect utility heating service for seven working days after the Cooperative has personally served a disconnection notice, or for ten working days after the Cooperative has deposited a first class mail notice. The notice must contain, in easy-to-understand language, the date on or after which disconnection will occur, the reason for disconnection, and ways to avoid disconnection.

## 9. Consumers above 50 percent of state median income

During the cold weather period, a consumer whose household income is above 50 percent of state median income:
(1) has the right to a payment agreement that takes into consideration the consumer's financial circumstances and any other extenuating circumstances of the household; and
(2) may not be disconnected and must be reconnected if the consumer makes timely payments under a payment agreement accepted by the Cooperative.

The second sentence of Section 7 does not apply to consumers whose household income is above 50 percent of state median income.

## 10. Reporting

Annually on November 1, the Cooperative must electronically file with the Minnesota Public Utilities Commission a report, in a format specified by the Minnesota Public Utilities Commission, specifying the number of utility heating service consumers whose service is disconnected or remains disconnected for nonpayment as of October 1 and October 15. If consumers remain disconnected on October 15, the Cooperative must file a report each week between November 1 and the end of the cold weather period specifying:
(1) the number of utility heating service consumers that are or remain disconnected from service for nonpayment; and
(2) the number of utility heating service consumers that are reconnected to service each week. The Cooperative may discontinue weekly reporting if the number of utility heating service consumers that are or remain disconnected reaches zero before the end of the cold weather period.

The data reported under this Section and Minn. Stat. 216B. 096 are presumed to be accurate upon submission and must be made available through the commission's electronic filing system.

## MEMBER SERVICE INFORMATION DEPOSITS

It will be the policy of Dakota Electric Association to collect a deposit not to exceed an estimated two months' gross bill or existing two months' average bill where applicable if the service has been terminated because of nonpayment or when a bankruptcy is filed. Any existing deposit must be applied to the delinquent bill, and then the new deposit will be assessed and must be paid prior to the time the service is restored.

When a member returns to Dakota Electric Association after leaving with an unpaid balance or other credit problems, a deposit equal to two average months' electric bills of the most recent occupant at that address may be assessed. This deposit is in addition to payment in full for the previously unpaid balance.

Dakota Electric shall not require a deposit for a new member with no prior service from the Association unless the credit history of the new member demonstrates that payment cannot be assured. The determination of the new member's credit history shall be made only by credit reports reflecting the purchase of utility service, unless permission in writing is received from the new member to use other credit reports, and such reports mailed to the new member. Refusal of a new member to permit use of a credit rating or credit service, other than that of a utility, shall not affect the Association's determination of that new member's credit history. Satisfactory credit shall be 12 consecutive months of on-time payments with no remaining unpaid balance.

If a member has maintained a good payment record for one year, the deposit will be refunded. A good payment record is defined as payment of the electric bill within 25 days of the due date each of the preceding 12 months.

Deposits shall earn interest at an annual rate as specified by Minnesota Statute 325E.02. This interest will be credited to the electric bill printed in December or will be credited to the final bill, whichever occurs first.

Deposits, plus interest, will be applied to the final bill, and any credit balance remaining will be refunded within forty-five (45) days from the date service is terminated.

Dakota Electric shall not require a deposit of any member without explaining in writing why that deposit or guarantee is required.

# MEMBER SERVICE INFORMATION DEMAND-SIDE MANAGEMENT PROGRAM 

Any Dakota Electric Association member allowing Demand-Side Management (DSM) controls on approved interruptible loads will receive an off-peak energy kilowatt-hour and/or demand kilowatt charge for that electricity as listed in the rates.

## General Rules and Policies

1. Dakota Electric Association shall supply additional meters and the DSM receivers at no cost to the member. All other requirements, such as the meter sockets, wiring, and installation shall be the responsibility of the member. The DSM receivers will remain the property of Dakota Electric Association. Only authorized DEA employees shall have the authority to break the seals for any reason, including repair of the DSM receivers or metering equipment.
2. DSM receivers and submeters shall be mounted adjacent to the existing kilowatt-hour meter. The meter shall be mounted on the outside of the building and shall be accessible to the Association at all times and comply with the Association meter socket requirements. Any alternate locations must be approved by the Association prior to installation.
3. Dakota Electric will make a final inspection after all of the necessary work has been done. At that time, if all equipment is functioning properly, the second meter will be installed, if required, and the controlled rate will apply. All installations must have an electrical inspection affidavit filed with the Minnesota State Board of Electricity and DEA.
4. All trouble calls dealing with the controlled loads shall be made to DEA. DEA will determine whether to send out a DEA service technician or request that the member call a service company on his/her own behalf. If the member's service technician determines that DEA's DSM receiver was malfunctioning and a DEA service technician verifies that, Dakota Electric Association will reimburse the member for the service call. If the problem is with the member's wiring or equipment, then the member will be responsible for costs incurred which may include a Load Management Service Charge.
5. All members with DSM-controlled loads shall allow periodic inspections of the controlled loads by Dakota Electric.
6. If any part of the controlled system is tampered with, the member is subject to being removed from the controlled rate for at least one (1) year.
7. Eligibility of participating loads will be guided by Great River Energy program requirements.

# MEMBER SERVICE INFORMATION DEMAND-SIDE MANAGEMENT PROGRAM CONTINUED 

## Controlled Water Heaters

1. The member may choose to have service under either Schedule 51, "Controlled Energy Storage," or Schedule 52, "Controlled Interruptible Service."
2. Under Schedule 51, "Controlled Energy Storage":
a. Typically, the water heater will be energized from 11 p.m. to 7 a.m.
b. There is no restriction on the size of the water heater, but Dakota Electric recommends an energy factor of .90 or greater and a minimum capacity of 80 gallons and larger capacity when usage and/or family size requires. DEA will assist members with sizing water heaters.
c. All kilowatt-hours shall be submetered. If the member has other qualifying loads, these kilowatt-hours may be combined on one meter.
3. Under Schedule 52, "Controlled Interruptible Service":
a. The member should recognize that the water heater may be off daily for extended periods, and this may result in occasional lack of sufficient hot water. The member must have an electric water heater with a minimum capacity of at least 40 gallons. Dakota Electric recommends an energy factor of .90 or greater.
b. All kilowatt-hours shall be submetered, where feasible, or a monthly credit will be given, as listed in Schedule 52, at DEA's option. If the member also has a dual fuel heating installation, these kilowatt-hours may be combined on one submeter.

# MEMBER SERVICE INFORMATION DEMAND-SIDE MANAGEMENT PROGRAM CONTINUED 

## Interruptible Installations

1. Schedule 52, "Controlled Interruptible Service," is available to members who use electricity as a heating source or other qualifying loads. Connected fixed electric space heating must be sized according to space heating requirements. Cord and plug electric space heating does not qualify.
2. Dakota Electric Association requires that a backup heat source capable of keeping the residence at a minimum of 55 degrees be present. Dakota Electric does not specify what the heat source should be except that it shall not be uncontrolled electric heat.
3. Heat pumps qualify for the interruptible rate. All electric resistance heat associated with the heat pumps must also be controlled. Heat pumps will be controlled both winter and summer in accordance with Dakota Electric's load control requirements.
4. All kilowatt-hours shall be submetered. If the member also has a water heater or other interruptible load on Schedule 52, these kilowatt-hours may be combined on one submeter. If the member has both Interruptible and Storage loads these loads may be combined under the rate schedule with the largest load.

## Energy Storage Installations

1. Schedule 51, "Controlled Energy Storage," is available to members who normally use electricity between 11 p.m. and $7 \mathrm{a} . \mathrm{m}$. (or as established by the Association) to charge equipment which will retain the energy for use during the remaining hours. Water, ice, slab storage, storage bricks, storage batteries, or other materials that qualify may be used for energy storage.
2. All kilowatt-hours shall be submetered. If the member also has a water heater or other energy storage load on Schedule 51, these kilowatt-hours may be combined on one submeter. If the consumer has both Interruptible and Storage loads, these loads may be combined under the rate schedule with the largest load.

# MEMBER SERVICE INFORMATION DEMAND-SIDE MANAGEMENT PROGRAM CONTINUED 

## Irrigation Loads

1. The controlled rate, as listed under Schedule 36, "Irrigation Service," is available to members who have DSM equipment installed. New installations may qualify for this rate when installed.
2. Members that switch from Interruptible to Firm service during the calendar year will be billed the Firm service rate during the month the change was made. The member must remain on the Firm service rate for the remainder of the calendar year. This includes members that intentionally bypass the load control equipment.
3. The Demand-Side Management receivers will interrupt power to the pump motor, and the motor will require manual restart. Any additional equipment necessary to shut down other parts of the irrigation system must be installed by the member at their cost.
4. The typical number of hours to be controlled during any 24 -hour period will be approximately six (6) hours. It may be longer based on electric system requirements.

## Controlled Central Air Conditioners

1. The member may choose to have service under Schedule 80, "Cycled Air Conditioning Service," Schedule 51, "Controlled Energy Storage," or Schedule 52, "Controlled Interruptible Service,"
2. Under Schedule 80 "Cycled Air Conditioning Service"
a. For members without other interruptible or controllable loads, such as an electric water heater, electric heat, heat pump, etc.
b. The central air conditioner will be cycled on and off when a peak or critical situation is reached.
c. Energy consumption may be submetered.
d. The member should recognize that the central air conditioner may be cycled for extended periods and this may result in a temperature rise within the home.
3. Under Schedule 51 "Controlled Energy Storage" or Schedule 52 "Controlled Interruptible Service"
a. All kilowatt-hours will be submetered. If the member also has an interruptible water heater or heat installation, these kilowatt-hours may be combined on one submeter.
b. The central air conditioner will be cycled on and off when a peak or critical situation is reached.
c. The member should recognize that the central air conditioner may be cycled for extended periods and this may result in a temperature rise within the home.

# MEMBER SERVICE INFORMATION STANDBY SERVICE RIDER 

## STANDBY, SUPPLEMENTARY, EMERGENCY AND INCIDENTAL SERVICES

 Unless otherwise specifically provided, the Association's rate schedules require that the member will take their entire electrical requirements from the Association. The Association's service is not available for standby, supplementary, emergency or incidental service with respect to any other source of power except when contracted for under a rate schedule providing for these services.
## A. Definitions:

1. Standby service is defined as service continuously available through a permanent connection to provide power and energy for use by a member in case of failure of another mechanical or electrical source of power.
2. Supplementary service is defined as service continuously available through a permanent connection to supplement or augment directly or indirectly another independent source of power.
3. Emergency service is defined as service supplied through a temporary connection for the member's use when their usual source of supply has failed.
4. Incidental service is defined as service continuously available through a permanent connection to provide power and energy for use by a member where such use is merely incidental to members operations and essentially for their convenience; e.g. (without limiting the generality of the foregoing), for voltage or frequency control, for partial lighting of selected or limited areas, or for the operation of controls, battery chargers, starting devices, electric clocks, or other equipment requiring relatively small quantities of energy as compared with member's total energy usage.
B. Parallel Operations. If a member has an independent source of power that will be operated in parallel with the Association's system, such source of power must be operated as provided below. Any member who operates their facility in non-compliance with these provisions will be subject to immediate discontinuance of service.

## MEMBER SERVICE INFORMATION <br> STANDBY SERVICE RIDER CONTINUED

1. No member may connect an independent source of power in parallel with the Association's system without prior written consent of the Association. Any member desiring to generate in parallel shall execute a contract with the Association that contains terms and provisions regarding metering, billing, technical and operating parameters for the member's independent source of power.
2. The interconnection of member's facilities with the Association's system shall not interfere with the quality of the Association's service to any of its other members.
3. The member will provide the necessary equipment as approved by the Association to enable the member to operate their independent source of power in parallel with the Association's system. The member's independent source of power will be designed so that the interconnection circuit breaker or load break switch between the Association and the member will open under the following conditions:
a. De-energized Association system
b. Sustained line faults on Association's system
c. Faults on member's system

A member shall consult with the Association regarding these minimum requirements, additional protection recommended, proper operation of interconnect circuit breaker or load break switch, and member's independent source of power disconnecting device.
4. Since the power factor and the voltage at which the Association's system and a member's system are operated will vary, each party agrees to operate their system at a power factor as near unity as possible in such manner as to absorb their share of the reactive power, and voltage as conducive to the best operating standards.
5. The Association reserves the right to discontinue service if continued parallel operation by the member results in trouble on the Association's system, such as interruptions, ground faults, radio or telephone interference, surges, or objectionable voltage fluctuations, where such trouble is caused by a member and the member fails to remedy the causes thereof within a reasonable time.

## MEMBER SERVICE INFORMATION INTERRUPTIBLE SERVICE (SCHEDULES 70 AND 71)

## A. General Rules and Policies for Interruptible Service (Schedules 70 and 71)

Participation in interruptible service, with or without a generator, must comply with the following requirements as applicable. If a generation system is used for curtailing a member's electrical requirements, the generation interconnection must comply with the requirements specified in the "Dakota Electric Association Distributed Generation Interconnection Requirements" document. The process for interconnecting with the Dakota Electric systems is documented in the "Distributed Generation Interconnection Process" document. Both the technical requirements and process documents follow the State of Minnesota Distributed Generation Interconnection standards. These document requirements include, but are not limited to the following.

1. The member is responsible for reducing load from electrical service provided by the Association during control periods to be eligible for an interruptible rate.
2. The Association will make every effort to give the member one-half hour notice prior to the start of a control period, but it is not guaranteed. Notices will be given in the form of an email, text message, or load control signal.
3. The duration and frequency of control periods shall be at the discretion of the Association. Control periods will normally occur at such times when the Association expects peak load conditions or when, in the Association's opinion, the reliability of the system is endangered.
4. The member is obligated to remain on the Interruptible rate for a minimum period of one year.
5. For Schedule 71 only, field tests will be conducted during normal peak demand hours to determine the amount of controllable demand and thereby establish the initial coincidental demand level for billing purposes.
6. The minimum controllable demand to qualify for this service shall be 50 kW .
7. The Association shall not be liable for any loss or damage caused by or resulting from testing any other interruption of service.
8. The member must allow the Association to inspect and test the load control installation and equipment provided by the member.
9. The member must notify the Association of any modifications or changes that are made to the original load control installation and equipment provided by the member.

The Association will supply a single dry contact to a member to initiate the load control. The member is responsible for any wiring from the Association provided dry contact to the member owned equipment. The member must provide and maintain a dial in direct (DID) telephone line to the Association's metering equipment. (PBX DID lines are acceptable.) The exact location of the phone line shall be verified with the Association. Alternatively, the member may select cellular meter and pay applicable communication fee.
10. Generator must be available for control at all times or the member will/may be removed from the rate, unless prior written approval is given by Dakota Electric.

MEMBER SERVICE INFORMATION INTERRUPTIBLE SERVICE (SCHEDULES 70 AND 71)

## (Continued)

B. General Rules and Policies for Distributed Generation Interconnection

1. The generation system installation must meet all of the applicable local and national standards for generation interconnection as well as the Dakota Electric Association Distributed Generation Interconnection Requirements. Any member that operates their generation system in noncompliance with these interconnection requirements will be subject to discontinuance of service. Current interconnection documents are available on the Association's Web site at http://light.dakotaelectric.com/Handbook/Pages $1 /$ Interconnecting Generation.aspx. The main topics covered in the Interconnection Requirements document include, but are not limited to:
a. Types of Interconnection
b. Interconnection Issues and Technical Requirements
c. Generation Metering, Monitoring, and Control
d. Protective Devices and Systems
e. Agreements
f. Metering Requirements
2. The member is responsible for all status point wiring from the on-site generation system to the Association's monitoring equipment. The generation status points typically include but are not limited to:
a. Generator and Utility switch or breaker positions
b. Generator Status - running or not running
c. Generator Trouble Alarm Status
d. Lock Out Relay Status - if applicable
3. The member retains responsibility for compliance with local and national standards in addition to the Dakota Electric Interconnection Requirements as they may change over time.
No consumer may connect on-site generation in parallel with the Association's system without prior written consent of the Association.
4. The interconnection of member's facilities with the Association's system shall not interfere with the quality of the Association's service to any of its other members.
5. The member's operation of on-site generators, shall be restricted to control periods, periodic maintenance, equipment testing, severe weather conditions, and power supply outages only.
6. The generator fuel supply must be adequate for at least ten (10) hours of operation at full load. The Association recommends a fuel supply of at least 24 hours to cover normal daily loads.
7. The Association's operation of the member's generation or curtailment systems will normally be during control periods, but the Association reserves the right to further control on-site generators or curtailment systems as needed to promote efficient and reliable operation of the Association's system.
8. The member will provide the necessary equipment as approved by the Association to enable the member to operate the on-site generation in parallel with the Association's system as specified in Dakota Electric Association's Interconnection Requirements document.
9. The Association reserves the right to discontinue service if continued parallel operations by the member results in trouble on the Association's system, such as interruptions, ground faults, radio or telephone interference, surges, or objectionable frequency and voltage fluctuations, where such trouble is caused by a member, and the member fails to remedy the causes thereof within a reasonable time.

Docket No. E-111/GR-19-478


## Dakota Electric Association <br> Residential TOU Rate (Schedule 56) <br> Residential Billing Determinants \& COS Results

Residential Billing Determinants

| 100,235 | Consumers |
| :--- | :--- |
| 838,684 | Energy Sales - All (MWh) |
| 281,636 | Energy Sales - On-Peak (MWh) |
| 557,048 | Energy Sales - Off-Peak (MWh) |

Summary of Residential Revenue Requirements
Power Supply
Wholesale Power

| 10,370,341 | Demand Related - Summer |
| :---: | :---: |
| 5,458,423 | Demand Related - Winter |
| 4,952,367 | Demand Related - Other |
| 20,781,131 | Subtotal - Demand |
| - | Energy Related - Critical Peak |
| 17,333,391 | Energy Related - On-Peak |
| 26,723,916 | Energy Related - Off-Peak |
| 44,057,307 | Subtotal Energy |
|  | Revenue Related |
| 64,838,438 | Subtotal - Wholesale |
|  | Allocated Overhead \& Margin |
| - | Direct Related |
| - | Revenue Related |
| 198,146 | Demand Related |
| 420,872 | Energy Related |
| 619,018 | Subtotal - Allocated |
| 65,457,456 | Subtotal - Power Supply |

Transmission
Direct Assigned
13,696,762 Demand Related
Energy Related

| - |
| :---: |
| $13,696,762$ | | Energy Related |
| :---: |
| Subtotal - Transmission |

Allocated Overhead \& Margin
Direct Related
Revenue Related
Demand Related
Energy Related
Subtotal - Allocated
13,696,762 Subtotal - Transmission

## Distribution

3,010,588 Dist. Sub. - Capacity
6,733,215 Primary Line - Capacity

11,552,938 Primary Line - Consumer
369,821 Line Transf. - Capacity
1,946,450 Line Transf. - Consumer
165,079 Sec. \& Serv.
5,150,000 Meter
11,393,185 Acct. \& Serv.
Revenue Related
Direct Assigned

| $40,321,276$ | Subtotal - Distribution |
| :--- | :--- |
| $3,608,460$ | Additional TOU Metering |
| $123,083,954$ | Total |

Dakota Electric Association
Residential TOU Rate (Schedule 56)

## Cost Assignment

Residential Distribution Revenue

|  | $15,636,660$ | Fixed Charge Revenue |
| ---: | ---: | :--- |
|  | $28,912,094$ | Energy Revenue |
|  | $44,548,754$ | Distribution Total |
| $\$ \quad 0.03450$ | Distribution Revenue per kWh |  |


|  | Transmission | D-Summer | $\underline{\text { D-Winter }}$ | D-Spr/Fall | Energy - CP | E-On-Peak | E-Off-Peak | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| On-Peak Summer | 4,080,601 | 9,506,146 |  |  | - | 2,722,337 | 1,231,580 | 17,540,664 |
| On-Peak Winter | 3,011,023 |  | 5,003,554 |  |  | 2,242,233 | 1,030,336 | 11,287,145 |
| On-Peak Spr/Fall | 5,463,742 |  |  | 4,539,670 |  | 4,080,950 | 1,906,150 | 15,990,512 |
| Int Peak | 1,141,397 | 864,195 | 454,869 | 412,697 |  | 8,287,871 | 3,686,195 | 14,847,224 |
| Off-Peak |  |  |  |  |  |  | 18,869,655 | 18,869,655 |
|  | 13,696,762 | 10,370,341 | 5,458,423 | 4,952,367 | - | 17,333,391 | 26,723,916 | 78,535,200 |


|  | GRE On-Peak <br> Energy | GRE Off-Peak <br> Energy |
| :--- | :---: | :---: |
| On-Peak Summer | $15.7 \%$ | $4.6 \%$ |
| On-Peak Winter | $12.9 \%$ | $3.9 \%$ |
| On-Peak Spr/Fall | $23.5 \%$ | $7.1 \%$ |
| Int Peak | $47.8 \%$ | $13.8 \%$ |
| Off-Peak |  | $70.6 \%$ |
|  | $100.0 \%$ | $100.0 \%$ |


| Coincident Demand |  |  |
| :--- | ---: | ---: |
| Summer | 608.3 | $32.5 \%$ |
| Winter | 448.9 | $24.0 \%$ |
| Other | 814.5 | $43.5 \%$ |
|  | 1871.8 | $100.0 \%$ |

## Dakota Electric Association

Residential TOU Rate (Schedule 56)
kWh Billing Unit Estimates

Test Year Forecast (2019)

| Month | kWh | \% |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 753 | 9.0\% |  |  |
| 2 | 623 | 7.4\% | 25.5\% | 25\% |
| 3 | 618 | 7.4\% |  |  |
| 4 | 533 | 6.4\% | 21.0\% | 21\% |
| 5 | 604 | 7.2\% |  |  |
| 6 | 765 | 9.1\% |  |  |
| 7 | 975 | 11.7\% | 31.0\% | 31\% |
| 8 | 854 | 10.2\% |  |  |
| 9 | 659 | 7.9\% |  |  |
| 10 | 619 | 7.4\% | 22.6\% | 23\% |
| 11 | 610 | 7.3\% |  |  |
| 12 | 756 | 9.0\% |  |  |
|  | 8,369 | 100.0\% |  |  |

Rate 31 Energy Sales

| Summer | $257,025,312$ | $30.7 \%$ |
| :--- | :--- | :--- |
| Other | $581,064,216$ | $69.3 \%$ |
|  | $838,089,528$ |  |

Hours

| On-Peak $(3-11)$ | $23.8 \%$ | $25 \%$ |
| :--- | ---: | ---: |
| Int Peak $(7-3)$ | $23.8 \%$ | $25 \%$ |
| Off-Peak $(11-7)$ | $52.4 \%$ | $50 \%$ |
|  | $100.0 \%$ | $100 \%$ |

## Period Hours \& kWh Billing Unit Estimates

| On-Peak Summer | $8.2 \%$ | $68,882,180$ |
| :--- | ---: | ---: |
| On-Peak Winter | $6.8 \%$ | $57,053,538$ |
| On-Peak S/F | $12.5 \%$ | $104,468,100$ |
| Int Peak | $24.9 \%$ | $208,412,955$ |
| Off-Peak | $47.6 \%$ | $399,272,755$ |
|  | $100 \%$ | $838,089,528$ |

## Dakota Electric Association

Residential TOU Rate (Schedule 56)
Rate Design

Rate Design

| Fixed Charge | 100,235 | cons. | $\$$ | 13.00 | $15,636,660$ |
| :--- | ---: | :--- | :--- | :--- | ---: |
| Energy Charge <br> Peak Period |  |  |  |  |  |
| Summer | $68,882,180$ | kWh | $\$$ | 0.289 | $19,916,935$ |
| Winter | $57,053,538$ | kWh | $\$$ | 0.232 | $13,255,357$ |
| Spring/Fall | $104,468,100$ | kWh | $\$$ | 0.188 | $19,594,413$ |
| Int. Period | $208,412,955$ | kWh | $\$$ | 0.106 | $22,036,975$ |
| Off-Peak Period | $399,272,755$ | kWh | $\$$ | 0.082 | $32,643,615$ |
|  | $838,089,528$ | kWh | Total |  | $123,083,954$ |

Definitions
Summer = June, July, Aug
Winter = Dec, Jan, Feb
Spring/Fall = Mar. Apr, May, Sept, Oct, Nov
Peak Period $=3 \mathrm{pm}$ to 11 pm M-F excl holidays
Intermediate Peak $=7$ am to 3 pm M-F excl holidays
Off-Peak $=$ all other hours

Docket No. E-111/GR-19-478


# Dakota Electric Association Residential Electric Vehicle Rate Wholesale Power Costs 

## 1. Assumptions

2.5\% Distribution Line Loss

80\% Coincidence Factor
Level 2 Charger
6.6 kW Demand
2.9 Hours to Full Charge
10.96 kWh Energy per Day
2. Wholesale Power Rates (GRE 2019)

Energy Charge

| Off Peak Energy Rate | $@$ | $\$ 0.04646$ | $/ \mathrm{kWh}$ |
| :--- | :--- | :--- | :--- |
| On Peak Energy Rate | $@$ | $\$ 0.05939$ | $/ \mathrm{kWh}$ |
| Critical Peak Energy Rate | $@$ | $\$ 0.05939$ | $/ \mathrm{kWh}$ |

Capacity Charge
Summer (Jun-Aug) @ \$18.24 /kW/mo.
Winter (Dec-Feb)
Other
Average
Transmission Charge
Ancillary Charge

## 3. Annual Energy

> | 12,000 | Annual Miles per Year |
| ---: | :--- |
| 3.65 | Average Miles per kWh |
| 3,288 | Annual Energy (kWh) |

## 4. Peak Charging

Level 2:
Demand (charging from 4 pm to 9 pm ):
6.6 kW Demand

80\% Coincidence Factor
5.28 Diversified Demand

| $\$$ | 17.90 | Average Monthly Coincident Charges per kW |
| :--- | :--- | :--- |
|  |  | 94.51 |
| Subtotal |  |  |

12 Months
\$ 1,134.14 Subtotal
2.5\% Line Loss
\$ 1,162.50 Annual Demand Cost



Exhibit_(DEA-15)
Page 2 of 3

# Dakota Electric Association Residential Electric Vehicle Rate Rate Design 

```
Line
    Off-Peak
    $ 0.0756 Page 2 of 3
    On-Peak
3 $ 0.05939 Wholesale On-Peak Energy (see Page 1 of 3)
4 - $ 0.04646 Wholesale Off-Peak Energy (see Page 1 of 3)
5 = $ 0.01293 Additional Cost of On-Peak Wholesale Energy
6 $ 1,162.50 Annual Demand Cost (see Page 1 of 3)
7 % 3,288 Annual Energy - kWh (see Page 1 of 3)
8=$0.35356 Demand Cost per kWh
9 $ 0.4421 Total On-Peak Rate (sum of lines 2,5 and 8)
```


## Present Billed Rates

```
    0.0674 Off-Peak Tariffed Rate
+ 0.0025 RTA
= 0.0699 Off-Peak Billed Energy Charges
    0.4144 On-Peak Tariffed Rate
+ 0.0025 RTA
= 0.4169 On-Peak Billed Energy Charges
```

Docket No. E-111/GR-19-478


## Standby Analysis <br> Cost of Service Summary




# Dakota Electric Association Cycled Air Conditioning Credit 

Assume: $\quad$ 2.5 Tons AC Capacity<br>14.0 Average SEER Rating<br>65.0\% Average Peak Diversity Factor 50.0\% Control Cycle

## Cost Analysis (2019 GRE wholesale rates)

```
    $ 18.24 Summer Capacity (per kW month)
+ $ 6.57 Transmission (per kW month)
+ $ 0.69 Ancillary Service (per kW month)
=$ 25.50 Subtotal
x 3 Summer Months
= $ 76.50 Capacity Savings per Coincident kW
x 0.70 Estimated Coincident Demand Reduction (kW)
=$ 53.28 Power Cost Capacity Savings
+ $ - Estimated Critical Peak Energy Savings
+ $ 15.00 GRE Credit ($5 per unit times 3 months)
= $ 68.28 Estimated Net Power Cost Savings (Summer Season)
- $ 23.38 Control Equipment and Program Costs
- $ 39.00 Controlled Credits for Summer Season
= $ 5.89 Net Annual Revenue
```


## Control Equipment and Program Costs:

\$ 116.00 Receiver

+ \$ 118.00 Electrician and Permit
+ \$ 17.00 Meter Technician
+ \$ (100.00) GRE Reimbursement
$=\$ 151.00$ Net installed cost of control equipment
x $\quad 14.7 \%$ Annualizing Factor *
$=\$ 22.18$ Subtotal
$+\$ \quad 1.20$ Program marketing and Administration **
$=\$ 23.38$ Control Equipment and Program Costs
* Annualizing factor includes interest, depreciation, and O\&M.
** Program marketing and administration estimated at 0.1 ¢ per kWh times typical annual AC consumption of $1,200 \mathrm{kWh}$.



## Dakota Electric Association

## Base Calculation for Resource \& Tax Adjustment Components

## Energy Cost Adjustment (ECA)

| Average Wholesale Energy Cost per kWh | $\$$ | 0.0521 |
| :--- | :---: | ---: |
| Rate 70 \& 71 Energy Sales |  | $406,800,000$ |
| Rate 36 Interruptible Energy Sales | $=\$$ | $21,801,344$ |
| Interruptible Wholesale Energy Cost |  |  |
|  |  | $\mathbf{\$}$ |
| ECA Base per kWh Sold | $\mathbf{0 . 0 5 2 1}$ |  |

## Load Management Rates

Rate 51
GRE Wholesale Cost - ETS Water Heating
Rate 51 - ETS Water Heating Sales
Rate 51 - ETS Water Heating Power Cost
GRE Wholesale Cost - ETS Space Heating
Rate 51 - ETS Space Heating Sales
Rate 51 - ETS Space Heating Power Cost
GRE Wholesale Cost - ETS Electric Vehicle
Rate 51 - ETS Electric Vehicle Sales
Rate 51 - ETS Electric Vehicle Power Cost
Rate 51 Power Costs
Rate 51 Energy Sales
Rate 51 Weighted Power Cost Base per kWh Sold

|  | \$ | 0.0200 |
| :---: | :---: | :---: |
| x |  | 8,491,977 |
| = | \$ | 169,840 |
|  | \$ | 0.0225 |
| x |  | 1,816,023 |
| = | \$ | 40,861 |
|  | \$ | 0.0200 |
| x |  | 300,960 |
| $=$ | \$ | 6,019 |
|  | \$ | 216,720 |
| $\div$ |  | 10,608,960 |
| $=$ | \$ | 0.0204 |

Rate 52
GRE Wholesale Cost - Peak Shave Water Heating
Rate 52 - Peak Shave Water Heating Sales
Rate 52 - Peak Shave Water Heating Power Cost
GRE Wholesale Cost - Dual Fuel Space Heating
Rate 52 - Dual Fuel Space Heating Sales
Rate 52 - Dual Fuel Space Heating Power Cost
Rate 52 Power Costs
Rate 52 Energy Sales
Rate 52 Weighted Power Cost Base per kWh Sold

| \$ | 0.0340 |
| :---: | :---: |
| x | 23,557,907 |
| \$ | 800,969 |
| \$ | 0.0365 |
| x | 20,569,693 |
| $=\$$ | 750,794 |
| \$ | 1,551,763 |
| $\div$ | 44,127,600 |
| $=\$$ | 0.0352 |

## Dakota Electric Association

## Base Calculation for Resource \& Tax Adjustment Components

## Geothermal

Rate 49
GRE Wholesale Cost - Geothermal

|  |  |
| :--- | ---: |
| K | $\$$ |
| x | 0.0813 |
| $=$ | 172,800 |

Rate 49 Power Cost Base per kWh Sold
\$
0.0813

## Power Cost Adjustment (PCA)

| Total Wholesale Power Cost | $\$ \$$ | $150,649,466{ }^{\text {A }}$ |
| :--- | ---: | ---: |
| ECA Power Cost | - | $21,600,730$ |
| Rate 51 Power Cost | - | 216,720 |
| Rate 52 Power Cost | - | $1,551,763$ |
| Rate 49 Power Cost | - | 14,049 |
| Wellspring (wholesale pass-through) | - | 23,370 |
| Member Specific Discount (wholesale pass-through) | - | $(45,040)$ |
| Large Load High Load Factor Credit (wholesale pass-through) | - | - |
| Contract Rate Service (wholesale pass-through) | - | - |
| Standby (wholesale pass-through) | $=$ | $127,260,814$ |
| Firm Wholesale Power Cost | $\div$ | $1,354,802,496$ |
| Firm kWh Energy Sales | $\mathbf{-}$ | $\mathbf{0 . 0 9 3 9}$ |


| Total Wholesale Power Cost |  | $\$$ | $150,649,466$ |
| :--- | :--- | :--- | ---: |
| Total Energy Sales | $\div$ | $1,824,313,200$ |  |
| Total System Power Cost per kWh Sold | $=\$$ | $\mathbf{0 . 0 8 2 6}$ |  |

Notes:
$\begin{array}{ll}\text { A } & \text { See Exhibit__(DEA-1), page } 22 \text { of } 22 . \\ \text { B } & \text { See Exhibit__(DEA-1), page } 12 \text { of } 22 .\end{array}$

## Dakota Electric Association <br> Base Calculation for Resource \& Tax Adjustment Components

## Conservation \& DSM Spending Base Calculation

| 2019 Budget Conservation \& DSM Spending | $\$$ | $2,206,789^{\text {C }}$ |
| :--- | ---: | ---: |
| Test Year MWh Sales | $1,824,313$ |  |
| Conservation \& DSM Base per kWh | $\$ 0$ | $\mathbf{0 . 0 0 1 2}$ |

Property Tax Recovery Base Calculation
Test Year Real \& Personal Property Taxes
Test Year MWh Sales
Property \& R/E Tax Recovery Base per kWh


| Allocation to Rate Classes Using Cost of Service Method |  |  |
| :---: | :---: | :---: |
| Class \& Rate | Property \& Real Estate Taxes in Base Rates ${ }^{\mathrm{E}}$ | \% of Taxes |
| Residential \& Farm Service <br> 31 Residential <br> 32 Res'l Demand Control <br> 53 Res'l Time of Day | \$ 2,223,454 | 62.62\% |
| Irrigation - 36 | 25,070 | 0.71\% |
| Small General Service - 41 | 116,013 | 3.27\% |
| General Service - 46 <br> 46 - General Service <br> 49 - Geothermal <br> 54 - General Service Time of Day | 614,089 | 17.29\% |
| Interruptible Service - 70 \& 71 | 449,646 | 12.66\% |
| Lighting - 44, 44-1, 44-2, 44-3 | 122,518 | 3.45\% |
| TOTAL | \$ 3,550,790 | 100.00\% |

Notes:
C See Workpaper \#9
D Per Summary of Test Year Adjustments, Exhibit__(DEA_1) Page 2 of 22.
E Per Allocation of Revenue Requirements to Rate Classes, Exhibit__(DEA-3).
Page 22 of 42.

Dakota Electric Association
Residential Line Extension Analysis


| PROJECT | Direct <br> Labor | Labor Overheads | Contract Labor | Materials, Tools, Supp | Undefined | Total before CIAC | Length <br> (Feet) |  | Total <br> $t$ per Ft <br> re CIAC |  | resent <br> CIAC <br> harges |  | oposed <br> CIAC <br> Method |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 118039 | 2,655.61 | 1,327.82 | 7,042.05 | 2,348.02 | 1,460.59 | 14,834.09 | 195 | \$ | 76.07 | \$ | 1,496 | \$ | 3,145 |
| 128798 | 429.36 | 214.70 | 0.00 | 124.87 | 236.15 | 1,005.08 | - |  | NA | \$ | 500 | \$ | 1,000 |
| 129137 | 4,054.75 | 2,487.39 | 2,062.30 | 6,594.29 | 2,230.10 | 17,428.83 | 620 | \$ | 28.11 | \$ | 5,024 | \$ | 7,820 |
| 129398 | 3,456.87 | 1,728.45 | 17,769.67 | 8,834.64 | 1,901.28 | 33,690.91 | 2,153 | \$ | 15.65 | \$ | 10,614 | \$ | 24,683 |
| 130963 | 1,534.41 | 767.21 | 1,512.15 | 2,378.05 | 843.93 | 7,035.75 | 275 | \$ | 25.58 | \$ | 2,160 | \$ | 4,025 |
| 131747 | 497.46 | 248.73 | 3,876.23 | 3,899.88 | 273.60 | 8,795.90 | 150 | \$ | 58.64 | \$ | 1,123 | \$ | 2,650 |
| 132939 | 3,832.37 | 1,916.21 | 2,636.92 | 2,104.75 | 2,107.81 | 12,598.06 | 90 | \$ | 139.98 | \$ | 625 | \$ | 1,990 |
| 133275 | 1,655.35 | 987.67 | 2,891.62 | 3,280.08 | 910.45 | 9,725.17 | 75 | \$ | 129.67 | \$ | 500 | \$ | 1,825 |
| 133908 | 2,276.56 | 1,130.80 | 2,008.81 | 2,963.36 | 1,252.12 | 9,631.65 | 442 | \$ | 21.79 | \$ | 3,546 | \$ | 5,862 |
| 134735 | 2,438.94 | 1,219.47 | 0.00 | 708.47 | 1,341.42 | 5,708.30 | - |  | NA | \$ | 500 | \$ | 1,000 |
| 134795 | 2,039.50 | 987.71 | 9,635.73 | 4,706.63 | 1,121.72 | 18,491.29 | 209 | \$ | 88.48 | \$ | 1,612 | \$ | 3,299 |
| 134963 | 1,927.67 | 720.29 | 6,230.14 | 3,285.81 | 1,060.23 | 13,224.14 | 380 | \$ | 34.80 | \$ | 3,032 | \$ | 5,180 |
| 135498 | 957.98 | 235.45 | 1,364.93 | 2,068.57 | 526.89 | 5,153.82 | 140 | \$ | 36.81 | \$ | 1,040 | \$ | 2,540 |
| 135680 | 1,239.68 | 619.86 | 2,710.17 | 3,135.59 | 681.82 | 8,387.12 | 475 | \$ | 17.66 | \$ | 3,820 | \$ | 6,225 |
| 135885 | 2,207.10 | 1,103.55 | 0.00 | 1,480.77 | 1,213.91 | 6,005.33 | - |  | NA | \$ | 500 | \$ | 1,000 |
| 135973 | 1,149.39 | 882.70 | 0.00 | 1,609.97 | 632.16 | 4,274.22 | - |  | NA | \$ | 500 | \$ | 1,000 |
| 136252 | 1,298.65 | 704.33 | 1,815.17 | 2,981.63 | 714.26 | 7,514.04 | 300 | \$ | 25.05 | \$ | 2,368 | \$ | 4,300 |
| 137790 | 274.42 | 181.22 | 0.00 | 1,415.44 | 150.92 | 2,022.00 | - |  | NA | \$ | 500 | \$ | 1,000 |
| 138306 | 1,103.55 | 551.78 | 0.00 | 1,338.55 | 606.95 | 3,600.83 | - |  | NA | \$ | 500 | \$ | 1,000 |
| 139509 | 767.70 | 383.85 | 0.00 | 282.01 | 422.24 | 1,855.80 | - |  | NA | \$ | 213 | \$ | 1,000 |
| 142657 | 1,454.27 | 727.17 | 0.00 | 1,642.55 | 799.86 | 4,623.85 | $-$ |  | NA | \$ | 500 | \$ | 1,000 |
|  | \$ 37,252 | \$ 19,126 | \$ 61,556 | \$ 57,184 | \$ 20,488 | \$ 195,606 | 5,504 | 30.25 |  | \$ | 40,670 |  | 81,544 |

Additional DEA Revenue
$42 \%$
$\$ \quad 40,874$
$\begin{array}{lll} & \$ & 3,637\end{array}$ Avg Cost for Extensions with No Footage



Exhibit __(DEA-11)
Class Line Extension Cost Analysis

| Line | Description |  | Resid. \& Farm | Small <br> General Service |  | Irrigation |  | General Service |  | C\&I <br> Interruptible |  | Lighting |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | I. Class Load Data |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | Number of Customers |  | 100,235 |  | 4,431 |  | 392 |  | 2,756 |  | 262 |  | 16,771 |
| 4 | Energy (kWh) |  | 838,683,744 |  | 42,537,600 |  | 7,963,872 |  | 463,059,984 |  | 406,800,000 |  | ,358,640 |
| 5 | Billing Demand (kW) |  | - |  | - |  | 76,255 |  | 1,449,303 |  | 970,490 |  | - |
| 6 | Base Revenue Per Cons. (Rev-PS) | \$ | 336 | \$ | 383 | \$ | 1,154 | \$ | 2,584 | \$ | 10,215 | \$ | 76 |
| 7 7 7 l |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | II. Allocation of Plant |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 | A. Distribution Extension Items |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 | Poles, towers | \$ | 11,800,477 | \$ | 612,764 | \$ | 103,966 | \$ | 2,210,293 | \$ | 1,519,012 | \$ | 74,064 |
| 11 | OH Cond | \$ | 15,474,059 | \$ | 812,987 | \$ | 106,739 | \$ | 1,411,713 | \$ | 732,940 | \$ | 67,527 |
| 12 | UG Conduit | \$ |  | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| 13 | UG Cond | \$ | 66,119,564 | \$ | 3,366,400 | \$ | 791,973 | \$ | 22,906,645 | \$ | 17,421,660 | \$ | 624,437 |
| 16 | Net Plant | \$ | 93,394,100 | \$ | 4,792,151 | \$ | 1,002,678 | \$ | 26,528,652 | \$ | 19,673,611 | \$ | 766,027 |
| 17 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 18 | Average Plant Invest. / Customer | \$ | 931.75 | \$ | 1,081.51 | \$ | 2,557.85 | \$ | 9,625.78 | \$ | 75,090.12 | \$ | 45.68 |
| 19 | Average Plant Invest. / kWh | \$ | 0.11136 | \$ | 0.11266 | \$ | 0.12590 | \$ | 0.05729 | \$ | 0.04836 | \$ | 0.07395 |
| 20 | Average Plant Invest. / kW |  | n/a |  | n/a | \$ | 13.15 | \$ | 18.30 | \$ | 20.27 |  | n/a |
| 21 | Multiple of Base Revenue |  | 2.8 |  | 2.8 |  | 2.2 |  | 3.7 |  | 7.4 |  | 0.6 |
| 22 B. Service Extenion tom |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 23 | B. Service Extension Items |  |  |  |  |  |  |  |  |  |  |  |  |
| 24 | Transf | \$ | 29,061,904 | \$ | 1,661,843 | \$ | 310,808 | \$ | 2,312,468 | \$ | 761,492 | \$ | 98,727 |
| 25 | Services | \$ | 2,401,440 | \$ | 115,874 | \$ | 11,602 | \$ | 80,186 | \$ | 7,918 | \$ | 8,036 |
| 26 | Meters | \$ | 3,602,323 | \$ | 218,184 | \$ | 40,621 | \$ | 314,124 | \$ | 138,790 | \$ | 12,055 |
| 27 | Cons Premise | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 123,745 |
| 28 | Leased Prop | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| 29 | St. Light | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |  | ,800,721 |
| 32 | Net Plant | \$ | 35,065,667 | \$ | 1,995,901 | \$ | 363,031 | \$ | 2,706,778 | \$ | 908,201 |  | \#\#\#\#\#\#\#\# |
| 33 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 34 | Average Plant Invest. / Customer | \$ | 349.83 | \$ | 450.44 | \$ | 926.10 | \$ | 982.14 | \$ | 3,466.41 | \$ | 598.85 |
| 35 | Average Plant Invest. / kWh | \$ | 0.04181 | \$ | 0.04692 | \$ | 0.04558 | \$ | 0.00585 | \$ | 0.00223 | \$ | 0.96956 |
| 36 | Average Plant Invest. / kW |  | n/a |  | n/a | \$ | 4.76 | \$ | 1.87 | \$ | 0.94 |  | $\mathrm{n} / \mathrm{a}$ |
| 37 | Multiple of Base Revenue |  | 1.0 |  | 1.2 |  | 0.8 |  | 0.4 |  | 0.3 |  | 7.9 |
| 38 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 39 | C. Total Extension Items | \$ | 1,282 | \$ | 1,532 | \$ | 3,484 | \$ | 10,608 | \$ | 78,557 | \$ | 645 |

Docket No. E-111/GR-19-478


## Dakota Electric Association Special Fees and Charges Proposed Fee Changes

|  | Current <br> Charge |  | Current <br> Actual Cost |  | Proposed Charge |  | $2018$ <br> Frequency |  | Add'l <br> Revenue |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Meter test at customer's request |  |  |  |  |  |  |  |  |  |
| Single phase | \$ | 85.00 | \$ | 98.40 | \$ | 95.00 | - | \$ | - |
| Three phase | \$ | 100.00 | \$ | 116.34 | \$ | 110.00 | - |  | - |
| Bad check | \$ | 15.00 | \$ | 11.47 | \$ | 11.50 | 2,259 |  | $(7,907)$ |
| Reconnection charge <br> (after disconnect, same customer) |  |  |  |  |  |  |  |  |  |
| Self contained meter |  |  |  |  |  |  |  |  |  |
| Normal working hours | \$ | 50.00 | \$ | 57.52 | \$ | 55.00 | 741 |  | 3,705 |
| After hours | \$ | 130.00 | \$ | 148.09 | \$ | 145.00 | 28 |  | 420 |
| Transformer rated meter |  |  |  |  |  |  |  |  |  |
| Normal working hours | \$ | 175.00 | \$ | 189.77 | \$ | 185.00 | 14 |  | 140 |
| After hours | \$ | 315.00 | \$ | 349.15 | \$ | 340.00 | 1 |  | 25 |
| Service charge (outside normal working hours when problem is not with DEA | \$ | 280.00 | \$ | 349.15 | \$ | 340.00 | 1 |  | 60 |
| Load Management Service Charge |  |  |  |  |  |  |  |  |  |
| Normal working hours | \$ | 70.00 | \$ | 80.46 | \$ | 80.00 |  |  | - |
| After hours | \$ | 140.00 | \$ | 161.47 | \$ | 160.00 | 1 |  | 20 |
| Pulse meter | \$ | 500.00 | \$ | 752.26 | \$ | 750.00 | - |  | - |
| Temporary service |  |  |  |  |  |  |  |  |  |
| Non-winter months | \$ | 205.00 |  | N/A | \$ | - | 8 |  | $(1,640)$ |
| Winter months | \$ | 340.00 |  | N/A | \$ | - | 5 |  | $(1,700)$ |
| Transfer/connection | \$ | 17.50 | \$ | 19.15 | \$ | 17.50 | 18,760 |  | - |
|  |  |  |  |  |  |  |  | \$ | $(6,877)$ |

## Dakota Electric Association

## Cost Justification for Proposed Special Fees and Charges



## Dakota Electric Association

Cost Justification for Proposed Special Fees and Charges (Continued)

Service Charge - two person crew, one truck
(service trouble calls after working hours, when the problem is not with DEA's equipment)

| After hours | Task | Item | Job Title | Overtime rate |  | Payroll |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | @ 1.5x | Hours | Tax | Only |  | Total |
|  |  | Labor | Crew Chief | \$ | 77.55 | 2.00 |  | 7.74\% | \$ | 167.10 |
|  |  | Labor | Power Line Specialist | \$ | 69.83 | 2.00 |  | 7.74\% | \$ | 150.47 |
|  |  | Bucket Truck |  | \$ | 31.58 | 1.00 |  |  | \$ | 31.58 |
|  |  |  |  |  |  |  | Total |  | \$ | 349.15 |




Dakota Electric Association
Cost Justification for Proposed Special Fees and Charges (Continued)

Transfer/Connection Charge Analysis

| Task | Employees | Job Title |
| :---: | :---: | :---: |
| Inside Clerical |  |  |
| Telephone \& resolution | 12 | Member Service Reps |
| Supervision | 2 | MSR Leads |
| Outside Field Personnel |  |  |
|  | 1 | Transfer representative |
|  | 1 | Chief meter reader |
|  | 1 | Meter reader |
| Vehicle Expense | Mileage | Transfer representative |
|  |  | Chief meter reader |
|  |  | Meter reader |
|  |  | Mileage Rate |
| Data Processing |  |  |
| Itineris Support |  | Monthly Support |
| PC \& 2 monitors |  | Annual cost |
| Mailing | Kubra cost | item including postage |


| Hourly Rate |  | (\% of 2080) |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Hours | Overhead |  |  |
| \$ | 26.80 | 8.8\% | 61.0\% | \$ | 94,773.72 |
| \$ | 31.20 | 1.5\% | 61.0\% | \$ | 3,134.48 |
| \$ | 36.47 | 70\% | 61.0\% | \$ | 85,491.52 |
| \$ | 36.47 | 39\% | 61.0\% | \$ | 47,630.99 |
| \$ | 36.47 | 65\% | 61.0\% | \$ | 79,384.98 |
|  | 25,400 | 70.00\% | 17,780 |  |  |
|  | 17,700 | 39.00\% | 6,903 |  |  |
|  | 16,600 | 65.00\% | 10,790 |  |  |
|  |  | Subtotal | 35,473 |  |  |
| \$ | 0.58 |  |  | \$ | 20,574.34 |
| \$ | 18,180.00 | 10.00\% |  | \$ | 21,816.00 |
| \$ | 430.00 | 8.80\% |  | \$ | 454.00 |
| Number |  |  |  |  |  |
|  |  | \$ 0.63 |  |  |  |
| Subtotal |  | \$ 0.63 | 9,380 | \$ | 5,909.40 |
|  |  |  | Total | \$ | 359,169.43 |
|  |  |  | Transfers |  | 18,760 |
|  |  |  | \$/Transfer | \$ | 19.15 |

## Dakota Electric Association <br> Special Fees and Charges <br> Frequency Analysis

|  | $\underline{2013}$ | 2018 |
| :---: | :---: | :---: |
| Meter test at customer's request |  |  |
| Single phase | 4 | - |
| Three phase | - |  |
| Bad check | 1,476 | 2,259 |
| Reconnection charge (after disconnect, same customer) |  |  |
| Self contained meter |  |  |
| Normal working hours | 1,241 | 741 |
| After hours | 131 | 28 |
| Transformer rated meter |  |  |
| Normal working hours | 6 | 14 |
| After hours | 2 | 1 |
| Service charge <br> (outside normal working hours when problem is not with DEA equipment) | 1 | 1 |
| Pulse meter | - |  |
| Temporary service | 34 | 13 |
| Transfer/connection | 13,722 | 18,760 |

# Dakota Electric Association <br> Special Fees and Charges <br> Payroll Overhead Calculation 

|  | Future <br> Test <br> Year |
| :---: | :---: |
| Pension | 16.71\% |
| Savings (401k) | 6.77\% |
| FICA Tax ${ }^{2}$ | 7.60\% |
| Life Insurance | 0.60\% |
| Workers' Compensation | 1.32\% |
| Medical Insurance | 12.87\% |
| State \& Federal Unemployment | 0.14\% |
| Other-Retirement Health Benefits | 0.93\% |
| Benefits excluding time-off | 46.94\% |
| Vacation/Sick/Holiday (assumed 269 hrs) | 14.04\% |
| Total overhead allocation | 60.98\% |
| Payroll taxes only | 7.74\% |

[^14]Dakota Electric Association
Summary of Lead Lag Analysis
Cash Working Capital Analysis
Twelve Months Ending December 31, 2018

®
$\stackrel{\infty}{\sim}$
$\stackrel{9}{\dot{m}}$
$6 \varepsilon$ て'Z

|  | Test Year <br> Expense |
| :--- | ---: |
| $\$$ | $149,356,821$ |
|  | $15,112,543$ |
| $6,003,178$ |  |
|  | $9,484,952$ |
| 570,291 |  |
|  | $1,334,808$ |
|  | 26,186 |
|  | $3,432,442$ |
|  |  |
|  |  |
|  | $185,321,221$ |
|  |  |

范

(A) Operating payroll is estimated to be $86 \%$ of total payroll
(B) Revenue Collection or Customer Payment Lag
(A) Operating payroll is estimated to be $86 \%$ of total payroll
(B) Revenue Collection or Customer Payment Lag
 Property Taxes
Total Expenses
Sales Tax
Working Capital Required/ (Provided)


# Dakota Electric Association Calculation of Coincidental Demand Charges 

C\&I Interruptible (Rates 70 and 71)

1. Summer (June, July, August)
\$ $25.50 \quad$ GRE Summer $\$ / \mathrm{kW}$-mo.
$+\quad 2.50 \%$ DEA Line Loss
\$26.14 Coincidental Demand Charge
2. Winter (January, February, December)
\$ 19.42 GRE Winter \$/kW-mo.
$+\quad$ 2.50\% DEA Line Loss
\$19.91 Coincidental Demand Charge
3. Other Months
\$ 13.34 GRE Winter \$/kW-mo.
$+\quad 2.50 \%$ DEA Line Loss
\$13.67 Coincidental Demand Charge

[^15]
$\qquad$
Page 1 of 5

DEA

## Customer Related Cost

## Cost of Service Breakdown

| Primary Line | \$/cons./mo. |  | \$/cons./mo. |  | Excluding Primary Line \$/cons./mo. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| Depreciation | \$ | 1.89 |  |  |  |  |
| Interest | \$ | 0.63 |  |  |  |  |
| O\&M | \$ | 3.49 |  |  |  |  |
| A\&G | \$ | 1.68 |  |  |  |  |
| Subtotal |  |  | \$ | 7.70 |  |  |
| Transformer |  |  |  |  |  |  |
| Depreciation | \$ | 0.68 |  |  |  |  |
| Interest | \$ | 0.23 |  |  |  |  |
| O\&M | \$ | 0.03 |  |  |  |  |
| A\&G | \$ | 0.01 |  |  |  |  |
| Subtotal |  |  | \$ | 0.96 | \$ | 0.96 |
| Meter \& Service |  |  |  |  |  |  |
| Depreciation | \$ | 0.18 |  |  |  |  |
| Interest | \$ | 0.06 |  |  |  |  |
| O\&M | \$ | 2.66 |  |  |  |  |
| A\&G | \$ | 1.28 |  |  |  |  |
| Subtotal |  |  | \$ | 4.19 | \$ | 4.19 |
| Direct Investment |  |  |  |  |  |  |
| Depreciation | \$ | - |  |  |  |  |
| Interest | \$ | - |  |  |  |  |
| O\&M | \$ | - |  |  |  |  |
| A\&G | \$ | - |  |  |  |  |
| Subtotal |  |  | \$ | - | \$ | - |
| Customer Accounting Expense | \$ | 9.34 |  |  | \$ | 9.34 |
| Taxes \& Miscellaneous | \$ | 1.21 |  |  | \$ | 0.15 |
| Margins | \$ | 1.72 |  |  | \$ | 0.38 |
| Subtotal |  |  | \$ | 12.27 |  |  |
| Total |  |  | \$ | 25.11 | \$ | 15.01 |

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DEA
Customer Related Cost

## Cost of Service Breakdown



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## DEA

## Customer Related Cost

## Cost of Service Breakdown

|  | \$/cons./mo. | \$/cons./mo. |  | Excluding Primary Line \$/cons./mo. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Primary Line |  |  |  |  |  |
| Depreciation | \$ 2.85 |  |  |  |  |
| Interest | \$ 0.95 |  |  |  |  |
| O\&M | \$ 5.25 |  |  |  |  |
| A\&G | \$ 2.53 |  |  |  |  |
| Subtotal |  | \$ | 11.58 |  |  |
| Transformer |  |  |  |  |  |
| Depreciation | \$ 1.29 |  |  |  |  |
| Interest | \$ 0.43 |  |  |  |  |
| O\&M | \$ 0.06 |  |  |  |  |
| A\&G | \$ 0.02 |  |  |  |  |
| Subtotal |  | \$ | 1.80 | \$ | 1.80 |
| Meter \& Service |  |  |  |  |  |
| Depreciation | \$ 0.43 |  |  |  |  |
| Interest | \$ 0.14 |  |  |  |  |
| O\&M | \$ 7.67 |  |  |  |  |
| A\&G | \$ 3.70 |  |  |  |  |
| Subtotal |  | \$ | 11.94 | \$ | 11.94 |
| Direct Investment |  |  |  |  |  |
| Depreciation | \$ |  |  |  |  |
| Interest | \$ |  |  |  |  |
| O\&M | \$ |  |  |  |  |
| A\&G | \$ - |  |  |  |  |
| Subtotal |  | \$ | - | \$ | - |
| Customer Accounting Expense | \$ 26.92 |  |  | \$ | 26.92 |
| Taxes \& Miscellaneous | \$ 2.22 |  |  | \$ | 0.15 |
| Margins | \$ 2.85 |  |  | \$ | 0.38 |
| Subtotal |  | \$ | 31.99 |  |  |
| Total |  | \$ | 57.31 | \$ | 41.19 |

Monthly Fixed Charge Analysis

Exhibit
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## DEA

## Customer Related Cost

## Cost of Service Breakdown

|  | \$/cons./mo. | \$/cons./mo. |  | Excluding Primary Line \$/cons./mo. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Primary Line |  |  |  |  |  |
| Depreciation | \$ 2.76 |  |  |  |  |
| Interest | \$ 0.93 |  |  |  |  |
| O\&M | \$ 5.09 |  |  |  |  |
| A\&G | \$ 2.46 |  |  |  |  |
| Subtotal |  | \$ | 11.24 |  |  |
| Transformer |  |  |  |  |  |
| Depreciation | \$ 1.23 |  |  |  |  |
| Interest | \$ 0.41 |  |  |  |  |
| O\&M | \$ 0.05 |  |  |  |  |
| A\&G | \$ 0.02 |  |  |  |  |
| Subtotal |  | \$ | 1.72 | \$ | 1.72 |
| Meter \& Service |  |  |  |  |  |
| Depreciation | \$ 0.46 |  |  |  |  |
| Interest | \$ 0.15 |  |  |  |  |
| O\&M | \$ 8.44 |  |  |  |  |
| A\&G | \$ 4.07 |  |  |  |  |
| Subtotal |  | \$ | 13.12 | \$ | 13.12 |
| Direct Investment |  |  |  |  |  |
| Depreciation | \$ |  |  |  |  |
| Interest | \$ |  |  |  |  |
| O\&M | \$ |  |  |  |  |
| A\&G | \$ - |  |  |  |  |
| Subtotal |  | \$ | - | \$ | - |
| Customer Accounting Expense | \$ 29.61 |  |  | \$ | 29.61 |
| Taxes \& Miscellaneous | \$ 2.23 |  |  | \$ | 0.15 |
| Margins | \$ 2.78 |  |  | \$ | 0.38 |
| Subtotal |  | \$ | 34.63 |  |  |
| Total |  | \$ | 60.71 | \$ | 44.99 |

$\qquad$
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DEA
Customer Related Cost
Cost of Service Breakdown

| Primary Line | \$/cons./mo. | \$/cons./mo. |  | Excluding Primary Line \$/cons./mo. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| Depreciation | \$ 2.95 |  |  |  |  |
| Interest | \$ 0.99 |  |  |  |  |
| O\&M | \$ 5.44 |  |  |  |  |
| A\&G | \$ 2.63 |  |  |  |  |
| Subtotal |  | \$ | 12.01 |  |  |
| Transformer |  |  |  |  |  |
| Depreciation | \$ 1.35 |  |  |  |  |
| Interest | \$ 0.45 |  |  |  |  |
| O\&M | \$ 0.06 |  |  |  |  |
| A\&G | \$ 0.02 |  |  |  |  |
| Subtotal |  | \$ | 1.89 | \$ | 1.89 |
| Meter \& Service |  |  |  |  |  |
| Depreciation | \$ 1.88 |  |  |  |  |
| Interest | \$ 0.63 |  |  |  |  |
| O\&M | \$ 39.21 |  |  |  |  |
| A\&G | \$ 18.91 |  |  |  |  |
| Subtotal |  | \$ | 60.63 | \$ | 60.63 |
| Direct Investment |  |  |  |  |  |
| Depreciation | \$ - |  |  |  |  |
| Interest | \$ - |  |  |  |  |
| O\&M | \$ - |  |  |  |  |
| A\&G | \$ - |  |  |  |  |
| Subtotal |  | \$ | - | \$ | - |
| Customer Accounting Expense | \$ 137.64 |  |  |  | 37.64 |
| Taxes \& Miscellaneous | \$ 5.04 |  |  | \$ | 0.15 |
| Margins | \$ 3.86 |  |  | \$ | 0.38 |
| Subtotal |  | \$ | 146.54 |  |  |
| Total |  | \$ | 221.08 |  | 00.69 |



## Comparison of Present and Proposed Rate Schedules

## Present Rates Proposed Rates

| Residential \& Farm Service (31) |  |  |  | Residential \& Farm Service (31) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fixed Charge | @ | \$9.00 | /month | Fixed Charge | @ | \$10.00 | /month |
| Energy Charge |  |  |  | Energy Charge |  |  |  |
| Summer | @ | \$0.13080 | $/ \mathrm{kWh}$ | Summer | @ | \$0.13790 | /kWh |
| Other | @ | \$0.11680 | /kWh | Other | @ | \$0.12390 | /kWh |


| Residential \& Farm Demand Control (32) |  |  |  |
| :--- | :---: | :---: | :--- |
|  |  |  |  |
| Fixed Charge | $@$ | $\$ 12.00$ | $/ \mathrm{month}$ |
| Demand Charge |  |  |  |
| $\quad$ Summer | $@$ | $\$ 14.70$ | $/ \mathrm{kW}$ |
| Other | $@$ | $\$ 11.10$ | $/ \mathrm{kW}$ |
| Energy Charge | $@$ | $\$ 0.07600$ | $/ \mathrm{kWh}$ |

Residential \& Farm Demand Control (32)

| Fixed Charge | $@$ | $\$ 13.00$ | $/ \mathrm{month}$ |
| :--- | :--- | :--- | :--- |
| Demand Charge |  |  |  |
| $\quad$ Summer | $@$ | $\$ 15.50$ | $/ \mathrm{kW}$ |
| Other | $@$ | $\$ 11.90$ | $/ \mathrm{kW}$ |
| Energy Charge | $@$ | $\$ 0.08100$ | $/ \mathrm{kWh}$ |


| $\frac{\text { Electric Vehicle (33) }}{\text { Energy Charge }}$ |  |  |  |
| :--- | :--- | :--- | :--- |
| $\quad$ Off Peak | @ | $\$ 0.06740$ | $/ \mathrm{kWh}$ |
| On Peak | $@$ | $\$ 0.41440$ | $/ \mathrm{kWh}$ |
| Other |  |  |  |
| $\quad$ Summer | $@$ | $\$ 0.13080$ | $/ \mathrm{kWh}$ |
| Other | @ | $\$ 0.11680$ | $/ \mathrm{kWh}$ |

## Electric Vehicle (33)

| Energy Charge |  |  |  |
| :--- | :--- | :--- | :--- |
| Off Peak | $@$ | $\$ 0.07560$ | $/ \mathrm{kWh}$ |
| On Peak | $@$ | $\$ 0.44210$ | $/ \mathrm{kWh}$ |
| Other |  |  |  |
| $\quad$ Summer | $@$ | $\$ 0.13790$ | $/ \mathrm{kWh}$ |
| $\quad$ Other | $@$ | $\$ 0.12390$ | $/ \mathrm{kWh}$ |


| Irrigation Service (36) |  |  |  | Irrigation Service (36) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Firm Service |  |  |  | Firm Service |  |  |  |
| Fixed Charge | @ | \$30.00 | /month | Fixed Charge | @ | \$30.00 | /month |
| Demand Charge |  |  |  | Demand Charge |  |  | /kW/mo. |
| Summer | @ | \$26.35 | /kW/mo. | Summer | @ | \$26.60 | /kW/mo. |
| Winter | @ | \$20.95 | /kW/mo. | Winter | @ | \$21.20 |  |
| Other | @ | \$15.50 | /kW/mo. | Other | @ | \$15.67 | /kW/mo. |
| Energy Charge | @ | \$0.04990 | $/ \mathrm{kWh}$ | Energy Charge | @ | \$0.05210 | $/ \mathrm{kWh}$ |
| Interruptible Service |  |  |  | Interruptible Service |  |  |  |
| Fixed Charge | @ | \$30.00 | /month | Fixed Charge | @ | \$30.00 | /month |
| Demand Charge | @ | \$4.55 | /kW/mo. | Demand Charge | @ | \$4.55 | /kW/mo |
| Energy Charge | @ | \$0.04990 | $/ \mathrm{kWh}$ | Energy Charge | @ | \$0.05210 | /kWh |
| Small General Service (41) |  |  |  | Small General Service (41) |  |  |  |
| Fixed Charge | @ | \$14.00 | /month | Fixed Charge | @ | \$15.00 | /month |
| Energy Charge |  |  |  | Energy Charge |  |  |  |
| Summer | @ | \$0.12690 | /kWh | Summer | @ | \$0.13750 | /kWh |
| Other | @ | \$0.11290 | /kWh | Other | @ | \$0.12350 | /kWh |

# Comparison of <br> Present and Proposed Rate Schedules <br> (Continued) 

| Present Rates |  |  |  |
| :---: | :---: | :---: | :---: |
| Security Lighting Service (44) - Closed to New |  |  |  |
| 175 W MV | @ | N/A | /month |
| 100 W HPS | @ | \$10.10 | /month |
| 150 W HPS | @ | \$11.99 | /month |
| 250 W HPS | @ | \$15.79 | /month |
| Street Lighting System (44-1) |  |  |  |
| 175 W MV (Clsd to New) | @ | \$10.52 | /month |
| 250 W MV (Clsd to New) | @ | \$13.46 | /month |
| 400 W MV (Clsd to New) | @ | \$18.54 | /month |
| 100 W HPS (Clse to New) | @ | \$7.56 | /month |
| 150 W HPS | @ | \$9.46 | /month |
| 200 W HPS | @ | \$11.41 | /month |
| 250 W HPS | @ | \$13.25 | /month |
| 400 W HPS | @ | \$17.67 | /month |
| Street Lighting Service (44-2) |  |  |  |
| 175 W MV (Clsd to New) | @ | \$15.23 | /month |
| 250 W MV (Clsd to New) | @ | \$18.16 | /month |
| 400 W MV (Clsd to New) | @ | \$23.25 | /month |
| 100 W HPS (Clsd to New) | @ | \$12.27 | /month |
| 150 W HPS (Clsd to New) | @ | \$14.16 | /month |
| 250 W HPS (Clsd to New) | @ | \$17.95 | /month |
| 400 W HPS (Clsd to New) | @ | \$22.38 | /month |


| Custom Residential Street Lighting (44-3) |  |  |  |
| :---: | :---: | ---: | :--- |
|  |  |  |  |
| 175 W MV (Clsd to New) | @ | $\$ 11.37$ | /month |
| 50 W HPS (Clsd to New) | $@$ | $\$ 6.70$ | $/$ month |
| 100 W HPS | $@$ | $\$ 8.41$ | $/$ month |
| 150 W HPS (Clsd to New) | $@$ | $\$ 10.30$ | /month |
| 250 W HPS (Clsd to New) | $@$ | $\$ 14.09$ | $/$ month |

LED Security Lighting Service (44-4)
LED, >4,500 Lumens @ 7.63 /month

| Proposed Rates <br> Security Lighting Service (44) |  |  |  |
| :---: | :---: | :---: | :---: |
| Closed to New |  |  |  |
| 175 W MV | $@$ | N/A | /month |
| 100 W HPS | $@$ | $\$ 12.01$ | $/$ month |
| 150 W HPS | @ | $\$ 14.26$ | $/$ month |
| 250 W HPS | $@$ | $\$ 18.83$ | $/$ month |


| Street Lighting System (44-1) |  |  |  |
| :---: | :---: | :---: | :---: |
| 175 W MV (Clsd to New) | @ | \$13.25 | /month |
| 250 W MV (Clsd to New) | @ | \$16.74 | /month |
| 400 W MV (Clsd to New) | @ | \$22.71 | /month |
| 100 W HPS (Clse to New) | @ | \$9.61 | /month |
| 150 W HPS | @ | \$11.78 | /month |
| 200 W HPS | @ | \$14.18 | /month |
| 250 W HPS | @ | \$16.35 | /month |
| 400 W HPS | @ | \$21.24 | /month |


| Street Lighting Service (44-2)   <br> 175 W MV (Clsd to New)  $@$ <br> 250 W MV (Clsd to New)  $\$ 17.44$ <br> /month   <br> 400 W MV (Clsd to New)  $\$ 20.93$ | /month |  |  |
| :---: | :--- | :--- | :--- | :--- |
| 100 W HPS (Clsd to New) |  | $\$ 26.89$ | /month |
| 150 W HPS (Clsd to New) | @ | $\$ 13.80$ | /month |
| 250 W HPS (Clsd to New) | @ | $\$ 20.54$ | /month |
| 400 W HPS (Clsd to New) | @ | $\$ 25.42$ | /month |



LED Security Lighting Service (44-4)
LED, >4,500 Lumens @ \$7.75 /month

## Comparison of Present and Proposed Rate Schedules

(Continued)

## Present Rates

LED Street Lighting Member Owned(44-5)

| A (40-80 watts) | @ | 4.81 | /month |
| :--- | :--- | ---: | :--- |
| B (81-150 watts) | @ | $\$ 6.71$ | /month |
| C (151-250 watts) | $@$ | $\$ 9.66$ | /month |
| D (251-350 watts) | @ | $\$ 13.05$ | /month |
| E (351-450 watts) | @ | $\$ 16.52$ | /month |

LED Street Lighting Member Owned(44-5)

| A (40-80 watts) | $@$ | $\$ 5.50$ | /month |
| :--- | :--- | ---: | :--- |
| B $(81-150$ watts $)$ | $@$ | $\$ 7.75$ | /month |
| C $(151-250$ watts $)$ | $@$ | $\$ 11.16$ | /month |
| D (251-350 watts) | $@$ | $\$ 15.04$ | /month |
| E (351-450 watts) |  | $\$ 19.07$ | /month |


| LED Street Lighting (44-6) |  |  |  |
| :---: | :---: | :---: | :---: |
| Standard |  |  |  |
| >5,200 L, Coach (Post) | @ | \$10.60 | /month |
| >5,200 L, Acorn (Post) | @ | \$11.24 | /month |
| >7,000 L, Cobra (Mast) | @ | \$8.31 | /month |
| >11,500 L, Shoebox | @ | \$10.71 | /month |
| Basic |  |  |  |
| >5,200 L, Coach (Post) | @ | \$6.83 | /month |
| >5,200 L, Acorn (Post) | @ | \$6.30 | /month |
| >7,000 L, Cobra (Mast) | @ | \$6.51 | /month |
| >11,500 L, Shoebox | @ | \$7.98 | /month |

## LED Street Lighting (44-6)

| $>5,200 \mathrm{~L}$, Coach (Post) | $@$ | $\$ 9.30$ | /month |
| :--- | :--- | ---: | :--- |
| $>5,200 \mathrm{~L}$, Acorn (Post) | $@$ | $\$ 10.85$ | $/$ month |
| $>7,000 \mathrm{~L}$, Cobra (Mast) | $@$ | $\$ 8.60$ | $/$ month |
| $>11,500 \mathrm{~L}$, Shoebox | $@$ | $\$ 10.70$ | $/$ month |
|  |  |  |  |
| $>5,200 \mathrm{~L}$, Coach (Post) | $@$ | $\$ 6.36$ | $/$ month |
| $>5,200 \mathrm{~L}$, Acorn (Post) | $@$ | $\$ 6.12$ | $/$ month |
| $>7,000 \mathrm{~L}$, Cobra (Mast) | $@$ | $\$ 6.98$ | $/$ month |
| $>11,500 \mathrm{~L}$, Shoebox | $@$ | $\$ 8.68$ | $/$ month |

## Low Wattage Unmetered Service (45)

Fixed Charge
General Service (46)

| Fixed Charge | $@$ | $\$ 34.00$ | $/ \mathrm{month}$ |
| :--- | :--- | ---: | :--- |
| Demand Charge |  |  |  |
| $\quad$ Summer | $@$ | $\$ 12.26$ | $/ \mathrm{kW}$ |
| $\quad$ Other | $@$ | $\$ 9.16$ | $/ \mathrm{kW}$ |
| Energy Charge |  |  |  |
| $\quad$ First 200 kWh/kW | $@$ | $\$ 0.07760$ | $/ \mathrm{kWh}$ |
| Next 200 kWh/kW | $@$ | $\$ 0.06760$ | kWh |
| Over 400 kWh/kW | $@$ | $\$ 0.05760$ | $/ \mathrm{kWh}$ |
| Primary Voltage Disc. | $@$ | $\$ 0.15$ | $/ \mathrm{kW}$ |
| Primary Metering Disc. | $@$ | $2.00 \%$ |  |

Low Wattage Unmetered Service (45)
Fixed Charge
@ $\quad \$ 10.50 \quad / m o n t h$

General Service (46)

| Fixed Charge | $@$ | $\$ 34.00$ | $/$ month |
| :--- | :--- | :--- | :--- |
| Demand Charge |  |  |  |
| Summer | $@$ | $\$ 13.70$ | $/ \mathrm{kW}$ |
| Other | $@$ | $\$ 10.60$ | $/ \mathrm{kW}$ |

## Energy Charge

Next $200 \mathrm{kWh} / \mathrm{kW}$ @ $\$ 0.06760 / \mathrm{kWh}$
Over $400 \mathrm{kWh} / \mathrm{kW}$ @ $\$ 0.05760$ /kWh
Primary Voltage Disc.
@
Primary Metering Disc.
$\$ 0.15 / \mathrm{kW}$
2.00\%
$\qquad$

# Comparison of <br> Present and Proposed Rate Schedules 

(Continued)

| Present Rates |  |  |  | Proposed Rates |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Municipal Civil Defense Sirens (47) |  |  |  | Municipal Civil Defense Sirens (47) |  |  |  |
| Fixed Charge | @ | \$5.00 | /month | Fixed Charge | @ | \$5.00 | /month |
| Geothermal Heat Pump (49) Closed to New |  |  |  | Geothermal Heat Pump (49) Closed to New |  |  |  |
| Energy Charge | @ | \$0.09400 | /kWh | Energy Charge | @ | \$0.10300 | /kWh |
| Controlled Energy Storage (51) |  |  |  | Controlled Energy Storage (51) |  |  |  |
| Net Energy Charge | @ | \$0.04400 | /kWh | Net Energy Charge | @ | \$0.04870 | /kWh |
| Controlled Interruptible Service (52) |  |  |  | Controlled Interruptible Service (52) |  |  |  |
| Net Energy Charge | @ | \$0.05500 | /kWh | Net Energy Charge | @ | \$0.06310 | /kWh |
| Alternate Rate for Water |  |  |  | Alternate Rate for Water |  |  |  |
| Heaters |  | (\$6.00) | /month | Heaters |  | (\$6.00) | /month |
| $\underline{\text { Residential \& Farm Time of Day (53) }}$ |  |  |  | $\underline{\text { Residential \& Farm Time of Day (53) }}$ |  |  |  |
| Fixed Charge | @ | \$12.00 | /month | Fixed Charge | @ | \$13.00 | /month |
| Energy Charge |  |  |  | Energy Charge |  |  |  |
| Peak Period |  |  |  | Peak Period |  |  |  |
| Summer | @ | \$0.18800 | /kWh | Summer | @ | \$0.21263 | /kWh |
| Other | @ | \$0.17400 | /kWh | Other | @ | \$0.19863 | /kWh |
| Off-Peak | @ | \$0.09400 | /kWh | Off-Peak | @ | \$0.09450 | /kWh |
| General Service Time of Day (54) |  |  |  | General Service Time of Day (54) |  |  |  |
| Fixed Charge | @ | \$36.00 | /month | Fixed Charge | @ | \$36.00 | /month |
| Demand Charge |  |  |  | Demand Charge |  |  |  |
| Peak Period |  |  |  | Peak Period |  |  |  |
| Summer | @ | \$24.85 | /kW/mo. | Summer | @ | \$26.14 | /kW/mo. |
| Winter | @ | \$18.95 | /kW/mo. | Winter | @ | \$19.91 | /kW/mo. |
| Other | @ | \$13.00 | /kW/mo. | Other | @ | \$13.67 | /kW/mo. |
| Maximum | @ | \$4.75 | /kW | Maximum | @ | \$5.25 | /kW |
| Energy Charge | @ | \$0.04990 | /kWh | Energy Charge | @ | \$0.05210 | /kWh |
| Primary Voltage Disc. | @ | \$0.15 | /kW | Primary Voltage Disc. | @ | \$0.15 | /kW |
| Primary Metering Disc. | @ | 2.00\% |  | Primary Metering Disc. | @ | 2.00\% |  |

# Comparison of <br> Present and Proposed Rate Schedules 

(Continued)

Present Rates
Residential \& Farm Service Time of Day (56)

| Fixed Charge <br> Energy Charges | $@$ | $\$ 12.00$ | $/ \mathrm{month}$ |
| :--- | :--- | :--- | :--- |
| $\quad$ Peak Period |  |  |  |
| $\quad$ Summer | $@$ | $\$ 0.2710$ | $/ \mathrm{kWh}$ |
| $\quad$ Winter | $@$ | $\$ 0.2210$ | $/ \mathrm{kWh}$ |
| $\quad$ Other | $@$ | $\$ 0.1750$ | $/ \mathrm{kWh}$ |
| Intermediate Period | $@$ | $\$ 0.0970$ | $/ \mathrm{kWh}$ |
| Off-Peak Period | $@$ | $\$ 0.0760$ | $/ \mathrm{kWh}$ |

Residential \& Farm Service Time of Day (56)

| Fixed Charge <br> Energy Charges | $@$ | $\$ 13.00$ | $/ \mathrm{month}$ |
| :--- | :--- | :--- | :--- |
| $\quad$ Peak Period |  |  |  |
| $\quad$ Summer | $@$ | $\$ 0.2890$ | $/ \mathrm{kW} / \mathrm{mo}$. |
| $\quad$ Winter | $@$ | $\$ 0.2320$ | $/ \mathrm{kW} / \mathrm{mo}$. |
| $\quad$ Other | $@$ | $\$ 0.1880$ | $/ \mathrm{kW} / \mathrm{mo}$. |
| Intermediate Period | $@$ | $\$ 0.1060$ | $/ \mathrm{kWh}$ |
| Off-Peak Period | $@$ | $\$ 0.0820$ | $/ \mathrm{kWh}$ |


| Standby Service (60) |  |  |  |
| :---: | :---: | :---: | :---: |
| Generation Reservation Fee |  |  |  |
| Summer | @ | \$3.21 | /kW |
| Winter | @ | \$2.47 | /kW |
| Other | @ | \$1.74 | /kW |
| Distribution Reservation Fee |  |  |  |
| Primary | @ | \$3.28 | /kW |
| Secondary | @ | \$3.51 | /kW |
| Substation | @ | \$0.90 | /kW |

Full Interruptible Service (70)

| Fixed Charge | $@$ | $\$ 110.00$ | $/ \mathrm{month}$ |
| :--- | :--- | ---: | :--- |
| Communication Fee | $@$ | $\$ 8.70$ | $/ \mathrm{month}$ |
| Coinc. Demand Charge |  |  |  |
| $\quad$ Summer | $@$ | $\$ 24.85$ | $/ \mathrm{kW}$ |
| Winter | $@$ | $\$ 18.95$ | $/ \mathrm{kW}$ |
| $\quad$ Other | $@$ | $\$ 13.00$ | $/ \mathrm{kW}$ |
| Non-Coinc. Demand | $@$ | $\$ 4.75$ | $/ \mathrm{kW}$ |
| Failure to Control |  | $\$ 5.00$ | $/ \mathrm{kW}$ |
| Energy Charge | $@$ | $\$ 0.04990$ | $/ \mathrm{kWh}$ |
| Primary Voltage Disc. | $@$ | $\$ 0.15$ | $/ \mathrm{kW}$ |
| Primary Metering Disc. | $@$ | $2.00 \%$ |  |


| Partial Interruptible Service (71) |  |  |  |
| :--- | :---: | ---: | :--- |
| Fixed Charge | $@$ | $\$ 110.00$ | $/$ month |
| Communication Fee | $@$ | $\$ 8.70$ | $/$ month |
| Coinc. Demand Charge |  |  |  |
| $\quad$ Summer | $@$ | $\$ 24.85$ | $/ \mathrm{kW}$ |
| Winter | $@$ | $\$ 18.95$ | $/ \mathrm{kW}$ |
| Other | $@$ | $\$ 13.00$ | $/ \mathrm{kW}$ |
| Non-Coinc. Demand | $@$ | $\$ 4.75$ | $/ \mathrm{kW}$ |
| Excess Demand | $@$ | $\$ 5.00$ | $/ \mathrm{kW}$ |
| Energy Charge | $@$ | $\$ 0.04990$ | $/ \mathrm{kWh}$ |
| Primary Voltage Disc. | $@$ | $\$ 0.15$ | $/ \mathrm{kW}$ |
| Primary Metering Disc. | $@$ | $2.00 \%$ |  |


| Standby Service (60) |  |  |
| :--- | :--- | :--- |
| Generation Reservation Fee |  |  |
|  |  |  |
| Summer | $@$ | $\$ 3.21$ |
| $/ \mathrm{kW}$ |  |  |
| Winter | $@$ | $\$ 2.47$ |
| $/ \mathrm{kW}$ |  |  |
| Other | $@$ | $\$ 1.74$ |
| $/ \mathrm{kW}$ |  |  |
| Distribution Reservation Fee |  |  |
| Primary | $@$ | $\$ 3.89$ |
| Secondary | $@$ | $\$ 4.02$ |
| kW |  |  |
| Substation | $@$ | $\$ 0.81$ | kW

## Full Interruptible Service (70)

Fixed Charge

| @ | $\$ 130.00$ | $/ \mathrm{month}$ |
| ---: | ---: | :--- |
| $@$ | $\$ 8.70$ | $/ \mathrm{month}$ |
|  |  |  |
| $@$ | $\$ 26.14$ | $/ \mathrm{kW} / \mathrm{mo}$. |
| $@$ | $\$ 19.91$ | $/ \mathrm{kW} / \mathrm{mo}$. |
| $@$ | $\$ 13.67$ | $/ \mathrm{kW} / \mathrm{mo}$. |
| $@$ | $\$ 5.25$ | $/ \mathrm{kW}$ |
| $@$ | $\$ 5.00$ | $/ \mathrm{kW}$ |
| $@$ | $\$ 0.05210$ | $/ \mathrm{kWh}$ |
| $@$ | $\$ 0.15$ | $/ \mathrm{kW}$ |
| $@$ | $2.00 \%$ |  |

## Partial Interruptible Service (71)

| Fixed Charge | $@$ | $\$ 130.00$ | $/ \mathrm{month}$ |
| :--- | :--- | ---: | :--- |
| Communication Fee | $@$ | $\$ 8.70$ | $/ \mathrm{month}$ |
| Coinc. Demand Charge |  |  |  |
| $\quad$ Summer | $@$ | $\$ 26.14$ | $/ \mathrm{kW} / \mathrm{mo}$. |
| Winter | $@$ | $\$ 19.91$ | $/ \mathrm{kW} / \mathrm{mo}$. |
| $\quad$ Other | $@$ | $\$ 13.67$ | $/ \mathrm{kW} / \mathrm{mo}$. |
| Non-Coinc. Demand | $@$ | $\$ 5.25$ | $/ \mathrm{kW}$ |
| Excess Demand | $@ 5.00$ | $/ \mathrm{kW}$ |  |
| Energy Charge | $@$ | $\$ 0.05210$ | $/ \mathrm{kWh}$ |
| Primary Voltage Disc. | $@$ | $\$ 0.15$ | $/ \mathrm{kW}$ |
| Primary Metering Disc. | $@$ | $2.00 \%$ |  |

# Comparison of Present and Proposed Rate Schedules <br> (Continued) 

## Present Rates

## Cycled Air Conditioning Service (80)

Option 1
Option 2
Option 3
Option 4
@
(\$0.03200) /kWh
@ (\$13.00) /month
@ (\$6.50) /ton/mo

## Cycled Air Conditioning Service (80)

Option 1 @
@ /kWh
Option 2 @ (\$0.03200) /kWh
Option 3 @ (\$13.00) /month
Option 4 @ (\$6.50) /ton/mo.

## Comparison of Revenue Present and Proposed Rates

| (a) | (b) | (c) | (d) | (e) | (f) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Revenue | Revenue |  |  |
| Line <br> No. | Rate Class | Present | Proposed | Increase (Decrease) |  |
|  |  | Rates | Rates | Amount | Percent |
|  |  | (\$) | (\$) | (\$) | (\%) |
| 1 | Residential \& Farm Service (31) | 114,332,035 | 119,389,671 | 5,057,636 | 4.42 |
| 2 | Residential \& Farm Demand Control (32) | 42,670 | 44,529 | 1,859 | 4.36 |
| 3 | Electric Vehicle (33) | 24,636 | 26,505 | 1,869 | 7.59 |
| 4 | Irrigation Service (36) Firm | 50,143 | 50,484 | 341 | 0.68 |
| 5 | Irrigation Service (36) Interruptible | 862,089 | 883,153 | 21,064 | 2.44 |
| 6 | Small General Service (41) | 5,799,609 | 6,197,337 | 397,728 | 6.86 |
| 7 | Security Lighting Service (44) - Closed to New | 102,369 | 120,526 | 18,157 | 17.74 |
| 8 | Street Lighting Service (44-2) | 466,293 | 524,779 | 58,486 | 12.54 |
| 9 | Street Lighting System (44-1) | 72,603 | 88,142 | 15,539 | 21.40 |
| 10 | Custom Residential Street Lighting (44-3) | 1,334,683 | 1,623,968 | 289,285 | 21.67 |
| 11 | LED Security Lighting Service (44-4) | 31,109 | 31,434 | 325 | 1.04 |
| 12 | LED Street Lighting Member Owned(44-5) | 1,297 | 1,473 | 176 | 13.57 |
| 13 | LED Street Lighting (44-6) | 59,884 | 57,768 | $(2,116)$ | (3.53) |
| 14 | Low Wattage Unmetered Service (45) | 8,520 | 8,946 | 426 | 5.00 |
| 15 | General Service (46) | 50,261,766 | 51,183,966 | 922,200 | 1.83 |
| 16 | Municipal Civil Defense Sirens (47) | 3,960 | 3,960 | - | - |
| 17 | Geothermal Heat Pump (49) Closed to New | 16,571 | 17,798 | 1,227 | 7.40 |
| 18 | Controlled Energy Storage (51) | 459,736 | 502,001 | 42,265 | 9.19 |
| 19 | Controlled Interruptible Service (52) | 2,634,418 | 2,784,452 | 150,034 | 5.70 |
| 20 | Residential \& Farm Time of Day (53) | 29,057 | 30,323 | 1,266 | 4.36 |
| 21 | General Service Time of Day (54) | 126,286 | 130,543 | 4,257 | 3.37 |
| 22 | Standby Service (60) | 66,840 | 74,160 | 7,320 | 10.95 |
| 23 | Full Interruptible Service (70) | 23,144,467 | 24,654,929 | 1,510,462 | 6.53 |
| 24 | Partial Interruptible Service (71) | 2,151,089 | 2,299,459 | 148,370 | 6.90 |
| 25 | Cycled Air Conditioning Service (80) | $(1,625,193)$ | $(1,625,193)$ | 1 | (0.00) |
| 26 | Wellspring | 23,370 | 23,370 | - | - |
| 27 | Total | 200,480,307 | 209,128,484 | 8,648,177 | 4.31 |


Comparison of Present and Proposed
Small General Service (41)

| Present |  | Proposed |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Service Char |  | \$14.00 | mo. |  | Fixed Charge |  |  | \$15.00 /mo. |  |  | /mo. |  |
| Energy Charge |  |  |  |  | Energy Charge |  |  |  |  |  |  |  |
| Summer |  | \$0.12690 | Wh |  | Summer $\quad \$ 0.13750$ |  |  |  | kWh |  |  |  |
| Other |  | \$0.11290 | Wh |  | Other |  |  | \$0.12350 kWh |  |  |  |  |
| RTA Charge $\quad \$ 0.00250 \mathrm{~kW}$ |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | Present vs. Proposed |  |  |  | Average Rate |  |  |  |
| kWh/ | Present |  | Proposed Billing |  | Summer |  |  |  | Present |  | Proposed |  |
| Mo. | Summer | Other | Summer | Other | Incr./(D |  |  | ecr.) | Summer | Other | Summer | Other |
| (kWh/mo) | (\$) | (\$) | (\$) | (\$) | (\$) | (\%) | (\$) | (\%) | ( $¢ / \mathrm{kWh}$ ) | ( $¢ / \mathrm{kWh}$ ) | ( $¢ / \mathrm{kWh}$ ) | ( $¢ / \mathrm{kWh}$ ) |
| 100 | 26.94 | 25.54 | 28.75 | 27.35 | 1.81 | 6.72 | 1.81 | 6.72 | 26.94 | 25.54 | 28.75 | 27.35 |
| 200 | 39.88 | 37.08 | 42.50 | 39.70 | 2.62 | 6.57 | 2.62 | 6.57 | 19.94 | 18.54 | 21.25 | 19.85 |
| 300 | 52.82 | 48.62 | 56.25 | 52.05 | 3.43 | 6.49 | 3.43 | 6.49 | 17.61 | 16.21 | 18.75 | 17.35 |
| 400 | 65.76 | 60.16 | 70.00 | 64.40 | 4.24 | 6.45 | 4.24 | 6.45 | 16.44 | 15.04 | 17.50 | 16.10 |
| 500 | 78.70 | 71.70 | 83.75 | 76.75 | 5.05 | 6.42 | 5.05 | 6.42 | 15.74 | 14.34 | 16.75 | 15.35 |
| 600 | 91.64 | 83.24 | 97.50 | 89.10 | 5.86 | 6.39 | 5.86 | 6.39 | 15.27 | 13.87 | 16.25 | 14.85 |
| 700 | 104.58 | 94.78 | 111.25 | 101.45 | 6.67 | 6.38 | 6.67 | 6.38 | 14.94 | 13.54 | 15.89 | 14.49 |
| 800 | 117.52 | 106.32 | 125.00 | 113.80 | 7.48 | 6.36 | 7.48 | 6.36 | 14.69 | 13.29 | 15.63 | 14.23 |
| 900 | 130.46 | 117.86 | 138.75 | 126.15 | 8.29 | 6.35 | 8.29 | 6.35 | 14.50 | 13.10 | 15.42 | 14.02 |
| 1,000 | 143.40 | 129.40 | 152.50 | 138.50 | 9.10 | 6.35 | 9.10 | 6.35 | 14.34 | 12.94 | 15.25 | 13.85 |
| 1,100 | 156.34 | 140.94 | 166.25 | 150.85 | 9.91 | 6.34 | 9.91 | 6.34 | 14.21 | 12.81 | 15.11 | 13.71 |
| 1,200 | 169.28 | 152.48 | 180.00 | 163.20 | 10.72 | 6.33 | 10.72 | 6.33 | 14.11 | 12.71 | 15.00 | 13.60 |
| 1,300 | 182.22 | 164.02 | 193.75 | 175.55 | 11.53 | 6.33 | 11.53 | 6.33 | 14.02 | 12.62 | 14.90 | 13.50 |
| 1,400 | 195.16 | 175.56 | 207.50 | 187.90 | 12.34 | 6.32 | 12.34 | 6.32 | 13.94 | 12.54 | 14.82 | 13.42 |
| 1,500 | 208.10 | 187.10 | 221.25 | 200.25 | 13.15 | 6.32 | 13.15 | 6.32 | 13.87 | 12.47 | 14.75 | 13.35 |
| 2,000 | 272.80 | 244.80 | 290.00 | 262.00 | 17.20 | 6.30 | 17.20 | 6.30 | 13.64 | 12.24 | 14.50 | 13.10 |
| 2,500 | 337.50 | 302.50 | 358.75 | 323.75 | 21.25 | 6.30 | 21.25 | 6.30 | 13.50 | 12.10 | 14.35 | 12.95 |
| 3,000 | 402.20 | 360.20 | 427.50 | 385.50 | 25.30 | 6.29 | 25.30 | 6.29 | 13.41 | 12.01 | 14.25 | 12.85 |
| 3,500 | 466.90 | 417.90 | 496.25 | 447.25 | 29.35 | 6.29 | 29.35 | 6.29 | 13.34 | 11.94 | 14.18 | 12.78 |
| 4,000 | 531.60 | 475.60 | 565.00 | 509.00 | 33.40 | 6.28 | 33.40 | 6.28 | 13.29 | 11.89 | 14.13 | 12.73 |

Comparison of Present and Proposed



| $\$ 34.00$ | $/ \mathrm{mo}$ |
| ---: | :--- |
| $\$ 12.26$ | $/ \mathrm{kW}$ |
| $\$ 9.16$ | $/ \mathrm{kW}$ |
| $\$ 0.07760$ | $/ \mathrm{kWh}$ |
| $\$ 0.06760$ | $/ \mathrm{kWh}$ |
| $\$ 0.05760$ | $/ \mathrm{kWh}$ |
| $\$ 0.00250$ | $/ \mathrm{kWh}$ |




が,

|  |  <br>  z <br>  <br>  |
| :---: | :---: |
|  |  |
|  |  <br>  <br>  <br>  |

$$
\begin{aligned}
\$ 110.00 & / \mathrm{mo} \\
& \\
\$ 24.85 & / \mathrm{kW} \\
\$ 18.95 & / \mathrm{kW} \\
\$ 13.00 & / \mathrm{kW} \\
\$ 4.75 & / \mathrm{kW} \\
\$ 0.04990 & / \mathrm{kWh} \\
(0.0005) & / \mathrm{kWh}
\end{aligned}
$$

\[

\]



# Statement of Operations <br> Proposed Rates <br> Test Year - 2018 Historical Adjusted 

| (a) | (b) | (c) | (d) | (e) |
| :---: | :---: | :---: | :---: | :---: |
| Line | Description | $2018$ | Adjustments ${ }^{1}$ | Pro Forma |
| 1 | Operating Revenue | (\$) | (\$) | (\$) |
| 2 | Rate Schedules | 202,630,477 | 6,498,007 | 209,128,484 |
| 3 | Other | 508,198 | 626,590 | 1,134,788 |
| 4 | Total Operating Revenue | 203,138,675 | 7,124,597 | 210,263,272 |
| 5 | Operating Expenses |  |  |  |
| 6 | Cost of Purchased Power | 149,330,034 | 1,319,432 | 150,649,466 |
| 7 | Transmission - O \& M | - |  |  |
| 8 | Distribution-Operation | 7,277,184 | $(383,045)$ | 6,894,139 |
| 9 | Distribution - Maintenance | 6,151,338 | 242,574 | 6,393,912 |
| 10 | Consumer Accounts | 5,312,955 | 380,854 | 5,693,809 |
| 11 | Consumer Service \& Information | 3,585,760 | $(180,461)$ | 3,405,299 |
| 12 | Sales | - | - | - |
| 13 | Administrative \& General | 11,907,838 | 71,783 | 11,979,621 |
| 14 | Depreciation \& Amortization | 10,281,975 | 404,073 | 10,686,048 |
| 15 | Taxes - Property | 3,372,283 | 178,507 | 3,550,790 |
| 16 | Taxes - Other | - | - | - |
| 17 | Other Interest Expense | 549,008 | - | 549,008 |
| 18 | Other Deductions | 6,239 | $(38,705)$ | $(32,466)$ |
|  | Total Operating Expenses (Before Long |  |  |  |
| 19 | Term Interest) | 197,774,614 | 1,995,012 | 199,769,626 |
|  | Net Operating Income (Before Long Term |  |  |  |
| 20 | Interest) | 5,364,061 | 5,129,585 | 10,493,646 |

[^16]$\qquad$

## Summary of Consumers, Energy Sales, and Revenue Under Proposed Rates

(Continued)

## I. Consumer and Sales Data for Pro Forma Test Year

| (a) | (b) | (c) | (d) | (e) | (f) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Line <br> No. | Description | Avg. No. Cons. | Energy Sales | Billing <br> Demand | Revenue ${ }^{2}$ |
|  |  |  | (kWh) | (kW) | (\$) |
| 1 | Residential \& Farm Service (31) | 100,202 | 838,089,528 | N.A. | 119,389,671 |
| 2 | Residential \& Farm Demand Control (32) | 15 | 378,000 | 917.2 | 44,529 |
| 3 | Electric Vehicle (33) | 88 | 300,960 | N.A. | 26,505 |
| 4 | Irrigation Service (36) Firm | 8 | 162,528 | 1,867.3 | 50,484 |
| 5 | Irrigation Service (36) Interruptible | 384 | 7,801,344 | 74,387.5 | 883,153 |
| 6 | Small General Service (41) | 4,431 | 42,537,600 | N.A. | 6,197,337 |
| 7 | Security Lighting Service (44) - Closed to New | 878 | 405,600 | N.A. | 120,526 |
| 8 | Street Lighting Service (44-2) | 2,269 | 2,405,280 | N.A. | 524,779 |
| 9 | Street Lighting System (44-1) | 470 | 521,040 | N.A. | 88,142 |
| 10 | Custom Residential Street Lighting (44-3) | 12,190 | 6,750,960 | N.A. | 1,623,968 |
| 11 | LED Security Lighting Service (44-4) | 356 | 64,896 | N.A. | 31,434 |
| 12 | LED Street Lighting Member Owned(44-5) | 11 | 8,712 | N.A. | 1,473 |
| 13 | LED Street Lighting (44-6) | 597 | 202,152 | N.A. | 57,768 |
| 14 | Low Wattage Unmetered Service (45) | 71 | - | N.A. | 8,946 |
| 15 | General Service (46) | 2,750 | 462,000,000 | 1,442,500.4 | 51,183,966 |
| 16 | Municipal Civil Defense Sirens (47) | 66 | - | N.A. | 3,960 |
| 17 | Geothermal Heat Pump (49) Closed to New | 3 | 172,800 | N.A. | 17,798 |
| 18 | Controlled Energy Storage (51) | 1,718 | 10,308,000 | N.A. | 502,001 |
| 19 | Controlled Interruptible Service (52) | 6,686 | 44,127,600 | N.A. | 2,784,452 |
| 20 | Residential \& Farm Time of Day (53) | 18 | 216,216 | N.A. | 30,323 |
| 21 | General Service Time of Day (54) | 6 | 1,059,984 | 6,802.3 | 130,543 |
| 22 | Standby Service (60) | 1 | - | - | 74,160 |
| 23 | Full Interruptible Service (70) | 234 | 379,080,000 | 858,880.1 | 24,654,929 |
| 24 | Partial Interruptible Service (71) | 28 | 27,720,000 | 111,609.5 | 2,299,459 |
| 25 | Cycled Air Conditioning Service (80) | 41,880 | 379,080,000 |  | $(1,625,193)$ |
| 26 | Wellspring |  |  |  | 23,370 |
| 27 | Total ${ }^{3}$ | 108,168 | 1,824,313,200 | 2,496,964.3 | 209,128,484 |

[^17]Exhibit __(DEA-5)
Page 3 of 10

## Summary of Consumers, Energy Sales, and

## Revenue Under Proposed Rates

(Continued)

## II. Estimate of Revenue Under Proposed Rates

| Rate Class | Billing <br> Determinants | Units | Rate | Revenue |
| :---: | :---: | :---: | :---: | :---: |
| Residential \& Farm Service (31) |  |  |  | (\$) |
| Fixed Charge | 100,202 | cons. | \$10.00 | 12,024,240 |
| Energy Charge |  |  |  |  |
| Summer | 257,025,312 | kWh | \$0.13790 | 35,443,791 |
| Other | 581,064,216 | kWh | \$0.12390 | 71,993,856 |
|  | 838,089,528 | kWh | Subtotal | 119,461,887 |
| RTA Charge ${ }^{1}$ | 838,089,528 | kWh |  |  |
| Controlled Water Heater Credit | 1,003 | units | (\$6.00) | $(72,216)$ |
|  |  |  | Total | 119,389,671 |
| Residential \& Farm Demand Control (32) |  |  |  |  |
| Fixed Charge | 15 | cons. | \$13.00 | 2,340 |
| Demand Charge |  |  |  |  |
| Summer | 182.2 | kW | \$15.50 | 2,824 |
| Other | 735.0 | kW | \$11.90 | 8,747 |
| Energy Charge | 378,000 | kWh | \$0.08100 | 30,618 |
|  |  |  | Subtotal | 44,529 |
| RTA Charge ${ }^{1}$ | 378,000 | kWh |  |  |
|  |  |  | Total | 44,529 |

## Electric Vehicle (33)

| Energy Charge |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Off Peak | $280,402 \mathrm{kWh}$ | $\$ 0.07560$ | 21,198 |  |
| On Peak | $8,554 \mathrm{kWh}$ | $\$ 0.44210$ | 3,782 |  |
| Other |  |  |  |  |
| Summer | $2,693 \mathrm{kWh}$ | $\$ 0.13790$ | 371 |  |
| Other | $9,311 \mathrm{kWh}$ | $\$ 0.12390$ | 1,154 |  |
|  |  | Subtotal | 26,505 |  |
| RTA Charge $^{1}$ | $300,960 \mathrm{kWh}$ |  | 26,505 |  |


| Irrigation Service (36) |  |  |  |  |
| :--- | ---: | :--- | ---: | ---: |
| Firm Service |  |  |  |  |
| Fixed Charge | 8 | cons. | $\$ 30.00$ | 2,880 |
| Demand Charge | 902.3 | kW | $\$ 26.60$ | 24,001 |
| Summer | 2.5 | kW | $\$ 21.20$ | 53 |
| Winter | 962.5 | kW | $\$ 15.67$ | 15,082 |
| Other | 162,528 | kWh | $\$ 0.05210$ | 8,468 |
| Energy Charge $^{\text {RTA Charge }{ }^{1}}$ | 162,528 | kWh |  | 5 |

[^18]
# Summary of Consumers, Energy Sales, and 

Revenue Under Proposed Rates
(Continued)

## II. Estimate of Revenue Under Proposed Rates

| Rate Class | Billing Determinants | Units | Rate | Revenue |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | (\$) |
| Irrigation Service (36) |  |  |  |  |
| Interruptible Service |  |  |  |  |
| Fixed Charge |  | cons. | \$30.00 | 138,240 |
| Demand Charge | 74,388 | kW | \$4.55 | 338,463 |
| Energy Charge | 7,801,344 | kWh | \$0.05210 | 406,450 |
| RTA Charge ${ }^{1}$ | 7,801,344 | kWh |  |  |
|  |  |  | Total | 883,153 |
| Small General Service (41) |  |  |  |  |
| Fixed Charge |  |  |  |  |
| Energy Charge | 4,431 | cons. | \$15.00 | 797,580 |
| Summer | 10,541,910 | kWh | \$0.13750 | 1,449,513 |
| Other | 31,995,690 |  | \$0.12350 | 3,951,468 |
|  | 42,537,600 | kWh | Subtotal | 6,198,561 |
| RTA Charge ${ }^{1}$ | 42,537,600 |  |  |  |
| Controlled Water Heater Credit | 17 units |  | Total (\$6.00) | (\$1,224) |
|  |  |  | 6,197,337 |

## Security Lighting Service (44) - Closed to New

## 175 W MV <br> 100 W HPS <br> 150 W HPS <br> 250 W HPS

RTA Charge ${ }^{1}$
$\begin{array}{rl} & \text { lights } \\ 819 & \text { lights } \\ 4 & \text { lights } \\ 8 & \text { lights } \\ 831 & \text { lights } \\ 405,600 & \mathrm{kWh}\end{array}$

|  |  |
| :--- | ---: |
| N/A |  |
| \$12.01 | 118,034 |
| \$14.26 | 684 |
| \$18.83 | 1,808 |
| Subtotal | 120,526 |
| Total |  |
|  |  |
|  |  |

## Street Lighting Service (44-2)

175 W MV
250 W MV
400 W MV
100 W HPS
150 W HPS
250 W HPS
400 W HPS

RTA Charge ${ }^{1}$

|  | lights | \$17.44 |  |
| :---: | :---: | :---: | :---: |
| 3 | lights | \$20.93 | 753 |
|  | lights | \$26.89 |  |
| 38 | lights | \$13.80 | 6,293 |
| 646 | lights | \$15.97 | 123,799 |
| 1,597 | lights | \$20.54 | 393,629 |
| 1 | lights | \$25.42 | 305 |
| 2,285 | lights | Subtotal | 524,779 |
| 2,405,280 kWh |  |  |  |
|  |  | Total | 524,779 |

[^19]Exhibit __(DEA-5)
Page 5 of 10

Summary of Consumers, Energy Sales, and Revenue Under Proposed Rates
(Continued)

## III. Estimate of Revenue Under Proposed Rates

| Rate Class | Billing <br> Determinants | Units | Rate | Revenue |
| :---: | :---: | :---: | :---: | :---: |
| Street Lighting System (44-1) |  |  |  | (\$) |
| 175 W MV |  | lights | \$13.25 |  |
| 250 W MV |  | lights | \$16.74 |  |
| 400 W MV |  | lights | \$22.71 |  |
| 100 W HPS |  | lights | \$9.61 |  |
| 150 W HPS | 101 | lights | \$11.78 | 14,277 |
| 200 W HPS | 101 | lights | \$14.18 | 17,186 |
| 250 W HPS | 272 | lights | \$16.35 | 53,366 |
| 400 W HPS | 13 | lights | \$21.24 | 3,313 |
|  | 487 | lights | Subtotal | 88,142 |
| RTA Charge ${ }^{1}$ | 521,040 | kWh |  |  |
|  |  |  | Total | 88,142 |

## Custom Residential Street Lighting (44-3)

175 W MV
50 W HPS
100 W HPS
150 W HPS
250 W HPS
RTA Charge ${ }^{1}$

## LED Security Lighting Service (44-4)

| LED, >4,500 Lumens | 338 lights |  | \$7.75 | 31,434 |
| :---: | :---: | :---: | :---: | :---: |
| RTA Charge ${ }^{1}$ | $64,896 \mathrm{kWh}$ |  |  |  |
|  |  | Total |  | 31,434 |


| lights |  |
| ---: | :--- |
| 81 | lights |
| 8,416 | lights |
| 3,732 | lights |
| 4 | lights |
| 12,233 | lights |

6,750,960 kWh
Total
\$14.03
$\$ 8.45 \quad 8,213$
\$10.39 1,049,307
$\$ 12.63 \quad 565,622$

| \$17.21 |
| :--- |
| $\begin{array}{r}1,623,968\end{array}$ |

Subtotal
Total $\quad 1,623,968$

RTA Charge ${ }^{1}$

[^20]Exhibit __(DEA-5)
Page 6 of 10

## Summary of Consumers, Energy Sales, and Revenue Under Proposed Rates <br> (Continued)

## III. Estimate of Revenue Under Proposed Rates

| Rate Class | Billing <br> Determinants | Units | Rate | Revenue |
| :---: | :---: | :---: | :---: | :---: |
| LED Street Lighting Member Owned(44-5) |  |  |  | (\$) |
| A (40-80 watts) |  | lights | \$5.50 |  |
| B (81-150 watts) |  | lights | \$7.75 |  |
| C (151-250 watts) | 11 | lights | \$11.16 | 1,473 |
| D (251-350 watts) |  | lights | \$15.04 |  |
| E (351-450 watts) |  | lights | \$19.07 |  |
|  |  |  |  | 1,473 |
| RTA Charge ${ }^{1}$ | 8,712 | kWh |  |  |
|  |  |  |  | 1,473 |
| LED Street Lighting (44-6) |  |  |  |  |
| Standard |  |  |  |  |
| >5,200 L, Coach (Post) |  | lights | \$9.30 | 13,504 |
| >5,200 L, Acorn (Post) | 48 | lights | \$10.85 | 6,250 |
| >7,000 L, Cobra (Mast) |  | lights | \$8.60 | 9,391 |
| >11,500 L, Shoebox | 151 | lights | \$10.70 | 19,388 |
| Basic |  |  |  |  |
| >5,200 L, Coach (Post) | 41 | lights | \$6.36 | 3,129 |
| >5,200 L, Acorn (Post) |  | lights | \$6.12 |  |
| >7,000 L, Cobra (Mast) | 53 | lights | \$6.98 | 4,439 |
| >11,500 L, Shoebox |  | lights | \$8.68 | 1,667 |
|  |  |  |  | 57,768 |
| RTA Charge ${ }^{1}$ | 202,152 | kWh |  |  |
|  |  |  |  | 57,768 |
| Low Wattage Unmetered Service (45) |  |  |  |  |
| Fixed Charge | 71 | cons. | \$10.50 | 8,946 |

[^21]
# Summary of Consumers, Energy Sales, and Revenue Under Proposed Rates <br> (Continued) 

## III. Estimate of Revenue Under Proposed Rates

| Rate Class | Billing <br> Determinants | Units | Rate | Revenue |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | (\$) |
| General Service (46) |  |  |  |  |
| Fixed Charge | 2,750 | cons. | \$34.00 | 1,122,000 |
| Demand Charge | 1,442,500.4 | kW |  |  |
| Summer | 413,627.7 |  |  |  |
| Summer Load Adjustment | $(11,771.4)$ |  |  |  |
| Net Summer | 401,856.3 | kW | \$13.70 | 5,666,699 |
| Other | 1,028,872.7 |  |  |  |
| Other Load Adjustment | $(21,406.1)$ |  |  |  |
| Net Other | 1,007,466.6 | kW | \$10.60 | 10,906,051 |
| Energy Charge |  |  |  |  |
| First $200 \mathrm{kWh} / \mathrm{kW}$ | 264,418,387 | kWh | \$0.07760 | 20,518,867 |
| Next $200 \mathrm{kWh} / \mathrm{kW}$ | 158,964,776 | kWh | \$0.06760 | 10,746,019 |
| Over $400 \mathrm{kWh} / \mathrm{kW}$ | 38,616,837 | kWh | \$0.05760 | 2,224,330 |
|  |  |  | Subtotal | 51,183,966 |
| Discounts |  |  |  |  |
| Primary Voltage |  |  | (\$0.15) |  |
| Primary Metering |  |  | (2.00\%) |  |
| RTA Charge 1 | 462,000,000 |  |  |  |
|  |  |  | Total | 51,183,966 |
| Municipal Civil Defense Sirens (47) |  | kWh |  |  |
| Fixed Charge | 66 | cons. | \$5.00 | 3,960 |
| Geothermal Heat Pump (49) |  |  |  |  |
| Energy Charge | 172,800 | kWh | \$0.10300 | 17,798 |
| RTA Charge ${ }^{1}$ | 172,800 | kWh |  |  |
|  |  |  | Total | $\underline{17,798}$ |
| Controlled Energy Storage (51) |  |  |  |  |
| Energy Net Charge - Rate 31 |  |  |  |  |
| Summer | 2,701,434 | kWh | \$0.04870 | 131,560 |
| Other | 7,509,011 | kWh | \$0.04870 | 365,689 |
| Energy Charge - Rate 41 |  |  |  |  |
| Summer | 6,874 | kWh | \$0.04870 | 335 |
| Other | 39,232 | kWh | \$0.04870 | 1,911 |
| Energy Charge - Rate 46 | 51,449 | kWh | \$0.04870 | 2,506 |
|  | 10,308,000 |  | Subtotal | 502,001 |
| RTA Charge ${ }^{\text {1 }}$ |  | kWh | NA |  |
|  |  |  | Total | 502,001 |

[^22]
# Summary of Consumers, Energy Sales, and Revenue Under Proposed Rates <br> (Continued) 

## III. Estimate of Revenue Under Proposed Rates

|  | Billing <br> Rate Class | Determinants | Units | Rate |
| :--- | :---: | :--- | :--- | :--- |$\quad$ Revenue


| Controlled Interruptible Service (52) |  |  |  | (\$) |
| :---: | :---: | :---: | :---: | :---: |
| Energy Net Charge - Rate 31 |  |  |  |  |
| Summer | 10,488,495 | kWh | \$ 0.0631 | 661,824 |
| Other | 32,538,130 | kWh | 0.0631 | 2,053,156 |
| Energy Charge - Rate 41 |  | kWh |  |  |
| Summer | 64,095 | kWh | \$0.06310 | 4,044 |
| Other | 386,791 | kWh | \$0.06310 | 24,407 |
| Energy Charge - Rate 46 | 650,089 |  | \$0.06310 | 41,021 |
| RTA Charge ${ }^{1}$ | 44,127,600 |  | NA |  |
|  |  |  | Total | 2,784,452 |
| Residential \& Farm Time of Day (53) |  |  |  |  |
| Fixed Charge | 18 | cons. | \$13.00 | 2,808 |
| Energy Charge |  |  |  |  |
| Peak Period |  |  |  |  |
| Summer | 49,267 | kWh | \$0.21263 | 10,476 |
| Other | 12,117 | kWh | \$0.19863 | 2,407 |
| Off-Peak Period | 154,832 | kWh | \$0.09450 | 14,632 |
|  | 216,216 | kWh | Subtotal | 30,323 |
| RTA Charge ${ }^{1}$ | 216,216 | kWh |  |  |
|  |  |  | Total | 30,323 |
| General Service Time of Day (54) |  |  |  |  |
| Fixed Charge | 6 | cons. | \$36.00 | 2,592 |
| Demand Charge |  |  |  |  |
| Peak Period |  |  |  |  |
| Summer | 960.1 | kW | \$26.14 | 25,097 |
| Winter | 436.9 | kW | \$19.91 | 8,699 |
| Other | 1,253.2 | kW | \$13.67 | 17,131 |
|  | 2,650.2 | kW |  |  |
| Maximum | 4,152.1 | kW | \$5.25 | 21,799 |
| Energy Charge | 1,059,984 | kWh | \$0.05210 | 55,225 |
|  |  |  | Subtotal | 130,543 |
| Discounts |  |  |  |  |
| Primary Voltage |  | kW | (\$0.15) |  |
| Primary Metering |  |  | (2.00\%) |  |
| RTA Charge ${ }^{1}$ | 1,059,984 | kWh |  |  |
|  |  |  | Total | 130,543 |

[^23]
# Summary of Consumers, Energy Sales, and <br> Revenue Under Proposed Rates <br> (Continued) 

## III. Estimate of Revenue Under Proposed Rates

Billing

| Rate Class | Determinants | Units | Rate | Revenue |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | (\$) |
| Standby Service (60) |  |  |  |  |
| Generation Reservation Fee |  |  |  |  |
| Summer | 1,000 | kW | \$3.21 | 9,630 |
| Winter | 1,000 | kW | \$2.47 | 7,410 |
| Other | 1,000 | kW | \$1.74 | 10,440 |
| Distribution Reservation Fee |  |  |  |  |
| Primary | 1,000 | kW | \$3.89 | 46,680 |
| Secondary |  | kW | \$4.02 |  |
|  |  | Total |  | $\underline{74,160}$ |
| Full Interruptible Service (70) |  |  |  |  |
| Fixed Charge | 234 | cons. | \$130.00 | 365,040 |
| Communication Fee | 51 |  | \$8.70 | 5,324 |
| Coinc. Demand Charge |  |  |  |  |
| Summer | 1,042.8 | kW | \$26.14 | 27,259 |
| Winter |  | kW | \$19.91 |  |
| Other |  | kW | \$13.67 |  |
| Total Coinc Demand | 1,042.8 | kW |  |  |
| Non-Coinc. Demand | 858,880.1 | kW | \$5.25 | 4,509,121 |
| Failure to Control | 1,042.8 | kW | \$5.00 | 5,214 |
| Energy Charge | 379,080,000 | kWh | \$0.05210 | 19,750,068 |
| Discounts |  |  | Subtotal | 24,662,026 |
| Primary Voltage | 47,311.1 | kW | (\$0.15) | $(\$ 7,097)$ |
| Primary Metering |  |  | (2.0\%) |  |
| RTA Charge ${ }^{1}$ | 379,080,000 | kWh | Total |  |
|  |  |  |  | 24,654,929 |

## Partial Interruptible Service (71)

| Fixed Charge | 28 | cons. | \$130.00 | 43,680 |
| :---: | :---: | :---: | :---: | :---: |
| Communication Fee | 17 |  | \$8.70 | 1,775 |
| Coinc. Demand Charge |  |  |  |  |
| Summer | 3,212.2 | kW | \$26.14 | 83,967 |
| Winter | 2,980.2 | kW | \$19.91 | 59,336 |
| Other | 5,964.3 | kW | \$13.67 | 81,532 |
| Total Coinc Demand | 12,156.7 | kW |  |  |
| Non-Coinc. Demand | 111,609.5 | kW | \$5.25 | 585,950 |
| Excess Demand |  | kW | \$5.00 |  |
| Energy Charge | 27,720,000 | kWh | \$0.05210 | 1,444,212 |
| Discounts |  | Subtotal |  | 2,300,452 |
| Primary Voltage | 6,623 | kW | \$0.15 | (993) |
| Primary Metering |  |  | 2.0\% | - |
| RTA Charge ${ }^{1}$ | 27,720,000 | kWh |  |  |
|  |  | Total |  | 2,299,459 |

[^24]Exhibit __(DEA-5)
Page 10 of 10

## Summary of Consumers, Energy Sales, and Revenue Under Proposed Rates

(Continued)

## III. Estimate of Revenue Under Proposed Rates

| Rate Class | Billing Determinants | Units | Rate | Revenue |
| :---: | :---: | :---: | :---: | :---: |
| Cycled Air Conditioning Service (80) |  |  |  |  |
| Option 1 |  | kWh |  |  |
| Option 2 |  |  |  |  |
| Residential Rate 8131 | 4,858,654 | kWh | (\$0.03200) | $(155,477)$ |
| Rate 8141 | 216,346 | kWh | (\$0.03200) | $(6,923)$ |
| Rate 8146 |  | kWh | (\$0.03200) |  |
|  | 5,075,000 | kWh |  | $(162,400)$ |
| Option 3 |  |  |  |  |
| Residential Rate 8231 | 35,158 | cons. | (\$13.00) | $(1,371,162)$ |
| Commercial |  | cons. | (\$13.00) |  |
|  |  |  |  | $(1,371,162)$ |
| Option 4 |  |  |  |  |
| Rate 8441 | 4,699 | tons | (\$6.50) | $(91,631)$ |
| Rate 8446 |  | tons | (\$6.50) |  |
|  | 4,699 |  |  | (91,631) |
|  |  |  |  | $(1,625,193)$ |
|  |  | Total |  |  |
| Wellspring |  |  |  | 23,370 |
| Grand Total | 1,824,313,200 |  |  | 209,128,484 |

[^25]
Summary of Cost of Service Analysis Load Management Rates
I. Summary
\[

$$
\begin{aligned}
& \begin{array}{l}
\text { Schedule } 49 \\
\text { Geothermal Heat Pump } \\
\text { Schedule } 51 \text { (Storage) } \\
\text { ETS-Water Heating ( } 16 \mathrm{hr} \text { ) } \\
\text { ETS-Storage }{ }^{1}
\end{array} \\
& \frac{\text { Schedule } 52 \text { (Interruptible) }}{\text { Peak Shave - Water }(8 \mathrm{hr})} \\
& \text { Dual Fuel - Space Heating }
\end{aligned}
$$
\]

Col. $\quad \underline{\text { Notes }}$
(a) Load management rates per GRE's present wholesale rate schedules.
(b) Based on GRE wholesale rate schedules for Year 2019.



©
(1) A :
(b)
GRE
$\underline{\text { Rate }}\left(\begin{array}{l}\text { RWh })\end{array}\right.$

8.13

2.00
2.25

3.40
3.65
(a) S

## Rate Description <br> Rate Description

Notes
(b) Based on GRE wholesale rate schedules for Year 2019.
(c) GRE General Service Energy Rate x $2.50 \%$ which repre
(c) GRE General Service Energy Rate x $2.50 \%$ which represents the average losses for the system. (d) See page 2.
(f) See page 3 for calculation of margin.
(g) Sum Col. (b) to Col. (f).
(i) Equals Total Cost times Weighted Sales. Sum equals retail rate of each schedule.

1 This rate may also apply to loads qualifying under the ETS Pool Heating program and/or Electric Vehicles program.
2 Geothermal equals GRE average energy rate plus average system capacity, transmission, and ancillary services costs on a per kWh basis.

## Cost of Service Analysis

## Load Management Rates

(Continued)

## II. Cost of Service Analysis

## A. Incremental Cost of Service <br> 1. Annual Cost of Control Unit and Meter <br> a. Investment <br> \$53 <br> 1. Meter <br> $\begin{array}{lr}\text { 2. Control Unit } & \$ 134 \\ \quad \text { Subtotal }\end{array}$

b. Annual Cost Factor

1. Capital Recovery Factor ${ }^{1}$
$\frac{0.0420 \mathrm{x}(1.0420)^{\wedge} 15}{1.0420^{\wedge} 15-1} \quad=\quad 9.1 \%$
2. Operation \& Maintenance

| $\frac{\mathrm{O} \& \mathrm{M} \text { Expense }}{\text { Dist. Plant }^{2}}$ |
| :---: | :--- | | $\frac{\$ 13,288,051}{\$ 267,355,082}$ |
| :--- |
| Total |$=$| $14.1 \%$ |
| :--- |

c. Annual Cost $\quad \$ 187.00 \mathrm{x} \quad 14.1 \%=\$ 26.35 /$ year
d. Per kWh Cost ${ }^{3} \quad 0.42 \not \subset / \mathrm{kWh}$
2. Purchased Power
a. At present wholesale energy rate adjusted for load management programs. See Page 1.
b. Average system losses for test year $=2.50 \%$

[^26]
## Cost of Service Analysis

## Load Management Rates

(Continued)

## II. Cost of Service Analysis (Continued)

A. Incremental Cost of Service (Continued)
3. Margin Requirement (Equity Portion Only) ${ }^{1}$
$\frac{\text { Required Net Operating Income - Interest Expense }}{\text { Total Expenses + Required Net Operating Income }}$

\[\)| $\$ 10,538,868-\$ 3,766,478$ |
| :--- |
| $\$ 199,769,626+\$ 10,538,868$ |\(=3.2202 \%

\]

B. Allocated Cost of Service (Full Share)

1. Distribution System Capacity
a. Depreciation (Acct. 403)
$\$ 10,686,048$
$3,766,478$

$13,288,051$$\quad$| $\$ 27,740,577$ |
| :---: |
| $1,824,313,200 \quad \mathrm{kWh}$ |
| 1.52 |
| $\mathrm{x} / \mathrm{kWh}$ |
| $50.00 \%$ |

2. Administration and General

| Accounts 920 to 930 |
| :--- | :--- |
| Total Energy Sales |$\quad=\quad \frac{\$ 11,979,621}{1,824,313,200} \mathrm{kWh} \quad=\quad 0.66 \phi / \mathrm{kWh}$

[^27]
## Cost of Service Analysis

## Load Management Rates

(Continued)

## B. Allocated Cost of Service (Full Share) (Continued)

3. Consumer Accounting

## Accounts 901 to $905 \times$ Weight Factor ${ }^{1}$

Total No. of Cons. x Off-Peak Usage

| $\$ 5,693,809$ | x | 0.50 |
| ---: | :--- | :---: |
| 108,165 | x | $6,300 \mathrm{~kW} \mathrm{~h}^{2}$ |

$0.42 \phi / \mathrm{kWh}$
4. Taxes

Account 408
Total Energy Sales
$\frac{\$ 3,550,790}{1,824,313,200} \mathrm{kWh}$
$0.19 ~ ¢ / \mathrm{kWh}$
5. Consumer Service \& Sales ${ }^{3}$
$0.10 ~ \& / k W h$
6. Total Allocated Costs (Before Margin Requirement)
$2.13 \not \subset / \mathrm{kWh}$

[^28]Docket No. E-111/GR-19-478

Cost of Service Sum

| Line <br> No. | Description | Total | Resid. <br> \& Farm |  |  |  |  |  |  | Small <br> General <br> Service | Irrigation | General <br> Service | C\&I <br> Interruptible | Lighting |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: |


| $\begin{aligned} & \text { Line } \\ & \text { No. } \end{aligned}$ | Cost of Service Summary Class Allocation Summary |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Category | Total | Resid. \& Farm | Small <br> General <br> Service | Irrigation | General Service | C\&I <br> Interruptible | Lighting |
| 1 | Power Supply |  |  |  |  |  |  |  |
| 2 | Direct and Revenue Related |  |  |  |  |  |  |  |
| 3 | Wholesale Cost |  |  |  |  |  |  |  |
| 4 | Allocated Cost |  |  |  |  |  |  |  |
| 5 | Subtotal |  |  |  |  |  |  |  |
| 6 | Capacity Related |  |  |  |  |  |  |  |
| 7 | Wholesale Cost | 33,514,067 | 20,781,131 | 1,032,371 | 24,859 | 11,370,890 | 149,849 | 154,967 |
| 8 | Allocated Cost | 328,991 | 198,146 | 10,188 | 183 | 105,776 | 12,878 | 1,819 |
| 9 | Subtotal | 33,843,058 | 20,979,277 | 1,042,559 | 25,042 | 11,476,666 | 162,728 | 156,786 |
| 10 | Energy Related |  |  |  |  |  |  |  |
| 11 | Wholesale Cost | 92,910,647 | 44,057,307 | 2,234,564 | 418,354 | 24,325,231 | 21,369,810 | 505,382 |
| 12 | Allocated Cost | 892,910 | 420,872 | 21,278 | 4,042 | 235,006 | 206,454 | 5,257 |
| 13 | Subtotal | 93,803,557 | 44,478,179 | 2,255,842 | 422,396 | 24,560,237 | 21,576,264 | 510,639 |
| 14 | Subtotal Power Supply | 127,646,615 | 65,457,456 | 3,298,400 | 447,438 | 36,036,904 | 21,738,992 | 667,425 |
| 15 | Transmission |  |  |  |  |  |  |  |
| 16 | Direct |  |  |  |  |  |  |  |
| 17 | Capacity | 22,649,623 | 13,696,762 | 706,106 | 12,511 | 7,229,676 | 880,227 | 124,341 |
| 18 | Energy |  |  |  |  |  |  |  |
| 19 | Allocated Cost |  |  |  |  |  |  |  |
| 20 | Subtotal Transmission | 22,649,623 | 13,696,762 | 706,106 | 12,511 | 7,229,676 | 880,227 | 124,341 |
| 21 | Distribution |  |  |  |  |  |  |  |
| 22 | Direct | 1,446,444 |  |  |  |  |  | 1,446,444 |
| 23 | Consumer | 35,017,518 | 30,207,652 | 1,736,178 | 269,591 | 2,007,933 | 695,080 | 101,085 |
| 24 | Capacity | 20,310,243 | 10,113,625 | 501,599 | 162,967 | 5,261,940 | 4,140,938 | 129,175 |
| 25 | Energy |  |  |  |  |  |  |  |
| 26 | Subtotal Distribution | 56,774,205 | 40,321,277 | 2,237,776 | 432,558 | 7,269,873 | 4,836,017 | 1,676,703 |
| 27 |  |  |  |  |  |  |  |  |
| 28 | Total | 207,070,443 | 119,475,495 | 6,242,283 | 892,507 | 50,536,453 | 27,455,236 | 2,468,469 |

Exhibit (DEA-3)
Page 4 of 42
Classification of Plant in Service (Net)

| $\begin{gathered} \text { Line } \\ \text { No. } \\ \hline \end{gathered}$ | Acct. <br> No. | Description | Class. <br> Factor | Total | Powe Energy | Supply Capacity | Tran <br> Energy | ission Capacity | Dist. Su Capacity | tation Cons. | Prima Capacity | y Line Cons. | Line Capacity | Transf. Cons. | Second. <br> \& Serv. <br> Cons. | Meter Cons. | Acct. \& Serv. Cons. | Revenue |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Net Intangible Plant |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | 301 | Organization | PLNT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | 302 | Franchises and consents | PLNT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | 303 | Miscellaneous intangible plant | PLNT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | 301-303 | Subtotal |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net Production Plant |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | 310-346 | Production Plant | PROD1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 Net Transmission Plant |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 | 350-359 | Transmission Plant | TRAN1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 Net Distribution Plant |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14 | 360 | Land | LAND | 4,163,712 |  |  |  |  | 4,163,712 |  |  |  |  |  |  |  |  |  |
| 15 | 361 | Structures | SUB |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16 | 362 | Station | SUB | 18,856,408 |  |  |  |  | 18,856,408 |  |  |  |  |  |  |  |  |  |
| 17 | 363 | Battery | SUB |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 18 | 364 | Poles, towers | POLES | 10,796,888 |  |  |  |  |  |  | 4,750,137 | 6,046,751 |  |  |  |  |  |  |
| 19 | 365 | OH Cond | PRI-OH | 13,738,437 |  |  |  |  |  |  | 2,414,494 | 11,323,943 |  |  |  |  |  |  |
| 20 | 366 | UG Conduit | PRI-UG |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 21 | 367 | UG Cond | PRI-UG | 84,374,330 |  |  |  |  |  |  | 63,512,819 | 20,861,511 |  |  |  |  |  |  |
| 22 | 368 | Transf | TRF | 17,481,215 |  |  |  |  |  |  |  |  | 3,443,783 | 14,037,432 |  |  |  |  |
| 23 | 369 | Services | SERV | 1,190,394 |  |  |  |  |  |  |  |  |  |  | 1,190,394 |  |  |  |
| 24 | 370 | Meters | MTR | 2,686,182 |  |  |  |  |  |  |  |  |  |  |  | 2,686,182 |  |  |
| 25 | 371 | Cons Premise | ICON | 123,745 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 26 | 372 | Leased Prop | LICON |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 27 | 373 | St. Light | STL | 4,543,471 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 28 | 360-373 | Subtotal |  | 157,954,781 |  |  |  |  | 23,020,120 |  | 70,677,450 | 38,232,205 | 3,443,783 | 14,037,432 | 1,190,394 | 2,686,182 |  |  |
| 29 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 30 Net General Plant |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 31 | 389 | Land \& Land Rights | PLNT | 102,278 |  |  |  |  | 14,906 |  | 45,765 | 24,756 | 2,230 | 9,089 | 771 | 1,739 |  |  |
| 32 | 390 | Structures and Improve. | PLNT | 4,601,923 |  |  |  |  | 670,678 |  | 2,059,148 | 1,113,874 | 100,333 | 408,973 | 34,681 | 78,260 |  |  |
| 33 | 391 | Office Furniture \& Equip. | PLNT | 5,056,678 |  |  |  |  | 736,954 |  | 2,262,629 | 1,223,945 | 110,247 | 449,387 | 38,109 | 85,994 |  |  |
| 34 | 392 | Transportation \& Equipment | PLNT | 918,591 |  |  |  |  | 133,874 |  | 411,027 | 222,341 | 20,027 | 81,635 | 6,923 | 15,622 |  |  |
| 35 | 393 | Stores Equipment | PLNT | 18,982 |  |  |  |  | 2,766 |  | 8,494 | 4,595 | 414 | 1,687 | 143 | 323 |  |  |
| 36 | 394 | Tool, Shop \& Garage Equip. | PLNT | 156,304 |  |  |  |  | 22,780 |  | 69,939 | 37,833 | 3,408 | 13,891 | 1,178 | 2,658 |  |  |
| 37 | 395 | Laboratory Equipment | PLNT | 209,246 |  |  |  |  | 30,495 |  | 93,628 | 50,647 | 4,562 | 18,596 | 1,577 | 3,558 |  |  |
| 38 | 396 | Power Operated Equipment | PLNT | 3,930,565 |  |  |  |  | 572,835 |  | 1,758,746 | 951,375 | 85,695 | 349,309 | 29,622 | 66,843 |  |  |
| 39 | 397 | Communication Equipment | PLNT | 345,799 |  |  |  |  | 50,396 |  | 154,729 | 83,699 | 7,539 | 30,731 | 2,606 | 5,881 |  |  |
| 40 | 398 | Miscellaneous Equipment | PLNT | 84,672 |  |  |  |  | 12,340 |  | 37,887 | 20,495 | 1,846 | 7,525 | 638 | 1,440 |  |  |
| 41 | 399 | Other tangible property | PLNT | 633,349 |  |  |  |  | 92,304 |  | 283,395 | 153,299 | 13,808 | 56,286 | 4,773 | 10,771 |  |  |
| 42 | 389-399 | Subtotal |  | 16,058,389 |  |  |  |  | 2,340,328 |  | 7,185,385 | 3,886,857 | 350,110 | 1,427,108 | 121,021 | 273,089 |  |  |
| 43 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 44 | To | Net Plant in Service |  | 174,013,170 |  |  |  |  | 25,360,448 |  | 77,862,835 | 42,119,061 | 3,793,893 | 15,464,540 | 1,311,415 | 2,959,271 |  |  |

Classification of Plant in Service (Net)

| $\begin{aligned} & \text { Line } \\ & \text { No. } \end{aligned}$ | Acct. No. | Description | Class. <br> Factor | Total | Resid. \& Farm Direct | Small <br> General Service <br> Direct | Irrigation Direct | General Service Direct | C\&I Interruptible Direct | Lighting Direct |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Net Intangible Plant |  |  |  |  |  |  |  |  |  |  |
| 2 | 301 | Organization | PLNT |  |  |  |  |  |  |  |
| 3 | 302 | Franchises and consents | PLNT |  |  |  |  |  |  |  |
| 4 | 303 | Miscellaneous intangible plant | PLNT |  |  |  |  |  |  |  |
| 5 | 301-303 | Subtotal |  |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |  |  |  |
| Net Production Plant |  |  |  |  |  |  |  |  |  |  |
| 8 | 310-346 | Production Plant | PROD1 |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |  |  |  |  |
| 10 Net Transmission Plant |  |  |  |  |  |  |  |  |  |  |
| 11 | 350-359 | Transmission Plant | TRAN1 |  |  |  |  |  |  |  |
| 12 |  |  |  |  |  |  |  |  |  |  |
| 13 Net Distribution Plant |  |  |  |  |  |  |  |  |  |  |
| 14 | 360 | Land | LAND | 4,163,712 |  |  |  |  |  |  |
| 15 | 361 | Structures | SUB |  |  |  |  |  |  |  |
| 16 | 362 | Station | SUB | 18,856,408 |  |  |  |  |  |  |
| 17 | 363 | Battery | SUB |  |  |  |  |  |  |  |
| 18 | 364 | Poles, towers | POLES | 10,796,888 |  |  |  |  |  |  |
| 19 | 365 | OH Cond | PRI-OH | 13,738,437 |  |  |  |  |  |  |
| 20 | 366 | UG Conduit | PRI-UG |  |  |  |  |  |  |  |
| 21 | 367 | UG Cond | PRI-UG | 84,374,330 |  |  |  |  |  |  |
| 22 | 368 | Transf | TRF | 17,481,215 |  |  |  |  |  |  |
| 23 | 369 | Services | SERV | 1,190,394 |  |  |  |  |  |  |
| 24 | 370 | Meters | MTR | 2,686,182 |  |  |  |  |  |  |
| 25 | 371 | Cons Premise | ICON | 123,745 |  |  |  |  |  | 123,745 |
| 26 | 372 | Leased Prop | LICON |  |  |  |  |  |  |  |
| 27 | 373 | St. Light | STL | 4,543,471 |  |  |  |  |  | 4,543,471 |
| 28 | 360-373 | Subtotal |  | 157,954,781 |  |  |  |  |  | 4,667,216 |
| 29 |  |  |  |  |  |  |  |  |  |  |
| $30 \quad$ Net General Plant |  |  |  |  |  |  |  |  |  |  |
| 31 | 389 | Land \& Land Rights | PLNT | 102,278 |  |  |  |  |  | 3,022 |
| 32 | 390 | Structures and Improve. | PLNT | 4,601,923 |  |  |  |  |  | 135,977 |
| 33 | 391 | Office Furniture \& Equip. | PLNT | 5,056,678 |  |  |  |  |  | 149,414 |
| 34 | 392 | Transportation \& Equipment | PLNT | 918,591 |  |  |  |  |  | 27,142 |
| 35 | 393 | Stores Equipment | PLNT | 18,982 |  |  |  |  |  | 561 |
| 36 | 394 | Tool, Shop \& Garage Equip. | PLNT | 156,304 |  |  |  |  |  | 4,618 |
| 37 | 395 | Laboratory Equipment | PLNT | 209,246 |  |  |  |  |  | 6,183 |
| 38 | 396 | Power Operated Equipment | PLNT | 3,930,565 |  |  |  |  |  | 116,140 |
| 39 | 397 | Communication Equipment | PLNT | 345,799 |  |  |  |  |  | 10,218 |
| 40 | 398 | Miscellaneous Equipment | PLNT | 84,672 |  |  |  |  |  | 2,502 |
| 41 | 399 | Other tangible property | PLNT | 633,349 |  |  |  |  |  | 18,714 |
| 42 | 389-399 | Subtotal |  | 16,058,389 |  |  |  |  |  | 474,490 |
| 43 ( |  |  |  |  |  |  |  |  |  |  |
| 44 | Tot | Net Plant in Service |  | 174,013,170 |  |  |  |  |  | 5,141,706 |

Adjusted Statement of Operations and Revenue Requirements
$\begin{array}{lccc}\text { (a) (b) (d) (e) } \\ \text { Line } & \text { (c) }\end{array}$

| Line <br> No. | Description | Total System ${ }^{1}$ | Adjustment ${ }^{2}$ | Adjusted System |
| :---: | :---: | :---: | :---: | :---: |
|  | Operating Revenue | (\$) | (\$) | (\$) |
| 1 | Rate Schedules | 200,474,161 | $(3,238,029)$ | 197,236,132 |
| 2 | Other | 1,100,791 |  | 1,100,791 |
| 3 | Total Operating Revenue | 201,574,952 | $(3,238,029)$ | 198,336,923 |
| 4 | Operating Expenses |  |  |  |
| 5 | Cost of Purchased Power |  |  |  |
| 6 | Substation | - | - | - |
| 7 | Transmission | 20,496,973 |  | 20,496,973 |
| 8 | Ancillary | 2,152,650 |  | 2,152,650 |
| 9 | Demand |  |  | - |
| 10 | Summer | 17,112,830 |  | 17,112,830 |
| 11 | Winter | 8,390,047 |  | 8,390,047 |
| 12 | Other | 8,011,190 |  | 8,011,190 |
|  | Energy |  |  | - |
| 13 | Wholesale Solar | 272,629 |  | 272,629 |
| 14 | Energy On-Peak | 36,623,232 | $(424,870)$ | 36,198,362 |
| 15 | Energy Off-Peak | 57,584,525 | $(1,144,869)$ | 56,439,656 |
| 16 | Standby Reservation fee | 27,060 | $(27,060)$ | - |
| 16 | Wellspring | 23,370 | $(23,370)$ | - |
|  | Member Specific Rate | $(45,040)$ | 45,040 | - |
| 16 | Transmission - O \& M |  | - | - |
| 18 | Distribution - Operation | 6,894,139 | $(277,154)$ | 6,616,985 |
| 19 | Distribution - Maintenance | 6,393,912 | $(277,154)$ | 6,116,758 |
| 20 | Consumer Accounts | 5,693,809 | - | 5,693,809 |
| 21 | Consumer Service \& Information | 3,405,299 | - | 3,405,299 |
| 22 | Sales | - | - | - |
| 23 | Administrative \& General | 11,979,621 | $(277,154)$ | 11,702,467 |
| 24 | Depreciation \& Amortization | 10,686,048 | $(277,154)$ | 10,408,894 |
| 25 | Taxes - Property | 3,550,790 | - | 3,550,790 |
| 26 | Taxes - Other | - | - | - |
| 27 | Other Interest Expense | 549,008 | - | 549,008 |
| 28 | Other Deductions | $(32,466)$ | - | $(32,466)$ |
| 29 | Total Operating Expenses (Before Long Term Interest) | 199,769,626 | $(2,683,745)$ | 197,085,881 |
| 30 | Long Term Interest ${ }^{3}$ | 3,766,478 | $(277,154)$ | 3,489,324 |
| 31 | Required Margin ${ }^{4}$ | 6,772,390 | $(277,152)$ | 6,495,238 |
| 32 | Revenue Requirements | 210,308,494 | (3,238,051) | 207,070,443 |

1 See Exhibit__(DEA-1), page 1.
${ }^{2}$ See page 7 for calculation of adjustment to exclude Municipal Civil Defense Sirens, Controlled
Off-Peak Energy Storage, Interruptible Heating Service, and Low Wattage Unmetered Service.
3 See Workpaper 1.
4 Required Net Operating Income less Long Term Interest. See calculation below:
$\$ 10,538,868-\$ 3,766,478=\$ 6,772,390$

## Adjustment to Eliminate Revenue and Expenses of Classes not included in the Base Cost of Service Study

1. Revenue ${ }^{1}$
a. Electric Vehicle (33)
b. Municipal Civil Defense Sirens (47)
c. Controlled Energy Storage (51)
d. Controlled Interruptible Service (52)
e. Low Wattage Unmetered Service (45)
f. Geothermal Heat Pump (49) Closed to New
g. Standby Service (60)
h. Wellspring
i. Total -- Revenue

## 2. Expenses

a. Purchased Power ${ }^{2}$

Energy:
Electric Vehicle (33)
Municipal Civil Defense Sirens (47)
ETS-Interruptible Water Heating 3
Peak Shave Water Heating (8 hr) 3
ETS-Interruptible Space Heating 3
Dual Fuel 3
Geothermal Heat Pump
Subtotal -- Energy Expenses
Standby
Wellspring
Member Specific Rate
Capacity - Geothermal
Subtotal -- Purchased Power Expenses
Remainder of Revenue to Allocate

| 264,300 | kWh x |  | 0.0200 | $=$ | 5,286 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $=$ | - |
| 6,187,000 | kWh x | x | 0.02000 | = | 123,740 |
| 21,206,900 | kWh x |  | 0.03400 | = | 721,035 |
| 1,323,100 | kWh x | x | 0.02250 | = | 29,770 |
| 18,516,900 | kWh x | x | 0.03650 | = | 675,867 |
| 172,800 | kWh x | x | 0.05087 | $=$ | 8,790 |
|  |  |  |  |  | 1,564,488 |
| 27,060 | /year |  |  | $=$ | 27,060 |
| 23,370 | /year |  |  | = | 23,370 |
| $(45,040)$ /year |  |  |  | $=$ | $(45,040)$ |
| 172,800 | $\mathrm{kWh} x$ | X | 0.03039 |  | 5,251 |
|  |  |  |  |  | 1,575,129 |

b. Distribution - Operation ${ }^{3}$
c. Distribution - Maintenance ${ }^{3}$
d. Administrative and General ${ }^{3}$
e. Depreciation ${ }^{3}$
f. Interest ${ }^{3}$
g. Margin Requirements ${ }^{3}$
h. Subtotal
i. Total -- Expenses

$$
=\quad 24,636
$$

$$
=\quad 3,960
$$

$$
=459,736
$$

$$
=2,634,418
$$

$$
=\quad 8,520
$$

$$
=\quad 16,571
$$

$$
=66,840
$$

$$
=\frac{23,370}{3,238,051}
$$

Classification of Revenue Requirements

Classification of Revenue Requirements

Classification of Revenue Requirements

| Line <br> No. | Acct. <br> No. | Description | Class. <br> Factor | Total | Power Energy | upply Capacity | $\begin{array}{r} \text { Trans } \\ \text { Energy } \end{array}$ | mission <br> Capacity | Dist. Subs Capacity | tation <br> Cons. | Prima Capacity | y Line Cons. | Line Trity Capacity | nsf. Cons. | Second \& Serv. Cons. | Meter Cons. | Acct. \& Serv. Cons. | Revenue |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 47 Consumer Acct., Service \& Sales |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 48 Consumer Accounting |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 49 | 901 | Supervision | CACC |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 50 | 902 | Meter Reading Expense | CACC | 935,425 |  |  |  |  |  |  |  |  |  |  |  |  | 935,425 |  |
| 51 | 903 | Records \& Collections | CACC | 4,358,650 |  |  |  |  |  |  |  |  |  |  |  |  | 4,358,650 |  |
| 52 | 904 | Uncollectible Accounts | CACC | 399,734 |  |  |  |  |  |  |  |  |  |  |  |  | 399,734 |  |
| 53 | 905 | Misc. Customer Account | CACC |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 54 |  | Subtotal |  | 5,693,809 |  |  |  |  |  |  |  |  |  |  |  |  | 5,693,809 |  |
| 55 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 56 |  | Consumer Service \& Info. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 57 | 907 | Supervision | CS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 58 | 908 | Customer Assistance | CS | 2,247,863 |  |  |  |  |  |  |  |  |  |  |  |  | 2,247,863 |  |
| 59 | 909 | Info. \& Instruction | CS | 875,663 |  |  |  |  |  |  |  |  |  |  |  |  | 875,663 |  |
| 60 | 910 | Misc. Cust Serv. \& Info | CS | 281,773 |  |  |  |  |  |  |  |  |  |  |  |  | 281,773 |  |
| 61 |  | Subtotal |  | 3,405,299 |  |  |  |  |  |  |  |  |  |  |  |  | 3,405,299 |  |
| 62 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 63 |  | Sales |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 64 | 911 | Supervision | SALES |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 65 | 912 | Demonstrating \& Selling | SALES |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 66 | 913 | Advertising | SALES |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 67 | 916 | Misc. Sales | SALES |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 68 |  | Subtotal |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 69 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $70 \quad$ Prorated Operating Expenses |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 71 | 920- | Administrative \& General |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 72 | 932 | Power Supply | EX6-PS | 1,170,247 | 860,025 | 317,373 |  |  |  |  |  |  |  |  |  |  |  |  |
| 73 |  | Transmission | EX6-TR |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 74 |  | Distribution | EX6-D | 10,532,220 |  |  |  |  | 840,462 |  | 946,332 | 2,240,927 | 4,828 | 19,681 |  | 1,853,498 | 4,389,432 |  |
| 75 |  | Subtotal - A\&G |  | 11,702,467 | 860,025 | 317,373 |  |  | 840,462 |  | 946,332 | 2,240,927 | 4,828 | 19,681 |  | 1,853,498 | 4,389,432 |  |
| 76 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 77 | 408 | Other Taxes |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 78 |  | Power Supply | EX6-PS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 79 |  | Transmission | EX6-TR |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 80 |  | Distribution | EX6-D |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 81 |  | Subtotal - Other Taxes |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 82 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 83 | 421- | Miscellaneous Expense |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 84 | 426,431 | Power Supply | EX6-PS | 51,654 | 37,961 | 14,009 |  |  |  |  |  |  |  |  |  |  |  |  |
| 85 |  | Transmission | EX6-TR |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 86 |  | Distribution | EX6-D | 464,888 |  |  |  |  | 37,098 |  | 41,771 | 98,914 | 213 | 869 |  | 81,813 | 193,748 |  |
| 87 |  | Subtotal - Misc. Expense |  | 516,542 | 37,961 | 14,009 |  |  | 37,098 |  | 41,771 | 98,914 | 213 | 869 |  | 81,813 | 193,748 |  |

Classification of Revenue Requirements

$\frac{\text { Classification of Revenue Requirements }}{\text { (Continued) }}$

| Line <br> No. | $\begin{aligned} & \text { Acct. } \\ & \text { No. } \end{aligned}$ | Description | Class. <br> Factor | Total | Power Energy | Supply Capacity | $\begin{gathered} \text { Trans } \\ \text { Energy } \end{gathered}$ | smission Capacity | Dist. Sub Capacity | station Cons. | $\begin{aligned} & \text { Primar } \\ & \text { Capacity } \end{aligned}$ | ry Line Cons. | $\begin{array}{r} \text { Line T } \\ \text { Capacity } \end{array}$ | Transf. Cons. | Second. \& Serv. Cons. | Meter Cons. | Acct. \& Serv. Cons. | Revenue |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 88 Fixed Charges |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 89 | 403- | Depreciation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 90 | 407 | Power Supply | PROPLNT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 91 |  | Transmission | TRNPLNT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 92 |  | Distribution | DSTPLNT | 10,408,894 |  |  |  |  | 1,516,978 |  | 4,657,498 | 2,519,423 | 226,938 | 925,038 | 78,444 | 177,014 |  |  |
| 93 |  | Subtotal - Depreciation |  | 10,408,894 |  |  |  |  | 1,516,978 |  | 4,657,498 | 2,519,423 | 226,938 | 925,038 | 78,444 | 177,014 |  |  |
| 94 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 95 | 408 | Property Taxes |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 96 |  | Power Supply | PROPLNT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 97 |  | Transmission | TRNPLNT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 98 |  | Distribution | DSTPLNT | 3,550,790 |  |  |  |  | 517,487 |  | 1,588,814 | 859,452 | 77,416 | 315,559 | 26,760 | 60,385 |  |  |
| 99 |  | Subtotal - Property Taxes |  | 3,550,790 |  |  |  |  | 517,487 |  | 1,588,814 | 859,452 | 77,416 | 315,559 | 26,760 | 60,385 |  |  |
| 100 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 101 | 427 | Interest-LT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 102 |  | Power Supply | PROPLNT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 103 |  | Transmission | TRNPLNT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 104 |  | Distribution | DSTPLNT | 3,489,324 |  |  |  |  | 508,529 |  | 1,561,311 | 844,574 | 76,075 | 310,096 | 26,297 | 59,340 |  |  |
| 105 |  | Subtotal - Interest-LT |  | 3,489,324 |  |  |  |  | 508,529 |  | 1,561,311 | 844,574 | 76,075 | 310,096 | 26,297 | 59,340 |  |  |
| 106 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 107 |  | Required Margin |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 108 |  | Power Supply | PROPLNT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 109 |  | Transmission | TRNPLNT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 110 |  | Distribution | DSTPLNT | 6,495,238 |  |  |  |  | 946,607 |  | 2,906,318 | 1,572,142 | 141,611 | 577,231 | 48,950 | 110,458 |  |  |
| 111 |  | Subtotal - Required Margin |  | 6,495,238 |  |  |  |  | 946,607 |  | 2,906,318 | 1,572,142 | 141,611 | 577,231 | 48,950 | 110,458 |  |  |
| 112 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 113 |  | mmary of Revenue Requirements |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 114 |  | Power Supply |  | 127,646,615 | 93,808,633 | 34,618,033 |  |  |  |  |  |  |  |  |  |  |  |  |
| 115 |  | Transmission |  | 22,649,623 |  |  |  | 22,649,623 |  |  |  |  |  |  |  |  |  |  |
| 116 |  | Distribution |  | 56,774,205 |  |  |  |  | 6,109,403 |  | 13,663,749 | 12,780,779 | 537,091 | 2,189,270 | 180,451 | 6,184,731 | 13,682,287 |  |
| 117 |  | Total Revenue Required |  | 207,070,443 | 93,808,633 | 34,618,033 |  | 22,649,623 | 6,109,403 |  | 13,663,749 | 12,780,779 | 537,091 | 2,189,270 | 180,451 | 6,184,731 | 13,682,287 |  |


| $\begin{gathered} \text { Line } \\ \text { No. } \\ \hline \end{gathered}$ | Acct. <br> No. | Description | Class. <br> Factor | Total | Resid. \& Farm Direct | Small General Service Direct | Irrigation Direct | General Service Direct | C\&I Interruptible Direct | Lighting Direct |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 88 Fixed Charges |  |  |  |  |  |  |  |  |  |  |
| 89 | 403- | Depreciation |  |  |  |  |  |  |  |  |
| 90 | 407 | Power Supply | PROPLNT |  |  |  |  |  |  |  |
| 91 |  | Transmission | TRNPLNT |  |  |  |  |  |  |  |
| 92 |  | Distribution | DSTPLNT | 10,408,894 |  |  |  |  |  | 307,560 |
| 93 |  | Subtotal - Depreciation |  | 10,408,894 |  |  |  |  |  | 307,560 |
| 94 |  |  |  |  |  |  |  |  |  |  |
| 95 | 408 | Property Taxes |  |  |  |  |  |  |  |  |
| 96 |  | Power Supply | PROPLNT |  |  |  |  |  |  |  |
| 97 |  | Transmission | TRNPLNT |  |  |  |  |  |  |  |
| 98 |  | Distribution | DSTPLNT | 3,550,790 |  |  |  |  |  | 104,918 |
| 99 |  | Subtotal - Property Taxes |  | 3,550,790 |  |  |  |  |  | 104,918 |
| 100 |  |  |  |  |  |  |  |  |  |  |
| 101 | 427 | Interest-LT |  |  |  |  |  |  |  |  |
| 102 |  | Power Supply | PROPLNT |  |  |  |  |  |  |  |
| 103 |  | Transmission | TRNPLNT |  |  |  |  |  |  |  |
| 104 |  | Distribution | DSTPLNT | 3,489,324 |  |  |  |  |  | 103,102 |
| 105 |  | Subtotal - Interest-LT |  | 3,489,324 |  |  |  |  |  | 103,102 |
| 106 |  |  |  |  |  |  |  |  |  |  |
| 107 |  | Required Margin |  |  |  |  |  |  |  |  |
| 108 |  | Power Supply | PROPLNT |  |  |  |  |  |  |  |
| 109 |  | Transmission | TRNPLNT |  |  |  |  |  |  |  |
| 110 |  | Distribution | DSTPLNT | 6,495,238 |  |  |  |  |  | 191,920 |
| 111 |  | Subtotal - Required Margin |  | 6,495,238 |  |  |  |  |  | 191,920 |
| 112 |  |  |  |  |  |  |  |  |  |  |
| 113 Summary of Revenue Requirements |  |  |  |  |  |  |  |  |  |  |
| 114 |  | Power Supply |  | 127,646,615 | $(732,748)$ | $(47,303)$ |  |  |  |  |
| 115 |  | Transmission |  | 22,649,623 |  |  |  |  |  |  |
| 116 |  | Distribution |  | 56,774,205 |  |  |  |  |  | 1,446,444 |
| 117 |  | Total Revenue Required |  | $\underline{\text { 207,070,443 }}$ | $(732,748)$ | $(47,303)$ |  |  |  | 1,446,444 |

Summary of Classification Factors

| $\begin{aligned} & \text { Line } \\ & \text { No. } \\ & \hline \end{aligned}$ | Name | Description | Source | Total | Power Supply |  | Transmission |  | Dist. Substation |  | Primary Line |  | Line Transf. |  | Second. \& Serv. Cons. | Meter Cons. | Acct. \& Serv. Cons. | Revenue |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Energy | Cap. | Energy | Capacity | Cap. | Cons. | Cap. | Cons. | Cap. | Cons. |  |  |  |  |
|  |  | Classification Factor D |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | PROPLNT | Production Plant | Plant |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | TRNPLNT | Transmission Plant | Plant |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | DSTPLNT | Distribution Plant | Plant | 157,954,781 |  |  |  |  | 23,020,120 |  | 70,677,450 | 38,232,205 | 3,443,783 | 14,037,432 | 1,190,394 | 2,686,182 |  |  |
| 4 | PLNT | Prod, Trans, Dist. Subtotal | Plant | 157,954,781 |  |  |  |  | 23,020,120 |  | 70,677,450 | 38,232,205 | 3,443,783 | 14,037,432 | 1,190,394 | 2,686,182 |  |  |
| 5 | EX1 | Assigned Dist. Oper. Exp. | Rev Req | 3,356,660 |  |  |  |  | 631,828 |  | 542,430 | 233,321 |  |  |  | 1,949,081 |  |  |
| 6 | EX2 | Assigned Dist. Main. Exp. | Rev Req | 1,420,834 |  |  |  |  | 125,460 |  | 225,403 | 1,057,138 | 2,528 | 10,304 |  |  |  |  |
| 7 | EX3 | Dist. Oper. \& Main. | Rev Req | 12,733,743 |  |  |  |  | 1,742,242 |  | 1,961,706 | 4,645,347 | 10,009 | 40,797 |  | 3,842,224 |  |  |
| 8 | EX4 | Assigned O \& M Exp. | Rev Req | 170,907,188 | 92,910,647 | 34,286,651 |  | 22,649,623 | 1,742,242 |  | 1,961,706 | 4,645,347 | 10,009 | 40,797 |  | 3,842,224 | 9,099,108 |  |
| 9 | EX4-PS | Power Supply | Rev Req | 126,424,714 | 92,910,647 | 34,286,651 |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 | EX4-TR | Transmission | Rev Req | 22,649,623 |  |  |  | 22,649,623 |  |  |  |  |  |  |  |  |  |  |
| 11 | EX4-D | Distribution | Rev Req | 21,832,851 |  |  |  |  | 1,742,242 |  | 1,961,706 | 4,645,347 | 10,009 | 40,797 |  | 3,842,224 | 9,099,108 |  |
| 12 | EX5 | Rev. Req. Less Margin | Rev Req | 200,575,205 | 93,808,633 | 34,618,033 |  | 22,649,623 | 5,162,796 |  | 10,757,431 | 11,208,637 | 395,479 | 1,612,039 | 131,501 | 6,074,272 | 13,682,287 |  |
| 13 | EX5-PS | Power Supply | Rev Req | 127,646,615 | 93,808,633 | 34,618,033 |  |  |  |  |  |  |  |  |  |  |  |  |
| 14 | EX5-TR | Transmission | Rev Req | 22,649,623 |  |  |  | 22,649,623 |  |  |  |  |  |  |  |  |  |  |
| 15 | EX5-D | Distribution | Rev Req | 50,278,967 |  |  |  |  | 5,162,796 |  | 10,757,431 | 11,208,637 | 395,479 | 1,612,039 | 131,501 | 6,074,272 | 13,682,287 |  |


| $\begin{aligned} & \text { Line } \\ & \text { No. } \end{aligned}$ | Name | Description | Source | Total | Resid. \& Farm Direct | Small <br> General <br> Service <br> Direct | $\begin{aligned} & \text { Irrigation } \\ & \text { Direct } \end{aligned}$ | General Service Direct | $\begin{gathered} \text { C\&I } \\ \text { Interruptible } \\ \text { Direct } \end{gathered}$ | Lighting Direct |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Classification Factor Data |  |  |  |  |  |  |  |  |  |  |
| 1 | PROPLNT | Production Plant | Plant |  |  |  |  |  |  |  |
| 2 | TRNPLNT | Transmission Plant | Plant |  |  |  |  |  |  |  |
| 3 | DSTPLNT | Distribution Plant | Plant | 157,954,781 |  |  |  |  |  | 4,667,216 |
| 4 | PLNT | Prod, Trans, Dist. Subtotal | Plant | 157,954,781 |  |  |  |  |  | 4,667,216 |
| 5 | Ex1 | Assigned Dist. Oper. Exp. | Rev Req | 3,356,660 |  |  |  |  |  |  |
| 6 | EX2 | Assigned Dist. Main. Exp. | Rev Req | 1,420,834 |  |  |  |  |  |  |
| 7 | EX3 | Dist. Oper. \& Main. | Rev Req | 12,733,743 |  |  |  |  |  | 491,419 |
| 8 | EX4 | Assigned O \& M Exp. | Rev Req | 170,907,188 | (725,733) | $(46,851)$ |  |  |  | 491,419 |
| , | EX4-PS | Power Supply | Rev Req | 126,424,714 | (725,733) | $(46,851)$ |  |  |  |  |
| 10 | EX4-TR | Transmission | Rev Req | 22,649,623 |  |  |  |  |  |  |
| 11 | EX4-D | Distribution | Rev Req | 21,832,851 |  |  |  |  |  | 491,419 |
| 12 | EX5 | Rev. Req. Less Margin | Rev Req | 200,575,205 | (732,748) | $(47,303)$ |  |  |  | 1,254,524 |
| 13 | EX5-PS | Power Supply | Rev Req | 127,646,615 | (732,748) | $(47,303)$ |  |  |  |  |
| 14 | EX5-TR | Transmission | Rev Req | 22,649,623 |  |  |  |  |  |  |
| 15 | EX5-D | Distribution | Rev Req | 50,278,967 |  |  |  |  |  | 1,254,524 |

Summary of Classification Factors

| Line <br> No. | Name | Description | Source | Total | Power Supply |  | Transmission |  | Dist. Substation |  | Primary Line |  | Line Transf. |  | Second. \& Serv. Cons. | Meter <br> Cons. | Acct. \& Serv. Cons. | Revenue |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Energy | Cap. | Energy | Capacity | Cap. | Cons. | Cap. | Cons. | Cap. | Cons. |  |  |  |  |
| 16 | Classification | Factors |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 17 | CACC | Consumer Accounting | Input | 1.000000 |  |  |  |  |  |  |  |  |  |  |  |  | 1.000000 |  |
| 18 | CS | Customer Service | Input | 1.000000 |  |  |  |  |  |  |  |  |  |  |  |  | 1.000000 |  |
| 19 | CS-PS | Cust. Service - Pwr. Supply | Input |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20 | CS-TR | Cust. Service - Transmission | Input |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 21 | CS-D | Cust. Service - Distribution | Input |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 22 | SALES | Sales | Input |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 23 | SALES-PS | Sales - Power Supply | Input |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 24 | SALES-TR | Sales - Transmission | Input |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 25 | SALES-D | Sales - Distribution | Input |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 26 | PROPLNT | Production Plant | Plant |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 27 | TRNPLNT | Transmission Plant | Plant |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 28 | DSTPLNT | Distribution Plant | Plant | 1.000000 |  |  |  |  | 0.145739 |  | 0.447454 | 0.242045 | 0.021802 | 0.088870 | 0.007536 | 0.017006 |  |  |
| 29 | PLNT | Prod, Trans, Dist. Subtotal | Plant | 1.000000 |  |  |  |  | 0.145739 |  | 0.447454 | 0.242045 | 0.021802 | 0.088870 | 0.007536 | 0.017006 |  |  |
| 30 | EX1 | Assigned Dist. Oper. Exp. | Rev Req | 1.000000 |  |  |  |  | 0.188231 |  | 0.161598 | 0.069510 |  |  |  | 0.580661 |  |  |
| 31 | EX2 | Assigned Dist. Main. Exp. | Rev Req | 1.000000 |  |  |  |  | 0.088300 |  | 0.158642 | 0.744027 | 0.001779 | 0.007252 |  |  |  |  |
| 32 | EX3 | Dist. Oper. \& Main. | Rev Req | 1.000000 |  |  |  |  | 0.136821 |  | 0.154056 | 0.364806 | 0.000786 | 0.003204 |  | 0.301736 |  |  |
| 33 | EX4 | Assigned O \& M Exp. | Rev Req | 1.000000 | 0.543632 | 0.200616 |  | 0.132526 | 0.010194 |  | 0.011478 | 0.027181 | 0.000059 | 0.000239 |  | 0.022481 | 0.053240 |  |
| 34 | EX4-PS | Power Supply | Rev Req | 0.739727 | 0.543632 | 0.200616 |  |  |  |  |  |  |  |  |  |  |  |  |
| 35 | EX4-TR | Transmission | Rev Req | 0.132526 |  |  |  | 0.132526 |  |  |  |  |  |  |  |  |  |  |
| 36 | EX4-D | Distribution | Rev Req | 0.127747 |  |  |  |  | 0.010194 |  | 0.011478 | 0.027181 | 0.000059 | 0.000239 |  | 0.022481 | 0.053240 |  |
| 37 | EX5 | Rev. Req. Less Margin | Rev Req | 1.000000 | 0.467698 | 0.172594 |  | 0.112923 | 0.025740 |  | 0.053633 | 0.055882 | 0.001972 | 0.008037 | 0.000656 | 0.030284 | 0.068215 |  |
| 38 | EX5-PS | Power Supply | Rev Req | 0.636403 | 0.467698 | 0.172594 |  |  |  |  |  |  |  |  |  |  |  |  |
| 39 | EX5-TR | Transmission | Rev Req | 0.112923 |  |  |  | 0.112923 |  |  |  |  |  |  |  |  |  |  |
| 40 | EX5-D | Distribution | Rev Req | 0.250674 |  |  |  |  | 0.025740 |  | 0.053633 | 0.055882 | 0.001972 | 0.008037 | 0.000656 | 0.030284 | 0.068215 |  |
| 41 | EX6 | A\&G Classification | Input | 1.000000 | 0.073491 | 0.027120 |  |  | 0.071819 |  | 0.080866 | 0.191492 | 0.000413 | 0.001682 |  | 0.158385 | 0.375086 |  |
| 42 | EX6-PS | Power Supply | Input | 0.100000 | 0.073491 | 0.027120 |  |  |  |  |  |  |  |  |  |  |  |  |
| 43 | EX6-TR | Transmission | Input |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 44 | EX6-D | Distribution | Input | 0.900000 |  |  |  |  | 0.071819 |  | 0.080866 | 0.191492 | 0.000413 | 0.001682 |  | 0.158385 | 0.375086 |  |
| 45 | FUEL | Fuel | Input |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 46 | ICON | Install Cons. Prem. | Input | 1.000000 |  |  |  |  |  |  | 0.175747 | 0.824253 |  |  |  |  |  |  |
| 47 | LAND | Land \& Land Rights | Input | 1.000000 |  |  |  |  | 1.00000 |  |  |  |  |  |  |  |  |  |
| 48 | LICON | Leased Property | Input | 1.000000 |  |  |  |  |  |  | 0.175747 | 0.824253 |  |  |  |  |  |  |
| 49 | MTR | Meters | Input | 1.000000 |  |  |  |  |  |  |  |  |  |  |  | 1.000000 |  |  |
| 50 | POLES | Poles, Towers, and Fixtures | 1.0000 |  |  |  |  |  |  |  | 0.439954 | 0.560046 |  |  |  |  |  |  |
| 51 | PRI-OH | Primary Line-Overhead | Input | 1.000000 |  |  |  |  |  |  | 0.175747 | 0.824253 |  |  |  |  |  |  |
| 52 | PRI-UG | Primary Line-Underground | 1.0000 |  |  |  |  |  |  |  | 0.752750 | 0.247250 |  |  |  |  |  |  |
| 53 | PROD1 | Production Plant | Input |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 54 | PROD2 | Production O \& M | Input |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 55 | PURTR-1 | Trans. Capacity | Input | 1.000000 |  |  |  | 1.000000 |  |  |  |  |  |  |  |  |  |  |
| 56 | PURTR-2 | Trans. Energy | Input | 1.000000 | 1.000000 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 57 | PURKW-1 | Purchased Power Capacity | Input | 1.000000 |  | 1.000000 |  |  |  |  |  |  |  |  |  |  |  |  |
| 58 | PURKW-2 | Summer | Input | 1.000000 |  | 1.000000 |  |  |  |  |  |  |  |  |  |  |  |  |
| 59 | PURKW-3 | Winter | Input | 1.000000 |  | 1.000000 |  |  |  |  |  |  |  |  |  |  |  |  |
| 60 | PURKW-4 | Other | Input | 1.000000 |  | 1.000000 |  |  |  |  |  |  |  |  |  |  |  |  |
| 61 | PURKWH-1 | Purchased Power Energy | Input | 1.000000 | 1.000000 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 62 | PURKWH-2 | On-Peak | Input | 1.000000 | 1.000000 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 63 | PURKWH-3 | Off-Peak | Input | 1.000000 | 1.000000 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 62 | SERV | Services | Input | 1.000000 |  |  |  |  |  |  |  |  |  |  | 1.000000 |  |  |  |
| 63 | STL | Street Lighting | Input |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 64 | SUB | Substation | Input | 1.000000 |  |  |  |  | 1.000000 |  |  |  |  |  |  |  |  |  |
| 65 | TRAN1 | Transmission Plant | Input | 1.000000 |  |  |  | 1.000000 |  |  |  |  |  |  |  |  |  |  |
| 66 | TRAN2 | Transmission Purchases | Input | 1.000000 |  |  |  | 1.000000 |  |  |  |  |  |  |  |  |  |  |
| 67 | TRF | Line Transf. | Input | 1.000000 |  |  |  |  |  |  |  |  | 0.196999 | 0.803001 |  |  |  |  |



| $\begin{aligned} & \text { Line } \\ & \text { No. } \\ & \hline \end{aligned}$ | Cost Classification | Summary of Allocation of Revenue Requirements to Rate Classes |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Alloc. Factor | Total | Resid. <br> \& Farm | Small <br> General Service | Irrigation | General Service | C\&I <br> Interruptible | Lighting |
| Power Supply |  |  |  |  |  |  |  |  |  |
| 2 | Wholesale Power |  |  |  |  |  |  |  |  |
| 3 | Direct Assigned Charges (Credits) | Direct |  |  |  |  |  |  |  |
| 4 | Demand Related | D7 |  |  |  |  |  |  |  |
| 5 | Demand Related - Summer | D4 | 17,112,830 | 10,370,341 | 464,867 | 21,695 | 6,179,315 | 76,613 |  |
| 6 | Demand Related - Winter | D5 | 8,390,047 | 5,458,423 | 302,784 |  | 2,488,808 | 36,721 | 103,311 |
| 7 | Demand Related - Other | D6 | 8,011,190 | 4,952,367 | 264,721 | 3,164 | 2,702,767 | 36,516 | 51,656 |
| 8 | Subtotal - Demand |  | 33,514,067 | 20,781,131 | 1,032,371 | 24,859 | 11,370,890 | 149,849 | 154,967 |
| 9 | Energy Charges - Critical Peak | E2 |  |  |  |  |  |  |  |
| 10 | Energy Related - On-Peak | E3 | 36,393,097 | 17,333,391 | 879,140 | 164,592 | 9,570,234 | 8,407,488 | 38,252 |
| 11 | Energy Related - Off-Peak | E4 | 56,517,550 | 26,723,916 | 1,355,423 | 253,762 | 14,754,997 | 12,962,322 | 467,130 |
| 12 | Subtotal - Energy |  | 92,910,647 | 44,057,307 | 2,234,564 | 418,354 | 24,325,231 | 21,369,810 | 505,382 |
| 13 | Revenue Related | R2 |  |  |  |  |  |  |  |
| 14 | Subtotal - Wholesale |  | 126,424,714 | 64,838,438 | 3,266,934 | 443,213 | 35,696,121 | 21,519,659 | 660,349 |
| 15 | Allocated Overhead \& Margin |  |  |  |  |  |  |  |  |
| 16 | Direct Related | Direct |  |  |  |  |  |  |  |
| 17 | Revenue Related | R2 |  |  |  |  |  |  |  |
| 18 | Demand Related | D7 | 328,991 | 198,146 | 10,188 | 183 | 105,776 | 12,878 | 1,819 |
| 19 | Energy Related | E1 | 892,910 | 420,872 | 21,278 | 4,042 | 235,006 | 206,454 | 5,257 |
| 20 | Subtotal - Allocated |  | 1,221,901 | 619,019 | 31,466 | 4,225 | 340,782 | 219,332 | 7,076 |
| 21 | Subtotal - Power Supply |  | 127,646,615 | 65,457,456 | 3,298,400 | 447,438 | 36,036,904 | 21,738,992 | 667,425 |
| 22 |  |  |  |  |  |  |  |  |  |
| 23 | Transmission |  |  |  |  |  |  |  |  |
| 24 | Direct Assigned | Direct |  |  |  |  |  |  |  |
| 25 | Demand Related | D7 | 22,649,623 | 13,696,762 | 706,106 | 12,511 | 7,229,676 | 880,227 | 124,341 |
| 26 | Energy Related | E1 |  |  |  |  |  |  |  |
| 27 | Subtotal--Transmission |  | 22,649,623 | 13,696,762 | 706,106 | 12,511 | 7,229,676 | 880,227 | 124,341 |
| 28 | Allocated Overhead \& Margin |  |  |  |  |  |  |  |  |
| 29 | Direct Related | Direct |  |  |  |  |  |  |  |
| 30 | Revenue Related | R2 |  |  |  |  |  |  |  |
| 31 | Demand Related | D7 |  |  |  |  |  |  |  |
| 32 | Energy Related | E1 |  |  |  |  |  |  |  |
| 33 | Subtotal - Allocated |  |  |  |  |  |  |  |  |
| 34 | Subtotal - Transmission |  | 22,649,623 | 13,696,762 | 706,106 | 12,511 | 7,229,676 | 880,227 | 124,341 |
| 35 |  |  |  |  |  |  |  |  |  |
| 36 Distribution |  |  |  |  |  |  |  |  |  |
| 37 | Power Supply -Energy | E1 |  |  |  |  |  |  |  |
| 38 | Dist. Sub. -Capacity | D9 | 6,109,403 | 3,010,588 | 149,743 | 47,121 | 1,598,656 | 1,263,802 | 39,493 |
| 39 | Dist. Sub. -Consumer | C2 |  |  |  |  |  |  |  |
| 40 | Primary Line -Capacity | D9 | 13,663,749 | 6,733,215 | 334,901 | 105,386 | 3,575,413 | 2,826,507 | 88,326 |
| 41 | Primary Line $\quad$-Consumer | C2 | 12,780,779 | 11,552,938 | 610,737 | 67,936 | 463,412 | 47,096 | 38,660 |
| 42 | Line Transf. -Capacity | D1 | 537,091 | 369,821 | 16,955 | 10,460 | 87,871 | 50,629 | 1,355 |
| 43 | Line Transf. -Consumer | C3 | 2,189,270 | 1,946,450 | 115,497 | 14,312 | 96,436 | 10,063 | 6,513 |
| 44 | Sec. \& Serv. -Consumer | C4 | 180,451 | 165,079 | 7,965 | 798 | 5,512 | 544 | 552 |
| 45 | Meter -Consumer | C5 | 6,184,731 | 5,150,000 | 311,923 | 58,073 | 449,082 | 198,419 | 17,234 |
| 46 | Acct. \& Serv. -Consumer | C6 | 13,682,287 | 11,393,185 | 690,057 | 128,473 | 993,491 | 438,957 | 38,125 |
| 47 | Revenue Related -Revenue | R2 |  |  |  |  |  |  |  |
| 48 | Direct Assigned | Direct | 1,446,444 |  |  |  |  |  | 1,446,444 |
| 49 | Subtotal - Distribution |  | 56,774,205 | 40,321,277 | 2,237,776 | 432,558 | 7,269,873 | 4,836,017 | 1,676,703 |
| 50 | Total |  | 207,070,443 | 119,475,495 | 6,242,283 | 892,507 | 50,536,453 | 27,455,236 | 2,468,469 |

Allocation of Net Plant in Service To Rate Classes

| Line <br> No. | $\begin{gathered} \text { Acct. } \\ \text { No. } \\ \hline \end{gathered}$ | Description | Class. <br> Factor | Total | Resid. <br> \& Farm | Small General Service | Irrigation | General Service | C\&I <br> Interruptible | Lighting |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  | Net Intangible Plant |  |  |  |  |  |  |  |  |
| 2 | 301 | Organization | PLNT |  |  |  |  |  |  |  |
| 3 | 302 | Franchises and consents | PLNT |  |  |  |  |  |  |  |
| 4 | 303 | Miscellaneous intangible plant | PLNT |  |  |  |  |  |  |  |
| 5 | 301-303 | Subtotal | PLNT |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |  |  |  |
| 7 |  | Net Production Plant |  |  |  |  |  |  |  |  |
| 8 | 310-346 | Production Plant | PROD1 |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |  |  |  |  |
| 10 |  | Net Transmission Plant |  |  |  |  |  |  |  |  |
| 11 | 350-359 | Transmission Plant | TRAN1 |  |  |  |  |  |  |  |
| 12 |  |  |  |  |  |  |  |  |  |  |
| 13 |  | Net Distribution Plant |  |  |  |  |  |  |  |  |
| 14 | 360 | Land | LAND | 4,163,712 | 2,517,895 | 129,805 | 2,300 | 1,329,041 | 161,813 | 22,858 |
| 15 | 361 | Structures | SUB |  |  |  |  |  |  |  |
| 16 | 362 | Station | SUB | 18,856,408 | 11,402,915 | 587,852 | 10,416 | 6,018,896 | 732,812 | 103,517 |
| 17 | 363 | Battery | SUB |  |  |  |  |  |  |  |
| 18 | 364 | Poles, towers | PRI | 10,796,888 | 7,806,614 | 405,374 | 68,778 | 1,462,221 | 1,004,903 | 48,997 |
| 19 | 365 | OH Cond | PRI | 13,738,437 | 11,425,872 | 600,301 | 78,815 | 1,042,393 | 541,194 | 49,861 |
| 20 | 366 | UG Conduit | PRI |  |  |  |  |  |  |  |
| 21 | 367 | UG Cond | PRI | 84,374,330 | 50,155,173 | 2,553,592 | 600,753 | 17,375,897 | 13,215,247 | 473,668 |
| 22 | 368 | Transf | TRF | 17,481,215 | 14,851,750 | 849,266 | 158,835 | 1,181,760 | 389,152 | 50,453 |
| 23 | 369 | Services | SERV | 1,190,394 | 1,088,990 | 52,546 | 5,261 | 36,362 | 3,591 | 3,644 |
| 24 | 370 | Meters | MTR | 2,686,182 | 2,236,773 | 135,476 | 25,222 | 195,048 | 86,178 | 7,485 |
| 25 | 371 | Cons Premise | ICON | 123,745 |  |  |  |  |  | 123,745 |
| 26 | 372 | Leased Prop | LICON |  |  |  |  |  |  |  |
| 27 | 373 | St. Light | STL | 4,543,471 |  |  |  |  |  | 4,543,471 |
| 28 | 360-373 | Subtotal |  | 157,954,781 | 101,485,981 | 5,314,211 | 950,381 | 28,641,619 | 16,134,891 | 5,427,699 |
| 29 |  |  |  |  |  |  |  |  |  |  |
| 30 |  | Net General Plant |  |  |  |  |  |  |  |  |
| 31 | 389 | Land \& Land Rights | PLNT | 102,278 | 65,714 | 3,441 | 615 | 18,546 | 10,448 | 3,515 |
| 32 | 390 | Structures and Improve. | PLNT | 4,601,923 | 2,956,737 | 154,827 | 27,689 | 834,457 | 470,081 | 158,133 |
| 33 | 391 | Office Furniture \& Equip. | PLNT | 5,056,678 | 3,248,917 | 170,126 | 30,425 | 916,917 | 516,534 | 173,759 |
| 34 | 392 | Transportation \& Equipment | PLNT | 918,591 | 590,195 | 30,905 | 5,527 | 166,566 | 93,833 | 31,565 |
| 35 | 393 | Stores Equipment | PLNT | 18,982 | 12,196 | 639 | 114 | 3,442 | 1,939 | 652 |
| 36 | 394 | Tool, Shop \& Garage Equip. | PLNT | 156,304 | 100,425 | 5,259 | 940 | 28,342 | 15,966 | 5,371 |
| 37 | 395 | Laboratory Equipment | PLNT | 209,246 | 134,441 | 7,040 | 1,259 | 37,942 | 21,374 | 7,190 |
| 38 | 396 | Power Operated Equipment | PLNT | 3,930,565 | 2,525,389 | 132,239 | 23,649 | 712,721 | 401,502 | 135,063 |
| 39 | 397 | Communication Equipment | PLNT | 345,799 | 222,176 | 11,634 | 2,081 | 62,703 | 35,323 | 11,882 |
| 40 | 398 | Miscellaneous Equipment | PLNT | 84,672 | 54,402 | 2,849 | 509 | 15,353 | 8,649 | 2,910 |
| 41 | 399 | Other tangible property | PLNT | 633,349 | 406,927 | 21,308 | 3,811 | 114,844 | 64,696 | 21,763 |
| 42 | 389-399 | Subtotal |  | 16,058,389 | 10,317,518 | 540,266 | 96,620 | 2,911,835 | 1,640,345 | 551,804 |
| 43 44 |  | Total Net Plant in Service |  | 174,013,170 | 111,803,499 | 5,854,477 | 1,047,001 | 31,553,453 | 17,775,236 | 5,979,503 |

Allocation of Revenue Requirements to Rate Classes

DEA Exhibit 3 COS FINAL.xlsm
Allocation of Revenue Requirements to Rate Classes
(Continued)

Allocation of Revenue Requirements to Rate Classes
(Continued)

| $\begin{aligned} & \text { Line } \\ & \text { No. } \\ & \hline \end{aligned}$ | Acct. No. | Description | Class. <br> Factor | Total | Resid. \& Farm | Small General Service | Irrigation | General Service | C\&I <br> Interruptible | Lighting |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 88 | 408 | Other Taxes |  |  |  |  |  |  |  |  |
| 89 |  | Power Supply | EX6-PS |  |  |  |  |  |  |  |
| 90 |  | Transmission | EX6-TR |  |  |  |  |  |  |  |
| 91 |  | Distribution | EX6-D |  |  |  |  |  |  |  |
| 92 |  | Subtotal - Other Taxes |  |  |  |  |  |  |  |  |
| 93 | 421- | Miscellaneous Expense |  |  |  |  |  |  |  |  |
| 94 | 426,431 | Power Supply | EX6-PS | 51,654 | 26,168 | 1,330 | 179 | 14,406 | 9,272 | 299 |
| 95 |  | Transmission | EX6-TR |  |  |  |  |  |  |  |
| 96 |  | Distribution | EX6-D | 464,888 | 358,653 | 20,610 | 3,731 | 44,306 | 25,544 | 12,044 |
| 97 |  | Subtotal - Misc. Expense |  | 516,542 | 384,821 | 21,940 | 3,910 | 58,712 | 34,816 | 12,343 |
| 98 |  | d Charges |  |  |  |  |  |  |  |  |
| 99 | 403- | Depreciation |  |  |  |  |  |  |  |  |
| 100 | 407 | Power Supply | PROPLNT |  |  |  |  |  |  |  |
| 101 |  | Transmission | TRNPLNT |  |  |  |  |  |  |  |
| 102 |  | Distribution | DSTPLNT | 10,408,894 | 6,517,900 | 340,085 | 73,490 | 1,800,160 | 1,318,107 | 359,153 |
| 103 |  | Subtotal - Depreciation |  | 10,408,894 | 6,517,900 | 340,085 | 73,490 | 1,800,160 | 1,318,107 | 359,153 |
| 104 | 408 | Property Taxes |  |  |  |  |  |  |  |  |
| 105 |  | Power Supply | PROPLNT |  |  |  |  |  |  |  |
| 106 |  | Transmission | TRNPLNT |  |  |  |  |  |  |  |
| 107 |  | Distribution | DSTPLNT | 3,550,790 | 2,223,454 | 116,013 | 25,070 | 614,089 | 449,646 | 122,518 |
| 108 |  | Subtotal - Property Taxes |  | 3,550,790 | 2,223,454 | 116,013 | 25,070 | 614,089 | 449,646 | 122,518 |
| 109 |  |  |  |  |  |  |  |  |  |  |
| 110 |  | Total Oper. Expenses |  | 174,436,258 | 99,526,544 | 5,209,956 | 809,501 | 41,580,003 | 25,310,637 | 1,999,617 |
| 111 |  |  |  |  |  |  |  |  |  |  |
| 112 | 427 | Interest-LT |  |  |  |  |  |  |  |  |
| 113 |  | Power Supply | PROPLNT |  |  |  |  |  |  |  |
| 114 |  | Transmission | TRNPLNT |  |  |  |  |  |  |  |
| 115 |  | Distribution | DSTPLNT | 3,489,324 | 2,184,965 | 114,005 | 24,636 | 603,459 | 441,863 | 120,397 |
| 116 |  | Subtotal - Interest-LT |  | 3,489,324 | 2,184,965 | 114,005 | 24,636 | 603,459 | 441,863 | 120,397 |
| 117 |  | Required Margin |  |  |  |  |  |  |  |  |
| 118 |  | Power Supply | PROPLNT |  |  |  |  |  |  |  |
| 119 |  | Transmission | TRNPLNT |  |  |  |  |  |  |  |
| 120 |  | Distribution | DSTPLNT | 6,495,238 | 4,067,225 | 212,216 | 45,859 | 1,123,315 | 822,510 | 224,114 |
| 121 |  | Subtotal - Required Margin |  | 6,495,238 | 4,067,225 | 212,216 | 45,859 | 1,123,315 | 822,510 | 224,114 |
| 122 |  | mary of Revenue Requirements |  |  |  |  |  |  |  |  |
| 123 |  | Total Rev. Req. |  | $\underline{\text { 207,070,443 }}$ | 119,475,495 | 6,242,283 | 892,507 | 50,536,453 | 27,455,236 | 2,468,469 |

## Rate Class Weighting Factors

## I. Three Phase Vs. Single Phase Class Weighting Factors

A. Investment to Serve $3 Ø$ vs. $1 Ø$ Consumers (use replacement cost)

1. Meters
a. Resid.\& Farm
b. Small General Service
c. Irrigation
d. General Service
e. C\&I Interruptible

| 10 |  | $3 \varnothing$ |  | Wtd. |
| :---: | :---: | :---: | :---: | :---: |
| \$88.39 | 100\% |  | 0\% | \$88.39 |
| \$88.39 | 65\% | \$181.86 | 35\% | \$121.10 |
| \$191.86 | 10\% | \$261.86 | 90\% | \$254.86 |
|  | 18\% | \$341.86 | 82\% | \$280.33 |
|  | 0\% | \$1,302.86 | 100\% | \$1,302.86 |

2 Service ${ }^{1}$
\$481
\$694
3. Transformer ${ }^{2}$
\$1,718 \$2,751
4. Primary Line ${ }^{3}$
\$1,151
\$1,787
B. Weighting Factors for Relative $3 Ø$ Class Investment Costs

1. Meters
a. Resid.\& Farm

| $\$ 88 \div$ | $\$ 88$ | $=$ | 1.00 |  |
| ---: | ---: | ---: | ---: | ---: |
| $\$ 121 \div$ | $\$ 88$ | $=$ | 1.37 |  |
| $\$ 255$ | $\div$ | $\$ 88$ | $=$ | 2.88 |
| $\$ 280$ | $\div$ | $\$ 88$ | $=$ | 3.17 |
| $\$ 1,303$ | $\div$ | $\$ 88$ | $=$ | 14.74 |
| $\$ 2,330$ | $\div$ | $\$ 1,847$ | $=$ | 1.26 |
| $\$ 8,582$ | $\div$ | $\$ 4,339$ | $=$ | 1.98 |
| $\$ 6,393$ | $\div$ | $\$ 4,099$ | $=$ | 1.56 |

${ }^{1}$ Assume a typical installation of 80 feet of $1 / 0$ triplex (or quadriplex), pole and miscellaneous materials to estimate the difference between a $1 \varnothing$ and $3 \varnothing$ installation.

2 Use the cost difference between 1-75 kVA transformer and 3-25 kVA transformers as representative of the difference between a $1 \varnothing$ versus a $3 \varnothing$ transformer installation.
${ }^{3}$ Assume a typical installation of 150 feet of $1 / 0$ ACSR to estimate the difference in primary line between a $1 \varnothing$ and $3 Ø$ installation.
Analysis of Class Load Characteristics

| $\begin{gathered} \text { Line } \\ \text { No. } \\ \hline \end{gathered}$ | Description | Units | Total | Resid. <br> \& Farm | Small General Service | Irrigation | General Service | C\&I <br> Interruptible | Lighting |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Class Billing Determinants |  |  |  |  |  |  |  |  |  |
| 2 | No. of Cons. | cons. | 124,847 | 100,235 | 4,431 | 392 | 2,756 | 262 | 16,771 |
| 3 | Energy Sales -- All | MWh | 1,769,404 | 838,684 | 42,538 | 7,964 | 463,060 | 406,800 | 10,359 |
| 4 | Energy Sales -- On-Peak | MWh | 591,321 | 281,636 | 14,284 | 2,674 | 155,499 | 136,606 | 622 |
| 5 | Energy Sales -- Off-Peak | MWh | 1,178,083 | 557,048 | 28,253 | 5,290 | 307,561 | 270,194 | 9,737 |
| 6 | Billing Demand | kW-mo. | 2,496,047 |  |  | 76,255 | 1,449,303 | 970,490 |  |
|  |  |  |  |  |  |  |  |  |  |
| 8 | Demand Estimate |  |  |  |  |  |  |  |  |
| 9 | Non-Coincidental Demand of |  |  |  |  |  |  |  |  |
| 10 | Individual Cons. | kW | 1,122,260.0 | 772,748 | 35,427 | 21,856 | 183,608 | 105,789 | 2,832 |
| 11 | Non-Coincidental Class Demand | kW | 387,770.7 | 201,097 | 9,755 | 4,702 | 101,451 | 67,934 | 2,832 |
| 12 | Coincidental Summer Demand | kW | 326,853.1 | 202,779 | 9,352 | 396 | 112,926 | 1,400 |  |
| 13 | Coincidental Winter Demand | kW | 229,990.6 | 149,628 | 8,300 |  | 68,224 | 1,007 | 2,832 |
| 14 | Coincidental Other Demand | kW | 219,605.0 | 135,756 | 7,257 | 87 | 74,089 | 1,001 | 1,416 |
| 15 | Coincidental Class Demand-Transm. | kW | 257,935.3 | 155,980 | 8,041 | 142 | 82,332 | 10,024 | 1,416 |
| 16 | Base Rated Substation Capacity | kVA | 632,500.0 |  |  |  |  |  |  |

## Estimate of Class Demands

## I. Residential \& Farm $(31,32,53)$

A. Demand Per Consumer Calculation

|  | Summer ${ }^{1}$ | Winter ${ }^{1}$ | Other ${ }^{1}$ | Avg. |
| :---: | :---: | :---: | :---: | :---: |
| Energy usage/Month (kWh/cons/mo) | 900 | 727 | 643 | 722 |
| Estimated fully diversified demand per consumer (kW/cons.) ${ }^{2}$ | 2.44 | 2.02 | 1.81 | 2.01 |

B. Sum of Non-Coincidental Demands of Individual Consumers (Annual Peak)

|  | A" Factor ${ }^{3}$ |  |  | $\left(1-0.4+0.4\left(1^{2}+40\right)^{\wedge 1 / 2)}\right.$ |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Total kW | $=$ | 100,235 | Cons. | x | 3.1612 | x | $2.44=$

Total $\mathrm{kW}=100,235$ Cons. $\mathrm{x} 3.1612 \mathrm{x} \quad 2.44=$
772,748
C. Non-Coincidental Class Demand (Average Monthly)

| "A" Factor | $=$ |  | $\left(1-(0.4 \times 100,235)+0.4\left(100,235^{2}+40\right) \wedge 1 / 2\right)$ | $=$ | 1.0001 |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Total kW | $=$ | 100,235 | Cons. | x $1.0001 ~ x$ | 2.01 | $=$ | 201,097 |

D. Non-Coincidental Class Demand (Summer)

| "A" Factor |  |  |  | $\left(1-(0.4 \times 100,235)+0.4\left(100,235^{2}+40\right)^{\wedge 1} / 2\right)$ | $=$ | 1.0001 |
| :--- | :--- | :--- | :--- | :--- | :--- | ---: |
| Total kW | $=$ | 100,235 | Cons. x $1.0001 ~ x$ | 2.44 | $=$ | 244,463 |

E. Non-Coincidental Class Demand (Winter)

$$
\begin{array}{rlrlrrrr}
\left(1-\text { "A" Factor }^{3}\right. & = & & \left(1-(0.4 \times 100,235)+0.4\left(100,235^{2}+40\right) \wedge 1 / 2\right) & = & 1.0001 \\
\text { Total kW } & = & 100,235 & \text { Cons. } & \text { x } & 1.0001 \quad \text { x } & 2.02 & =
\end{array}
$$

[^29]
## Estimate of Class Demands

(Continued)

## I. Residential \& Farm $(31,32,53)$ (Continued)

F. Non-Coincidental Class Demand (Other)

| "A" Factor | $=$ |  | $\left(1-(0.4 \times 100,235)+0.4\left(100,235^{2}+40\right) \wedge 1 / 2\right)$ | $=$ | 1.0001 |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Total kW | $=$ | 100,235 | Cons. $\quad$ x | $1.0001 \quad$ x | 1.81 | $=$ |

G. Assigned Coincidental Demand Responsibility -- Summer
$\mathrm{kW}=202,779{ }^{4}$
H. Assigned Coincidental Demand Responsibility -- Winter
$\mathrm{kW}=149,628^{4}$
I. Assigned Coincidental Demand Responsibility -- Other
$\mathrm{kW}=135,756{ }^{4}$
J. Assigned Class Coincidental Demand Responsibility (25\% Summer, 25\% Winter, 50\% Other) $\mathrm{kW}=155,980^{4}$

[^30]
## Estimate of Class Demands

(Continued)

## II. Small General Service (41)

A. Demand Per Consumer Calculation

|  | Summer 1 | Winter ${ }^{1}$ | Other 1 | Avg. |
| :---: | :---: | :---: | :---: | :---: |
| Energy usage/Month (kWh/cons/mo) | 852 | 938 | 783 | 800 |
| Estimated fully diversified demand per consumer (kW/cons.) ${ }^{2}$ | 2.32 | 2.53 | 2.16 | 2.20 |

B. Sum of Non-Coincidental Demands of Individual Consumers (Annual Peak)

| "A" Factor | $=$ |  | $=$ | 3.1612 |
| :--- | :--- | :--- | :--- | :--- |
| Total kW | $\left(1-0.4+0.4\left(1^{2}+40\right)^{\wedge 1 / 2)}\right.$ |  |  |  |
| 3.53 | $=$ | 3.427 |  |  |

C. Non-Coincidental Class Demand (Average Monthly)

| "A" Factor | $\left(1-(0.4 \times 4,431)+0.4\left(4,431^{2}+40\right)^{\wedge} 1 / 2\right)$ |  |  |  |  |  | = | 1.0018 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total kW = | 4,431 | Cons. | X | 1.0018 | X | 2.20 | $=$ | 9,755 |

D. Non-Coincidental Class Demand (Summer)

| "A" Factor ${ }^{3}=$ | $\left(1-(0.4 \times 4,431)+0.4\left(4,431^{2}+40\right)^{\wedge} 1 / 2\right)$ |  | $=$ | 1.0018 |
| :--- | :--- | :--- | :--- | :--- |
| Total kW | $=$ | 4,431 Cons. x 1.0018 x | 2.32 | $=$ |
| 10,319 |  |  |  |  |

E. Non-Coincidental Class Demand (Winter)

| "A" Factor | $\left(1-(0.4 \times 4,431)+0.4\left(4,431^{2}+40\right)^{\wedge} 1 / 2\right)$ |  |  |  |  |  | $=$ | 1.0018 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total kW = | 4,431 | Cons. | X | 1.0018 | X | 2.53 | $=$ | 11,227 |

[^31]$$
\mathrm{kW} / \text { cons. }=.005925(\mathrm{kWh}) .885
$$

3 The "A" Factor from the RUS Demand Table reflects interclass diversity.

$$
\text { " } \mathrm{A} \text { " }=\left(1-.4 \mathrm{C}+.4\left(\mathrm{C}^{2}+40\right)^{1 ⁄ 2}\right)
$$

## Estimate of Class Demands

(Continued)

## II. Small General Service (41) (Continued)

F. Non-Coincidental Class Demand (Other)

| "A" Factor |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3 |  | $\left(1-(0.4 \times 4,431)+0.4\left(4,431^{2}+40\right)^{\wedge 1 / 2)}\right.$ |  | $=$ | 1.0018 |  |
| Total kW | $=$ | 4,431 | Cons. | x $1.0018 \quad$ x | 2.16 | $=$ |

G. Assigned Coincidental Demand Responsibility -- Summer
$\mathrm{kW}=\quad 9,352^{4}$
H. Assigned Coincidental Demand Responsibility -- Winter
$\mathrm{kW}=8,300^{4}$
I. Assigned Coincidental Demand Responsibility -- Other
$\mathrm{kW}=\quad 7,257^{4}$
J. Assigned Class Coincidental Demand Responsibility (25\% Summer, 25\% Winter, 50\% Other)

$$
\mathrm{kW}=8,041{ }^{4}
$$

[^32]
## Estimate of Class Demands

(Continued)

## III. Irrigation (36)

A. Sum of Non-Coincidental Demands of Individual Consumers (Annual Peak)

The sum of the peak annual non-coincidental demand of the consumers in this class is determined as follows:

$$
21,856 \mathrm{~kW}
$$

B. Non-Coincidental Class Demand (Average Monthly)

1. The sum of the monthly non-coincidental (class basis) demands of individual consumers in this class is determined from billing records (adjusted to Test Year conditions) to be $76,255 \mathrm{~kW}$.
2. The average nondiversified (class basis) monthly load factor of the class is calculated as follows:

$$
\text { 7,963,872 } \quad \mathrm{kWh} /(\quad 76,255 \quad \mathrm{~kW} \text { x } 730 \quad \mathrm{hr} .)=14.3 \%
$$

3. The coincidence factor is estimated from Bary curves to be $74 \%$.
4. The non-coincidental (system basis) average monthly demand of the class is estimated to be:

$$
(76,255 \mathrm{~kW} / 12 \mathrm{mo} .) \times 0.74=\quad 4,702 \mathrm{~kW}
$$

C. Non-Coincidental Class Demand (Summer)

1. The sum of the summer non-coincidental (class basis) demands of individual consumers in this class is determined from billing records (adjusted to Test Year conditions) to be $15,828 \mathrm{~kW}$.
2. The average nondiversified (class basis) summer load factor of the class is calculated as follows:

$$
2,312,050 \quad \mathrm{kWh} /(\quad 15,828 \quad \mathrm{~kW} \text { x } \quad 730 \quad \mathrm{hr} .)=20.0 \%
$$

3. The coincidence factor is estimated from Bary curves to be $79 \%$.
4. The non-coincidental (system basis) summer demand of the class is estimated to be:
$15,828 \mathrm{~kW} \times 0.79=$
12,504 kW

## Estimate of Class Demands

(Continued)

## III. Irrigation (36) (Continued)

D. Non-Coincidental Class Demand (Winter)

1. The sum of the winter non-coincidental (class basis) demands of individual consumers in this class is determined from billing records (adjusted to Test Year conditions) to be 159 kW .
2. The average nondiversified (class basis) winter load factor of the class is calculated as follows:

$$
\text { 11,999 } \quad \mathrm{kWh} /(\quad 159 \quad \mathrm{~kW} \mathrm{x} \quad 730 \quad \mathrm{hr} .)=0.0 \%
$$

3. The coincidence factor is estimated from Bary curves to be $0 \%$.
4. The non-coincidental (system basis) winter demand of the class is estimated to be:

$$
159 \mathrm{~kW} \times 0.00=
$$

E. Non-Coincidental Class Demand (Other)

1. The sum of the other months non-coincidental (class basis) demands of individual consumers in this class is determined from billing records (adjusted to Test Year conditions) to be 4,716 kW.
2. The average nondiversified (class basis) other load factor of the class is calculated as follows:

$$
165,287 \quad \mathrm{kWh} /(\quad 4,716 \quad \mathrm{~kW} \mathrm{x} \quad 730 \quad \mathrm{hr} .)=4.8 \%
$$

3. The coincidence factor is estimated from Bary curves to be $58 \%$.
4. The non-coincidental (system basis) other demand of the class is estimated to be:

$$
4,716 \mathrm{~kW} \times 0.58=\quad 2,735 \mathrm{~kW}
$$

F. Assigned Coincidental Demand Responsibility -- Summer

$$
\mathrm{kW}=\quad 396^{1}
$$

G. Assigned Coincidental Demand Responsibility -- Winter

$$
\mathrm{kW}=\quad 0^{1}
$$

H. Assigned Coincidental Demand Responsibility -- Other

$$
\mathrm{kW}=\quad 87 \quad 1
$$

I. Assigned Class Coincidental Demand Responsibility (25\% Summer, 25\% Winter, 50\% Other)

$$
\mathrm{kW}=\quad 142^{1}
$$

[^33]
# Estimate of Class Demands 

(Continued)

## IV. General Service (46)

A. Sum of Non-Coincidental Demands of Individual Consumers (Annual Peak)

The sum of the peak annual non-coincidental demand of the consumers in this class is determined as follows:

$$
183,608 \mathrm{~kW}
$$

B. Non-Coincidental Class Demand (Average Monthly)

1. The sum of the monthly non-coincidental (class basis) demands of individual consumers in this class is determined from billing records (adjusted to Test Year conditions) to be 1,449,303 kW.
2. The average nondiversified (class basis) monthly load factor of the class is calculated as follows:

$$
\text { 463,059,984 kWh/( 1,449,303 kW x } 730 \quad \mathrm{hr} .)=43.8 \%
$$

3. The coincidence factor is estimated from Bary curves to be $84 \%$.
4. The non-coincidental (system basis) average monthly demand of the class is estimated to be:

$$
(1,449,303 \mathrm{~kW} / 12 \mathrm{mo} .) \times 0.84=\quad 101,451 \mathrm{~kW}
$$

C. Non-Coincidental Class Demand (Summer)

1. The sum of the summer non-coincidental (class basis) demands of individual consumers in this class is determined from billing records (adjusted to Test Year conditions) to be $139,671 \mathrm{~kW}$.
2. The average nondiversified (class basis) summer load factor of the class is calculated as follows:

$$
50,334,827 \quad \mathrm{kWh} /(\quad 139,671 \mathrm{~kW} \text { x } 730 \quad \mathrm{hr} .)=49.4 \%
$$

3. The coincidence factor is estimated from Bary curves to be $84 \%$.
4. The non-coincidental (system basis) summer demand of the class is estimated to be:

$$
139,671 \mathrm{~kW} \times 0.84=
$$

## Estimate of Class Demands

(Continued)

## IV. General Service (46) (Continued)

D. Non-Coincidental Class Demand (Winter)

1. The sum of the winter non-coincidental (class basis) demands of individual consumers in this class is determined from billing records (adjusted to Test Year conditions) to be 109,861 kW.
2. The average nondiversified (class basis) winter load factor of the class is calculated as follows:

$$
42,032,747 \quad \mathrm{kWh} /(\quad 109,861 \quad \mathrm{~kW} \text { x } 730 \quad \mathrm{hr} .)=52.4 \%
$$

3. The coincidence factor is estimated from Bary curves to be $84 \%$.
4. The non-coincidental (system basis) winter demand of the class is estimated to be:

$$
109,861 \mathrm{~kW} \times 0.84=
$$

E. Non-Coincidental Class Demand (Other)

1. The sum of the Other non-coincidental (class basis) demands of individual consumers in this class is determined from billing records (adjusted to Test Year conditions) to be $116,785 \mathrm{~kW}$.
2. The average nondiversified (class basis) other load factor of the class is calculated as follows:

$$
39,942,113 \quad \mathrm{kWh} /(\quad 116,785 \mathrm{~kW} \text { x } 730 \quad \mathrm{hr} .)=46.9 \%
$$

3. The coincidence factor is estimated from Bary curves to be $83 \%$.
4. The non-coincidental (system basis) other demand of the class is estimated to be:

$$
116,785 \mathrm{~kW} \times 0.83=\quad 96,931 \mathrm{~kW}
$$

F. Assigned Coincidental Demand Responsibility -- Summer

$$
\mathrm{kW}=\quad 112,926^{1}
$$

G. Assigned Coincidental Demand Responsibility -- Winter

$$
\mathrm{kW}=\quad 68,224 \quad 1
$$

H. Assigned Coincidental Demand Responsibility -- Other

$$
\mathrm{kW}=\quad 74,089 \quad 1
$$

I. Assigned Class Coincidental Demand Responsibility (25\% Summer, 25\% Winter, 50\% Other)

$$
\mathrm{kW}=\quad 82,332 \quad 1
$$

[^34]
# Estimate of Class Demands 

(Continued)

## V. General Service Peak Alert $(\mathbf{7 0 , 7 1})$

A. Sum of Non-Coincidental Demands of Individual Consumers (Annual Peak)

The sum of the peak annual non-coincidental demand of the consumers in this class is determined as follows:
105,789 kW
B. Non-Coincidental Class Demand (Average Monthly)

1. The sum of the monthly non-coincidental (class basis) demands of individual consumers in this class is determined from billing records (adjusted to Test Year conditions) to be 970,490 kW.
2. The average nondiversified (class basis) monthly load factor of the class is calculated as follows:

$$
406,800,000 \quad \mathrm{kWh} /(\quad 970,490 \mathrm{~kW} \mathrm{x} \quad 730 \quad \mathrm{hr} .)=57.4 \%
$$

3. The coincidence factor is estimated from Bary curves to be $84 \%$.
4. The non-coincidental (system basis) average monthly demand of the class is estimated to be:

$$
(970,490 \mathrm{~kW} / 12 \mathrm{mo} .) \times 0.84=\quad 67,934 \mathrm{~kW}
$$

C. Non-Coincidental Class Demand (Summer)

1. The sum of the summer non-coincidental (class basis) demands of individual consumers in this class is determined from billing records (adjusted to Test Year conditions) to be 93,162 kW.
2. The average nondiversified (class basis) summer load factor of the class is calculated as follows:

$$
38,279,750 \quad \mathrm{kWh} /(\quad 93,162 \quad \mathrm{~kW} \mathrm{x} \quad 730 \quad \mathrm{hr} .)=56.3 \%
$$

3. The coincidence factor is estimated from Bary curves to be $84 \%$.
4. The non-coincidental (system basis) summer demand of the class is estimated to be:

$$
93,162 \mathrm{~kW} \times 0.84=
$$

## Estimate of Class Demands

(Continued)

## V. General Service Peak Alert $(\mathbf{7 0 , 7 1})$ (Continued)

D. Non-Coincidental Class Demand (Winter)

1. The sum of the winter non-coincidental (class basis) demands of individual consumers in this class is determined from billing records (adjusted to Test Year conditions) to be $68,418 \mathrm{~kW}$.
2. The average nondiversified (class basis) winter load factor of the class is calculated as follows:

$$
\text { 31,189,530 kWh/( 68,418 kW x } 730 \quad \text { hr. })=62.4 \%
$$

3. The coincidence factor is estimated from Bary curves to be $84 \%$.
4. The non-coincidental (system basis) winter demand of the class is estimated to be:

$$
68,418 \mathrm{~kW} \times 0.84=\quad 57,471 \mathrm{~kW}
$$

E. Non-Coincidental Class Demand (Other)

1. The sum of the Other non-coincidental (class basis) demands of individual consumers in this class is determined from billing records (adjusted to Test Year conditions) to be $80,958 \mathrm{~kW}$.
2. The average nondiversified (class basis) other load factor of the class is calculated as follows:

$$
33,065,360 \quad \mathrm{kWh} /(\quad 80,958 \quad \mathrm{~kW} \text { x } \quad 730 \quad \mathrm{hr} .)=55.9 \%
$$

3. The coincidence factor is estimated from Bary curves to be $84 \%$.
4. The non-coincidental (system basis) other demand of the class is estimated to be:

$$
80,958 \mathrm{~kW} \times 0.84=\quad 68,005 \mathrm{~kW}
$$

F. Assigned Coincidental Demand Responsibility -- Summer
$\mathrm{kW}=\quad 1,400^{1}$
G. Assigned Coincidental Demand Responsibility -- Winter
$\mathrm{kW}=\quad 1,007{ }^{1}$
H. Assigned Coincidental Demand Responsibility -- Other
$\mathrm{kW}=\quad 1,001{ }^{1}$
I. Assigned Class Coincidental Demand Responsibility (25\% Summer, 25\% Winter, 50\% Other)
$\mathrm{kW}=\quad 1,102{ }^{1}$

[^35]
## Estimate of Class Demands

(Continued)

## VI. Street and Security Lighting

A. Sum of Non-Coincidental Demands of Individual Consumers (Annual Peak)

| Size \& Type | Power Required Per Light |  |  | No. of Lights | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Lamp | Ballast | Total |  |  |
|  | (kW) | (kW) | (kW) |  | (kW) |
| Security Lighting (Schedule 44) |  |  |  |  |  |
| 175 W MV | 0.175 | 0.035 | 0.210 | 0 | 0 |
| 100 W HPS | 0.100 | 0.035 | 0.135 | 819 | 111 |
| 150 W HPS | 0.150 | 0.050 | 0.200 | 4 | 1 |
| 250 W HPS | 0.250 | 0.060 | 0.310 | 8 | 2 |
|  |  |  |  | 831 | 114 |
| Street Lighting (Schedule 44-2)) (DEA Owned Equipment) |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| 175 W MV | 0.175 | 0.035 | 0.210 | 0 | 0 |
| 250 W MV | 0.250 | 0.050 | 0.300 | 3 | 1 |
| 400 W MV | 0.400 | 0.050 | 0.450 | 0 | 0 |
| 100 W HPS | 0.100 | 0.035 | 0.135 | 38 | 5 |
| 150 W HPS | 0.150 | 0.050 | 0.200 | 646 | 129 |
| 250 W HPS | 0.250 | 0.060 | 0.310 | 1,597 | 495 |
| 400 W HPS | 0.400 | 0.075 | 0.475 | 1 | 0 |
|  |  |  |  | 2,285 | 631 |
| Street Lighting (Schedule 44-1) |  |  |  |  |  |
| (Cons. Owned Equipment) |  |  |  |  |  |
| 175 W MV | 0.175 | 0.035 | 0.210 | 0 | 0 |
| 250 W MV | 0.250 | 0.050 | 0.300 | 0 | 0 |
| 400 W MV | 0.400 | 0.050 | 0.450 | 0 | 0 |
| 100 W HPS | 0.100 | 0.035 | 0.135 | 0 | 0 |
| 150 W HPS | 0.150 | 0.050 | 0.200 | 101 | 20 |
| 200 W HPS | 0.200 | 0.055 | 0.255 | 101 | 26 |
| 250 W HPS | 0.250 | 0.060 | 0.310 | 272 | 84 |
| 400 W HPS | 0.400 | 0.075 | 0.475 | 13 | 6 |
|  |  |  |  | 487 | 136 |
| Custom Resid. Lighting(Schedule 44-3) <br> (DEA Owned contrib. by Cons.) |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| 175 W MV | 0.175 | 0.035 | 0.210 | 0 | 0 |
| 50 W HPS | 0.050 | 0.020 | 0.070 | 81 | 6 |
| 100 W HPS | 0.100 | 0.035 | 0.135 | 8,416 | 1,136 |
| 150 W HPS | 0.150 | 0.050 | 0.200 | 3,732 | 746 |
| 250 W HPS | 0.250 | 0.060 | 0.310 | 4 | 1 |
|  |  |  |  | 12,233 | 1,889 |
| LED Security Lighting (44-4) |  |  |  |  |  |
| LED, >4,500 Lumens |  |  | 0.048 | 338 | 16 |

## Estimate of Class Demands

(Continued)

## VI. Street and Security Lighting (Continued)

A. Sum of Non-Coincidental Demands of Individual Consumers (Annual Peak)

| Size \& Type | Power Required Per Light |  |  | No. of Lights | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Lamp | Ballast | Total |  |  |
| LED Street Lighting Member Owned(44-5) |  |  |  |  |  |
| A (40-80 watts) |  |  | 0.060 | 0 | 0 |
| B (81-150 watts) |  |  | 0.115 | 0 | 0 |
| C (151-250 watts) |  |  | 0.200 | 11 | 2 |
| D (251-350 watts) |  |  | 0.300 | 0 | 0 |
| E (351-450 watts) |  |  | 0.400 | 0 | 0 |
|  |  |  |  | 11 | 2 |
| LED Street Lighting (44-6) |  |  |  |  |  |
| Standard |  |  |  |  |  |
| >5,200 L, Coach (Post) |  |  | 0.075 | 121 | 9 |
| >5,200 L, Acorn (Post) |  |  | 0.060 | 48 | 3 |
| >7,000 L, Cobra (Mast) |  |  | 0.066 | 91 | 6 |
| >11,500 L, Shoebox |  |  | 0.109 | 151 | 16 |
| Basic |  |  |  |  |  |
| >5,200 L, Coach (Post) |  |  | 0.075 | 41 | 3 |
| >5,200 L, Acorn (Post) |  |  | 0.060 | 0 | 0 |
| >7,000 L, Cobra (Mast) |  |  | 0.066 | 53 | 3 |
| >11,500 L, Shoebox |  |  | 0.109 | 16 | 2 |

## VI. Street and Security Lighting

B. Non-Coincidental Class Demand (Average Monthly)

1. The non-coincidental (system basis) class demand for the average month is assumed equal to the undiversified peak annual demand of $2,832 \mathrm{~kW}$ calculated above.
C. Assigned Coincidental Demand Responsibility -- Summer

$$
\mathrm{kW}=\quad 0 \quad 1
$$

D. Assigned Coincidental Demand Responsibility -- Winter

$$
\mathrm{kW}=\quad 2,832 \quad 1
$$

E. Assigned Coincidental Demand Responsibility -- Other

$$
\mathrm{kW}=\quad 1,416{ }^{1}
$$

F. Assigned Class Coincidental Demand Responsibility (25\% Summer, $25 \%$ Winter, $50 \%$ Other)

$$
\mathrm{kW}=\quad 1,416 \quad 1
$$

[^36]
## Dakota Electric

## Estimate of Class Demands

(Continued)

## VII. Estimate of Coincidental Demand

| A. Non-Coincidental Class Demands | $\frac{\text { Summer }}{(\mathrm{kW})}$ | $\frac{\text { Winter }}{(\mathrm{kW})}$ | $\frac{\text { Other }}{(\mathrm{kW})}$ |
| :---: | :---: | :---: | :---: |
| Residential \& Farm $(31,32,53)$ | 174,147 | 202,394 | 169,945 |
| Residential \& Farm Controlled A/C (8131) | 70,316 | 0 | 11,719 |
| Small General Service (41) | 9,064 | 11,227 | 9,357 |
| Small General Service Controlled A/C (8141) | 1,255 | 0 | 209 |
| Irrigation (36) | 12,504 | 0 | 2,735 |
| General Service (46) | 117,323 | 92,283 | 96,931 |
| General Service Peak Alert (70,71) | 78,256 | 57,471 | 68,005 |
| Street and Security Lighting | 2,832 | 2,832 | 2,832 |
| Total | 465,697 | 366,207 | 361,734 |
| B. Coincidence Factors (Summer) | Summer | Winter | Other |
| 1. Other Classes | (kW) | (kW) | (kW) |
| Coincidence Factor |  |  |  |
| Summer Coincidental Demand | 326,853 | 229,990 | 219,605 |
| Less: |  |  |  |
| Residential \& Farm Controlled A/C (8131) | 35,158 |  | 5,860 |
| Small General Service Controlled A/C (8141) | 628 |  | 105 |
| Irrigation (36) | 396 | 0 | 87 |
| General Service Peak Alert (70,71) | 1,400 | 1,007 | 1,001 |
| Street and Security Lighting | 0 | 2,832 | 1,416 |
| Total | 289,271 | 226,152 | 211,137 |
| Summer Non-Coincidental Demand | 465,697 |  | 361,734 |
| Less: |  |  |  |
| Residential \& Farm Controlled A/C (8131) | 70,316 | 366,207 | 11,719 |
| Small General Service Controlled A/C (8141) | 1,255 |  | 209 |
| Irrigation (36) | 12,504 | 0 | 2,735 |
| General Service Peak Alert (70,71) | 78,256 | 57,471 | 68,005 |
| Street and Security Lighting | 2,832 | 2,832 | 2,832 |
| Total | 300,534 | 305,904 | 276,233 |
| Coincidence Factor = | 289,271 | 226,152 | 211,137 |
|  | 300,534 | 305,904 | 276,233 |
|  | 96.25\% | 73.93\% | 76.43\% |

## Estimate of Class Demands

(Continued)

## VII. Estimate of Coincidental Demand

C. Assigned Coincidental Demand Responsibility (Summer Peak)

| Rate Class | Summer Non-Coinc. Demand | Coinc. <br> Factor | Summer Coinc. Demand |
| :---: | :---: | :---: | :---: |
|  | (kW) |  | (kW) |
| Residential \& Farm $(31,32,53)$ | 174,147 | 0.9625 | 167,621 |
| Plus: Controlled A/C | 70,316 | 0.5000 | 35,158 |
| Total Residential \& Farm $(31,32,53)$ | 244,463 | 0.8295 | 202,779 |
| Small General Service (41) | 9,064 | 0.9625 | 8,724 |
| Less Controlled A/C | 1,255 | 0.5000 | 628 |
| Total Small General Service (41) | 10,319 | 0.9063 | 9,352 |
| Irrigation (36) | 12,504 | 0.0317 | 396 |
| General Service (46) | 117,323 | 0.9625 | 112,926 |
| General Service Peak Alert (70,71) | 78,256 | 0.0179 | 1,400 |
| Street and Security Lighting | 2,832 | 0.0000 | 0 |
| Total | 465,697 |  | 326,853 |

D. Assigned Coincidental Demand Responsibility (Winter Peak)

${ }^{1}$ Approximately $95.8 \%$ of the irrigation load is controlled so that it does not add to the GRE coincidental peak. Assume $75 \%$ coincident factor for the remaining customers.

| Summer | $0.042 \times 12,504 \mathrm{~kW} \times 0.75$ | $396 \mathrm{~kW}(\mathrm{CD})$ | $=$ | 396 |
| :--- | :--- | ---: | :--- | ---: | ---: |
| Other | $0.042 \times 2,735 \mathrm{~kW} \times 0.75$ | $87 \mathrm{~kW}(\mathrm{CD})$ | $=$ | 87 |

## Estimate of Class Demands

(Continued)

## VII. Estimate of Coincidental Demand

E. Assigned Coincidental Demand Responsibility (Other Peak)

| $\underline{\text { Rate Class }}$ | Other Non-Coinc. Demand | Coinc. <br> Factor | Other <br> Coinc. <br> Demand |
| :---: | :---: | :---: | :---: |
|  | (kW) |  | (kW) |
| Residential \& Farm $(31,32,53)$ | 169,945 | 0.7643 | 129,896 |
| Less Controlled A/C | 11,719 | 0.5000 | 5,860 |
| Net Residential \& Farm $(31,32,53)$ | 181,664 | 0.7473 | 135,756 |
| Small General Service (41) | 9,357 | 0.7643 | 7,152 |
| Less Controlled A/C | 209 | 0.5000 | 105 |
| Net Small General Service (41) | 9,566 | 0.7586 | 7,257 |
| Irrigation (36) | 2,735 | 0.0317 | 87 |
| General Service (46) | 96,931 | 0.7643 | 74,089 |
| General Service Peak Alert (70,71) | 68,005 | 0.0320 | 1,001 |
| Street and Security Lighting | 2,832 | 0.5000 | 1,416 |
| Total | 361,734 |  | 219,605 |

F. Assigned Coincidental Demand Responsibility
(25\% Summer, 25\% Winter, 50\% Other months)
Residential \& Farm $(31,32,53)$
Small General Service (41)
Irrigation (36)
General Service (42)
General Service Peak Alert (70)
Street and Security Lighting
$\quad$ Total

| General Service Peak Alert (70) |  | Class NCP | CF | Monthly Transm. | Annual Transm. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Summer | 3 mos. | 78,256 | 0.0179 | 1,400 | 4,200 |
| Winter | 3 mos . | 57,471 | 0.2000 | 11,494 | 34,483 |
| Other | 6 mos. | 68,005 | 0.2000 | 13,601 | 81,606 |
|  |  |  |  |  | 120,289 |
|  |  |  |  |  | 12 |
|  |  |  |  |  | 10,024 |

Development of Allocation Factors

| Line <br> No. | Description | Units | Total | Resid. \& Farm | Small General Service | Irrigation | General Service | C\&I <br> Interruptible | Lighting |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Allocation Factor Input Data |  |  |  |  |  |  |  |  |
| 2 | Energy |  |  |  |  |  |  |  |  |
| 3 | Energy Sales -- All | MWh | 1,769,404 | 838,684 | 42,538 | 7,964 | 463,060 | 406,800 | 10,359 |
| 4 | Energy Sales -- Critical Peak | MWh |  |  |  |  |  |  |  |
| 5 | Energy Sales -- On-Peak | MWh | 591,321 | 281,636 | 14,284 | 2,674 | 155,499 | 136,606 | 622 |
| 6 | Energy Sales -- Off-Peak | MWh | 1,178,083 | 557,048 | 28,253 | 5,290 | 307,561 | 270,194 | 9,737 |
| 7 | Dist. Losses | MWh | 2.68\% | 2.68\% | 2.68\% | 2.68\% | 2.68\% | 2.68\% | 2.68\% |
| 8 | Energy -- All @ Sub. | MWh | 1,816,837 | 861,167 | 43,678 | 8,177 | 475,474 | 417,705 | 10,636 |
| 9 | Energy -- Critical Peak @ Sub. | MWh |  |  |  |  |  |  |  |
| 10 | Energy -- On-Peak @ Sub. | MWh | 607,173 | 289,186 | 14,667 | 2,746 | 159,667 | 140,268 | 638 |
| 11 | Energy -- Off-Peak @ Sub. | MWh | 1,209,664 | 571,981 | 29,011 | 5,431 | 315,806 | 277,437 | 9,998 |
| 12 | Trans. Losses | MWh |  |  |  |  |  |  |  |
| 13 | Energy -- All @ Source | MWh | 1,816,837 | 861,167 | 43,678 | 8,177 | 475,474 | 417,705 | 10,636 |
| 14 | Energy -- Critical Peak @ Source | MWh |  |  |  |  |  |  |  |
| 15 | Energy -- On-Peak @ Source | MWh | 607,173 | 289,186 | 14,667 | 2,746 | 159,667 | 140,268 | 638 |
| 16 | Energy -- Off-Peak @ Source | MWh | 1,209,664 | 571,981 | 29,011 | 5,431 | 315,806 | 277,437 | 9,998 |
| 17 | Demand |  |  |  |  |  |  |  |  |
| 18 | Non-Coin. Demand @ Cons. | kW | 1,122,260 | 772,748 | 35,427 | 21,856 | 183,608 | 105,789 | 2,832 |
| 19 | Class Non-Coin. Demand @ Sub. | kW | 387,771 | 201,097 | 9,755 | 4,702 | 101,451 | 67,934 | 2,832 |
| 20 | Class Non-Coin. Demand Transm. | kW | 387,771 | 201,097 | 9,755 | 4,702 | 101,451 | 67,934 | 2,832 |
| 21 | Summer Coin. Demand | kW | 326,853 | 202,779 | 9,352 | 396 | 112,926 | 1,400 |  |
| 22 | Winter Coin. Demand | kW | 229,991 | 149,628 | 8,300 |  | 68,224 | 1,007 | 2,832 |
| 23 | Other Coin. Demand | kW | 219,605 | 135,756 | 7,257 | 87 | 74,089 | 1,001 | 1,416 |
| 24 | Trans. Coin. Demand | kW | 257,935 | 155,980 | 8,041 | 142 | 82,332 | 10,024 | 1,416 |
| 25 |  |  |  |  |  |  |  |  |  |
| 26 | Average and Excess Demand |  |  |  |  |  |  |  |  |
| 27 | Average Demand | kW | 207,402 | 98,307 | 4,986 | 933 | 54,278 | 47,683 | 1,214 |
| 28 | Class Excess Demand | kW | 180,369 | 102,790 | 4,769 | 3,769 | 47,173 | 20,251 | 1,618 |
| 29 | Alloc. Excess Demand | kW | 50,534 | 28,799 | 1,336 | 1,056 | 13,217 | 5,674 | 453 |
| 30 | Avg. \& Excess Demand | kW | 257,935 | 127,105 | 6,322 | 1,989 | 67,494 | 53,357 | 1,667 |
| 31 | Revenue |  |  |  |  |  |  |  |  |
| 32 | Present Rate Revenue | \$ | 197,242,256 | 112,877,123 | 5,701,055 | 912,232 | 50,388,052 | 25,295,556 | 2,068,238 |
| 33 | Proposed Rate Revenue | \$ | 197,242,256 | 112,877,123 | 5,701,055 | 912,232 | 50,388,052 | 25,295,556 | 2,068,238 |
| 34 | Consumer |  |  |  |  |  |  |  |  |
| 35 | No. Consumers |  | 124,847 | 100,235 | 4,431 | 392 | 2,756 | 262 | 16,771 |
| 36 | Pri. Line Weight. Factor |  |  | 1.00 | 1.20 | 1.50 | 1.46 | 1.56 | 0.02 |
| 37 | Weight. No. of Cons. |  | 110,887.9 | 100,235.0 | 5,298.8 | 589.4 | 4,020.6 | 408.6 | 335.4 |
| 38 | Transf. Weight. Factor |  |  | 1.00 | 1.34 | 1.88 | 1.80 | 1.98 | 0.02 |
| 39 | Weight. No. of Cons. |  | 112,739.4 | 100,235.0 | 5,947.6 | 737.0 | 4,966.1 | 518.2 | 335.4 |
| 40 | Service Weight. Factor |  |  | 1.00 | 1.09 | 1.24 | 1.21 | 1.26 | 0.02 |
| 41 | Weight. No. of Cons. |  | 109,568.6 | 100,235.0 | 4,836.5 | 484.3 | 3,346.9 | 330.5 | 335.4 |
| 42 | Meter Weight. Factor |  |  | 1.00 | 1.37 | 2.88 | 3.17 | 14.74 | 0.02 |
| 43 | Weight. No. of Cons. |  | 120,374.1 | 100,235.0 | 6,071.0 | 1,130.3 | 8,740.5 | 3,861.9 | 335.4 |
| 44 | Cons. Acct. Weight Factor |  |  | 1.00 | 1.37 | 2.88 | 3.17 | 14.74 | 0.02 |
| 45 | Weight. No. of Cons. <br> DEA Exhibit 3 COS FINAL.xlsm |  | 120,374.1 | 100,235.0 | 6,071.0 | 1,130.3 | 8,740.5 | 3,861.9 | 335.4 |

Development of Allocation Factors
(Continued)

| Line <br> No. | Description | Data <br> Line <br> No. | Name | Total | $\begin{gathered} \text { Resid. } \\ \text { \& Farm } \end{gathered}$ |  | Irrigation | General Service | C\&I <br> Interruptible | Lighting |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 46 | Allocation Factors |  |  |  |  |  |  |  |  |  |
| 47 | Energy Related |  |  |  |  |  |  |  |  |  |
| 48 | Energy -- All @ Sub. | 8 | E1 | 1.000000 | 0.473992 | 0.024041 | 0.004501 | 0.261704 | 0.229908 | 0.005854 |
| 49 | Energy -- Critical Peak @ Sub. | 9 | E2 |  |  |  |  |  |  |  |
| 50 | Energy -- On-Peak @ Sub. | 10 | E3 | 1.000000 | 0.476282 | 0.024157 | 0.004523 | 0.262968 | 0.231019 | 0.001051 |
| 51 | Energy -- Off-Peak @ Sub. | 11 | E4 | 1.000000 | 0.472843 | 0.023982 | 0.004490 | 0.261069 | 0.229350 | 0.008265 |
| 52 | Energy -- All @ Source | 13 | E5 | 1.000000 | 0.473992 | 0.024041 | 0.004501 | 0.261704 | 0.229908 | 0.005854 |
| 53 | Energy -- Critical Peak @ Sourct | 14 | E6 |  |  |  |  |  |  |  |
| 54 | Energy -- On-Peak @ Source | 15 | E7 | 1.000000 | 0.476282 | 0.024157 | 0.004523 | 0.262968 | 0.231019 | 0.001051 |
| 55 | Energy -- Off-Peak @ Source | 16 | E8 | 1.000000 | 0.472843 | 0.023982 | 0.004490 | 0.261069 | 0.229350 | 0.008265 |
| 56 |  |  |  |  |  |  |  |  |  |  |
| 57 | Demand Related |  |  |  |  |  |  |  |  |  |
| 58 | Non-coin. Demand @ Cons. | 18 | D1 | 1.000000 | 0.688564 | 0.031567 | 0.019475 | 0.163606 | 0.094265 | 0.002523 |
| 59 | Non-coin. Demand @ Class | 19 | D2 | 1.000000 | 0.518597 | 0.025156 | 0.012127 | 0.261627 | 0.175192 | 0.007303 |
| 60 | Non-coin. Demand @ Transm | 20 | D3 | 1.000000 | 0.518597 | 0.025156 | 0.012127 | 0.261627 | 0.175192 | 0.007303 |
| 61 | Summer Coin. Demand | 21 | D4 | 1.000000 | 0.620398 | 0.028611 | 0.001213 | 0.345495 | 0.004284 |  |
| 62 | Winter Coin. Demand | 22 | D5 | 1.000000 | 0.650583 | 0.036088 |  | 0.296638 | 0.004377 | 0.012314 |
| 63 | Other Coin. Demand | 23 | D6 | 1.000000 | 0.618181 | 0.033044 | 0.000395 | 0.337374 | 0.004558 | 0.006448 |
| 64 | Trans. Coin. Demand @ Sub. | 24 | D7 | 1.000000 | 0.604724 | 0.031175 | 0.000552 | 0.319196 | 0.038863 | 0.005490 |
| 65 | Coin. Demand @ Source | 25 | D8 |  |  |  |  |  |  |  |
| 66 | Avg. \& Excess | 30 | D9 | 1.000000 | 0.492779 | 0.024510 | 0.007713 | 0.261671 | 0.206862 | 0.006464 |
| 67 |  |  |  |  |  |  |  |  |  |  |
| 68 | Revenue Related |  |  |  |  |  |  |  |  |  |
| 69 | Present Rate Revenue | 32 | R1 | 1.000000 | 0.572277 | 0.028904 | 0.004625 | 0.255463 | 0.128246 | 0.010486 |
| 70 | Proposed Rate Revenue | 33 | R2 | 1.000000 | 0.572277 | 0.028904 | 0.004625 | 0.255463 | 0.128246 | 0.010486 |
| 71 |  |  |  |  |  |  |  |  |  |  |
| 72 | Consumer Related |  |  |  |  |  |  |  |  |  |
| 73 | No. of Cons. | 35 | C1 | 1.000000 | 0.802863 | 0.035491 | 0.003140 | 0.022075 | 0.002099 | 0.134332 |
| 74 | Pri. Line Weight. Cons. | 37 | C2 | 1.000000 | 0.903931 | 0.047786 | 0.005315 | 0.036259 | 0.003685 | 0.003025 |
| 75 | Transf. Weight. Cons. | 39 | C3 | 1.000000 | 0.889086 | 0.052756 | 0.006537 | 0.044049 | 0.004597 | 0.002975 |
| 76 | Services Weight. Cons. | 41 | C4 | 1.000000 | 0.914815 | 0.044141 | 0.004420 | 0.030546 | 0.003016 | 0.003061 |
| 77 | Meter Weight. Cons. | 43 | C5 | 1.000000 | 0.832696 | 0.050434 | 0.009390 | 0.072611 | 0.032082 | 0.002786 |
| 78 | Cons. Acct. Weight. Cons. | 45 | C6 | 1.000000 | 0.832696 | 0.050434 | 0.009390 | 0.072611 | 0.032082 | 0.002786 |



Exhibit $\qquad$ (DEA-2)
Page 1 of 8

## Determination of Revenue <br> Requirements - Summary



[^37]
## Rate Base

| (a) | (b) | (c) <br> Line <br> No. |
| :---: | :---: | ---: |
|  | Description | Proposed <br> Pest Year |
|  | Utility Plant in Service $^{1}$ | $(\$)$ |
| 2 | Construction Work in Progress $^{1}$ | $300,342,133$ |
| 3 | Less: Accumulated Provision for Deprec. $^{2}$ | $4,222,209$ |
| 4 | Net Plant $^{1}$ | $126,526,023$ |
| 5 | Materials \& Supplies - Electric $^{3}$ | $178,038,319$ |
| 6 | Working Capital $^{4}$ | $4,715,491$ |
| 7 | Subtotal $^{6}$ | $6,816,147$ |
| 8 | Less: Consumer Deposits $^{1}$ | $11,531,638$ |
| 9 | Total Rate Base | 505,101 |

[^38]
## Rate Base Calculations <br> Materials \& Supplies

$\left.\begin{array}{crcc}\text { (a) } & \text { (b) } & \begin{array}{c}\text { (c) } \\ \text { Line } \\ \text { No. }\end{array} & \text { Month }\end{array} \begin{array}{c}\text { Supplies } \\ \text { Electric }{ }^{\mathbf{1}}\end{array}\right]$

[^39]Exhibit__(DEA-2)
Page 4 of 8

## Cost of Debt

| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Line No. | Description | Interest Rate | Estimated Balance | Annualized Interest Expense ${ }^{1}$ | Target Debt | Cost of Debt | Weighted Cost of Debt |
|  | Long Term Debt | (\%) | (\$) | (\$) | (\%) | (\%) | (\%) |
| 1 | CFC | 3.400\% | 1,585,363 | 53,902 |  |  |  |
| 2 | CFC | 4.500\% | 2,082,541 | 93,714 |  |  |  |
| 3 | CFC | 4.050\% | 1,766,030 | 71,524 |  |  |  |
| 4 | CFC | 4.250\% | 2,218,947 | 94,305 |  |  |  |
| 5 | CFC | 3.500\% | 2,465,360 | 86,288 |  |  |  |
| 6 | CFC | 3.800\% | 3,794,320 | 144,184 |  |  |  |
| 7 | CFC | 3.550\% | 11,379,844 | 403,984 |  |  |  |
| 8 | CFC | 3.550\% | 4,704,028 | 166,993 |  |  |  |
| 9 | CFC | 3.750\% | 4,337,267 | 162,648 |  |  |  |
| 10 | CFC | 3.300\% | 1,917,161 | 63,266 |  |  |  |
| 11 | CFC | 2.500\% | 1,309,090 | 32,727 |  |  |  |
| 12 | CFC | 3.600\% | 4,705,933 | 169,414 |  |  |  |
| 13 | CFC | 3.750\% | 9,749,608 | 365,610 |  |  |  |
| 14 | CFC | 4.250\% | 9,957,793 | 423,206 |  |  |  |
| 15 | CFC/Farmer Mac | 4.250\% | 2,816,884 | 119,718 |  |  |  |
| 16 | CFC/Farmer Mac | 3.830\% | 1,632,746 | 62,534 |  |  |  |
| 17 | CFC/Farmer Mac | 3.970\% | 992,292 | 39,394 |  |  |  |
| 18 | CoBank | 4.350\% | 1,059,986 | 46,109 |  |  |  |
| 19 | CoBank | 2.590\% | 3,841,338 | 99,491 |  |  |  |
| 20 | CoBank | 4.101\% | 4,904,209 | 201,122 |  |  |  |
| 21 | CoBank | 3.500\% | 1,088,704 | 38,105 |  |  |  |
| 22 | CoBank | 4.560\% | 4,332,287 | 197,552 |  |  |  |
| 23 | CoBank | 3.950\% | 3,433,732 | 135,632 |  |  |  |
| 24 | CoBank | 3.960\% | 3,738,278 | 148,036 |  |  |  |
| 25 | CoBank | 1.910\% | 167,115 | 3,192 |  |  |  |
| 26 | CoBank | 2.760\% | 1,546,883 | 42,694 |  |  |  |
| 27 | CoBank | 3.960\% | 3,745,754 | 148,332 |  |  |  |
| 28 | CoBank | 3.340\% | 4,574,903 | 152,802 |  |  |  |
| Total Long Term Debt 12/31/2018 ${ }^{2}$ |  |  | 99,848,397 | 3,766,478 | 60\% | 3.77\% | 2.26\% |

[^40]$\qquad$

## Historic Total Capitalization

| (a) <br> Line | (b) | $(\mathrm{c})$ | $(\mathrm{d})$ | $\left(\begin{array}{l}\text { (e) } \\ \text { No. }\end{array}\right.$ |
| :---: | :---: | ---: | ---: | ---: |
| Year | Equity | Debt | Total Capitalization ${ }^{1}$ |  |
|  |  |  |  | $(\$)$ |
| 1 | 1998 | $47,724,259$ | $89,235,673$ | $136,959,932$ |
| 2 | 1999 | $47,523,140$ | $86,467,753$ | $133,990,893$ |
| 3 | 2000 | $48,277,127$ | $86,508,221$ | $134,785,348$ |
| 4 | 2001 | $52,338,198$ | $84,148,127$ | $136,486,325$ |
| 5 | 2002 | $56,192,068$ | $91,885,042$ | $148,077,110$ |
| 6 | 2003 | $59,702,313$ | $92,300,874$ | $152,003,187$ |
| 7 | 2004 | $60,411,502$ | $104,332,408$ | $164,743,910$ |
| 8 | 2005 | $69,656,348$ | $100,360,082$ | $170,016,430$ |
| 9 | 2006 | $81,417,061$ | $101,287,278$ | $182,704,339$ |
| 10 | 2007 | $89,428,738$ | $107,146,528$ | $196,575,266$ |
| 11 | 2008 | $94,900,838$ | $107,846,291$ | $202,747,129$ |
| 12 | 2009 | $100,631,181$ | $114,660,602$ | $215,291,783$ |
| 13 | 2010 | $109,245,168$ | $115,021,054$ | $224,266,222$ |
| 14 | 2011 | $119,055,182$ | $112,770,620$ | $231,825,802$ |
| 15 | 2012 | $127,764,369$ | $98,368,388$ | $226,132,757$ |
| 16 | 2013 | $136,837,360$ | $92,752,617$ | $229,589,977$ |
| 17 | 2014 | $147,409,115$ | $96,605,051$ | $244,014,166$ |
| 18 | 2015 | $150,975,647$ | $94,984,079$ | $245,959,726$ |
| 19 | 2016 | $161,294,191$ | $93,878,841$ | $255,173,032$ |
| 20 | 2017 | $169,199,058$ | $97,068,697$ | $266,267,755$ |
| 21 | 2018 | $173,151,167$ | $99,848,397$ | $272,999,564$ |

The mean growth rate in Total Capitalization is estimated to be:

$$
\text { 2013-2018 }=\quad 3.52 \%
$$

Total Capitalization figures represent Margins \& Equities plus Total Long-Term Debt for the years listed. See Workpaper 1 for years 2014 thru 2018.

## Asset Growth Rate

## Department of Commerce Methodology

(Natural Logarithm of a Number)
(a)
(b)
(c)
(d)
(e)
$L N o f$
Assets Year Time Assets ${ }^{1}$ From LRF

| 19.6450 | 2018 | 1 | $340,193,777$ | $340,193,777$ |
| :--- | :--- | :--- | :--- | :--- |
| 19.6618 | 2019 | 2 | $345,961,418$ | $345,961,418$ |
| 19.6816 | 2020 | 3 | $352,873,712$ | $352,873,712$ |
| 19.6974 | 2021 | 4 | $358,477,813$ | $358,477,813$ |
| 19.7135 | 2022 | 5 | $364,321,717$ | $364,321,717$ |
| 19.7318 | 2023 | 6 | $371,018,880$ | $371,018,880$ |
| 19.7445 | 2024 | 7 | $375,785,642$ | $375,785,642$ |
| 19.7583 | 2025 | 8 | $380,994,230$ | $380,994,230$ |
| 19.7713 | 2026 | 9 | $385,996,186$ | $385,996,186$ |
| 19.7851 | 2027 | 10 | $391,362,529$ | $391,362,529$ |
| 19.8009 | 2028 | 11 | $397,573,959$ | $397,573,959$ |

0.0154 (10 yr. exponential GR)
0.0173 (5 yr. exponential GR)

1 Assets represent forecasted Assets for the years listed. See Workpaper 5, Page 2.

## Ratio Calculations <br> Department of Commerce Methodology

| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Equity ${ }^{1}$ | Debt ${ }^{2}$ | $\begin{gathered} \text { Total } \\ \text { Capital }^{3} \end{gathered}$ | Equity Ratio ${ }^{4}$ | $\begin{gathered} \text { Debt } \\ \text { Ratio }^{5} \end{gathered}$ | Assets ${ }^{6}$ | $\begin{gathered} \text { Equity as } \\ \text { \% of Assets }{ }^{7} \end{gathered}$ |
| 2019 | 175,914,526 | 105,640,524 | 281,555,050 | 0.6248 | 0.3752 | 345,961,418 | 50.85\% |
| 2020 | 177,214,989 | 111,540,354 | 288,755,343 | 0.6137 | 0.3863 | 352,873,712 | 50.22\% |
| 2021 | 178,231,219 | 116,416,226 | 294,647,445 | 0.6049 | 0.3951 | 358,477,813 | 49.72\% |
| 2022 | 179,402,896 | 121,376,453 | 300,779,349 | 0.5965 | 0.4035 | 364,321,717 | 49.24\% |
| 2023 | 180,280,744 | 127,483,768 | 307,764,512 | 0.5858 | 0.4142 | 371,018,880 | 48.59\% |
| 2024 | 179,749,233 | 133,070,041 | 312,819,274 | 0.5746 | 0.4254 | 375,785,642 | 47.83\% |
| 2025 | 179,718,738 | 138,597,124 | 318,315,862 | 0.5646 | 0.4354 | 380,994,230 | 47.17\% |
| 2026 | 178,123,694 | 145,364,127 | 323,487,821 | 0.5506 | 0.4494 | 385,996,186 | 46.15\% |
| 2027 | 176,747,430 | 152,394,734 | 329,142,164 | 0.5370 | 0.4630 | 391,362,529 | 45.16\% |
| 2028 | 176,124,124 | 159,517,470 | 335,641,594 | 0.5247 | 0.4753 | 397,573,959 | 44.30\% |
|  |  |  | 5-yr average: | 60.51\% | 39.49\% |  | 49.72\% |
|  |  |  | 10-yr average: | 57.77\% | 42.23\% |  | 47.92\% |

[^41]
## Overall Return on Rate Base Department of Commerce Methodology

| Assumptions: |  |  |
| :--- | :--- | ---: |
| 1 | Asset Growth Rate |  |
| 2 | Equity Ratio | $1.73 \%$ |
| 3 | Debt Ratio | $53.085 \%$ |
| 4 | Test Year Total Capital | $\$ 272,999,564$ |
| 5 | Test Year Total Equity | $\$ 173,151,167$ |
| 6 | Test Year Total Debt | $\$ 99,848,397$ |
| 7 | Annual Capital Credits | $\$ 3,500,000$ |
| 8 | Rate Base | $\$ 189,064,856$ |
| 9 | Cost of Long-Term Debt | $3.77 \%$ |

## Terms:

CC Capital Credits
DR Debt Ratio $=($ Debt $/$ Total Capital $)$
ER Equity Ratio = (Equity/Total Capital $)$
g Growth in Equity
i Cost of Long-Term Debt
K Rate of Return on Equity
OCC Overall Cost of Capital
RB Rate Base
ROR Return on Rate Base
TC Total Capital
TIER Times Interest Earned Ratio

## DOC Method:

| Return on Equity: $\mathrm{K}=\mathrm{g}+(\mathrm{CC} /(\mathrm{ER} \mathrm{x} \mathrm{TC}))$ | g | ER | TC | CC |  |
| :--- | :--- | :---: | :---: | :--- | :--- |
|  | 0.0173 | 0.5309 | $272,999,564$ | $\$$ | $3,500,000$ |


| Return on Equity: | 0.0414 | $\mathrm{~K}=\mathrm{g}+(\mathrm{CC} /(\mathrm{ER} \times \mathrm{TC}))$ |
| ---: | :---: | :--- |
| Overall Cost of Capital (OCC): | 0.0397 | $\mathrm{OCC}=(\mathrm{ER} \times \mathrm{K})+((1-\mathrm{ER}) \times \mathrm{i})$ |
| Overall Return on Rate Base: | $\mathbf{0 . 0 5 7 3}$ | $\mathrm{ROR}=\mathrm{OCC} \times(\mathrm{TC} / \mathrm{RB})$ |
| Times Interest Earned Ratio: | 2.24 | $\mathrm{TIER}=((\mathrm{K} \times \mathrm{ER})+(\mathrm{i} \times \mathrm{DR})) /(\mathrm{i} \times \mathrm{DR})$ |

[^42]

# Statement of Operations <br> Present Rates <br> Test Year - 2018 Historical Adjusted 

| (a) <br> Line <br> No. | (b) Description | $\begin{gathered} \text { (c) } \\ 2018 \\ \text { Actual } \\ \hline \end{gathered}$ | (d) ${ }_{\text {Adjustments }{ }^{1}}$ | (e) <br> Pro Forma Test Year |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Operating Revenue | (\$) | (\$) | (\$) |
| 2 | Rate Schedules | 202,630,477 | $(2,150,170)$ | 200,480,307 |
| 3 | Other | 508,198 | 592,593 | 1,100,791 |
| 4 | Total Operating Revenue | 203,138,675 | $(1,557,577)$ | 201,581,098 |
| 5 | Operating Expenses |  |  |  |
| 6 | Cost of Purchased Power | 149,330,034 | 1,319,432 | 150,649,466 |
| 7 | Transmission - O \& M | - |  | - |
| 8 | Distribution- Operation | 7,277,184 | $(383,045)$ | 6,894,139 |
| 9 | Distribution - Maintenance | 6,151,338 | 242,574 | 6,393,912 |
| 10 | Consumer Accounts | 5,312,955 | 380,854 | 5,693,809 |
| 11 | Consumer Service \& Information | 3,585,760 | $(180,461)$ | 3,405,299 |
| 12 | Sales | - |  | - |
| 13 | Administrative \& General | 11,907,838 | 71,783 | 11,979,621 |
| 14 | Depreciation \& Amortization | 10,281,975 | 404,073 | 10,686,048 |
| 15 | Taxes - Property | 3,372,283 | 178,507 | 3,550,790 |
| 16 | Taxes - Other | - |  | - |
| 17 | Other Interest Expense | 549,008 |  | 549,008 |
| 18 | Other Deductions | 6,239 | $(38,705)$ | $(32,466)$ |
| 19 | Total Operating Expenses (Before |  |  |  |
|  | Long Term Interest) | 197,774,614 | 1,995,012 | 199,769,626 |
| 20 | Net Operating Income (Before Long |  |  |  |
|  | Term Interest) | 5,364,061 | $(3,552,589)$ | 1,811,472 |

[^43]
## Summary of Test Year Adjustments to Operating Expenses

| (a) <br> Line <br> No. | (b) Description |  | (c) <br> 2018 <br> Actual |  | (d) justments |  | (e) <br> Pro Forma Test Year | Change from 2018 Actual |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Operating Expenses |  |  |  |  |  |  |  |  |
| 1 | Distribution - Operation (DO) | \$ | 7,277,184 | \$ | $(383,045)$ |  | 6,894,139 | -5.3\% |
| 2 | Distribution - Maintenance (DM) |  | 6,151,338 |  | 242,574 |  | 6,393,912 | 3.9\% |
| 3 | Consumer Accounts (CA) |  | 5,312,955 |  | 380,854 |  | 5,693,809 | 7.2\% |
| 4 | Consumer Service \& Information (CS) |  | 3,585,760 |  | $(180,461)$ |  | 3,405,299 | -5.0\% |
| 5 | Sales |  |  |  | - |  | - |  |
| 6 | Administrative \& General (AG) |  | 11,907,838 |  | 71,783 |  | 11,979,621 | 0.6\% |
| 7 | Depreciation \& Amortization |  | 10,281,975 |  | 404,073 |  | 10,686,048 | 3.9\% |
| 8 | Taxes - Property |  | 3,372,283 |  | 178,507 |  | 3,550,790 | 5.3\% |
| 9 | Taxes - Other |  | - |  | - |  | - |  |
| 10 | Other Interest Expense |  | 549,008 |  | - |  | 549,008 | 0.0\% |
| 11 | Other Deductions |  | 6,239 |  | $(38,705)$ |  | $(32,466)$ | -620.4\% |
|  | Total Operating Expenses Excluding Purchased Power (Before Long Term Interest) | \$ | 48,444,580 | \$ | 675,580 | \$ | 49,120,160 | 1.4\% |

Check Total

Summary of Test Year Adjustments to Operating Expenses Payroll

General Payroll Increase
Capital to Expense Changes
Staffing Changes
Total Payroll Adjustments
Payroll Benefits
Benefits on General Payroll Increase
Benefits on Capital to Expense Changes
Benefits on Staffing Changes
Base Benefit Decrease
Total Payroll Benefits
Depreciation
Other Adjustments
Property Taxes
Reduction in CIP Spending 2019 Budget to 2018 Actual
Regulatory Filing Fees
Rate Filing Fees recovery over 5 years
Net Deduction for Disallowed Expenses
Total Test Year Adjustments

## Reference

| $\$$ | 420,048 | Page 3 of 22 |
| :---: | :---: | :---: |
|  | $(65,168)$ | Page 4 of 22 |
|  | 260,379 | Page 5 of 22 |
|  | 615,259 |  |

197,171 Page 7 of 22
$(30,590) \quad$ Page 7 of 22
122,222 Page 7 of 22
$(393,317) \quad$ Page 6 of 22
$(104,514)$
404,073 Page 8 of 22
$(118,505) \quad$ Page 10 of 22
178,507 Page 8 of 22
$(200,296) \quad$ Page 9 of 22
18,800 Page 9 of 22
82,000 Page 10 of 22
$(199,744) \quad$ Page 10 of 22
\$ 675,580

| TEST YEAR ADJUSTMENTS ADJUSTMENTS TO PAYROLL |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| GENERAL WAGE INCREASE |  |  |  |  |
|  | Effective Date | Avg. \% <br> Increase | Wages Booked Prior To Increase | Wages Booked After Increase |
|  |  |  | (\$) | (\$) |
| Union (Hourly Wages \& OT) |  |  | Expensed | Expensed |
| Historical Test Year | 1/1/18 | 2.50\% | - | 7,047,334 |
|  |  |  |  | Jan thru Dec |
| Future Test Year | 1/1/19 | 2.50\% | - | 7,223,518 |
| Non-Union (Salaries, PT, etc.) |  |  |  |  |
| Historical Test Year | 6/1/18 | 2.50\% | 3,745,930 | 5,462,416 |
|  |  |  | Jan thru Jun | Jul - Dec |
| Future Test Year | 6/1/19 | 2.75\% | 3,839,578 | 5,612,632 |
| Net Adjustment to Expensed Wages |  |  |  | 420,048 |
| Total Union \& Non-Union |  |  |  <br> Wages Only | Total Comp inc OT, PT, etc. |
| Historical |  |  | 15,133,222 | 16,255,680 |
| Future Test Year |  |  | 15,524,462 | 16,675,728 |
| Net Increase |  |  | 2.6\% | 2.6\% |

Is the increase shown for the Future Test Year committed or still to be negotiated?
$\begin{array}{ll}\text { Union: } & \text { Committed } \\ \text { Non-Union: } & \text { Not Committed }\end{array}$

## CAPITAL TO EXPENSE CHANGE FOR NORMALIZED CONSTRUCTION YEAR

|  | \% <br> Expensed |  | Total <br> Payroll |  | Expensed Payroll |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Historical 2018 Test Year | 86.0\% | \$ | 18,709,060 | \$ | 16,097,181 |
| Average \% Expensed 2015 thru 2018 | 85.7\% |  |  |  | 16,033,664 |
| Additional Expensed for Normalized Year |  |  |  | \$ | $(63,517)$ |
| Test Year Net Increase |  |  |  |  | 2.6\% |
| Net Additional Expensed for Normalized Year |  |  |  | \$ | $(65,168)$ |
| Allocated to Operations \& Maintenance Categories |  |  |  |  |  |

Payroll Percentage Expensed History

|  | $\%$ <br> Expensed | Total <br> Payroll | Expensed <br> 2 | 2015 |
| :--- | :---: | ---: | ---: | ---: |

Exhibit__(DEA-1)
Page 5 of 22


1 Additional wages which would have been booked had the individual been employed for the entire Historical Year assuming an average of 2 FTEs unfilled.

| Dakota Electric AssociationTEST YEAR ADJUSTMENTSADJUSTMENTS TO PAYROLL RELATED EXPENSE |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| G/L <br> Account <br> Number |  | Rate |  | Total Cost Historical Test Year |  |
|  |  | Historical Test Year | Future Test Year |  |  |
| (\% of Payroll) (\% of Payroll) |  |  |  | (\$ Expensed) |  |
| Pension <br> Savings (401k) <br> FICA Tax <br> Life Insurance <br> Workers' Compensation <br> Medical Insurance <br> State \& Federal Unemployment Other-Retirement Health Benefits | 81540-41 | 17.57\% | 16.71\% A | \$ | $\begin{array}{r} 2,680,484 \\ 964,809 \end{array}$ |
|  | 81530-31 | 6.32\% | 6.77\% B |  |  |
|  | 81410 | 7.60\% | 7.60\% | 1,159,549 |  |
|  | 81520 | 0.55\% | 0.60\% | 84,336 |  |
|  | 82520 | 1.23\% | 1.32\% | 188,060 |  |
|  | 81510-15 | 12.55\% | 12.87\% | 1,915,268 |  |
|  | 81420-30 | 0.16\% | 0.14\% | 23,855 |  |
|  | 81550 | 3.54\% | 0.93\% C | 539,650 |  |
|  |  | 49.5\% | 46.94\% | \$ | 7,556,011 |
| Pro Forma Test Year Expensed Payroll Benefits |  |  |  | \$ 7,162,694 |  |
|  |  |  | Adjustment | \$ | $(393,317)$ |
| Historical Test Year Exp | Salaries \& | Hourly Wages | 15,259,255 |  |  |

## Notes:

A - Per NRECA, effective January 2019, the salaried and hourly rate is $28.93 \%$ and has increased 29pp from 2018. The decrease as a percent of total payroll is due to employee turnover as new hires are not eligible for the Retirement \& Pension Plan.

B- Beginning March 1, 2006, new hires are not eligible for the Retirement \& Pension Plan, but are enrolled in a new 401 k plan where DEA will contribute $5 \%$ of base pay and will match up to an additional $5 \%$ of base pay. DEA contributes only $4 \%$ to employees that are in the pension plan. When employees with the pension retire at the lower rate and are replaced by new hires at the higher rate, the average rate increases.

C-The decrease in the Other-Retirement Health Benefits is due to a 2018 yearend accrual adjustment to the post-employment FAS 106 benefit related to the increase in medical insurance. This increase is not anticipated in 2019.

## Dakota Electric Association

TEST YEAR ADJUSTMENTS SUMMARY ADJUSTMENTS TO PAYROLL AND BENEFITS

| SUMMARY OF COMPENSATION CHARGED TO EXPENSE ACCOUNTS |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Category | Historical <br> Test Year <br> Expensed <br> Compensation |  | Capital to Expense Changes | Staffing <br> Changes | Adjusted <br> Test Year <br> Expensed <br> Compensation |
|  | (\$) | (\$) | (\$) | (\$) | (\$) |
| I Operations | 2,985,569 | 77,906 | $(33,389)$ | $(34,438)$ | 2,995,648 |
| I Maintenance | 2,841,645 | 74,151 | $(31,779)$ | 156,816 | 3,040,833 |
| C Consumer Accounting | 2,113,151 | 55,142 | - | 111,823 | 2,280,116 |
| C Consumer Services | 1,001,465 | 26,133 | - | 7,671 | 1,035,269 |
| \& Administration \& General | 7,116,699 | 185,707 | - | 18,507 | 7,320,913 |
| Other (Diversified projects) | 38,652 | 1,009 | - | - | 39,661 |
| Construction | - | - | - | - | - |
| Total | 16,097,181 | 420,048 | $(65,168)$ | 260,379 | 16,712,440 |

SUMMARY OF PAYROLL BENEFITS CHARGED TO EXPENSE ACCOUNTS

| Category | Historical <br> Test Year <br> Expensed <br> Benefits | Benefits on General Payroll Increase | Benefits on Capital to Expense Changes | Benefits on Staffing Changes | Base <br> Benefits Adjustment | Adjusted <br> Test Year <br> Expensed <br> Benefits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 46.94\% | 46.94\% | 46.94\% | -2.58\% |  |
|  | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) |
| Operations | 1,401,425 | 36,569 | $(15,673)$ | $(16,165)$ | $(72,949)$ | 1,333,207 |
| Maintenance | 1,333,867 | 34,806 | $(14,917)$ | 73,609 | $(69,432)$ | 1,357,933 |
| Consumer Accounting | 991,912 | 25,884 | - | 52,490 | $(51,633)$ | 1,018,653 |
| Consumer Services | 470,087 | 12,267 | - | 3,601 | $(24,470)$ | 461,485 |
| Administration \& General | 3,340,577 | 87,171 | - | 8,687 | $(173,889)$ | 3,262,546 |
| Other (Diversified projects) | 18,143 | 474 | - | - | (944) | 17,673 |
| Construction | - | - | - | - | - | - |
| Total | 7,556,011 | 197,171 | $(30,590)$ | 122,222 | $(393,317)$ | 7,451,497 |


| Dakota Electric Association <br> TEST YEAR ADJUSTMENTS <br> ADJUSTMENTS - OTHER |  |
| :---: | :---: |
| Adjustment to Depreciation |  |
| Depreciation on Existing Plant |  |
| 1. Depreciation expense for the month of December 2018: | \$ 890,504 |
| 2. Multiply by 12 months. | 12 |
| 3. Normalized Depreciation Expense on Existing Plant | \$ 10,686,048 |
| Depreciation for the Pro Forma Test Year | \$ 10,686,048 |
| Less Historical 2018 Depreciation | (10,281,975) |
| Adjustment for Test Year | \$ 404,073 |
| Adjustment to Property Tax Expense |  |
| 1. Property Tax booked in the Historical Test Year: | \$ 3,371,493 |
| 2. Property Tax to be booked in the next 12 months: | 3,550,000 |
| Property Tax Adjustment | \$ 178,507 |

Note:
Current annual depreciation rates are outlined in the 5 -year depreciation study in Docket No. E111/D-17-505.

| TEST YEAR ADJUSTMENTS ADJUSTMENTS - OTHER (continued) |  |  |
| :---: | :---: | :---: |
| Projected Reduction in Total CIP Spending 2018 Actual to 2019 Budget |  |  |
| 2019 Budget CIP Spending | \$ | 2,206,786 |
| 2018 Actual Spending |  | 2,407,082 |
| Adjustment for CIP Spending | \$ | $(200,296)$ |
| Adjustment to Regulatory Filing Fees |  |  |
| 1. Indirect Assessments for 2019 Budget <br> 2 Direct Assessments for 2019 Budget Total Assessments | \$ | 344,000 |
|  |  | 85,000 |
|  | \$ | 429,000 |
| Assessments for the Pro Forma Test Year | \$ | 429,000 |
| Less Historical 2018 Filing Fees |  | $(410,200)$ |
| Adjustment for Test Year | \$ | 18,800 |


| Dakota Electric Association |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TEST YEAR ADJUSTMENTS ADJUSTMENTS - OTHER (continued) |  |  |  |  |  |
|  | FERC Acct |  | Project Code |  |  |
| Adjustment for Rate Filing Expense |  |  |  |  |  |
| Estimated Rate Filing Expense (excluding internal labor) |  |  | RATECASE19 | \$ | 410,000 |
| Amortize over 5 years |  |  |  |  | 5 |
| Adjustment (to A\&G Expense) | 928 |  |  | \$ | 82,000 |
| Adjustment for nonrecurring reimbursements |  |  |  |  |  |
| Adjustment for nonrecurring reimbursements |  |  |  | \$ | - |
| Other Adjustments |  |  |  |  |  |
| Normalize Contracted Services for Kubra Data Transfer Services |  |  |  | \$ | 36,758 |
| Normalize Contracted Services for Itineris |  |  |  |  | 109,080 |
| Normalize Collection Recovery Costs |  |  |  |  | 27,358 |
| Normalize Contracted Services for meter reading |  |  |  |  | 13,952 |
| Normalize for Circuits Redesign and advertising removal |  |  |  |  | 2,300 |
| Distributed Generation contracts terminated |  |  |  |  | 19,320 |
| Subsidiaries contracts terminated |  |  |  |  | 6,129 |
| Dispatching contracts terminated |  |  |  |  | 24,308 |
| Internet project completed (only depreciation remaining) |  |  |  |  | $(8,496)$ |
| Removal of AGi project |  |  |  |  | $(382,291)$ |
| New broadband lease agreement (shared expense with GRE) |  |  |  |  | 33,077 |
| Other Adjustments |  |  |  | \$ | $(118,505)$ |
| Adjustment for Disallowed Expenses |  |  | Project |  |  |
| Exclude Touchstone Energy Branding Project | 920 |  | BRANDING |  | $(115,225)$ |
| Exclude Image bill insert | 909 |  | Portion of MKT |  | $(7,667)$ |
| Customer Relations Disallowed Expenses: |  |  |  |  |  |
| Exclude Customer Zoo Event | 930 |  | CUSEVENT |  | $(37,608)$ |
| Subtract 50\% of Donation Project \$ Disallowed: |  |  |  |  |  |
| Community Donations | 426.1 | 50\% | DONCOMM |  | $(8,663)$ |
| Human Services Donations | 426.1 | 50\% | DONHUMSV |  | $(6,873)$ |
| Special Donations | 426.1 | 50\% | DONSPEC |  | $(9,500)$ |
| Youth Donations | 426.1 | 50\% | DONYOUTH |  | $(13,958)$ |
| Other Donations | 426.1 | 50\% | Various |  | (250) |
|  |  |  |  | \$ | $(199,744)$ |

## Summary of Consumers, Energy Sales, and Revenue Under Present Rates

## I. Consumer and Sales Data for 2018 (As Recorded)

| (a) | (b) | (c) | (d) | (e) | (f) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Line <br> No. | Description | Avg. No. Cons. | Energy Sales ${ }^{1}$ | $\begin{gathered} \text { Billing } \\ \text { Demand }^{11} \\ \hline \end{gathered}$ | Revenue ${ }^{1}$ |
|  |  |  | (kWh) | (kW) | (\$) |
| 1 | Residential \& Farm Service (31) | 99,322 | 867,819,897 | N.A. | 116,867,077 |
| 2 | Residential \& Farm Demand Control (32) | 15 | 407,603 | 989 | 45,353 |
| 3 | Electric Vehicle (33) | 0 | 332,257 | N.A. | 25,854 |
| 4 | Irrigation Service (36) Firm | 9 | 301,498 | 3,464 | 90,636 |
| 5 | Irrigation Service (36) Interruptible | 382 | 8,585,963 | 81,869 | 961,923 |
| 6 | Small General Service (41) | 4,426 | 42,642,557 | N.A. | 5,744,594 |
| 7 | Security Lighting Service (44) - Closed to New | 831 | 446,106 | N.A. | 102,393 |
| 8 | Street Lighting Service (44-2) | 2,284 | 2,487,972 | N.A. | 463,839 |
| 9 | Street Lighting System (44-1) | 487 | 523,536 | N.A. | 70,135 |
| 10 | Custom Residential Street Lighting (44-3) | 12,233 | 7,432,586 | N.A. | 1,331,468 |
| 11 | LED Security Lighting Service (44-4) | 338 | 63,709 | N.A. | 30,558 |
| 12 | LED Street Lighting Member Owned(44-5) | 11 | 8,056 | N.A. | 1,196 |
| 13 | LED Street Lighting (44-6) | 465 | 171,871 | N.A. | 51,719 |
| 14 | Low Wattage Unmetered Service (45) | 66 | - | N.A. | 7,888 |
| 15 | General Service (46) | 2,696 | 449,957,114 | 1,404,899 | 48,236,894 |
| 16 | Municipal Civil Defense Sirens (47) | 66 | - | N.A. | 3,960 |
| 17 | Geothermal Heat Pump (49) Closed to New | 3 | 203,303 | N.A. | 19,781 |
| 18 | Controlled Energy Storage (51) | 1,280 | 10,853,238 | N.A. | 501,196 |
| 19 | Controlled Interruptible Service (52) | 6,403 | 49,078,197 | N.A. | 2,949,495 |
| 20 | Residential \& Farm Time of Day (53) | 18 | 217,249 | N.A. | 27,157 |
| 21 | General Service Time of Day (54) | 6 | 1,143,456 | 7,338 | 134,668 |
| 22 | Standby Service (60) | 1 | - | - | 65,387 |
| 23 | Full Interruptible Service (70) | 233 | 384,258,036 | 870,612 | 24,613,715 |
| 24 | Partial Interruptible Service (71) | 27 | 25,529,544 | 102,790 | 2,062,689 |
| 25 | Cycled Air Conditioning Service (80) | 41,630 | 4,754,757 | N.A. | $(1,786,057)$ |
| 26 | Wellspring |  |  |  | 6,959 |
| 27 | Total ${ }^{2}$ | 107,135 | 1,852,463,748 | 2,471,961 | 202,630,477 |

1 See Workpaper 12.
2 The total number of consumers excludes Security, Street \& Residential Lighting, Low Wattage Unmetered Service , Municipal Civil Defense Sirens, Controlled Off-Peak Energy Storage, Interruptible Heating, and Controlled Air Conditioning Service.

## Summary of Consumers, Energy Sales, and Revenue Under Present Rates

(Continued)
II. Consumer and Sales Data for Pro Forma Test Year

| (a) | (b) | (c) | (d) | (e) | (f) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Line <br> No. | Description | 2019 Budget Avg No. Cons. | Energy <br> Sales | $\begin{gathered} \text { Billing } \\ \text { Demand }^{2} \\ \hline \end{gathered}$ | Revenue ${ }^{3}$ |
|  |  |  | (kWh) | (kW) | (\$) |
| 1 | Residential \& Farm Service (31) | 100,202 | 838,089,528 | N.A. | 114,332,035 |
| 2 | Residential \& Farm Demand Control (32) | 15 | 378,000 | 917.2 | 42,670 |
| 3 | Electric Vehicle (33) | 88 | 300,960 | N.A. | 24,636 |
| 4 | Irrigation Service (36) Firm | 8 | 162,528 | 1,867.3 | 50,143 |
| 5 | Irrigation Service (36) Interruptible | 384 | 7,801,344 | 74,387.5 | 862,089 |
| 6 | Small General Service (41) | 4,431 | 42,537,600 | N.A. | 5,799,609 |
| 7 | Security Lighting Service (44) - Closed to New | 878 | 405,600 | N.A. | 102,369 |
| 8 | Street Lighting Service (44-2) | 2,269 | 2,405,280 | N.A. | 466,293 |
| 9 | Street Lighting System (44-1) | 470 | 521,040 | N.A. | 72,603 |
| 10 | Custom Residential Street Lighting (44-3) | 12,190 | 6,750,960 | N.A. | 1,334,683 |
| 11 | LED Security Lighting Service (44-4) | 356 | 64,896 | N.A. | 31,109 |
| 12 | LED Street Lighting Member Owned(44-5) | 11 | 8,712 | N.A. | 1,297 |
| 13 | LED Street Lighting (44-6) | 597 | 202,152 | N.A. | 59,884 |
| 14 | Low Wattage Unmetered Service (45) | 71 | - | N.A. | 8,520 |
| 15 | General Service (46) | 2,750 | 462,000,000 | 1,442,500.4 | 50,261,766 |
| 16 | Municipal Civil Defense Sirens (47) | 66 | - | N.A. | 3,960 |
| 17 | Geothermal Heat Pump (49) Closed to New | 3 | 172,800 | N.A. | 16,571 |
| 18 | Controlled Energy Storage (51) | 1,718 | 10,308,000 | N.A. | 459,736 |
|  | Controlled Interruptible Service (52) | 6,686 | 44,127,600 | N.A. | 2,634,418 |
| 20 | Residential \& Farm Time of Day (53) | 18 | 216,216 | N.A. | 29,057 |
| 21 | General Service Time of Day (54) | 6 | 1,059,984 | 6,802.3 | 126,286 |
| 22 | Standby Service (60) | 1 | - |  | 66,840 |
| 23 | Full Interruptible Service (70) | 234 | 379,080,000 | 858,880.1 | 23,144,467 |
| 24 | Partial Interruptible Service (71) | 28 | 27,720,000 | 111,609.5 | 2,151,089 |
| 25 | Cycled Air Conditioning Service (80) | 41,880 | 5,075,000 | N.A. | $(1,625,193)$ |
| 26 | Wellspring |  |  |  | 23,370 |
| 27 | Total ${ }^{4}$ | 108,165 | 1,824,313,200 | 2,496,964.3 | 200,480,307 |
| 28 | Actual Revenue Recorded 2018 |  |  |  | 202,630,477 |
| 29 | Adjustment |  |  |  | $(2,150,170)$ |

[^44]
## Summary of Consumers, Energy Sales, and Revenue Under Present Rates

(Continued)
III. Estimate of Revenue Under Present Rates

| Rate Class | Billing Determinants | Units | Rate | Revenue |
| :---: | :---: | :---: | :---: | :---: |
| Residential \& Farm Service (31) |  |  |  | (\$) |
| Fixed Charge | 100,202 | cons. | \$9.00 | 10,821,816 |
| Energy Charge | 838,089,528 | kWh |  |  |
| Summer | 257,025,312 | kWh | \$0.13080 | 33,618,911 |
| Other | 581,064,216 | kWh | \$0.11680 | 67,868,300 |
|  |  |  | Subtotal | 112,309,027 |
| RTA Charge ${ }^{1}$ | 838,089,528 | kWh | \$0.00250 | 2,095,224 |
| Controlled Water Heater Credit | 1,003 | units | (\$6.00) | $(72,216)$ |
|  |  |  | Total | 114,332,035 |
| Residential \& Farm Demand Control (32) |  |  |  |  |
| Fixed Charge | 15 | cons. | \$12.00 | 2,160 |
| Demand Charge | 917.2 | kW |  |  |
| Summer | 182.2 | kW | \$14.70 | 2,678 |
| Other | 735.0 | kW | \$11.10 | 8,159 |
| Energy Charge | 378,000 | kWh | \$0.07600 | 28,728 |
|  |  |  | Subtotal | 41,725 |
| RTA Charge ${ }^{1}$ | 378,000 | kWh | \$0.00250 | 945 |
|  |  |  | Total | 42,670 |
| Electric Vehicle (33) |  |  |  |  |
| Energy Charge |  |  |  |  |
| Off Peak | 280,402 | kWh | \$0.06740 | 18,899 |
| On Peak | 8,554 | kWh | \$0.41440 | 3,545 |
| Other |  |  |  |  |
| Summer | 2,693 | kWh | \$0.13080 | 352 |
| Other | 9,311 | kWh | \$0.11680 | 1,088 |
|  |  |  | Subtotal | 23,884 |
| RTA Charge ${ }^{1}$ | 300,960 | kWh | \$0.00250 | 752 |

[^45]
# Summary of Consumers, Energy Sales, and Revenue Under Present Rates 

(Continued)

## III. Estimate of Revenue Under Present Rates

| Rate Class | Billing Determinants | Units | Rate | Revenue |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | (\$) |
| Irrigation Service (36) |  |  |  |  |
| Firm Service |  |  |  |  |
| Fixed Charge | 8 | cons. | \$30.00 | 2,880 |
| Demand Charge | 1,867.3 |  |  |  |
| Summer | 902.3 |  | \$26.35 | 23,776 |
| Winter |  | kW | \$20.95 | 52 |
| Other | 962.5 | kW | \$15.50 | 14,919 |
| Energy Charge | 162,528 | kWh | \$0.04990 | 8,110 |
|  |  |  | Subtotal | 49,737 |
| RTA Charge ${ }^{1}$ | 162,528 | kWh | \$0.00250 | 406 |
|  |  |  | Total | 50,143 |
| Interruptible Service |  |  |  |  |
| Fixed Charge | 384 | cons. | \$30.00 | 138,240 |
| Demand Charge | 74,388 | kW | \$4.55 | 338,463 |
| Energy Charge | 7,801,344 | kWh | \$0.04990 | 389,287 |
|  |  |  | Subtotal | 865,990 |
| RTA Charge ${ }^{1}$ | 7,801,344 | kWh | (\$0.00050) | $(3,901)$ |
|  |  |  | Total | 862,089 |
| Small General Service (41) |  |  |  |  |
| Fixed Charge | 4,431 | cons. | \$14.00 | 744,408 |
| Energy Charge | 42,537,600 | kWh |  |  |
| Summer | 10,541,910 | kWh | \$0.12690 | 1,337,768 |
| Other | 31,995,690 | kWh | \$0.11290 | 3,612,313 |
|  |  |  | Subtotal | 5,694,489 |
| RTA Charge ${ }^{1}$ | 42,537,600 |  | \$0.00250 | 106,344 |
| Controlled Water Heater Credit |  | units | (\$6.00) | $(1,224)$ |
|  |  |  | Total | 5,799,609 |

[^46]Exhibit 1,2,4-8 FINAL.xlsx

# Summary of Consumers, Energy Sales, and Revenue Under Present Rates 

(Continued)
III. Estimate of Revenue Under Present Rates

| Rate Class |
| :--- |
| Security Lighting Service (44) |

$$
175 \mathrm{~W} \text { MV }
$$

100 W HPS
150 W HPS
250 W HPS
RTA Charge ${ }^{1}$

Street Lighting Service (44-2)
175 W MV
250 W MV
400 W MV
100 W HPS
150 W HPS
250 W HPS
400 W HPS
RTA Charge ${ }^{1}$

## Street Lighting System (44-1)

| 175 W MV | - | lights | \$10.52 | 0 |
| :---: | :---: | :---: | :---: | :---: |
| 250 W MV | - | lights | \$13.46 | 0 |
| 400 W MV | - | lights | \$18.54 | 0 |
| 100 W HPS | - | lights | \$7.56 | 0 |
| 150 W HPS | 101 | lights | \$9.46 | 11,466 |
| 200 W HPS | 101 | lights | \$11.41 | 13,829 |
| 250 W HPS | 272 | lights | \$13.25 | 43,248 |
| 400 W HPS | 13 | lights | \$17.67 | 2,757 |
|  | 487 | lights | Subtotal | 71,300 |
| RTA Charge ${ }^{1}$ | 521,040 | kWh | \$0.00250 | 1,303 |
|  |  |  | Total | 72,603 |

# Summary of Consumers, Energy Sales, and Revenue Under Present Rates 

(Continued)
III. Estimate of Revenue Under Present Rates

|  | Billing <br> Rate Class | Determinants | Units | Rate |
| :---: | :---: | :---: | :---: | :---: | Revenue | (\$) |
| :---: |

## Custom Residential Street Lighting (44-3)

| 175 W MV | - | lights | \$11.37 | 0 |
| :---: | :---: | :---: | :---: | :---: |
| 50 W HPS | 81 | lights | \$6.70 | 6,512 |
| 100 W HPS | 8,416 | lights | \$8.41 | 849,343 |
| 150 W HPS | 3,732 | lights | \$10.30 | 461,275 |
| 250 W HPS | 4 | lights | \$14.09 | 676 |
|  | 12,233 | lights | Subtotal | 1,317,806 |
| RTA Charge ${ }^{1}$ | 6,750,960 | kWh | \$0.00250 | 16,877 |
|  |  |  | Total | 1,334,683 |

## LED Security Lighting (44-4)

LED, >4,500 Lumens
RTA Charge ${ }^{1}$

## LED Street Lighting Member Owned(44-5)

A (40-80 watts)
B (81-150 watts)
C (151-250 watts)
D (251-350 watts)
E (351-450 watts)
RTA Charge ${ }^{1}$

| - | lights | $\$$ | 4.81 | - |
| :---: | :---: | :---: | ---: | :---: |
| - | lights | $\$$ | 6.71 | - |
| 11 | lights | $\$$ | 9.66 | 1,275 |
| - | lights | $\$$ | 13.05 | - |
| - | lights | $\$$ | 16.52 | - |
| 11 | Subtotal | 1,275 |  |  |
| $8,712 \mathrm{kWh}$ | $\$ 0.00250$ | 22 |  |  |
|  |  |  |  |  |

[^47]
# Summary of Consumers, Energy Sales, and Revenue Under Present Rates 

(Continued)
III. Estimate of Revenue Under Present Rates

Rate Cla
LED Street Lighting (44-6)

## Standard

$>5,200 \mathrm{~L}$, Coach (Post)
$>5,200 \mathrm{~L}$, Acorn (Post)
$>7,000 \mathrm{~L}$, Cobra (Mast)
$>11,500$ L, Shoebox

## Basic

$>5,200 \mathrm{~L}$, Coach (Post)
$>5,200 \mathrm{~L}$, Acorn (Post)
$>7,000 \mathrm{~L}$, Cobra (Mast)
>11,500 L, Shoebox
RTA Charge ${ }^{1}$
41 lights
0 lights
53 lights
16 lights
521

| $\$ 6.83$ | 3,360 |
| ---: | ---: |
| $\$ 6.30$ | - |
| $\$ 6.51$ | 4,140 |
| $\$ 7.98$ | 1,532 |
| $\$ 0.00250$ | 59,379 |
|  | 505 |

## Low Wattage Unmetered Service (45)

Fixed Charge
71 cons.
$\$ 10.00 \quad 8,520$

## General Service (46)

Fixed Charge
Demand Charge
Summer
Other
Energy Charge
First 200 kWh/kW
Next 200 kWh/kW
Over $400 \mathrm{kWh} / \mathrm{kW}$
Discounts
Primary Voltage
Primary Metering
RTA Charge ${ }^{1}$

Billing
Determinants Units
Units Rate
Revenue
(\$)

# Summary of Consumers, Energy Sales, and <br> Revenue Under Present Rates 

(Continued)
III. Estimate of Revenue Under Present Rates

| Rate Class |
| :--- |
| Municipal Civil Defense Sirens (47) |
| Fixed Charge |

## Geothermal Heat Pump (49)

Energy Charge
RTA Charge ${ }^{1}$

| 172,800 | kWh | $\$ 0.09400$ | 16,243 |
| :--- | :--- | :--- | ---: |
|  |  | Subtotal | 16,243 |
| 172,800 | kWh | $\$ 0.00190$ | 328 |
|  |  | Total | 16,571 |
|  |  |  |  |

## Controlled Off-Peak Space \& Energy Storage (51)

Energy Net Charge - Rate 31
Summer
Other
Energy Charge - Rate 41
Summer
Other
Energy Charge - Rate 46
RTA Charge ${ }^{1}$

## Interruptible Heating Service (52)

Energy Net Charge - Rate 31
Summer
Other
Energy Charge - Rate 41
Summer
Other
Energy Charge - Rate 46

RTA Charge ${ }^{1}$

[^48]Exhibit 1,2,4-8 FINAL.xlsx

## Summary of Consumers, Energy Sales, and Revenue Under Present Rates

(Continued)
III. Estimate of Revenue Under Present Rates

|  | Billing |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Rate Class | Determinants | Units | Rate | Revenue |

## Residential \& Farm Time of Day (53)

Fixed Charge
Energy Charge
Peak Period
Summer
Other
Off-Peak Period

RTA Charge ${ }^{1}$

## General Service Time of Day (54)

Fixed Charge
Demand Charge
Peak Period
Summer
Winter
Other
Maximum
Energy Charge

Discounts
Primary Voltage
Primary Metering
RTA Charge ${ }^{1}$

Standby Service Large Power General (60)
Generation Reservation Fee
Summer
Winter
Other
Distribution Reservation Fee
Primary
Secondary

6 cons.
6,802.3
960.1 kW
436.9 kW

1,253.2 kW
4,152.1 kW
1,059,984 kWh
$\$ 4.75$
$\$ 0.04990$ Subtotal

| kW |  |
| ---: | :--- |
| $1,059,984$ | kWh |


|  | $(\$ 0.15)$ |
| ---: | :--- |
| $(2.00 \%)$ |  |
| $\$ 0.00250$ |  |


| 2,650 |
| ---: |
| 126,286 |

${ }^{1} 2019$ applied RTA.

## Summary of Consumers, Energy Sales, and Revenue Under Present Rates

(Continued)

## III. Estimate of Revenue Under Present Rates

| Rate Class | Billing <br> Determinants | Units | Rate | Revenue |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | (\$) |
| Full Interruptible Service (70) |  |  |  |  |
| Fixed Charge | 234 | cons. | \$110.00 | 308,880 |
| Communication Fee | 51 |  | \$8.70 | 5,324 |
| Coinc. Demand Charge |  |  |  |  |
| Summer | 1,042.8 | kW | \$24.85 | 25,914 |
| Winter | 0.0 | kW | \$18.95 | 0 |
| Other | 0.0 | kW | \$13.00 | 0 |
| Total Coinc Demand | 1,042.8 | kW |  |  |
| Non-Coinc. Demand | 858,880.1 | kW | \$4.75 | 4,079,680 |
| Failure to Control | 1,042.8 |  | \$5.00 | 5,214 |
| Energy Charge | 379,080,000 | kWh | \$0.04990 | 18,916,092 |
| Discounts |  |  | Subtotal | 23,341,104 |
| Primary Voltage | 47,311.12 | kW | (\$0.15) | $(\$ 7,097)$ |
| Primary Metering | - |  | (2.0\%) | \$0 |
| RTA Charge ${ }^{1}$ | 379,080,000 | kWh | (\$0.00050) | $(189,540)$ |
|  |  |  | Total | 23,144,467 |
| Partial Interruptible Service (71) |  |  |  |  |
| Fixed Charge | 28 | cons. | \$110.00 | 36,960 |
| Communication Fee | 17 |  | \$8.70 | 1,775 |
| Coinc. Demand Charge |  |  |  |  |
| Summer | 3,212.2 | kW | \$24.85 | 79,823 |
| Winter | 2,980.2 | kW | \$18.95 | 56,475 |
| Other | 5,964.3 | kW | \$13.00 | 77,536 |
| Total Coinc Demand | 12,156.7 | kW |  |  |
| Non-Coinc. Demand | 111,610 | kW | \$4.75 | 530,145 |
| Excess Demand |  | kW | \$5.00 | 0 |
| Energy Charge | 27,720,000 | kWh | \$0.04990 | 1,383,228 |
| Discounts |  |  | Subtotal | 2,165,942 |
| Primary Voltage | 6,622.67 | kW | \$0.15 | (993) |
| Primary Metering | 0 |  | 2.00\% | - |
| RTA Charge ${ }^{1}$ | 27,720,000 | kWh | (\$0.00050) | $(13,860)$ |
|  |  |  | Total | 2,151,089 |

[^49]
## Summary of Consumers, Energy Sales, and Revenue Under Present Rates

(Continued)
III. Estimate of Revenue Under Present Rates

| Rate Class | Billing <br> Determinants | Units | Rate | Revenue |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | (\$) |
| Controlled Air Conditioning Service (80) |  |  |  |  |
| Option 1 |  | kWh | \$0.00 | 0 |
| Option 2 |  |  |  |  |
| Residential Rate 81/31 | 4,858,654 | kWh | (\$0.03200) | $(155,477)$ |
| Rate 81/41 | 216,346 | kWh | (\$0.03200) | $(6,923)$ |
| Rate 81/46 | 0 | kWh | (\$0.03200) | 0 |
|  | 5,075,000 | kWh |  | $(162,400)$ |
| Option 3 |  |  |  |  |
| Residential Rate 82/31 | 35,158 | cons. | (\$13.00) | $(1,371,162)$ |
| Commercial | 0 | cons. | (\$13.00) | 0 |
|  | 35,158 |  |  | $(1,371,162)$ |
| Option 4 |  |  |  |  |
| Rate 84/41 | 4,699 | tons | (\$6.50) | $(91,631)$ |
| Rate 84/46 | 0 | tons | (\$6.50) | 0 |
|  | 4,699 |  |  | $(91,631)$ |
|  |  |  | tal | $(1,625,193)$ |

$$
\begin{array}{ll}
\text { Wellspring } & \text { 23,370 }
\end{array}
$$

## Estimate of Pro Forma

## Test Year Purchased Power Expense



[^50]
## STATE OF MINNESOTA

## BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

In the Matter of the Application of DAKOTA ELECTRIC ASSOCIATION
for Authority to Increase Rates for
Electric Service in Minnesota
Docket No. E-111/GR-19-478

PREFILED DIRECT TESTIMONY OF
DOUGLAS R. LARSON
VICE PRESIDENT OF REGULATORY SERVICES
DAKOTA ELECTRIC ASSOCIATION

STATE OF MINNESOTA
BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION
In the Matter of the Application of
DAKOTA ELECTRIC ASSOCIATION,
for Authority to Increase Rates
Docket No. E-111/GR-19-478
for Electric Service in Minnesota

PREFILED DIRECT TESTIMONY OF
VICE PRESIDENT OF REGULATORY SERVICES
DAKOTA ELECTRIC ASSOCIATION

## I. QUALIFICATIONS

Q. Please state your name.
A. My name is Douglas R. Larson.
Q. Where are you employed?
A. I am employed by Dakota Electric Association (DEA, Dakota Electric, or Cooperative).

Dakota Electric's headquarters are located at $4300220^{\text {th }}$ Street West, Farmington, Minnesota 55024.
Q. Please describe the business activities of Dakota Electric.
A. Dakota Electric Association was founded in 1937 as a non-profit, member-owned distribution electric utility. It serves about 108,000 members in an area covering much of Dakota County, just south of Minneapolis and St. Paul. Dakota Electric also provides electric service in portions of Scott, Rice and Goodhue counties.

Dakota Electric purchases wholesale electricity from Great River Energy (GRE), located in Maple Grove, Minnesota.

Testimony of D.R. Larson, page 2

A twelve-person elected board of directors made up of members governs the Cooperative. Dakota Electric is also regulated by the Minnesota Public Utilities Commission and is the only rate-regulated electric cooperative in Minnesota.
Q. Please state your title and describe your responsibilities with Dakota Electric Association.
A. I am Vice President of Regulatory Services. In this position, I am responsible for 1) developing new rates, monitoring existing rates, submitting miscellaneous tariff filings, and coordinating and/or preparing all necessary information pertaining to rate increase filings; 2) evaluating power supply issues through participation in meetings at Great River Energy; and 3) monitoring state and federal electric utility and environmental legislation and determining the potential affect on DEA's operation as a distribution cooperative.
Q. What is your educational and professional background?
A. My educational and professional background is summarized in Schedule 1 attached to this direct testimony.
Q. Have you previously presented testimony before the MPUC?
A. Yes. Schedule 2 attached to this direct testimony identifies the electric and natural gas utility general rate case proceedings, electric service territory compensation hearings, the contested rulemaking and the certificate of need proceeding in which I have presented testimony before the MPUC.

Testimony of D.R. Larson, page 3
Q. Have you submitted testimony to other state regulatory commissions?
A. Yes. Schedule 2 attached to this direct testimony also identifies the electric utility general rate case proceedings in which I have presented testimony before other state regulatory commissions.

## II. PURPOSE OF TESTIMONY

Q. What is the purpose of your testimony in this proceeding?
A. The purpose of my testimony is to present the analysis of Dakota Electric's revenue requirements, class cost of service study and proposed rates within the context of the 2018 Historical Test Year, adjusted for known and measurable changes.
Q. Please describe the organization of your direct testimony.
A. My direct testimony is organized around the following sections with topics covered as follows:

| Section I | Qualifications <br> - Identification <br> - Educational and professional background <br> - Previous testimony |
| :---: | :---: |
| Section II | Purpose of Testimony <br> - Organization of testimony <br> - Identification of exhibits <br> - Identification of workpapers |
| Section III | Summary of Filing |
| Section IV | Revenue Requirements <br> - Statement of Operations <br> - Rate of Return |
| Section V | Cost of Service Study <br> - COS overview <br> - Identify COS content <br> - General procedure for conducting COS <br> - Identify and summarize COS results |
| Section VI | Other Cost Analyses <br> - Load Management Cost Analysis |

Testimony of D.R. Larson, page 4

- Monthly Fixed Charge Cost Analysis
- Coincidental Demand Charges
- Special Fees and Charges
- Line Extension Analysis
- Base Calculations for Resource and Tax Adjustment
- Air Conditioning Analysis
- Standby Rate Analysis
- Electric Vehicle Rate Analysis
- Residential TOU Analysis

Section VII Rate Design

- Approach to rate design
- Proposed rates

Section VIII Summary and Conclusion
Q. Please identify the exhibits included with your testimony.
A. The following exhibits are included as part of my testimony:

| Exhibit__(DEA-1) | Statement of Operations - Present Rates |
| :--- | :--- |
| Exhibit_(DEA-2) | Determination of Revenue Requirements |
| Exhibit__(DEA-3) | Cost of Service Analysis |
| Exhibit__(DEA-4) | Load Management Cost Analysis |
| Exhibit__(DEA-5) | Statement of Operations - Proposed Rates <br> Comparison of Present and Proposed Rates |
| Exhibit__(DEA-6) | Monthly Fixed Charge Analysis |
| Exhibit__(DEA-7) | Coincidental Demand Charges |
| Exhibit__(DEA-8) | Summary of Lead-Lag Study |
| Exhibit__(DEA-9) | Special Fees and Charges |
| Exhibit__(DEA-10) | Line Extension Analysis |
| Exhibit__(DEA-11) | Base Calculations for Resource and Tax Adjustment |
| Exhibit__(DEA-12) | Air Conditioning Analysis |
| Exhibit__(DEA-13) | Standby Rate Analysis |
| Exhibit__(DEA-14) | Electric Vehicle Rate Analysis |
| Exhibit__(DEA-15) | Residential TOU Rate Analysis |
| Exhibit__(DEA-16) | Present Rate Schedules |
| Exhibit__(DEA-17) | Blackline Mark-up of Present Rate Schedules |
| Exhibit__(DEA-18) | Proposed Rate Schedules |
| Exhibit__(DEA-19) |  |

Testimony of D.R. Larson, page 5
Q. Please identify the documents included in the workpapers you have submitted:
A. The workpapers include the following documents:

1) Form 7s 2014-2018
2) Audited 2018 Financials and 2018 Annual Report
3) Accounting System Description and Cross-Reference Projects to Form 7
4) 2019 Budget ( 2017 \& 2018 Actual)
5) Long Range Forecast
6) Lead-Lag Study Detail
7) Cost Allocation Policy
8) Depreciation Summary
9) Conservation Improvement Program
10) Estimate of System Losses and System Own Use
11) Individual Customer Actual 2018 Usage and Demand by Rate Class
12) Monthly Billed Sales 2013-2018
13) Sales History and Forecasted Test Year Normalization
14) Property Tax Detail
15) Travel, Entertainment and Related Employee Expenses
16) Test Year Adjustments Bridge Schedule
17) Long Term Interest Expense / Prudently Incurred
18) Advertising
19) Donations / Charitable Contributions
20) Organizational Dues
21) Minimum Size Method w/ Demand Adjustment
22) Guide to the Cost of Service Study
23) Street Lighting Analysis
24) Reconciliation
25) Smart Metering Statement
Q. Has the material included in your exhibits and workpapers been prepared by you or by others under your direction?
A. The exhibits and workpapers I am sponsoring have been prepared by myself and others at Dakota Electric. In addition, the cost of service study model was completed by Richard J. Macke at Power System Engineering, Inc.

Testimony of D.R. Larson, page 6

## III. SUMMARY OF FILING

## Q. What are Dakota Electric's objectives in filing this general rate case?

A. Dakota Electric has two objectives in filing this general rate case. The first objective is financial. Dakota Electric's 2019 budget has negative operating margins of about $(\$ 2,250,000)$, making an increase in rates necessary. This general rate filing will allow the Cooperative to increase distribution operating revenues and achieve acceptable financial operating results. The second objective of this general rate filing is to make continuing adjustments to align class rates and revenue with the cost of providing service.
Q. Would you please summarize the revenue requirement, COS study results and proposed rate design results contained in your testimony?
A. Revenue Requirements -- Summary

The revenue requirements of the Cooperative simply refer to the total cost of doing business and are comprised of operating expenses plus margin requirements. By comparing the revenue requirements against present revenue, the adequacy of the present rates can be assessed; and a general change in rates can be discussed.

Operating expenses for the Cooperative (excluding interest) total $\$ 199,769,626$. We have calculated a proposed Rate of Return (ROR) on rate base of 5.73 percent, resulting in a required revenue increase of $\$ 8,727,396$ or 4.35 percent. The following table presents a summary of the revenue requirements analysis for the 2018 Test Year:


## Class Cost of Service -- Summary

Once the overall revenue requirements analysis was complete, the class Cost of Service (COS) analysis was prepared by Power System Engineering, Inc. This analysis is aimed at identifying the cost responsibility of each rate class and uses the same model approved by the MPUC in our 2003, 2009, and 2014 general rate cases with refinements described later in my testimony. The COS is also useful in determining the cost components of each rate class (i.e. member, energy and demand costs). The results of the class COS analysis are summarized on the following table:

Testimony of D.R. Larson, page 8

| Table 2 <br> Cost of Service Summary |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Rate Class |  | Revenue Requirement | Increase (Decrease) |  |
|  |  |  | Amount | Percent ${ }^{2}$ |
|  | (\$) | (\$) | (\$) | (\%) |
| Residential \& Farm ( $31,32,53$ ) | 113,507,080 | 119,475,495 | 5,968,415 | 5.29 |
| Small General Service (41) | 5,732,872 | 6,242,283 | 509,411 | 8.94 |
| Irrigation (36) | 917,323 | 892,507 | $(24,816)$ | (2.72) |
| General Service ( 46,54 ) | 50,669,263 | 50,536,453 | $(132,811)$ | (0.26) |
| C\&I Interruptible ( 70,71 ) | 25,436,728 | 27,455,236 | 2,018,508 | 7.98 |
| Lighting | 2,079,781 | 2,468,469 | 388,689 | 18.79 |
|  |  |  | Total System | 4.35 |

It is important, at this point, to distinguish between the COS and actual rate design. Due to the limitations inherent to a COS analysis, these results should be viewed as providing a general range of where rates should be. It is, in fact, uncommon for rates to be designed exactly in line with COS results.

Includes an allocated share of Other Operating Revenue.
Percentage is calculated using only rate schedule revenue (excludes Other Operating Revenue).

Testimony of D.R. Larson, page 9

Proposed Rates - Summary

Using the completed COS analysis, and in conjunction with Dakota Electric management and board of directors, we developed proposed rates. These rates are designed to meet various objectives of Dakota Electric and are discussed later in my testimony. The following table summarizes the impact of the proposed rates on Dakota Electric's rate revenue by service schedule:

| (a) | (b) | (c) | (d) | (e) | (f) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Revenue | Revenue |  |  |
| Line |  | Present | Proposed | Increase (Decrease) |  |
| No. | Rate Class | Rates <br> (\$) | Rates <br> (\$) | Amount <br> (\$) | Percent <br> (\%) |
| 1 | Residential \& Farm Service (31) | 114,332,035 | 119,389,671 | 5,057,636 | 4.42 |
| 2 | Residential \& Farm Demand Control (32) | 42,670 | 44,529 | 1,859 | 4.36 |
| 3 | Electric Vehicle (33) | 24,636 | 26,505 | 1,869 | 7.59 |
| 4 | Irrigation Service (36) Firm | 50,143 | 50,484 | 341 | 0.68 |
| 5 | Irrigation Service (36) Interruptible | 862,089 | 883,153 | 21,064 | 2.44 |
| 6 | Small General Service (41) | 5,799,609 | 6,197,337 | 397,728 | 6.86 |
| 7 | Security Lighting Service (44) | 102,369 | 120,526 | 18,157 | 17.74 |
| 8 | Street Lighting Service (44-2) | 466,293 | 524,779 | 58,486 | 12.54 |
| 9 | Street Lighting System (44-1) | 72,603 | 88,142 | 15,539 | 21.40 |
| 10 | Custom Residential Street Lighting (44-3) | 1,334,683 | 1,623,968 | 289,285 | 21.67 |
| 11 | LED Security Lighting Service (44-4) | 31,109 | 31,434 | 325 | 1.04 |
| 12 | LED Street Lghtg Member-Owned(44-5) | 1,297 | 1,473 | 176 | 13.57 |
| 13 | LED Street Lighting (44-6) | 59,884 | 57,768 | $(2,116)$ | (3.53) |
| 14 | Low Wattage Unmetered Service (45) | 8,520 | 8,946 | 426 | 5.00 |
| 15 | General Service (46) | 50,261,766 | 51,183,966 | 922,200 | 1.83 |
| 16 | Municipal Civil Defense Sirens (47) | 3,960 | 3,960 | - |  |
| 17 | Geothermal Heat Pump (49) | 16,571 | 17,798 | 1,227 | 7.40 |
| 18 | Controlled Energy Storage (51) | 459,736 | 502,001 | 42,265 | 9.19 |
| 19 | Controlled Interruptible Service (52) | 2,634,418 | 2,784,452 | 150,034 | 5.70 |
| 20 | Residential \& Farm Time of Day (53) | 29,057 | 30,323 | 1,266 | 4.36 |
| 21 | General Service Time of Day (54) | 126,286 | 130,543 | 4,257 | 3.37 |
| 22 | Standby Service (60) | 66,840 | 74,160 | 7,320 | 10.95 |
| 23 | Full Interruptible Service (70) | 23,144,467 | 24,654,929 | 1,510,462 | 6.53 |
| 24 | Partial Interruptible Service (71) | 2,151,089 | 2,299,459 | 148,370 | 6.90 |
| 25 | Cycled Air Conditioning Service (80) | $(1,625,193)$ | $(1,625,193)$ | - |  |

Testimony of D.R. Larson, page 10

## IV. REVENUE REQUIREMENTS

## Q. Please summarize the concept of revenue requirements.

A. In order to ensure financial viability, the Cooperative's retail rates must generate sufficient revenue to meet operating expenses and margin requirements. The margin requirement must in turn be adequate to cover interest expense, meet our lenders financial covenants and accomplish other capital management objectives such as rotating patronage capital and maintaining (or achieving) the desired equity position. In this testimony I will refer to the total operating expense and margin requirement as the "revenue requirements" of the Cooperative. This is expressed by the following equation:

REVENUE REQUIREMENTS $=$ OPERATING EXPENSE + MARGIN REQUIREMENT

To evaluate a cooperative's revenue requirement and the adequacy of its present rate structure to meet the requirement, it is common practice to analyze revenue and costs for a 12-month period of time called the Test Year.

## Q. What Test Year was used to determine revenue requirements?

A. The Test Year revenue requirements for the study were based on Dakota Electric's actual historical operations for calendar year 2018, with adjustments for known and measurable changes.

## Q. Has a Statement of Operations been prepared for the Test Year based on the revenue

 generated by DEA's present rates?A. Yes. Exhibit__(DEA-1) provides a Statement of Operations for the Test Year based on the revenue generated by DEA's present rates.

Testimony of D.R. Larson, page 11

Page 1 of Exhibit_(DEA-1) provides a summary of the Statement of Operations for the historical Test Year calendar 2018. The results shown in Column C reflect an unadjusted Test Year as actually recorded on DEA's books for the period January 1, 2018 through December 31, 2018 and correspond to the results shown in Exhibit_(DEA-2), page 1, Column C. Column D summarizes the various normalizing adjustments to the revenue and expense accounts proposed by the Cooperative with the resulting adjusted Pro Forma Test Year shown in Column E.

Page 2 of Exhibit_(DEA-1) provides a summary of each of the proposed adjustments. Pages 3 through 10 of Exhibit_(DEA-1) provide the detailed calculations for the following adjustments:

- Payroll;
- Payroll benefits;
- Depreciation;
- Other Adjustments;
- Property taxes;
- Reduction in CIP spending 2018 actual to 2019 budget;
- Regulatory filing fees;
- Rate Case filing fees recovery over 5 years; and
- Net deduction for disallowed expenses.

Page 11 of Exhibit_(DEA-1) presents the average number of consumers, energy sales, billing demand and revenue for Dakota Electric's rate classes as recorded for calendar year 2018.

Pages 12 through 21 of Exhibit_(DEA-1) present the calculation of revenue under present rates for the Pro Forma Test Year. That is, these pages multiply Pro Forma Test Year number of consumers, energy sales and billing demand times appropriate service schedule rates to determine the class and system revenue for the Pro Forma Test Year. These revenue calculations are based on Dakota Electric's present tariffed fixed, energy and demand rates

Testimony of D.R. Larson, page 12
for various rate schedules, including the Resource and Tax Adjustment (RTA) charges and/or credits that became effective on January 1, 2019. The calculation of forecasted Test Year billing units is shown in Workpaper 13. The forecasted billing units rely on regression analysis for the residential rate class which is most sensitive to fluctuating consumption based on changing weather. For those classes that do not experience such consumption fluctuations due to weather, the Test Year billing units reflect the higher of the 2019 budgeted units or a 10-year trendline analysis.

Finally, page 22 of Exhibit__(DEA-1) presents an overview of wholesale power costs.

## Q. What are Dakota Electric's Test Year revenue requirements?

A. Exhibit__(DEA-2) summarizes the operating results for DEA on both an unadjusted and an adjusted basis for the Test Year ended December 31, 2018. A summary of the Operating Statement is provided as follows:

| Table 4 <br> Statement of Operations - Present Rates |  |  |
| :---: | :---: | :---: |
| Description | $\begin{gathered} 2018 \\ \text { Actual } \\ \hline \end{gathered}$ | Pro Forma Test Year |
|  | (\$) | (\$) |
| Operating Revenue | 203,138,675 | 201,581,098 |
| Operating Expenses ${ }^{3}$ | 197,774,614 | 199,769,626 |
| Net Operating Income | 5,364,061 | 1,811,472 |
| Non-Operating Income |  |  |
| Capital Credits | 5,111,212 | 5,111,212 |
| Other | 292,978 | 292,978 |
| Subtotal | 5,404,190 | 5,404,190 |
| Total Margins | 10,768,251 | 7,215,662 |

3 Before interest expense is deducted.

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It should be emphasized that the Net Operating Income stated is before interest expense on long term debt is deducted.

Furthermore, it is important to distinguish between operating income or margins and total income. Use of the term "operating" is intended to designate revenue and expenses associated with the basic utility function (i.e., supplying electric distribution service to members). It is to be distinguished from Non-Operating Income, such as interest earnings from short-term investments and patronage capital credit assignments from associated organizations. Because Non-Operating Income is outside the operations and direct control of the distribution cooperative, it is not generally considered in establishing the revenue requirement for retail ratemaking purposes. Retail rates are generally designed to be sufficient, but only sufficient, to cover the operating revenue requirement.

Page 1, Column D of Exhibit__(DEA-2) shows that, in order to achieve the required ROR of 5.73 percent, present rates would need to be increased by $\$ 8,727,396$ or about 4.35 percent.

## Q. How was Dakota Electric's margin requirement calculated?

A. To complete the Test Year Revenue Requirement, an appropriate level of margin must be added to the previously determined operating expenses. In establishing the level of margin required to achieve the Cooperative's financial objectives, we have determined an appropriate return on rate base using a calculation methodology recommended by the Department of Commerce and approved by the Commission in our last two general rate cases.

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Q. Please explain your determination of Rate of Return.
A. The Rate of Return method for establishing the Cooperative's margin requirement has been used by the Commission in Dakota Electric's general rate cases since we have been rateregulated in the early 1980's. The ROR method is intended to ensure that earnings are sufficient to cover the cost of debt (interest) and generate a fair return on the investment (equity) for the owners. When applied to cooperatives, the concept is intended to permit the development of sufficient margins to cover the cost of debt and equity capital. However, in the case of cooperatives, the term "return on equity" involves a totally different concept than it does for investor-owned utilities. Return on (or of) equity for cooperatives is related to the retirement, or rotation, of patronage capital. Thus, the ROR required for a cooperative must result in sufficient margins to:

1. Pay interest expense on long-term debt;
2. Rotate patronage capital as stated in the policy of the cooperative;
3. Maintain or achieve the desired equity position; while
4. Meeting the financial covenants of our lenders.
Q. Has the rate-based ROR approach as applied to cooperatives been endorsed by the MPUC?
A. Yes. The method was originally endorsed by the MPUC in 1976 in a case involving Anoka Electric Cooperative (Docket No. U-75-103). Since that time, it has been used in all other cases involving cooperatives, including DEA's last rate filing (Docket No. E-111/GR-14-482).
Q. Please provide an overview of Dakota Electric's Rate of Return calculation.
A. The calculations necessary to determine the Cooperative's overall Rate of Return (ROR) are shown on pages 2 through 8 of Exhibit $\qquad$ (DEA-2). Page 2 of Exhibit $\qquad$ (DEA-2) shows

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the calculation of the Cooperative's Rate Base, with page 3 providing the supporting detail for Materials \& Supplies used in the determination of Rate Base. Page 4 summarizes Dakota Electric's loans with the National Rural Utilities Cooperative Finance Corporation (CFC), Farmer Mac, and CoBank. The Cooperative's overall cost of debt used in the Test Year is 3.77 percent. Page 5 of Exhibit__(DEA-2) reviews Dakota Electric's historic total capitalization (debt and equity) for the years 1998 through 2018. We note that the mean growth rate in historic total capitalization for 2013 through 2018 is estimated to be 3.52 percent. Page 6 of Exhibit__(DEA-2) shows the calculation of the natural logarithm asset growth rate. Dakota Electric applied the 5 year exponential growth rate in the rate of return calculation as was used in the last general rate case. The five year period encompasses nearterm years with more certainty in the growth forecast and aligns with our general expectation of filing rate cases at approximately five year intervals. Page 7 of Exhibit__(DEA-2) presents various ratio calculations. Finally, page 8 of Exhibit__(DEA2) shows the calculation of DEA's 5.73 percent proposed ROR on rate base.
Q. Please identify the input assumptions used to calculate the overall ROR on rate base.
A. The input assumptions used to calculate the overall ROR on rate base are as follows:

| Asset Growth Rate | $1.73 \%$ |
| :--- | ---: |
| Equity Ratio | $53.085 \%$ |
| Debt Ratio | $46.915 \%$ |
| Test Year Total Capital | $\$ 272,999,564$ |
| Test Year Total Equity | $\$ 173,151,167$ |
| Test Year Total Debt | $\$ 99,848,397$ |
| Annual Capital Credits | $\$ 3,500,000$ |
| Rate Base | $\$ 189,064,856$ |
| Cost of Long-Term Debt | $3.77 \%$ |

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Q. Please identify the calculation for determining return on equity.
A. The calculation for determining the 4.14 percent return on equity is as follows:

$$
\begin{aligned}
& \mathrm{K}=\mathrm{g}+(\mathrm{CC} /(\mathrm{ER} \times \mathrm{TC})) \\
& \text { where: } \\
& \\
& \\
& \\
& \\
& \\
& \\
& \\
& \mathrm{K}=\text { Rate of Return on Equity } \\
& \mathrm{CC}=\text { Capital Credits } \\
& \\
& \\
& \\
& \mathrm{ER}=\text { Equity Ratio } \\
& \mathrm{TC}=\text { Total Capital }
\end{aligned}
$$

Q. Please identify the calculation for determining overall cost of capital.
A. The calculation for determining the 3.97 percent overall cost of capital is as follows:

$$
\begin{array}{ll}
\text { OCC }=(\text { ER } \times \text { K })+((1-\text { ER }) \times \text { i }) \\
\text { where: } & \\
& \text { OCC }=\text { Overall Cost of Capital } \\
& \text { ER }=\text { Equity Ratio } \\
& \mathrm{K}=\text { Rate of Return on Equity } \\
& \mathrm{i}=\text { Cost of Long-Term Debt }
\end{array}
$$

Q. Please identify the calculation for determining overall rate of return on rate base.
A. The calculation for determining the 5.73 percent overall rate of return on rate base is as follows:

$$
\mathrm{ROR}=\mathrm{OCC} x(\mathrm{TC} / \mathrm{RB})
$$

where: $\quad$ ROR $=$ Return on Rate Base
OCC = Overall Cost of Capital
TC = Total Capital
RB = Rate Base

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Q. How does Rate of Return on Rate Base relate to the financial performance requirements of the Cooperative's lenders?
A. Rate of return on rate base is not a financial performance metric used by Dakota Electric's lenders.

## Q. Please explain.

A. The financial performance metric used by our lenders is Modified Debt Service Coverage (MDSC). MDSC measures the number of times operating cash flow covers debt service on long-term debt. MDSC is calculated as follows:

MDSC $=($ Operating Margins + Non-Operating Margins-Interest + Interest Expense + Depreciation and Amortization Expense for year + Cash received in respect of Generation and Transmission and other Capital Credits)/(All payments of principal and interest during calendar year)

For the National Rural Utilities Cooperative Finance Corporation (CFC), Dakota Electric must maintain at least a 1.35 modified debt service coverage ratio calculated as an average of the two highest, out of the most recent three years. The 1.35 MDSC is a default threshold.

For CoBank, Dakota Electric must maintain at least a 1.25 modified debt service coverage ratio each year. The 1.25 MDSC is an annual default threshold.
Q. How does the pro forma Test Year revenue requirement and proposed revenue increase translate to MDSC for the Cooperative?
A. The filed pro forma revenue requirement using the 5.73 percent calculated rate of return and proposed revenue increase results in a calculated MDSC of about 2.0.

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Q. How do these results compare to the MDSC financial performance of other cooperatives?
A. Benchmark information from CFC for 1) all cooperatives in the country, 2) Minnesota cooperatives, and 3) cooperatives of similar size to Dakota Electric is as follows:
"US Total" MDSC:
Annual 5 yr. avg. $=1.84$
2 of 3 yr . high avg. $=1.96$
Minnesota MDSC:
Annual 5 yr. avg. $=1.69$
2 of 3 yr . high avg. $=1.76$
Similar Size Cooperative MDSC:
Annual 5 yr. avg. $=1.99$
2 of 3 yr . high avg. $=2.19$
Dakota Electric's calculated Test Year MDSC of about 2.0 is at the average of cooperatives of similar size to Dakota Electric.
Q. Please summarize Dakota Electric's revenue requirements in this proceeding.
A. A summary of the revenue requirements is presented in Table 5. The details of these calculations are provided in Exhibit $\qquad$ (DEA-2).

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| Table 5 <br> Revenue Requirements Summary |  |  |
| :---: | :---: | :---: |
|  |  | (\$) |
| 1. Operating Expenses (Excluding Interest) |  | 199,769,626 |
| 2. Margin Requirements |  |  |
| a. Rate Base |  | 189,064,856 |
| b. Rate of Return |  | 5.73\% |
| c. Return Required |  | 10,831,846 |
| d. Less: Non-Operating Income |  | 292,978 |
| e. Net Operating Income Required |  | 10,538,868 |
| 3. Total Revenue Requirements |  | 210,308,494 |
| 4. Revenue from Present Rates |  |  |
| a. Tariff Revenue (net of RTA) |  | 200,480,307 |
| b. Other Operating Revenue |  |  |
|  |  | 1,100,791 |
| c. Total Revenue |  | 201,581,098 |
| 5. Potential Increase (Decrease) |  | 8,727,396 |
|  | or | 4.35\% |

Q. What level of net operating income is DEA proposing?
A. DEA has established a proposed level of net operating income (before interest expense) of about $\$ 10,539,000$. The calculation of this net operating income is shown above in Table 5 and in Exhibit $\qquad$ (DEA-2).

## Q. What overall revenue increase is DEA requesting?

A. A summary of the proposed increase is shown in the above Table 5 with detailed calculations shown in Exhibit__(DEA-2). To eliminate the present revenue deficiency, annual revenue must be increased by $\$ 8,727,396$ or approximately 4.35 percent.

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## V. COST OF SERVICE ANALYSIS

## Q. Have you prepared a Cost of Service study for Dakota Electric?

A. Yes. A class COS analysis has been prepared to provide information to be used in designing rates. The basic objective of this analysis is to identify the cost of providing service to each rate class as a function of load and service characteristics. The methodology employed is often referred to as the "fully allocated average embedded" COS approach meaning that 1 ) costs are allocated on an average system-wide basis, and 2) embedded or accounting costs as recorded on the Cooperative's books are used in the analysis. We believe that this is generally the most appropriate technique to use in allocating cost responsibility to the various classes and developing rate design data and this has been confirmed by the Commission's approval of our cost of service study and methods in past rate cases.
Q. Has Dakota Electric used the same cost of service study model approved by the Commission in your last general rate case?
A. Yes, the cost of service study model is the same model approved by the Commission in our last rate case, with one modification.

## Q. Please explain the modification.

A. In the Commission's final Order in Dakota Electric's 2014 general rate case in Docket No. E-111/GR-14-482, Ordering Paragraph \#8 required that:

Dakota Electric Association shall include a demand adjustment in the Class Cost of Service Study submitted in its next rate case.

In compliance with this Order, we have incorporated a demand adjustment in the minimum size method used to classify specified distribution accounts within the class cost of service study. Workpaper 21 describes the calculation of minimum size classification factors for

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the respective distribution accounts, identifies the analysis used to determine the relevant demand adjustment, and incorporates the demand adjustment into the minimum size methodology. These demand adjusted classification factors are then applied in the COS. For a point of reference, we have also included COS summary results based on overall classification using the zero-intercept method.

## Q. Please describe Exhibit__(DEA-3).

A. Exhibit__(DEA-3) includes the COS analysis for Dakota Electric. The detailed calculations and assumptions that go into the analysis are as follows:

$$
\text { Page } \quad \text { Description }
$$

1-3 Cost of Service Summary
4-5 Classification of Plant in Service
6-7 Adjusted Statement of Operations
8-13 Classification of Revenue Requirements
14-17 Summary of Classification Factors
18 Summary of Allocation of Revenue Requirements to Rate Classes
19 Allocation of Plant in Service to Rate Classes
20-22 Allocation of Revenue Requirements to Rate Classes
23 Rate Class Weighting Factors
24 Analysis of Class Load Characteristics
25-40 Analysis of Class Demand Characteristics
41-42 Development of Allocation Factors

NOTE: To help facilitate review of the cost of service study, Dakota Electric has prepared a "Guide to the Cost of Service Study" that is submitted as Workpaper 22. This document provides a detailed review of methods used in the COS and incorporates answers to information requests submitted by the Department of Commerce in our last several rate cases.

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Q. How should the results of a COS be used?
A. It is important to recognize some of the inherent limitations of such a study. First, it must be emphasized that there are many different methodologies, techniques and assumptions that have been and will continue to be advocated by rate analysts. Because the various philosophies and assumptions can affect the results of the analysis, the results should be treated as providing an indication of the general range of class cost responsibility; and not as precise values.

Second, a COS analysis is directed at determining the cost imposed by a rate class on the system rather than at determining the cost imposed by individual customers within each classification. The cost responsibility of a specific, individual consumer may or may not be entirely consistent with the cost allocations made to their assigned consumer classification.

Third, accurate demand characteristics and load factor data for individual customer classes are often unavailable. Capacity allocations must therefore be made on the basis of estimates or "typical" data. These assumptions or estimates can have an effect on the end results.

Fourth, a COS analysis does not address itself to many of the other legitimate objectives of rate design such as member acceptance or the avoidance of excessively abrupt changes from the historical rate policies of the cooperative. In addition, it does not recognize the need to keep each rate schedule competitive, in as much as possible, with the corresponding rate schedule of neighboring utilities or the need to keep the rate structure simple so that it is easily administered and understood by members.

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With the above limitations in mind, a COS study can provide a useful guideline for assigning cost responsibility (i.e., revenue requirements) to each of the customer classifications in a manner which avoids unjustifiable price discrimination. The study also provides information useful in designing the individual rate schedules and provides support for justifying rate differentials to retail members.

## Q. Explain the general procedure for conducting a COS study.

A. The basic procedure used to determine the cost responsibility of each consumer classification is as follows:

Step 1 - Classify the plant account records into basic cost causative categories.
Step 2-Classify the Test Year expenses and margin requirement into the same cost causative categories.

Step 3-Develop allocation factors for each rate class.
Step 4 - Allocate costs to the various rate classes using the class allocation factors developed for each cost causative category.

In this regard, it is important to note that Dakota Electric has used the same COS model that was approved in our last three rate cases, with a refinement to account for capacity (demand adjustment) provided by facilities identified in the minimum size method as ordered by the Commission in our last rate case.

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Q. What do you mean by cost causative categories?
A. Plant investments, Test Year expenses and margin requirement are classified into the following cost causative categories:

1. Direct - Costs which are directly attributable to one specific customer classification. Expense associated with security and street lighting is an example of a Direct Expense.
2. Consumer - Costs that are the result of the number and location of each member and which do not vary significantly with the demand imposed on the system or the amount of energy consumed. Metering and customer accounting expenses perhaps best illustrate this type of expense. In addition, a portion of distribution expenses are categorized using the results of the minimum size analysis.
3. Capacity - Costs which result from providing and maintaining operation facilities required to meet the peak demand whether it be the system peak, circuit peak or individual member service peak. Much of the expense of operating and maintaining a three phase backbone feeder would generally fall within this category as would the Demand Charge in the purchased power rate.
4. Energy - Costs which are related to the amount of energy used. The major item in this category is the Energy Charge in the purchased power rate.

Each of these general cost causative categories is further subdivided as follows:

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| Direct | Consumer | Capacity | Energy |
| :---: | :---: | :---: | :---: |
| As Assigned |  | Power Supply P | Power Supply |
|  |  | Distribution Substation |  |
|  | Primary Line | Primary Line |  |
|  | Line Transformer | Line Transformer |  |
|  | Secondary \& Service |  |  |
|  | Meter |  |  |
|  | Customer Accounting |  |  |

Q. Could you briefly explain the methodology used in assigning plant accounts to cost causative categories?
A. The cost causative classification of the various electric plant accounts is presented in pages 4 and 5 of Exhibit__(DEA-3). The methodology used in assigning the plant accounts to the cost causative categories is discussed as follows:

1. Intangible Plant (Acct. 301 to 303) - The Intangible Plant accounts were prorated to the cost categories in the same relationship as the distribution plant allocations.
2. Land, Structures, Station and Battery (Accts. 360 to 363) - The Land and Land Rights, Structures and Improvements, Station Equipment, and Battery accounts were classified as capacity related since the facilities represented by the investment are generally dictated by capacity considerations.
3. Primary Line and Devices (Accts. 364, 365, 366, 367) - Assignment of the Primary Line and Device accounts was based on results of the "Minimum Size Method" to determine the consumer component share. A narrative and calculation of the minimum size method, with a demand adjustment, is provided in Workpaper 21. The remaining amount was then assigned to the capacity component.
4. Line Transformers (Acct. 368) - Classification of the Line Transformer account was approached in similar fashion using the "Minimum Size Method" with a demand adjustment. (See Workpaper 21.) Again, it was reasoned that there exists a certain

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minimum transformer investment required to provide basic service to each consumer independent of energy usage or capacity requirements. This cost is assigned to the consumer component, while the remaining investment is considered capacity related.
5. Services and Meters (Accts. 369 and 370) - Because the investment in Services and Meters is basically independent of usage level, it was assigned entirely to the customer component.
6. Consumer Premise (Acct. 371) - The Consumer's Premises account is associated to lighting plant and was directly assigned to the Lighting Class.
7. Street Lighting (Acct. 373) - The street or security lighting account was assigned directly to the Lighting Class.
8. General Plant Accounts (Accts. 389 to 399) - The General Plant accounts were assigned to the cost causative categories in the same relationship as the total distribution plant allocations. Because the assignment of the general plant has minimal effect on the classification of Test Year expenses, which ultimately is used to determine class COS responsibility, a more detailed analysis of general plant was not warranted.

## Q. Explain how revenue requirements were classified.

A. The Operating Statement for the Test Year forms the basis for the COS analysis. Actual expenses by account for the historical 12-month period were used to establish the pattern of the Test Year cost breakdown to the various accounts.

The various components of the revenue requirements were classified to the four basic cost causative categories as presented on pages 8 through 13 of Exhibit__(DEA-3). The factors

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used in the expense classification are summarized in pages 14 through 17 of Exhibit__(DEA-3). The methodology and rationale for that methodology is discussed below:

1. Purchased Power (Acct. 555) - The Demand and Energy Charge portions of the cost of Purchased Power were assigned to the capacity and energy components, respectively. This includes Transmission Charges which were assigned to the capacity component.
2. Distribution Operation and Maintenance (Accts. 580-598) - Distribution expense accounts that are related to specific plant accounts (Accts. 582, 583, 584, 585, 586, 591, 592, 593, 594, 595, 596 and 597) were classified in proportion to the corresponding plant accounts. These expenses result from operating and maintaining the distribution plant and thus may be considered plant related. The remaining distribution expense accounts (Accts. 580, 581, 587, 588, 589, 590 and 598) were prorated on the basis of the sum of the previously assigned distribution expense accounts. These accounts basically represent overhead or general distribution expenses.
3. Consumer Accounting (Accts. 901-905) - Consumer Accounting expenses were assigned in total to the consumer component since this expense is basically independent of energy usage or capacity requirements. Instead, these accounts are related to the number of consumers.
4. Consumer Service and Information and Sales (Accts. 907-916) - Consumer Service and Information and Sales expenses are also considered consumer related expenses.
5. Administrative and General (Accts. 920-932) - Administrative and General (A\&G) expenses are common costs for which there exists no obvious relationship to the functional categories. Thus, we have assigned 10 percent of these expenses to the

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power supply function and the remainder in proportion to the total of all other expenses without power supply.
6. Depreciation and Amortization (Accts. 403-407) - Depreciation and Amortization expense was allocated in proportion to the net plant account assignments.
7. Property Taxes (Acct. 408) - Property Taxes were assigned in proportion to the net plant account assignments.
8. Other Taxes, Other Interest, and Other Deductions - Other Taxes, Other Interest, and Other Deductions were assigned in a manner similar to the A\&G Accounts.
9. Net Operating Income (Margin Requirement) - Since margin is comprised of interest expense and return on equity, both related to plant investment, it is reasonable to classify this cost in proportion to the net plant assignments. This approach most nearly parallels the method used to determine target margin requirements (i.e., rate base - ROR method).

## Q. Discuss the allocation of costs to rate classes.

A. The allocation of the revenue requirement to each consumer classification is presented in pages 20 to 22 of Exhibit__(DEA-3). The allocations are based on various allocation factors that reflect certain cost causative drivers as discussed below:

## 1. Direct Cost Allocation

Costs specifically associated with street or security lighting facilities (investment and $O \& M$ ) directly assigned to the Lighting Class are an example of a possible direct cost allocation.

## 2. Consumer Costs Allocations

Generally speaking, consumer related costs were allocated to the various classes on the basis of the total number of consumers in each class. However, several

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adjustments were made in the general allocation procedure to reflect differences in the cost of providing basic service. Weighting factors were developed on page 23 of Exhibit__(DEA-3) to recognize the higher cost of three phase service versus standard single phase service for each subcategory of consumer related cost. A "weighting factor" of 0.02 was used to allocate the consumer expense related to providing basic service to an individual security or street light. Because these lights make use of facilities and services which have been primarily provided for under other rate schedules, it may be argued that it costs no more to prepare a bill for a consumer with a security light than for one without. However, it seems only fair that the lighting classes should be required to pay at least a token portion of the consumer related expense, hence the 0.02 weighting factor.

## 3. Capacity Cost Allocations

Three different allocation factors were developed for the capacity component. (See pages 24 to 40 of Exhibit__(DEA-3) for the development of class demands):
a. Line transformer capacity related costs were allocated in accordance with the estimated undiversified non-coincidental annual peak demand of each consumer in each class as this definition of demand most closely approximates transformer capacity requirements.
b. Distribution Substation and Primary Line capacity costs were allocated using the Average and Excess Demand Method based on the average monthly coincidental demand for each class (not necessarily coincidental with the system). Distribution system capacity related costs are a function not only of the system peak, but also the individual circuit and even consumer peak demand. The Average and Excess Demand Method gives recognition to the average demand imposed on the system by each class as well as the average monthly peak

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demand of the class (non-coincidental) and prevents any class from getting a "free ride" from a capacity standpoint.
c. Purchased Power Demand Charges were allocated in accordance with the average monthly coincidental class demands established by season.
d. Purchased Power Transmission Charges were allocated in accordance with the average monthly coincidental class demands

## 4. Energy Cost Allocations

Energy related costs were allocated on the basis of total energy sales in each rate class and further segmented into on-peak and off-peak energy.

Allocation factors for each category are developed in pages 41 to 42 of Exhibit__(DEA-3).
Q. Please summarize the results of the COS study performed for Dakota Electric.
A. Results obtained from the COS analysis are summarized in Tables 6,7 and 8. Table 6 provides a comparison of the calculated cost of providing service to each rate class with the revenue generated under the present rates by that class.

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| Table 6 <br> Cost of Service Summary |  |  |  |  |
| :--- | ---: | :---: | :---: | :---: |
| Rate Class | Revenue <br> Present <br> Rates $^{4}$ | Revenue <br> Requirement | Increase (Decrease) |  |
|  | $(\$)$ | $(\$)$ | $(\$)$ | $(\%)$ |
| Residential \& Farm (31,32,53) | $113,507,080$ | $119,475,495$ | $5,968,415$ | 5.29 |
| Small General Service (41) | $5,732,872$ | $6,242,283$ | 509,411 | 8.94 |
| Irrigation (36) | 917,323 | 892,507 | $(24,816)$ | $(2.72)$ |
| General Service (46,54) | $50,669,263$ | $50,536,453$ | $(132,811)$ | $(0.26)$ |
| C\&I Interruptible (70,71) | $25,436,728$ | $27,455,236$ | $2,018,508$ | 7.98 |
| Lighting | $2,079,781$ | $2,468,469$ | 388,689 | 18.79 |

Table 7 shows a breakdown of the COS by cost category for each class.

| Table 7 <br> Cost Allocation Summary |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Rate Class | Cost Category |  |  |  |
|  | Power <br> Supply | Transmission | Distribution | Total |
|  | (\$) | (\$) | (\$) | (\$) |
| Residential \& Farm ( $31,32,53$ ) | 65,457,456 | 13,696,762 | 40,321,277 | 119,475,495 |
| Small General Service (41) | 3,298,400 | 706,106 | 2,237,776 | 6,242,283 |
| Irrigation (36) | 447,438 | 12,511 | 432,558 | 892,507 |
| General Service ( 46,54 ) | 36,036,904 | 7,229,676 | 7,269,873 | 50,536,453 |
| Interruptible Service ( 70,71 ) | 21,738,992 | 880,227 | 4,836,017 | 27,455,236 |
| Street and Security Lighting | 667,425 | 124,341 | 1,676,703 | 2,468,469 |
| Total | 127,646,615 | 22,649,623 | 56,774,205 | 207,070,443 |

4 Includes an allocated share of Other Operating Revenue.
5 Percentage is calculated using only rate schedule revenue (excludes Other Operating Revenue).

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Table 8 provides total costs by class expressed in terms of $\$$ per customer per month (consumer component) and $\notin$ per kWh (capacity and energy components).

| Table 8 |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Unit Cost Summary |  |  |  |  |
| Rate Class | Consumer <br> Unit Cost | Demand <br> Unit Cost | Energy <br> Unit Cost |  |
| $(\$ / c u s t . m o)$ |  |  |  |  |
| $(\phi / \mathrm{kWh})$ | $(\phi / \mathrm{kWh})$ |  |  |  |
| Residential \& Farm (31,32,53) | 25.11 | 5.34 | 5.30 |  |
| Small General Service (41) | 32.65 | 5.29 | 5.30 |  |
| Irrigation (36) | 57.31 | 2.52 | 5.30 |  |
| General Service (46,54) | 60.71 | 5.18 | 5.30 |  |
| Interruptible Service (70,71) | 221.08 | 1.27 | 5.30 |  |
| Street and Security Lighting | 0.50 | 3.96 | 4.93 |  |

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## VI. OTHER COST ANALYSES

Q. Is any other cost analysis included in this filing besides the class COS study?
A. Yes, several other cost analyses are included in my exhibits as follows:

| Exhibit__(DEA-4) | Load Management Cost Analysis |
| :--- | :--- |
| Exhibit_(DEA-7) | Monthly Fixed Charge Analysis |
| Exhibit_(DEA-8) | Coincidental Demand Charges |
| Exhibit_(DEA-10) | Special Fees and Charges |
| Exhibit_(DEA-11) | Line Extension Analysis |
| Exhibit_(DEA-12) | Base Calculations for Resource and Tax Adjustment |
| Exhibit_(DEA-13) | Air Conditioning Analysis |
| Exhibit_(DEA-14) | Standby Rate Analysis |
| Exhibit_(DEA-15) | Electric Vehicle Rate Analysis |
| Exhibit__(DEA-16) | Residential TOU Analysis -Schedule 56 |

Q. Please explain the load management cost analysis.
A. The load management cost analysis, shown in Exhibit__(DEA-4), presents the costs to provide service to Schedules 49, 51, and 52. These costs include meter and control unit, wholesale power costs, line losses, allocated distribution costs, and margin. In the case of storage service, the cost is calculated at $4.87 \phi$ per kWh , while the cost for interruptible service is $6.31 \not \subset$ per kWh . The cost for geothermal heat pump service is calculated at $11.07 \phi$ per kWh. This cost analysis will form the basis for rate recommendations for Schedules 49, 51 and 52 described later in my testimony.

## Q. Explain the exhibit that calculates monthly fixed charge costs.

A. Exhibit__(DEA-7) calculates the monthly costs that should be applied in the monthly fixed charge of retail rates. This exhibit first identifies the "customer" related costs allocated to each class in the cost of service study. While such costs have been allocated based on number of consumers, not all of these costs may be appropriate for recovery in the monthly fixed charge. As Dakota Electric testified in our last general rate cases, we believe it is

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appropriate for the monthly fixed charge to recover costs we incur to stand ready to provide electric service, excluding costs for primary line. Such costs to be included in the monthly fixed charge include the monthly cost of a transformer, meter and service, customer accounting, as well as taxes and margin associated with plant costs proposed for recovery in the monthly fixed charge. The monthly fixed costs identified for recovery in this analysis are as follows:

| Residential | $\$ 15.01$ |
| :--- | :--- |
| Small General | $\$ 20.32$ |
| Irrigation | $\$ 41.19$ |
| General | $\$ 44.99$ |
| C\&I Interruptible | $\$ 200.69$ |

This cost analysis will form the basis for rate recommendations described later in my testimony.
Q. Discuss the calculation of Coincidental Demand Charges shown in Exhibit__(DEA-8).
A. The calculation of Coincidental Demand Charges reflects the wholesale demand-related charges Dakota Electric experiences from Great River Energy adjusted for distribution line loss. These calculations allow us to determine the summer, winter and other months' retail Coincident Demand Charges for the partial interruptible option and full interruptible option for Dakota Electric's Schedules 70 and 71.
Q. Explain the analysis for special fees and charges.
A. Exhibit_(DEA-10) presents an analysis of Dakota Electric's costs associated with special fees and charges. This exhibit calculates the labor, benefits, vehicles and other expenses associated with each special fee and charge. The results of this analysis will be used to update Dakota Electric's special fees and charges.

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Q. Explain the line extension analysis.
A. Exhibit__(DEA-11) presents the costs of actual line extension project costs and charges. This exhibit also identifies the amount of plant investment Dakota Electric recovers through base rates for these line extensions. The plant investment amounts on a per kWh and per kW basis from this exhibit will be applied to commercial line extensions.

Looking at recovery for individual residential line extensions, Exhibit__(DEA-11) shows that Dakota Electric's base rates for residential members recover about $\$ 1,300$ of distribution plant costs per residential member. By comparison, the average cost for extensions to individual residential members with no footage (includes material, labor, and vehicle costs to set a transformer and make the electrical connection) is about $\$ 3,600$. To recover these basic extension costs, Dakota Electric proposes to increase the present flat fee for all individual residential extensions from $\$ 500$ to $\$ 1,000$. For new connections where the extension of cable is also required, Dakota Electric proposes to increase the present charge of $\$ 8.30$ per foot to $\$ 11.00$ per foot. These changes will also eliminate the application of a free footage allowance. This flat fee increase will provide additional revenue to cover more of the fixed costs associated with transformer and connection costs not otherwise recovered in base rates. We note that while these line extension costs are proposed to increase, the amount of increase is still below our extension costs not being recovered in base rates. Dakota Electric anticipates making continued incremental increases to individual residential line extension provisions in future rate case proceedings.

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Q. Have you calculated new base factors for Dakota Electric's Resource \& Tax Adjustment (RTA)?
A. Yes. Exhibit__(DEA-12) presents the calculation of RTA base components for cost of power, conservation and DSM expenditures, and property tax recovery. These new base components will be applied with the implementation of final rates.

## Q. Please describe the calculation of power cost bases.

A. We have calculated several different power cost bases that track differences in wholesale power costs associated with specific retail rates. The calculation begins with an identification of an Energy Cost Adjustment (ECA) base. This ECA base relates to retail interruptible service that Dakota Electric provides to C \& I members under interruptible service Schedules 70 and 71. This ECA base also applies to interruptible irrigation service provided under Schedule 36. (We note that firm irrigation service under Schedule 36 will be subject to the firm Power Cost Adjustment (PCA) base as described below.) The average wholesale energy cost per kWh applicable to the Energy Cost Adjustment base equals $\$ 0.0521$ per kWh sold.

The next part of this exhibit calculates weighted power cost bases for Dakota Electric's load management rates including Schedules 51 and 52. For each rate schedule, we have calculated a weighted average wholesale power cost reflecting the relative purchase of water heating and space heating service under each schedule. Schedule 51 has a weighted power cost base per kWh sold of $\$ 0.0204$. Schedule 52 has a weighted power cost base per kWh sold of \$0.0352.

Next, we calculate the power cost base for rate Schedule 49, geothermal service. The base for this service includes the Cooperative's system average wholesale cost for energy,

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capacity, transmission, and ancillary service cost on a per kWh basis. The resulting Schedule 49 power cost base per kWh sold is $\$ 0.0813$.

Finally, this exhibit calculates the Power Cost Adjustment (PCA) base applicable to Dakota Electric's remaining firm service rate schedules. This calculation begins with the Cooperative's total wholesale power cost, from which we subtract ECA power costs, Rate 51 power costs, Rate 52 power costs, Rate 49 power costs, and wholesale power cost passthroughs for Wellspring, Member Specific Discount, Large Load High Load Factor Credit, Contract Rate Service, and Standby service. The result is a PCA base per kWh sold for Dakota Electric's firm service rate schedules of \$0.0939.

## Q. Explain the exhibit that evaluates cycled air conditioning.

A. Exhibit__(DEA-13) calculates the wholesale power cost savings achieved through cycling central air conditioners. Dakota Electric's cycled air conditioning program, in coordination with Great River Energy, provides for load control of central air conditioners typically during times of high demand. Air conditioners are controlled, or cycled, through fifteen minute on and fifteen minute off cycles during the respective control period. This exhibit calculates a diversified demand reduction for a typical controlled air conditioning unit. Based on this analysis, Dakota Electric recommends maintaining the present $\$ 13.00$ per month credit in the months of June, July, and August, with a corresponding increase in the energy credit for those units that are separately metered and an increase in the per ton credit for commercial units.

## Q. Please explain the Standby Analysis.

A. Exhibit__(DEA-14) calculates the primary and secondary distribution reservation fees for Standby Service. These costs are based on allocated costs to Dakota Electric's General

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Service Schedule 46, which corresponds to the size and type of customers who would likely receive such standby service. In fact, the one standby member that Dakota Electric serves is of a size that would normally receive service under Schedule 46. This exhibit also updates the substation standby reservation fee consist with the methodology approved by the Commission when Dakota Electric proposed this fee in Docket No. E-999/CI-15-115.

## Q. Please explain the Electric Vehicle Rate Analysis.

A. Exhibit__(DEA-15) updates the cost analysis that Dakota Electric submitted to the Commission when we proposed this service. The update reflects Test Year wholesale power supply and distribution costs. This rate has been very well received by members with electric vehicles, as we reported in a May 31, 2019, EV Informational Letter to the Commission. Based on participation and the high level of off-peak charging, Dakota Electric proposes to remove the "pilot" designation for this rate.

## Q. Please explain the Residential TOU Analysis for Schedule 56.

A. Exhibit__(DEA-16) presents an analysis of costs and development of rate design for the residential time of use rate (Schedule 56) that was approved in our last rate case. Page 1 of this exhibit identifies wholesale power and distribution costs based on the cost of service study results for the residential class. Page 2 assigns these costs to respective cost components and time periods. Page 3 estimates billing units, on a total residential class basis, for the billing periods for this schedule. Finally, page 4 develops rates for each billing component using the cost assignments from page 2.

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## VII. RATE DESIGN

Various tables showing the results of the COS analysis are useful in discussing the design and evaluation of Dakota Electric's rates. These tables, which have been previously presented, are listed below:

Table<br>Description<br>Table 6 Cost of Service Summary<br>Table 7 Cost Allocation Summary<br>Table $8 \quad$ Unit Cost Summary

## Q. What objectives have you considered while developing proposed rate changes?

A. There are many legitimate objectives that influence the design of rates. Some of the more important ones are as follows:

1. The proposed rates must develop the requisite total revenue.
2. The proposed rates should reflect the cost of providing service. No class or subclass should subsidize or be subsidized by another.
3. The rate schedules should be simple and concise to facilitate consumer acceptance and administration.
4. Abrupt departures from historical rate practices and levels should be avoided.
5. The rate structure should be acceptable to the membership.
6. Where there is a possibility of a consumer being eligible to receive service under more than one rate schedule, the transition should be made as smoothly as possible.
7. The rates should promote the efficient use of energy and system capacity.

It is generally not possible to fully accomplish all of the above objectives in developing rate schedules. Compromises based on judgment reflecting the policy of the Cooperative must be made.

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Q. Please describe how the proposed rates were developed.
A. The first step in designing the proposed rates was to establish the proposed or targeted increase for each class. While the COS analysis played an important role in establishing the targeted increase for each class, other rate design objectives such as 1 ) the need to avoid abrupt changes and 2) the desire to achieve member-consumer acceptance also came into play. Thus, the dollar and percentage increase or decrease for each class as shown in Table 6 were tempered by experienced judgment in order to accomplish the overall rate design objectives.
Q. Summarize the revenue impact of your proposed rates.
A. The rate design recommendations for the rate schedules contained and discussed herein result in an approximate $\$ 8,700,000$ revenue increase. (We note that additional annual revenue will be provided by proposed changes to special fees and charges and from residential line extensions.) Table 9 presents a comparison of the Present and Proposed Rates by service schedule.
Q. Provide an overview of your approach to proposed changes in monthly fixed charges.
A. Exhibit__(DEA-7) identifies the cost basis for the proposed monthly fixed charges and was described above. Using these results and recognizing the historic difficulty of increasing this billing component, Dakota Electric proposes to increase the monthly fixed charge for residential service and small general service by $\$ 1$ per month. This is the amount that was approved in prior rate cases after considerable testimony. For the other rate schedules, we

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propose aligning the monthly fixed charge on a similar cost basis percentage as the residential monthly fixed charge. The proposed monthly fixed charge changes 1) provide a more appropriate recovery of costs through this rate component, 2) reduce the amount of such costs that are otherwise recovered in volumetric charges, 3 ) align with similar charges the Commission has approved for neighboring utilities, and 4) make some progress toward cost recovery of this component in this rate case. We note, however, that this modest increase in the monthly fixed charge could result in taking 20 years or more to reach the appropriate cost recovery level for this component - based on the more recent approximate five-year cycle for Dakota Electric rate cases.
Q. Please describe the proposed rates.
A. A discussion of each of the proposed rates follows:

## Residential \& Farm Service (31)

The COS study shows the need to increase revenue from Residential \& Farm (Schedules 31,32 and 53) of about $\$ 5,968,000$ or a 5.29 percent increase (see Table 6 ) over revenue from present rates. Dakota Electric is proposing a slightly lower increase for residential members. We propose to increase the monthly fixed charge from the present $\$ 9.00$ to \$10.00. The present summer Energy Charge of $\$ 0.1308$ per kWh ( $\$ 0.1333$ per kWh including the RTA) is proposed to increase to $\$ 0.1379$ per kWh for the summer months of June, July and August. The proposed Energy Charge for all other months will increase from $\$ 0.1168$ per kWh ( $\$ 0.1193$ per kWh including the RTA) to $\$ 0.1239$ per kWh . These proposed rates reflecting a "zeroing" of the present RTA and result in an increase to the Schedule 31 class of approximately 4.42 percent.

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| Table 10 <br> Comparison of Present and Proposed Residential \& Farm Service (31) |  |  |
| :---: | :---: | :---: |
| Description | Present Rate | Proposed Rate |
| Fixed Charge | \$9.00/month | \$10.00/month |
| Energy Charge |  |  |
| Summer Months | \$0.1308/kWh | \$0.1379/kWh |
| Other Months | \$0.1168/kWh | \$0.1239/kWh |
| Average Charge |  |  |
| RTA Charge | \$0.0025/kWh | \$0.0000/kWh |

Dakota Electric is also proposing clarifying language to the Schedule 31 "Availability" clause and the addition of a clause describing billing for master-metered multi-tenant residential facilities. Both of these additions relate to the cost of service study and language we added to the to Schedule 31 related to service to apartments. The clarifying language proposed for the Availability clause indicates that Schedule 31 applies "to individually metered apartment units and mastered-metered multi-tenant complexes." This was the intent of the application that was adopted in our 2003 general rate case. It is reasonable for apartment units and apartment complexes to be billed under Schedule 31 since these are residential loads with residential load profiles. The new clause "Billing for MasterMetered Multi-Tenant Residential Facilities" specifies that "The monthly bill for mastermetered multi-tenant residential facilities will be determined by multiplying the number of residential living units per master-meter times the Fixed Charge plus the metered energy consumption times the applicable energy charge plus the Resource and Tax Adjustment."

## Residential \& Farm Demand Control (32)

As previously noted, the COS study generally shows a required revenue increase from Residential members of about 5.29 percent. Accordingly, we recommend that the monthly Fixed Charge be increased from $\$ 12.00$ to $\$ 13.00$. We further propose to continue the seasonality in this rate structure through the Demand Charge by increasing the summer

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Demand Charge from $\$ 14.70$ per kW per month to $\$ 15.50$ and the demand rate for all other months from $\$ 11.10$ per kW to $\$ 11.90$ per kW . We propose to increase the Energy Charge from the present tariff amount of $\$ 0.0760$ per kWh ( $\$ 0.0785$ per kWh including the RTA) to $\$ 0.0810$ per kWh . These proposed rates result in a revenue increase of about 4.36 percent for this rate schedule.

| Comparison of Present and Proposed <br> Residential \& Farm Demand Control (32) |  |  |
| :--- | :---: | :---: |
| Description | Present <br> Rate | Proposed <br> Rate |
| Fixed Charge | $\$ 12.00 / \mathrm{month}$ | $\$ 13.00 / \mathrm{month}$ |
| Demand Charge |  |  |
| $\quad$Summer Months | $\$ 14.70 / \mathrm{kW}$ | $\$ 15.50 / \mathrm{kW}$ |
| $\quad$ Other Months | $\$ 11.10 / \mathrm{kW}$ | $\$ 11.90 / \mathrm{kW}$ |
| Energy Charge | $\$ 0.0760 / \mathrm{kWh}$ | $\$ 0.0810 / \mathrm{kWh}$ |
| Average Charge | $\$ 0.0025$ | $\$ 0.0000$ |
| RTA Charge |  |  |

## Electric Vehicle - Residential (33)

Dakota Electric received Commission approval to implement a pilot residential electric vehicle service in Docket No. E-111/M-12-874. This service (also referred to as Schedule EV-1) provides our residential members with an additional option for charging the batteries in their electric vehicle. Dakota Electric proposes to remove the "pilot" designation for this schedule and update the rates for this service based on the Test Year wholesale power and distribution cost analysis in Exhibit__(DEA-15). The comparison of present and proposed rates is shown in Table 12 below.

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| Table 12 <br> Comparison of Present and Proposed Residential Electric Vehicle Service (33) |  |  |
| :---: | :---: | :---: |
| Description | Present Rate | Proposed Rate |
| Energy Charges: |  |  |
| Off-Peak | \$0.0674/kWh | \$0.0756/kWh |
| On-Peak | \$0.4144/kWh | \$0.4421/kWh |
| Other | Schedule 31 | Schedule 31 |
| RTA Charge | \$0.0025/kWh | \$0.0000/kWh |

## Irrigation Service (36)

The cost of service study shows the need to reduce revenues from irrigation service by about $\$ 25,000$ or about $2.72 \%$. However, to accommodate overall rate moderation among classes and to maintain relationships between similar billing components in other schedules, we propose a modest revenue increase for irrigation. The firm service irrigation rate structure presently includes a monthly fixed charge of $\$ 30$ per month that is applied every month throughout the calendar year. We propose keeping this monthly fixed charge at $\$ 30$ per month. The seasonal component for this firm service is incorporated in the Demand Charge with a present summer month Demand Charge of $\$ 26.35$ which we propose to increase to $\$ 26.60$. The $\$ 20.95$ per kW per month Demand Charge in the winter months is proposed to increase to $\$ 21.20$ per kW , and the $\$ 15.50$ per kW Demand Charge in the spring and fall months is proposed to increase to $\$ 15.67$ per kW . The present Energy Charge of $\$ 0.0499$ per kWh ( $\$ 0.0524$ per kWh including the RTA) for all energy consumed throughout the year is proposed to change to $\$ 0.0521$ per kWh.

Like the firm irrigation rate, the controlled irrigation rate will include a monthly fixed charge of $\$ 30.00$ per month that will be applied during all months throughout the

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calendar year. Dakota Electric proposes no change in the present $\$ 4.55$ per kW demand charge that recover distribution costs. (Since there is no seasonality in the wholesale power cost associated with controlled irrigation, the controlled irrigation rate does not incorporate any seasonality.) Finally, the proposed energy rate for controlled irrigation service will be the same $\$ 0.0521$ per kWh proposed for firm irrigation service.

| Table 13 <br> Comparison of Present and Proposed Firm Irrigation Service (36) |  |  |  |
| :---: | :---: | :---: | :---: |
| Firm Service |  | Present | Proposed |
| Fixed Charge | @ | \$30.00/month | \$30.00 /month |
| Demand Charge |  |  |  |
| Summer | @ | \$26.35/kW/month | \$26.60/kW/month |
| Winter | @ | \$20.95/kW/month | \$21.20/kW/month |
| Other | @ | \$15.50/kW/month | \$15.67/kW/month |
| Energy Charge | @ | \$0.0499/kWh | \$0.0521/kWh |
| RTA Charge | @ | \$0.0025/kWh | \$0.0000/kWh |
| Table 14 <br> Comparison of Present and Proposed Interruptible Irrigation Service (36) |  |  |  |
|  |  |  |  |
| Interruptible Service |  | Present | Proposed |
| Fixed Charge | @ | \$30.00/month | \$30.00 /month |
| Demand Charge | @ | \$4.55/ kW/month | \$4.55/kW/month |
| Energy Charge | @ | \$0.0499/kWh | \$0.0521/kWh |
| RTA Charge | @ | (\$0.0005)/kWh | \$0.0000/kWh |

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## Small General Service (41)

The COS study shows the need to increase revenues from the Small General Service class in the amount of $\$ 509,000$ or 8.94 percent. Dakota Electric proposes a more moderate overall revenue increase accomplished by increasing the monthly Fixed Charge for Small General Service from the present $\$ 14.00$ per month to $\$ 15.00$ per month. The present Energy Charge of $\$ 0.1269$ per $\mathrm{kWh}(\$ 0.1294$ per kWh including the RTA) in the summer months of June, July and August is proposed to increase to $\$ 0.1375$ per kWh and the present and the $\$ 0.1129$ per kWh ( $\$ 0.1154$ per kWh including the RTA) Energy Charge during all other months is proposed to increase to $\$ 0.1235$ per kWh . These proposed rates result in a revenue increase of about 6.86 percent for this rate schedule.

| Table 15 <br> Comparison of Present and Proposed <br> Small General Service (41) |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Present <br> Rate |  |  |  | Proposed <br> Rate |
| Fixed Charge | $\$ 14.00 / \mathrm{month}$ | $\$ 15.00 / \mathrm{month}$ |  |  |
| Energy Charge |  |  |  |  |
| Summer Months | $\$ 0.1269 / \mathrm{kWh}$ | $\$ 0.1375 / \mathrm{kWh}$ |  |  |
| Other Months | $\$ 0.1129 / \mathrm{kWh}$ | $\$ 0.1235 / \mathrm{kWh}$ |  |  |
| RTA Charge | $\$ 0.0025 / \mathrm{kWh}$ | $\$ 0.0000 / \mathrm{kWh}$ |  |  |

## General Service (46)

While the cost of service study shows a decrease of about 0.26 percent is justified for the General Service rate schedule, we are proposing a modest increase in revenue from this rate schedule to balance revenue from other classes.

The present General Service Schedule 46 includes a monthly Fixed Charge of $\$ 34.00$, which we propose to keep at the same amount. The Demand Charge in the summer months of June, July and August is proposed to increase from $\$ 12.26$ per kW to $\$ 13.70$ per kW .

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The Demand Charge during the remaining months is proposed to increase from $\$ 9.16$ per kW to $\$ 10.60$ per kW . These demand rate changes make progress in aligning demand charges with underlying capacity costs of providing service.

The proposed Energy Charges reflect load characteristics of customers on a monthly basis. This energy structure, commonly referred to as an "hours-use demand rate," is based on the amount of energy that an individual member uses each month in relation to the member's monthly non-coincident demand. That is, this energy rate is load-factor sensitive. The present energy rate for the first 200 kWh of energy consumption per kW of demand is $\$ 0.0776$ per $\mathrm{kWh}(\$ 0.0801$ per kWh including the RTA) and is proposed to stay at $\$ 0.0776$ per kWh . The next 200 kWh of energy consumption per kW of demand presently at $\$ 0.0676$ per kWh ( $\$ 0.0701$ per kWh including the RTA) is proposed to stay at $\$ 0.0676$ per kWh . All energy consumption above 400 kWh per kW of demand presently at $\$ 0.0576$ per kWh ( $\$ 0.0601$ per kWh including the RTA) is proposed to stay at $\$ 0.0576$ per kWh. Dakota Electric will continue to offer primary voltage discounts for members presently receiving primary service. The proposed General Service Schedule 46 rates result in an annual revenue increase of about 1.83 percent.

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| Comparison of Present and Proposed <br> General Service (46) Rates |  |  |
| :--- | :--- | :---: |
| Description |  |  |
| Present Rate | Proposed Rate |  |
| Fixed Charge | $\$ 34.00 / \mathrm{month}$ |  |
| Demand Charge | $\$ 34.00 / \mathrm{month}$ |  |
| Summer Months | $\$ 12.26 / \mathrm{kWh}$ |  |
| Other Months | $\$ 9.16 / \mathrm{kWh}$ |  |
| Energy Charge |  |  |
| First 200 kWh/kW | $\$ 0.0776 / \mathrm{kWh}$ |  |
| Next 200 kWh/kW | $\$ 0.0676 / \mathrm{kWh}$ |  |
| Over 400 kWh/kW | $\$ 0.0576 / \mathrm{kWh}$ |  |
| RTA Charge | $\$ 0.0025 / \mathrm{kWh}$ |  |
| Discounts |  |  |
| Primary Voltage Disc. | $\$ 0.00 .0676 / \mathrm{kWh}$ |  |
| Primary Metering Disc. | $\$ 0.15 / \mathrm{kWh}$ |  |

Dakota Electric is also proposing two additions to billing provisions for Schedule 46.
The first addition relates to the determination of billing demand. Prior to our 2003 general rate case, Dakota Electric had a provision in our general service rates that limited the billing impact for low load factor accounts. This provision was eliminated in the 2003 rate case and we find that it is reasonable and necessary to reintroduce a similar provision. Dakota Electric proposes to add language to the renamed "Determination of Demand" clause as follows: "In no month shall the Billing Demand be greater than the value in kW determined by dividing the kWh sales for the billing month by the product of 24 hours x 0.1 load factor x days in the billing month." Such a load factor billing limitation is reasonable since low load factor consumers generally exhibit lower system coincidence (distribution and wholesale power) than average consumers in the class.

The second addition relates to a proposed new clause describing billing for multi-use facilities. Multi-use facilities are properties that include a combination of commercial or institutional load along with some portion of residential domestic consumption. A growing example of this type of facility would be a property with independent living/apartment units where tenants may transfer

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to a unit with nursing or hospital type care. This could also include facilities with combined retail and residential living. The intent of this new clause is to provide clarification on billing for these facilities. Where electric service is provided through a single meter, the billing would be under either Schedules 41, 46 or 54. Where metering is separated between residential and commercial consumption, the service would be billed under Schedule 31 and Schedules 41/46/54 respectively.

## Lighting Service (Rates 44, 44-1, 44-2, 44-3, 44-4, 44-5, 44-6)

The COS shows a need to increase lighting revenue by about 18.79 percent. This is a substantial increase. To ease this impact on members with lighting service, Dakota Electric proposes to implement this increase over the course of three years. (Dakota Electric took a similar approach in our 2003 rate case when implementing a higher increase for irrigation service.) Dakota Electric proposes the following three-year phasein of lighting rates:

## Table 17

Comparison of Present and Proposed Rates for Lighting Service

| Description | Present Rate per Month | Year 1 <br> Rate <br> per Month | Year 2 <br> Rate per Month | Year 3 Rate per Month |
| :---: | :---: | :---: | :---: | :---: |
| Security Lighting Service (44) |  |  |  |  |
| 100 W HPS | \$ 10.10 | \$ 10.74 | \$ 11.37 | \$ 12.01 |
| 150 W HPS | \$ 11.99 | \$ 12.75 | \$ 13.50 | \$ 14.26 |
| 250 W HPS | \$ 15.79 | \$ 16.80 | \$ 17.82 | \$ 18.83 |
| Street Lighting Service (44-1) |  |  |  |  |
| 175 W MV | \$ 10.52 | \$ 11.43 | \$ 12.34 | \$ 13.25 |
| 250 W MV | \$ 13.46 | \$ 14.55 | \$ 15.65 | \$ 16.74 |
| 400 W MV | \$ 18.54 | \$ 19.93 | \$ 21.32 | \$ 22.71 |
| 100 W HPS | \$ 7.56 | \$ 8.24 | \$ 8.93 | \$ 9.61 |
| 150 W HPS | \$ 9.46 | \$ 10.23 | \$ 11.01 | \$ 11.78 |
| 200 W HPS | \$ 11.41 | \$ 12.33 | \$ 13.26 | \$ 14.18 |
| 250 W HPS | \$ 13.25 | \$ 14.28 | \$ 15.32 | \$ 16.35 |
| 400 W HPS | \$ 17.67 | \$ 18.86 | \$ 20.05 | \$ 21.24 |

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Street Lighting Service (44-2)

| 175 W MV | $\$$ | 15.23 | $\$$ | 15.97 | $\$$ | 16.70 | $\$$ | 17.44 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 250 W MV | $\$$ | 18.16 | $\$$ | 19.08 | $\$$ | 20.01 | $\$$ | 20.93 |
| 400 W MV | $\$$ | 23.25 | $\$$ | 24.46 | $\$$ | 25.68 | $\$$ | 26.89 |
| 100 W HPS | $\$$ | 12.27 | $\$$ | 12.78 | $\$$ | 13.29 | $\$$ | 13.80 |
| 150 W HPS | $\$$ | 14.16 | $\$$ | 14.76 | $\$$ | 15.37 | $\$$ | 15.97 |
| 250 W HPS | $\$$ | 17.95 | $\$$ | 18.81 | $\$$ | 19.68 | $\$$ | 20.54 |
| 400 W HPS | $\$$ | 22.38 | $\$$ | 23.39 | $\$$ | 24.41 | $\$$ | 25.42 |

Custom residential Lighting (44-3)

| 175 W MV | $\$$ | 11.37 | $\$$ | 12.26 | $\$$ | 13.14 | $\$$ | 14.03 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 50 W HPS | $\$$ | 6.70 | $\$$ | 7.28 | $\$$ | 7.87 | $\$$ | 8.45 |
| 100 W HPS | $\$$ | 8.41 | $\$$ | 9.07 | $\$$ | 9.73 | $\$$ | 10.39 |
| 150 W HPS | $\$$ | 10.30 | $\$$ | 11.08 | $\$$ | 11.85 | $\$$ | 12.63 |
| 250 W HPS | $\$$ | 14.09 | $\$$ | 15.13 | $\$$ | 16.17 | $\$$ | 17.21 |

LED Security Lighting Service (44-4)

| ED (>4,500 lumens) | \$ | 7.63 | \$ | 7.67 | \$ | 7.71 | \$ | 7.75 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

LED Street Lighting (44-5)
A (40-80 watts)
5.27 \$
5.50

B (81-150 watts)
\$ 6.71
C (151-250 watts)
9.66

D (251-350 watts)
\$ 13.05
E (351-450 watts)
16.52
7.40 \$
7.75

LED Street Lighting 'Standard" (44-
6)

| Coach | $\$$ | 10.60 | $\$$ | 10.17 | $\$$ | 9.73 | $\$$ | 9.30 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Acorn | $\$$ | 11.24 | $\$$ | 11.11 | $\$$ | 10.98 | $\$$ | 10.85 |
| Cobra | $\$$ | 8.31 | $\$$ | 8.41 | $\$$ | 8.50 | $\$$ | 8.60 |
| Shoebox | $\$$ | 10.71 | $\$$ | 10.71 | $\$$ | 10.70 | $\$$ | 10.70 |
| ED Street Lighting "Basic" (44-6) |  |  |  |  |  |  |  |  |
| Coach | $\$$ | 6.83 | $\$$ | 6.67 | $\$$ | 6.52 | $\$$ | 6.36 |
| Acorn | $\$$ | 6.30 | $\$$ | 6.24 | $\$$ | 6.18 | $\$$ | 6.12 |
| Cobra | $\$$ | 6.51 | $\$$ | 6.67 | $\$$ | 6.82 | $\$$ | 6.98 |
| Shoebox | $\$$ | 7.98 | $\$$ | 8.21 | $\$$ | 8.45 | $\$$ | 8.68 |

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## Low Wattage Unmetered Service (45)

Dakota Electric proposes to increase the Low Wattage Unmetered Service Schedule 45 rate from $\$ 10.00$ per month to $\$ 10.50$ per month.

| Table 18 |  |  |
| :--- | :---: | :---: |
| Comparison of Present and Proposed <br> Low Wattage Unmetered Service (45) |  |  |
| Description | Present <br> Rate | Proposed <br> Rate |
| Fixed Charge | $\$ 10.00 /$ month | $\$ 10.50 / \mathrm{month}$ |

## Municipal Civil Defense Sirens (47)

Dakota Electric is not proposing any changes in the monthly $\$ 5.00$ fixed charge applicable to Municipal Civil Defense Sirens.

| Table 19 |  |  |
| :---: | :---: | :---: |
| Comparison of Present and Proposed <br> Municipal Civil Defense Sirens (47) |  |  |
| Description | Present <br> Rate | Proposed <br> Rate |
| Fixed Charge | $\$ 5.00 /$ month | $\$ 5.00 / \mathrm{month}$ |

## Geothermal Heat Pump (49)

Dakota Electric's cost analysis for the Geothermal Heat Pump Rate is shown in Exhibit__(DEA-4). The costs for Schedule 49 include meter and control unit, wholesale power costs, line losses, allocated distribution costs, and margin. The cost for geothermal heat pump service is calculated at $\$ 0.1107$ per kWh . We propose an increase in the energy charge for this service from the present tariffed rate of $\$ 0.0940$ per $\mathrm{kWh}(\$ 0.0959$ per kWh including the RTA) to $\$ 0.103$ per kWh . Since geothermal heat pump service is no longer offered as a special program rate through our wholesale power supplier, this service been closed to new members since our last rate case.

Testimony of D.R. Larson, page 53

## Controlled Energy Storage (51)

Dakota Electric's cost analysis for Controlled Energy Storage is shown in Exhibit $\qquad$ 4). The cost for Controlled Energy Storage service is calculated at $\$ 0.0487$ per kWh . We propose an increase in the Energy Charge for this service from the present $\$ 0.0440$ per $\mathrm{kWh}(\$ 0.0446$ per kWh including the RTA) to $\$ 0.0487$ per kWh . This represents an increase of approximately 9.19 percent for this service.

| Table 20  <br> $\begin{array}{c}\text { Comparison of Present and Proposed } \\ \text { Controlled Energy Storage (51) }\end{array}$  <br> Description  $\begin{array}{c}\text { Present } \\ \text { Rate }\end{array}$ |  |  |
| :--- | :---: | :---: |
| Proposed |  |  |
| Rate |  |  |$]$| $\$ 0.0440 / \mathrm{kWh}$ |
| :--- |

## Controlled Interruptible Service (52)

A cost analysis for Controlled Interruptible Service is shown in Exhibit__(DEA-4). The cost for Controlled Interruptible service is calculated at $\$ 0.0631$ per kWh. Dakota Electric proposes an increase in the rate for this service from the present energy rate of $\$ 0.0550$ per $\mathrm{kWh}(\$ 0.0597$ per kWh including the RTA) to a proposed energy rate of $\$ 0.0631$ per kWh . This represents a 5.7 percent increase.

| Table 21 |  |  |
| :---: | :---: | :---: |
| Comparison of Present and Proposed <br> Controlled Interruptible Service (52) |  |  |
| Description | Present <br> Rate | Proposed <br> Rate |
| Net Energy Charge | $\$ 0.0550 / \mathrm{kWh}$ | $\$ 0.0631 / \mathrm{kWh}$ |

## Residential \& Farm Time of Day (53)

The COS for Residential \& Farm Time of Day service was incorporated in the COS study with the Residential \& Farm Service Schedule 31. Since the COS for these classes is

Testimony of D.R. Larson, page 54
similar, we are proposing a similar revenue increase for Schedule 53. This revenue increase will be achieved by increasing the monthly Fixed Charge from the present $\$ 12.00$ to \$13.00. The present summer Peak Period Energy Charge of $\$ 0.1880$ per kWh (\$0.1905 per kWh including the RTA) will be increased to $\$ 0.21263$ per kWh and the present other months Peak Period Energy Charge of $\$ 0.1740$ per kWh ( $\$ 0.1765$ per kWh including the RTA) will be increased to $\$ 0.19863$ per kWh . The Off-Peak Energy Charge will be changed from $\$ 0.0940$ per kWh ( $\$ 0.0965$ per kWh including the RTA) to $\$ 0.09450$ per kWh . These proposed changes result in an overall increase of about 4.36 percent.

| Table 22  <br> Comparison of Present and Proposed <br> Residential <br> \& Farm Time of Day (53) Present <br> Rate |  |  |
| :---: | :---: | :---: |
| Description | Proposed <br> Rate |  |
| Fixed Charge | $\$ 12.00 / \mathrm{month}$ | $\$ 13.00 / \mathrm{month}$ |
| Energy Charges |  |  |
| Peak Period: |  |  |
| Summer | $\$ 0.1880 / \mathrm{kWh}$ | $\$ 0.21263 / \mathrm{kWh}$ |
| Other | $\$ 0.1740 / \mathrm{kWh}$ | $\$ 0.19863 / \mathrm{kWh}$ |
| Off-Peak | $\$ 0.0940 / \mathrm{kWh}$ | $\$ 0.09450 / \mathrm{kWh}$ |
| RTA Charge | $\$ 0.0025 / \mathrm{kWh}$ | $\$ 0.0000 / \mathrm{kWh}$ |

## General Service Time of Day (54)

Dakota Electric proposes to realign component rates for Schedule 54 to track changes to other similar rate schedules. We propose to keep the monthly Fixed Charge for Rate 54 at the present $\$ 36.00$. The Peak Period Demand Charge will be changed to $\$ 26.14$ per kW in the summer months (June, July and August), $\$ 19.91$ per kW in the winter months (December, January and February) and $\$ 13.67$ per kW during all other months. The Maximum Demand Charge of $\$ 4.75$ per kW will be increased to $\$ 5.25$ per kW . The Energy Charge of $\$ 0.0499$ per kWh ( $\$ 0.0524$ per kWh including the RTA) will be changed to $\$ 0.0521$ per kWh . This proposed rate design results in a revenue increase of about 3.37 percent for this rate schedule.

Testimony of D.R. Larson, page 55

| Table 23 <br> Comparison of Present and Proposed <br> General Service Time of Day Service (54) |  |  |
| :--- | ---: | ---: |
| Present <br> Description |  | Proposed <br> Rate |
| Fixed Charge | $\$ 36.00 / \mathrm{month}$ | $\$ 36.00 / \mathrm{month}$ |
| Demand Charges |  |  |
| Peak Period: | $\$ 24.85 / \mathrm{kW} / \mathrm{month}$ | $\$ 26.14 / \mathrm{kW} / \mathrm{month}$ |
| Summer Months | $\$ 18.95 / \mathrm{kW} / \mathrm{month}$ | $\$ 19.91 / \mathrm{kW} / \mathrm{month}$ |
| Winter Months | $\$ 13.00 / \mathrm{kW} / \mathrm{month}$ | $\$ 13.67 / \mathrm{kW} / \mathrm{month}$ |
| Other Months | $\$ 4.75 / \mathrm{kW}$ | $\$ 5.25 / \mathrm{kW}$ |
| Maximum | $\$ 0.0499 / \mathrm{kWh}$ | $\$ 0.0521 / \mathrm{kWh}$ |
| Energy Charge | $\$ 0.15 / \mathrm{kW}$ | $\$ 0.15 / \mathrm{kW}$ |
| Primary Voltage Disc. | $2.00 \%$ | $2.00 \%$ |
| Primary Metering Disc. | $\$ 0.0025 / \mathrm{kWh}$ | $\$ 0.0000 / \mathrm{kWh}$ |
| RTA Charge |  |  |

## Residential \& Farm Time of Day (56)

(NOTE: This service was originally identified as Schedule 55 when it was first proposed in our last general rate case. During that proceeding, we realized that the " 55 " code was already being used internally - so the final approved designation for this service is Schedule 56.)

The cost analysis and development of the proposed rates for the Residential \& Farm Time of Day service is detailed in Exhibit 16. Table 31 identifies the proposed charges for this service.

| Table 24 <br> Comparison of Present and Proposed <br> Residential <br> \& Farm Time of Day (56) |  |  |
| :---: | :---: | :---: |
| Description | Present <br> Rate | Proposed <br> Rate |
| Fixed Charge | $\$ 12.00 / \mathrm{month}$ | $\$ 13.00 / \mathrm{month}$ |
| Energy Charges |  |  |
| Peak Periods: | $\$ 0.2710 / \mathrm{kWh}$ | $\$ 0.2890 / \mathrm{kWh}$ |
| Summer | $\$ 0.2210 / \mathrm{kWh}$ | $\$ 0.2320 / \mathrm{kWh}$ |
| Winter | $\$ 0.1750 / \mathrm{kWh}$ | $\$ 0.1880 / \mathrm{kWh}$ |
| Other | $\$ 0.0970 / \mathrm{kWh}$ | $\$ 0.1060 / \mathrm{kWh}$ |
| Intermediate | $\$ 0.0760 / \mathrm{kWh}$ | $\$ 0.0820 / \mathrm{kWh}$ |
| Off-Peak | $\$ 0.0025 / \mathrm{kWh}$ | $\$ 0.0000 / \mathrm{kWh}$ |
| RTA Charge |  |  |

Testimony of D.R. Larson, page 56

## Standby Service (60)

The distribution reservation fees for standby service have been analyzed in the attached Exhibit__(DEA-14). This analysis reflects the average primary and secondary distribution costs on a per kW basis for our General Service Schedule 46 members. It also updates the substation standby reservation fee consist with the methodology approved by the Commission when Dakota Electric proposed this fee in Docket No. E-999/CI-15-115. Based on this analysis, we propose increasing the primary distribution reservation fee from $\$ 3.28$ per kW to $\$ 3.89$ per kW . The secondary distribution reservation fee is proposed to increase from $\$ 3.51$ per kW to $\$ 4.02$ per kW . The substation distribution reservation fee is proposed to decrease from $\$ 0.90$ per kW to $\$ 0.81$ per kW . The generation reservation fees for this service are a direct passthrough of such wholesale power standby reservation fees from Great River Energy and are updated annually as authorized in this schedule.

## Interruptible Service - Full Interruptible Option (70)

The cost of service study shows a need to increase revenue from the C \& I interruptible members by about 7.98 percent. We propose a more moderate revenue increase. We propose increasing the monthly Fixed Charge from $\$ 110.00$ to $\$ 130.00$ per month. Coincidental Demand Charges are proposed at $\$ 26.14$ per kW in the summer months, $\$ 19.91$ per kW in the winter months and $\$ 13.67$ per kW during all other months. The NonCoincidental Demand Charge will be increased from the present $\$ 4.75$ per kW to $\$ 5.25$ per kW . The Energy Charge will be increased from $\$ 0.0499$ per kWh ( $\$ 0.0494$ per kWh including the RTA) to $\$ 0.0521$ per kWh .

Testimony of D.R. Larson, page 57

| Comparison of Present and Proposed <br> Interruptible Service (Full Interruptible Option) <br> (70) |  |  |  |
| :--- | ---: | ---: | :---: |
| Present <br> Date | Proposed <br> Rate |  |  |
| Fixed Charge | $\$ 110.00 / \mathrm{month}$ | $\$ 130.00 / \mathrm{month}$ |  |
| Communication Fee | $\$ 8.70 / \mathrm{month}$ | $\$ 8.70 / \mathrm{month}$ |  |
| Coinc. Demand Charge | $\$ 24.85 / \mathrm{kW} / \mathrm{month}$ |  |  |
| Summer Months | $\$ 18.95 / \mathrm{kW} / \mathrm{month}$ | $\$ 26.14 / \mathrm{kW} / \mathrm{month}$ |  |
| Winter Months | $\$ 13.00 / \mathrm{kW} / \mathrm{month}$ | $\$ 19.91 / \mathrm{kW} / \mathrm{month}$ |  |
| Other Months | $\$ 4.75 / \mathrm{kW}$ | $\$ 13.67 / \mathrm{kW} / \mathrm{month}$ |  |
| Non-Coinc. Demand Charge | $\$ 0.0499 / \mathrm{kWh}$ | $\$ 5.25 / \mathrm{kW}$ |  |
| Energy Charge | $\$ 0.15 / \mathrm{kW}$ | $\$ 0.0521 / \mathrm{kWh}$ |  |
| Primary Voltage Disc. | $2.00 \%$ | $\$ 0.15 / \mathrm{kW}$ |  |
| Primary Metering Disc. | $(\$ 0.0005) / \mathrm{kWh}$ | $2.00 \%$ |  |
| RTA Charge |  | $\$ 0.0000 / \mathrm{kWh}$ |  |

## Interruptible Service - Partial Interruptible Option (71)

Dakota Electric proposes the same retail rates for Schedule 71 as Schedule 70. The difference between these two services is that Schedule 70 consumers agree to fully interrupt their load during specified load control periods. Schedule 71 members, however, agree to reduce their load during control periods but not necessarily to zero. Accordingly, these consumers will have some portion of their load on during the control periods.

| Table 26Comparison of Present and ProposedInterruptible Service (Partial Interruptible Option) (71) |  |  |
| :---: | :---: | :---: |
| Description | Present Rate | $\begin{aligned} & \text { Proposed } \\ & \text { Rate } \end{aligned}$ |
| Fixed Charge | \$110.00/month | \$130.00/month |
| Communication Fee | \$8.70/month | \$8.70/month |
| Coinc. Demand Charge |  |  |
| Summer Months | \$24.85/kW/month | \$26.14/kW/month |
| Winter Months | \$18.95/kW/month | \$19.91/kW/month |
| Other Months | \$13.00/kW/month | \$13.67/kW/month |
| Non-Coinc. Demand Charge | \$4.75/kW | \$5.25 /kW |
| Excess Demand | \$5.00/kW | \$5.00/kW |
| Energy Charge | \$0.0499/kWh | \$0.0521/kWh |
| Primary Voltage Disc. | \$0.15/kW | \$0.15/kW |
| Primary Metering Disc. | 2.00\% | 2.00\% |
| RTA Charge | \$0.0060/kWh | \$0.0000/kWh |

Testimony of D.R. Larson, page 58

## Cycled Air Conditioning Service (80)

Dakota Electric's pricing for the four options under cycled air conditioning service reflect the savings we experience in wholesale capacity charges by members agreeing to control their air conditioners during peak periods. An analysis of wholesale power cost savings associated with cycled air conditioning is presented in Exhibit _(DEA-13). Based on this analysis, we propose no changes in the credit provided to the members participating in cycled air conditioning. The proposed rates for these options are presented below:

| Table 27 <br> Comparison of Present and Proposed <br> Controlled Air Conditioning Service (80) |  |  |  |
| :---: | :---: | :---: | :---: |
| Pescription | Present <br> Rate | Proposed <br> Rate |  |
| Option 1 |  | $(\$ 0.0320) / \mathrm{kWh}$ |  |
| Option 2 | $(\$ 0.0320) / \mathrm{kWh}$ | $(\$ 13.00) / \mathrm{month}$ |  |
| Option 3 | $(\$ 13.00) /$ month | $(\$ 6.50) /$ ton $/ \mathrm{month}$ |  |
| Option 4 | $(\$ 60) /$ ton $/$ month |  |  |

Testimony of D.R. Larson, page 59
Q. Have you prepared comparisons of the Present and Proposed Rates?
A. Yes, I have. Exhibit__ (DEA-6) provides several different comparisons of the present versus proposed rates as follows:

- Comparison of Present and Proposed Rates
- Comparison of Revenue under Present and Proposed Rates
- Comparison of Bills under Present and Proposed Rates for Selected Classes
Q. Is Dakota Electric proposing changes to other charges in addition to the rate schedules identified above?
A. Yes. Dakota Electric is proposing changes to its special fees and charges per occurrence as follows:

Testimony of D.R. Larson, page 60

| Description | Current Charge | Proposed Charge |
| :---: | :---: | :---: |
| Meter Test at Customer's Request |  |  |
| Single phase | \$85.00 | \$95.00 |
| Three phase | \$100.00 | \$110.00 |
| Bad Check | \$15.00 | \$11.50 |
| Reconnection Charge (after disconnect, same customer) |  |  |
| Self-Contained Meter: |  |  |
| Normal working hours | \$50.00 | \$55.00 |
| After hours | \$130.00 | \$145.00 |
| Transformer-Rated Meter: |  |  |
| Normal working hours | \$175.00 | \$185.00 |
| After hours | \$315.00 | \$340.00 |
| Service Charge (outside normal working hours when problem is not with DEA equipment) | \$280.00 | \$340.00 |
| Load Management Service Charge: |  |  |
| Normal working hours | \$70.00 | \$80.00 |
| After hours | \$140.00 | \$160.00 |
| Pulse Meter | \$500.00 | \$750.00 |
| Temporary Service: |  |  |
| - Non-winter months | \$205.00 | NA |
| -Winter menths | \$340.00 | NA |
| Transfer/Connection | \$ 17.50 | \$17.50 |

These changes are supported by the cost analysis presented in Exhibit__(DEA-10). The Temporary Service special fees listed are being deleted since there is already language in our Rate Book (Section VI, Sheet 8) that describes the provision of Temporary Service. This sheet states that "When installing temporary service to a member, Dakota Electric Association will require that the member bear the cost of the installation and removal of service in excess of any salvage realized." While this language has been in place, Dakota Electric has been charging according to the rates identified for Special Fees or Charges. It is more appropriate for these installations to pay the actual costs for each specific installation.

Testimony of D.R. Larson, page 61
Q. Are there any other proposed changes?
A. As I mentioned earlier, Dakota Electric is also proposing to update its line extension charges. The present line extension policy provides a base footage allowance of 75 feet, with a $\$ 500.00$ charge imposed on all individual residential line extensions plus $\$ 8.30$ per foot for extensions in excess of 75 feet. Based on the analysis in Exhibit__(DEA-11), Dakota Electric proposes to change individual residential line extension charges to a base fee of $\$ 1,000.00$ plus $\$ 11.00$ per foot for each foot of the extension (no free footage allowance). We are also proposing language that would refund the amount paid for individual residential line extensions that exceed actual costs for the extension. This proposal for individual residential line extension charges 1) better reflects costs recovered through base rates, 2) helps ensure that new members are paying a more reasonable share of line extension costs, 3) limits payments to no more than actual costs, while 4) reducing the cost burden on existing ratepayers.

Dakota Electric also proposes to update the line extension factors applicable for extensions to members receiving service under Schedule 41, Schedule 46, and Schedules 70/71. These factors are based on the analysis shown in Exhibit_(DEA-11). We also propose to add a factor and line in the calculation description for extensions to multitenant residential complexes. This proposed credit per residential unit for multi-tenant master-metered residential buildings is consistent with the residential credit used in the analysis for individual residential line extensions.

Testimony of D.R. Larson, page 62
Q. Have you prepared revised tariff pages reflecting the proposed changes discussed in your testimony?
A. Yes. Exhibit__(DEA-17) includes Dakota Electric's present rate schedules. This exhibit is followed by Exhibit__(DEA-18) that includes marked-up versions of present rate schedules showing all proposed additions and deletions. (The software used for this purpose specifically identifies text that has been deleted. Text proposed for addition is shown as underlined.) Finally, Exhibit_(DEA-19) presents a "clean" version of proposed rate schedules.

Testimony of D.R. Larson, page 63

## VIII. SUMMARY \& CONCLUSION

## Q. Please summarize your testimony and requests for Commission action.

A. Dakota Electric requests that the Commission:

1. Authorize an overall revenue increase of $\$ 8,727,396$ or about 4.35 percent.
2. Approve the pro forma Test Year Revenue Requirements contained in Exhibit__(DEA-1).
3. Approve a Rate of Return on Rate Base of 5.73 percent as calculated in Exhibit $\qquad$
4. Approve the Cooperative's Cost of Service study as contained in Exhibit $\qquad$ including the use of the minimum size method (with demand adjustment) in this and future general rate proceedings for the Cooperative.
5. Approve the charges for retail rate schedules as described in this testimony and contained in Exhibit__(DEA-6) and proposed tariff pages included in Exhibit__(DEA18) and Exhibit $\qquad$ (DEA-19).
6. Approve the RTA base components contained in Exhibit _(DEA-12) and as reflected in proposed tariff pages shown in Exhibit__(DEA-18) and Exhibit__(DEA-19).
7. Approve the proposed Special Fees and Charges shown in Exhibit__(DEA-10) and as reflected in proposed tariff pages shown in Exhibit__(DEA-18) and Exhibit__(DEA19).
8. Approve the proposed changes for individual residential line extensions as described in this testimony and analyzed in Exhibit__(DEA-11).
9. Approve the proposed modifications/clarifications to tariff pages in Section VI of the Cooperative's rate book as reflected in in proposed tariff pages shown in Exhibit__(DEA-18) and Exhibit__(DEA-19).

Testimony of D.R. Larson, page 64
Q. Does this conclude your prefiled Direct Testimony?
A. Yes, it does.

Schedule 1
Professional and Educational Background
Direct Testimony of Douglas R. Larson
Docket No. E-111/GR-19-478

## PROFESSIONAL EXPERIENCE

## Dakota Electric Association - Farmington, Minnesota (2008 - Present)

Vice President of Regulatory Services
Responsible for regulatory matters including developing new rates, monitoring existing rates, submitting miscellaneous tariff filings, and coordinating and/or preparing all necessary information pertaining to rate increase filings; evaluating power supply issues through participation in meetings at Great River Energy; and monitoring state and federal electric utility and environmental legislation and determining the potential affect on DEA's operation as a distribution cooperative.

Power System Engineering - Blaine, Minnesota (1998-2008)
Vice President of Rates and Financial Planning
Senior Rate and Financial Analyst
Manager of PSE's Blaine, Minnesota office. Responsibilities include preparation of rate and cost of service analyses for electric cooperative and municipal clients; economic evaluation of mergers, acquisitions and special programs; key account analysis; development of large power contracts and special rates; development of restructuring plans and various elements of such plans; and development of financial forecast and economic feasibility studies.

## Dakota Electric Association - Farmington, Minnesota (1992-1998)

Director of Regulatory \& Legislative Affairs
Coordinated and/or prepared all necessary information pertaining to rate filings, cost of service studies, new rate proposals and miscellaneous tariff filings. Monitored state and federal electric utility and environmental legislation to determine the potential effect on Dakota Electric's operations as a distribution cooperative. Participated in statewide rulemaking proceedings initiated by state agencies that affect electric utility operations. Prepared and conducted conservation, rate and industry-related presentations for consumer and other public meetings.

Dakota Energy Alternatives, Inc. - Farmington, Minnesota (1993-1998)
President/CEO - Unregulated Business Activities
Vice President of Business Operations
Supervised staff of professional engineers and support staff who sold and installed standby generation for commercial and industrial customers. Established relationships/partnerships with organizations to expand the standby generation business. Worked with officers to evaluate new business ventures.

## Minnesota Department of Public Service - St. Paul, Minnesota (1986 - 1992) <br> Rate Analyst

Filed testimony in utility rate cases regarding conservation, marketing, cost of service and rate design. Reviewed service area disputes between utilities and complaints from customers and recommended corrective actions. Presented testimony to establish compensation for municipal service territory acquisitions. Reviewed miscellaneous utility filings and prepared recommendations for Public Utilities Commission action. Also participated in Public Utilities Commission task forces to revise Minnesota Rules.

## Minnesota Department of Energy \& Economic Development, Energy Division

St. Paul, Minnesota (1983-1986)
Research Analyst
Responsible for filing testimony in utility rate cases regarding conservation planning and the calculation of cost-effective utility programs. Reviewed utility conservation programs and prepared comments for the Public Utilities Commission.

## EDUCATION

University of Minnesota - Minneapolis, Minnesota
Master of Business Administration
St. Olaf College - Northfield, Minnesota
Bachelor of Arts Degree in Economics

Schedule 2<br>Regulatory Proceedings<br>Direct Testimony of Douglas R. Larson<br>Docket No. E-111/GR-19-478

## Minnesota

| Docket Number | Utility | Type of Proceeding |
| :--- | :--- | :--- |
| G-009/GR-84-128 | Montana-Dakota Utilities | Rate Case |
| G-007/GR-84-669 | Inter-City Gas | Rate Case |
| G-002/GR-85-108 | Northern States Power | Rate Case |
| G,E-999/R-86-322 | Cold Weather Rules | Rulemaking |
| E-001/GR-86-384 | Interstate Power | Rate Case |
| E-221,148/SA-87-661 | City of Buffalo \& Wright-Hennepin | Service Territory |
|  | Cooperative |  |
| E-002/GR-87-670 | Northern States Power | Rate Case |
| E-132, 299/SA-88-270 | City of Rochester \& Peoples Cooperative | Service Territory |
| E-132,299/SA-88-996 | City of Rochester \& Peoples Cooperative | Service Territory |
| E-002/GR-89-865 | Northern States Power | Rate Case |
| E-309,124/SA-89-778 | City of Shakopee \& Minnesota Valley Coop | Service Territory |
| G-010/GR-90-678 | Midwest Gas | Rate Case |
| E-002/GR-91-001 | Northern States Power | Rate Case |
| E-002/CN-91-019 | Northern States Power | Certificate of Need |
| E-111/GR-91-074 | Dakota Electric Association | Rate Case |
| E-111/GR-03-261 | Dakota Electric Association | Rate Case |
| E-111/GR-09-175 | Dakota Electric Association | Rate Case |
| E-111/GR-14-482 | Dakota Electric Association | Rate Case |

## $\underline{\text { Kansas }}$

| $\underline{\text { Docket Number }}$ | $\underline{\text { Utility }}$ |
| :--- | :--- |
| 01 PNRE 058-RTS | Pioneer Electric Cooperative |$\quad$| Type of Proceeding |
| :--- |
| Rate Case |

## Iowa

| Docket Number | Linn County REC Utility |
| :--- | :--- |$\quad$| Type of Proceeding |
| :--- |
| RPU-02-1 |



# Your Touchstone Energy ${ }^{\oplus}$ Cooperative 



In the Matter of the Application of
DAKOTA ELECTRIC ASSOCIATION
for Authority to File, Establish, and make Effective
Revised Rates for the Sale of Electricity

Docket No. E-111/GR-19-478

Volume 1:Transmittal Documents Interim Petition
Testimony and Exhibits

September 19, 2019
Daniel P. Wolf, Executive Secretary
Minnesota Public Utilities Commission
$1217^{\text {th }}$ Place East, Suite 350
Saint Paul, MN 55101-2147

# SUBJECT: In the Matter of the Application of Dakota Electric Association for Authority to Increase Rates for Electric Service in Minnesota Docket No. E-111/GR-19-478 

## Dear Mr. Wolf:

Dakota Electric Association respectfully submits this Application for Authority to Increase Electric Rates (Application) pursuant to Minnesota Statutes 216B.16, Subd. 1. The Application includes changes in present rates and modifications to Dakota Electric Association's special fees and charges.

The name, address, and telephone number of the Cooperative and attorney are as follows:

Representing Attorney:
Eric F. Swanson
Winthrop \& Weinstine
225 South Sixth Street, Suite 3500
Minneapolis, Minnesota 55402-4629
(612) 604-6511

Utility Filing for Rate Change:
Dakota Electric Association $4300220^{\text {th }}$ Street West
Farmington, MN 55024
(651) 463-6327

Since our last general rate case was filed in 2014, Dakota Electric has experienced steadily increasing costs in providing electric distribution service. Dakota Electric's 2019 budget anticipates a net operating margin of about $\$ 2,250,000$ making an increase in rates necessary and unavoidable. Based on our Historical 2018 Test Year operating results (adjusted for known and measurable changes), this filing documents the need for an annual revenue increase of about $\$ 8,700,000$ or about 4.3 percent.

If the Commission elects to suspend the proposed rate increase under Minnesota Statute 216B.16, Subd. 2, we request that, pursuant to Minnesota Statute 216B.16, Subd. 3, an interim rate increase of approximately $\$ 6,000,000$ or about 3.0 percent be effective beginning with
consumption occurring on and after November 18, 2019, subject to refund (Agreement to Refund attached) should the Commission ultimately approve a lower final revenue level.

We request implementation of the proposed rates within 10 months of the date of Application and request that a Commission Order is received at the beginning of August 2020. However, we understand that multiple general rate proceedings will be filed with the Commission this year. Accordingly, Dakota Electric is willing to provide a limited waiver of the 10 -month statutory timeframe, extending the disposition of this case, if such an extension is necessary.

Dakota Electric's Application consists of the following:
Volume 1 Transmittal Documents
Interim Rate Petition
Testimony and Exhibits (including proposed rates)
Volume 2 Workpapers (supporting documentation)
To facilitate the review and confirmation of required filing information, attached is a document that identifies Dakota Electric's general rate case compliance requirements with an indication of where each compliance document is located in our submission. These compliance requirements include provisions in Minnesota Rules, Minnesota Statutes, Commission Policy Statements, and the final orders from our last two general rate cases (Docket No. E-111/GR-09-175 and Docket No. E-111/GR-14-482).

Enclosed is a copy of the official notice we propose to provide to customers as a bill insert and to counties and municipalities in our service area through a separate mailing. Upon approval we will begin sending this notice to customers.

In addition to our electronic filing, notice of this general rate case has been sent to those on the Cooperative's general service list and a list of potentially interested persons provided by Commission staff.

Sincerely,


Gregory C. Miller
President and Chief Executive Officer

## Dakota Electric Association General Service List

Daniel P. Wolf, Exec. Sec.
MN Public Utilities Commission
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St. Paul, MN 55101-2147
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MN Department of Commerce
$857^{\text {th }}$ Place East, Suite 500
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Eric Swanson
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$4300-220^{\text {th }}$ Street West
Farmington, MN 55024

# Dakota Electric Association <br> List of Potentially Interested Persons <br> General Rate Case <br> Docket No. E-111/GR-19-478 

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## Certificate of Service

I, Cherry Jordan, hereby certify that I have this day served copies of the attached document to those on the following service list by e-filing, personal service, or by causing to be placed in the U.S. mail at Farmington, Minnesota.

Docket No. E-111/GR-19-478

Dated this 19th day of September 2019
/s/ Cherry Jordan
Cherry Jordan

## "AGREEMENT TO REFUND"

I, Gregory C. Miller, President and Chief Executive Officer, acting on behalf of Dakota Electric Association, do hereby agree that the Association will refund any portion of the increase in interim rates, determined by the Minnesota Public Utilities Commission to be unreasonable, together with interest thereon.


Gregory C. Miller, President and Chief Executive Officer
DAKOTA ELECTRIC ASSOCIATION
Farmington, Minnesota 55024

## BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Katie Sieben<br>Dan Lipschultz<br>Valerie Means<br>Matt Schuerger<br>John Tuma<br>Chair<br>Commissioner<br>Commissioner<br>Commissioner<br>Commissioner

In the Matter of the Application of
DAKOTA ELECTRIC ASSOCIATION
for Authority to Increase Rates
for Electric Service in Minnesota

## SUMMARY OF RATE INCREASE PETITION

On September 19, 2019, Dakota Electric Association submitted an Application for Authority to Increase Electric Rates (Application) pursuant to Minnesota Statutes 216B.16, Subd. 1. The Application includes changes in present rates and modifications to Dakota Electric Association's special fees and charges.

Since our last general rate case was filed in 2014, Dakota Electric has experienced steadily increasing costs in providing electric distribution service. Dakota Electric's 2019 budget anticipates a negative net operating margin of about $\$ 2,250,000$, making an increase in rates necessary and unavoidable. Based on our Historical 2018 Test Year operating results (adjusted for known and measurable changes), this filing documents the need for an annual revenue increase of about $\$ 8,700,000$ or about 4.3 percent.

If the Commission elects to suspend the proposed rate increase under Minnesota Statute 216B.16, Subd. 2, we request that, pursuant to Minnesota Statute 216B.16, Subd. 3, an interim rate increase of approximately $\$ 6,000,000$ or about 3.0 percent be effective beginning with consumption occurring on and after November 18, 2019, subject to refund (Agreement to Refund attached) should the Commission ultimately approve a lower final revenue level.

We request implementation of the proposed rates within 10 months of the date of Application and request that a Commission Order is received at the beginning of August 2020. However, we understand that multiple general rate proceedings will be filed with the Commission this year. Accordingly, Dakota Electric is willing to provide a limited waiver of the 10 -month statutory timeframe, extending the disposition of this case, if such an extension is necessary.

# Dakota Electric Association <br> General Rate Case Compliance Requirements Docket No. E-111/GR-19-478 

## MN Rule

Minn. R. 7825.3200(A)

Minn. R. 7825.3300

Minn. R. 7825.3500

Minn. R. 7825.3600

Minn. R. 7825.3700

Minn. R. 7825.3800
Scope and Supplemental Information

Minn. R. 7825.3900

## Description

General rate changes shall include items prescribed in Minn. R. 7825.3300 to 7825.4400

Methods and Procedures for Refunding

Proposal for Change in Rates
A. Name, address, etc.
B. Date of filing and date of modified rates
C. Description and purpose of request
D. Effect in gross revenue \$ and \%
E. Signature and title of utility officer

Modified Rate Schedules and Tariffs

Expert Opinions and Supporting Exhibits

Jurisdictional Financial Summary Schedule
A. The proposed rate base, operating income, overall rate of return, and calculation of income requirements, income deficiency, and revenue requirements for the test year.
B. The actual unadjusted rate base, unadjusted operating income, overall rate of return, and calculation of income requirements, income deficiency, and revenue requirements for the most recent fiscal year.
C. The projected unadjusted rate base, unadjusted operating income, overall rate of return, and calculation of income requirements, income deficiency, and revenue requirements for the projected fiscal year.

## Compliance

See Minn. R. 7825.3300 to 7825.4400 below

Volume 1, "Agreement to Refund"

Volume 1, Cover letter

Volume 1, Exhibits 17-19

Volume 1, Testimony and Exhibits 1-19

See Minn. R. 7825.3900 to 7825.4400 below

Volume 1, Exhibit 2

## MN Rule

Minn. R. 7825.4000

Minn. R. 7825.4100

Minn. R. 7825.4200

Minn. R. 7825.4300

Rate Base Schedules
A. Summary schedule by major rate base component
B. Comparison of total utility and Minnesota jurisdictional rate base amounts by detailed rate base component
C. Rate Base Adjustments
D. Rate Base Assumptions and Approach
E. Rate Base Jurisdictional Allocation Factors (for multijurisdictional utilities)

Operating Income Schedules
A. Jurisdictional Operating Income Statements
B. Total Utility and Jurisdictional Operating Income Statements
C. Utility Income Tax Computations (investorowned utilities)
D. Operating Income Adjustments
E. Operating Income Assumptions and Approach
F. Operating Income Jurisdictional Allocation Factors (for multijurisdictional utilities)

Rate of Return Cost of Capital Schedules
A. Rate of Return Summary Schedules
B. Supporting Schedules
C. Average Short-Term Securities

Rate Structure and Design Information
A. Summary Comparison Test Year Operating Revenue
B. Detailed Comparison Test Year Operating Revenue
C. Cost of Service Study

## Compliance

Volume 1, Exhibit 2

Volume 1, Exhibit 1 and Exhibit 5

Volume 1, Exhibit 2
A. Volume 1, Exhibit 6
B. Volume 1, Exhibit 6
C. Volume 1, Exhibit 3

## MN Rule

Minn. R. 7825.4400

Minn. R. 7814.2400, subp. 4

Minn. R. 7829.2400

Description
Other Supplemental Information
A. Annual Report
B. Gross Revenue Conversion Factor (InvestorOwned)
C. Form 7 (cooperatives)
D. Form 7A (cooperatives)
E. Form 325 Financial Forecast (cooperatives)

New Base Electric Fuel Cost

Filing requiring determination of gross revenue.
Brief summary of the filing, sufficient to apprise potentially interested parties of its nature and general content.

A utility filing a general rate change request shall serve copies of the filing on the Department and Residential Utilities Division of the Office of the Attorney General. The utility shall serve the filing or the summary described in subpart 1 on the persons on the applicable general service list and persons who were parties to its last general rate case or incentive plan proceeding.

## Compliance

A. Volume 2, WP 2
B. NA
C. Volume 2, WP 1
D. Volume 2, WP 1
E. Volume 2, WP 5

Volume 1, Exhibit 12

Volume 1, Summary of Filing

Volume 1, Cover Letter

## MN Statute

Minn. Stat. § 216B.16,
subd. 3

Minn. Stat. § 216B. 241
Minn. Stat. § 216B.16,
subd. 1

Minn. Stat.§ 216B.16, subd.17; Travel, Entertainment and Related Employee Expenses

Description

Interim Rates

Energy Conservation Improvement Plan

Schedule separately itemizing all travel, entertainment, and related employee expenses as specified by the commission, including but not limited to the following categories:
(1) travel and lodging expenses;
(2) food and beverage expenses;
(3) recreational and entertainment expenses;
(4) board of director-related expenses, including and separately itemizing all compensation and expense reimbursements;
(5) expenses for the ten highest paid officers and employees, including and separately itemizing all compensation and expense reimbursements;
(6) dues and expenses for memberships in organizations or clubs;
(7) gift expenses;
(8) expenses related to owned, leased, or chartered aircraft; and
(9) lobbying expenses.

## Compliance

Volume 1, Notice and Petition for Interim Rates, and Interim Rate Schedules

Volume 2, WP 9

Volume 2, WP 15

Policy Statement
Description
Compliance

| Advertising | Statement that recovery is requested only for permitted advertisements. | Volume 2, WP 18 |
| :---: | :---: | :---: |
|  | Description of advertisements for which recovery is requested. |  |
|  | Sample advertisements for which recovery is requested. |  |
| Charitable Contributions | Evidence as to whether the recipients of the contributions: serve the utility's Minnesota service area; are nondiscriminatory in selecting recipients; and do not promote political or special interest groups. | Volume 2, WP 19 |
|  | Evidence as to what organizations are gifted, their activities, and that no part of the contribution goes to benefit any private stockholder or individual. |  |
|  | Itemized schedule showing amount, recipient and time of donations. |  |
|  | Only $50 \%$ of qualified contributions shall be allowed as operating expenses. |  |
| Organizational Dues | Schedule showing each organization being paid, the number of employees belonging to each organization and the dollar amount of dues being paid to each organization. | Volume 2, WP 20 |
|  | Testimony explaining the primary purpose of each organization. |  |
| Research Expenses | Description of each research activity for which an expense is claimed, with all expenses for each activity itemized and supported. | Not Applicable |
| Cash Working Capital | Lead/lag study with: 1) lead time divided into service to meter reading; meter reading to billing; and billing to collection; and 2) lag expenses divided in categories such as fuel, purchased power, labor. Other issues may include average or minimum cash | Volume 2, WP 6 |

balances required, depreciation, dividends and interest on debt.

Name, address and telephone number of utility and attorneys.

Date of filing and date proposed interim rates are requested to become effective.

Description and need for interim rates.
Description and corresponding dollar amount change included in interim rates as compared with most current approved general rate case and with the most recent year for which audited data is available.

Effect of the interim rates expressed in gross revenue dollars and as a percentage of test year gross revenues.

Certification by officer of the utility.
Signature and title of the utility officer authorizing the proposed interim rates.

Methods and procedures for refunding.
Supporting schedules and work papers.
Modified tariffs.
Notices.

## MPUC Order <br> E-111/GR-09-175

Description
Compliance
Sales Forecast
Long-Term Interest
Expense

Minimum-Size
Method

Line Extensions

## MPUC Order <br> E-111/GR-14-482

Purchased-Power

COS Demand
Adjustment

Dakota Electric shall, in future rate cases, be consistent in its use and source of weather data in determining its sales forecast.

Dakota Electric shall, in its next rate case, demonstrate that its long-term interest expense is prudently incurred. Such demonstration shall include data of rates offered by other lenders.

Dakota Electric shall, in its next rate case, either use the minimum-size method to classify distribution accounts, or provide such an analysis to support the outcome of the zero-intercept method.

Regarding line extensions, if Dakota Electric determines that there has been any increase in the number of its overhead extensions, it shall include that information in its next rate case.

## Description

Dakota Electric Association shall include in the initial filing of its next rate case work papers for both the purchased-power revenue and purchased-power expense amounts included in the pro forma testyear financial schedule.

Dakota Electric Association shall include a demand adjustment in the Class Cost of Service Study submitted in its next rate case.

Volume 2, WP 13

Volume 2, WP 17

Volume 2, WP 21

Volume 1, DRL Testimony

Compliance

Volume 2, WP 24

Volume 2, WP 21 and
Volume 1, Exhibit 3

Misc. Dockets

E-999/CI-06-159

E-111/M-16-774

E-111/M-16-923

E-111/M-17-180

Description
Compliance

In an August 10, 2007 Order, the Commission stated Volume 2, WP 25 its intention to examine individual utility smart metering practices in the context of rate cases.

The Association will track the wholesale power cost credits associated with each Member Specific Discount and exclude them from both the calculation of the base cost of power in future rate cases and the calculation of the Power Cost
Adjustment Charges in the Resource and Tax
Adjustment filings to the Minnesota Public Utilities Commission. This will ensure that the credits Dakota Electric receives from its wholesale power supplier are not double-counted.

The Association will track the wholesale power costs Volume 1, Exhibit 12 associated with All Large Load High Load Factor credits and exclude them from both the calculation of the base cost of power in future rate cases and the calculation of the Power Cost Adjustment Charges in the Resource and Tax Adjustment filings to the Minnesota Public Utilities Commission. This will ensure that the credits Dakota Electric receives from its wholesale power supplier are not doublecounted.

The Association will track the wholesale power costs Volume 1, Exhibit 12 associated with all contract rates and exclude them from both the calculation of the base cost of power in future rate cases and the calculation of the Power Cost Adjustment Charges in the Resource and Tax Adjustment filings to the Commission.

## Proposed changes for base electricity rates

Dakota Electric Association has asked the Minnesota Public Utilities Commission (MPUC) for permission to increase electric utility rates and service charges. The proposed increase in total cooperative annual revenues will be about $\$ 8.7$ million or $4.3 \%$ overall.

## Interim rates

State law allows us to collect higher rates on an interim basis while our rate filing is reviewed. If the MPUC approves our request for $\$ 6.0$ million or a $3.0 \%$ interim increase, the additional charge will apply to electricity use beginning in November, for which members will begin receiving bills in December. This interim increase appears on your bill as "Interim Rate Adjustment." For Residential and Small General Service members, the interim adjustment applies to the monthly fixed charge, energy charge and resource and tax adjustment*. For General Service members the interim adjustment also applies to the demand charge.

The interim increase will remain in effect until the MPUC determines final rates. The MPUC is expected to make its decision in 2020. If the approved overall total increase is lower than interim rates, we will refund members the difference with interest. If the overall total increase is higher, we will not charge members the difference

## What is increasing Dakota Electric's costs?

 Since Dakota Electric's last request for a rate increase in 2014, costs for equipment, labor and materials have continued to increase. These factors, combined with minimal growth in electric sales in the last five years, contributed to the need for this filing.
## How is Dakota Electric controlling costs?

- Using technology and process improvements to increase efficiency.
- Employees do things every day to reduce expenses. They may not produce large savings on their own but when added together, help lower expenses.
- Offering a variety of programs to help members conserve energy and save money.


## Impact on monthly bills

While the effect of the proposed increase on your bill will vary depending upon member classification and amount of energy use, the average monthly bill for a residential member will increase by $\$ 4.22$ from $\$ 94.96$ per month to $\$ 99.18$ per month. The charts below provide more detail on the impact of proposed increases.

| Proposed Change in Monthly Electricity Costs |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Member classification | Average monthly kWh use | Current monthly bill | Interim monthly bill | Proposed final monthly bill |
| Residential | 700 | \$94.96 | \$97.81 | \$99.18 |
| Small General Service | 1,000 | \$132.90 | \$136.89 | \$142.00 |
| General Service | 16,000 | \$1,637 | \$1,686 | \$1,654 |


| Energy (per kWh) and Demand (per kW) Rates (including RTA) |  |  |
| :---: | :---: | :---: |
| Member classification | Current | Proposed |
| Residential |  |  |
| Energy: Summer (June - Aug) | $13.33 ¢$ | 13.79¢ |
| Energy: Other (Sept - May) | 11.93¢ | 12.39¢ |
| Small General Service |  |  |
| Energy: Summer (June - Aug) | 12.94¢ | $13.75 ¢$ |
| Energy: Other | 11.54¢ | $12.35 ¢$ |
| General Service |  |  |
| Energy: First 200 kWh per kW | $8.01 ¢$ | 7.76¢ |
| Energy: Next 200 kWh per kW | 7.01\% | 6.76¢ |
| Energy: Over 400 kWh per kW | 6.01 C | 5.76¢ |
| Demand: Summer (June - Aug) | \$12.26 | \$13.70 |
| Demand: Other (Sept - May) | \$9.16 | \$10.60 |


| Monthly Fixed Charges |  |  |
| :--- | ---: | :---: |
| Member classification | Current | Proposed |
| Residential | $\$ 9.00$ | $\$ 10.00$ |
| Small General Service | $\$ 14.00$ | $\$ 15.00$ |
| General Service | $\$ 34.00$ | $\$ 34.00$ |

*The resource and tax adjustment (RTA) is a periodic rate adjustment for changes in wholesale power costs, property and real estate taxes and conservation spending.

## Review process

The Minnesota Public Utilities Commission will hold public hearings and accept written comments about our rate request. The public will be able to comment on our rate request at the public hearings. You may add oral comments, written comments, or both into the record. Dakota Electric will provide details about the hearings in local newspapers, in a bill insert and at www.dakotaelectric.com.

## More information

Details about proposed rates are available on Dakota Electric's Web site at www.dakotaelectric.com. A complete copy of our filing is also available for review at our Farmington office between 8 a.m. and 4:30 p.m. Monday through Friday. Our office is located at 4300 220th Street West, Farmington, MN.

You may also examine our current and proposed rate schedules and our request for new rates by contacting the Department of Commerce at:

Minnesota Department of Commerce
85 7th Place East, Suite 500
St. Paul, MN 55101
Phone: 651-296-9314

Web site: https://www.edockets.state.mn.us/EFiling/ search.jsp. Web address is case sensitive. Select 19 in the year field, enter 478 in the number field, click on search and the list of documents will appear on the next page.

Dakota Electric will also keep members informed of rate filing developments in our monthly Circuits newsletter and at www.dakotaelectric.com. As always, if you have questions or comments for Dakota Electric, contact us at 651-463-6212 or rates@dakotaelectric.com.

## How to participate

Anyone who wishes to formally intervene in this case should contact:

Minnesota Office of Administrative Hearings
P.O. Box 64620

St. Paul, MN 55164-0620
Phone: 651-361-7900

Citizens with hearing or speech disabilities may call through their preferred Telecommunication Relay Service.

You do not need to contact the Minnesota Office of Administrative Hearings if you simply want to attend the public hearings, provide oral comments at the public hearings or submit comment letters.

You may submit written comments to:
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101-2147
Phone: 651-296-0406 or 800-657-3782
E-mail: consumer.puc@state.mn.us
Citizens with hearing or speech disabilities may call through their preferred Telecommunication Relay Service.

Be sure to reference MPUC Docket No. E-111/GR-19478 in all correspondence or requests.

# Dakota Electric seeks increase in electric rates 

Interim rates effective with usage on and after November_, 2019 until final decision is made.

Docket No. E-111/GR-19-478


## SCHEDULE 31

## RESIDENTIAL AND FARM SERVICE

Availability
Available to individual residential and farm members for all domestic and farm use except irrigation.
This includes service to apartment units. Service is subject to the established rules and regulations of the Association.

Type of Service
Single phase or three phase, when economically feasible, 60 hertz, at available secondary voltages.
Monthly Rate

| Fixed Charge |  | $\$ 9.00$ per month |
| :--- | :--- | :--- |
| Energy Charge |  |  |
| $\quad$ Summer (June-Aug) | @ | $\$ 0.1308$ per kWh |
| Other | $@$ | $\$ 0.1168$ per kWh |
| Plus Applicable Taxes |  |  |

Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Minimum Monthly Charge

The minimum monthly charge under the above rate shall be the Fixed Charge.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 32

## RESIDENTIAL AND FARM DEMAND CONTROL RATE

## Availability

Available to residential and farm members with at least 5 kW of qualifying off-peak loads as determined by the Association. This rate is subject to the rules and regulations of the Association. Members requesting service under this rate schedule must remain on this rate schedule for a minimum of twelve (12) months.

Type of Service
Single phase, 60 Hertz, at available secondary voltages.
Monthly Rate

| Fixed Charge |  | $\$ 12.00$ per month |
| :--- | :--- | :--- |
| Energy Charge |  |  |
| Demand Charge |  | $\$ 0.0760$ per kWh |
| Summer (June-Aug) <br> Other | @ | $\$ 14.70$ per kW |
| Plus Applicable Taxes | @ | $\$ 11.10$ per kW |

Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

Billing Demand Determination
The demand will be determined based on the peak 15-minute demand reading during control periods for the month the bill was rendered. An estimated demand will be used for new customers until the actual controlled demand is established.

## Minimum Monthly Charge

The minimum monthly charge under the above rate shall be the $\$ 12.00$ Fixed Charge plus a minimum billing demand of 3 kW .

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be increased or decreased by $\$ 0.0001$ per kilowatt-hour for each 0.1 mill or major fraction by which the energy component in the Association's purchased power cost per kilowatt-hour purchased from its power supplier exceeds, or is less than $\$ 0.0903$ per kilowatt-hour purchased. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set fourth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE EV-1 <br> PILOT - RESIDENTIAL ELECTRIC VEHICLE SERVICE

## Availability

Available on voluntary basis as a pilot program for residential consumers taking service under Schedule 31 who also desire metered service for the sole purpose of electrically charging a licensed automobile or light truck. Service on this tariff is limited to electric vehicles that are SAE J1772 compliant and registered and operable on public highways in the State of Minnesota. Low-speed electric vehicles, including golf carts, are ineligible to take service under this tariff even if licensed to operate on public streets. The consumer may be required to provide the Association with proof of registration of the electric vehicle prior to taking service under this tariff. Service is subject to the established rules and regulations of the Association.

## Term

The pilot program will be offered for a minimum of a two year period. At the end of the initial two year pilot period, the Association will determine if this program will be continued, modified, or eliminated. If it is eliminated, the consumers participating in the pilot program will revert back to the appropriate retail rate tariff for their class of service.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages.

## Rate

Energy Charges:
Off-Peak: $\quad 6.74 \not \subset$ per kWh
On-Peak: $\quad 41.44 \notin$ per kWh
Other: $\quad$ Schedule 31 energy charges apply
Plus RTA and applicable sales tax

## Definition of Periods

Energy Charge time periods are defined as follows:
Off-Peak $\quad$ 9:00 pm to 8:00 am Mon. - Fri., and all day Weekends and Holidays
On-Peak $\quad$ 4:00 pm to 9:00 pm Mon. - Fri., excluding Holidays
Other $\quad$ 8:00 am to 4:00 pm Mon. - Fri., excluding Holidays
Holidays shall be: New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

|  | INTERIM |  |
| :--- | :--- | ---: |
| DAKOTA ELECTRIC ASSOCIATION | SECTION: | V |
| $4300220^{\text {th }}$ Street West | SHEET: | 5.0 |
| Farmington, MN 55024 | REVISION: | $1 \underline{7} 6$ |

## SCHEDULE 36

IRRIGATION SERVICE

## Availability

Available to any member for service to irrigation pumps. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages.

## Monthly Rate

Firm Service

| Fixed Charge |  | $\$ 30.00$ per month |
| :--- | :--- | :--- |
| Demand Charge | $@$ | $\$ 26.35$ per kW |
| $\quad$ Summer (June-Aug) | $@$ | $\$ 20.95$ per kW |
| Winter (Dec-Feb) | $@$ | $\$ 15.50$ per kW |
| Other | $@$ | $\$ 0.0499$ per kWh |
| Energy Charge |  |  |

Plus Applicable Taxes
Interruptible
Fixed Charge $\$ 30.00$ per month

Demand Charge
@ $\quad \$ 4.55$ per kW
Energy Charge
@ $\quad \$ 0.0499$ per kWh
Plus Applicable Taxes
Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

Determination of Metered Demand
The Metered Demand in kilowatts shall be the greatest 15 -minute demand (subject to power factor adjustment) during the month for which the bill is rendered. Demand will be read to the nearest 0.01 kilowatt.

## Power Factor Adjustment

The member agrees to maintain as near unity (100 percent) power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent, the demand for billing purposes shall be the demand as recorded by the demand meter multiplied by 90 percent and divided by the percent power factor.

Minimum Monthly Charge
The Minimum Monthly Charge under the above rate shall be the Fixed Charge.

## SCHEDULE 41 <br> SMALL GENERAL SERVICE

## Availability

Available to any commercial member for all uses, except irrigation pumps, where the Metered Demand is 15 kW or less. If the Metered Demand exceeds 15 kW for three consecutive months, the member will be transferred to the General Service Rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages.

## Monthly Rate

| Fixed Charge <br> Energy Charge | $\$ 14.00$ per month |  |
| :--- | :--- | :--- |
| $\quad$ Summer (June-Aug) | @ | $\$ 0.1269$ per kWh |
| $\quad$ Other | @ $\$ 0.1129$ per kWh |  |

Plus Applicable Taxes
Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Determination of Metered Demand

The Metered Demand in kilowatts shall be the greatest 15 -minute demand during the month for which the bill is rendered. Demand will be read to the nearest 0.01 kilowatt.

Minimum Monthly Charge
The Minimum Monthly Charge under the above rate shall be the Fixed Charge.

## Non-metered Option

This option has limited availability. It may be available for: devices that are located at individual points of delivery and are operated with a continuous or predetermined load level that exceeds the threshold determined for Schedule 45. The monthly energy consumption will be determined by the Association based on equipment documentation provided by the member. The maximum monthly energy allowed under this option will be 500 kWh .

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 44

## SECURITY LIGHTING SERVICE

## Availability

Available for year-around illumination for private residential, farm, or commercial lighting on existing Association service poles where service poles and service wires can be connected on the line side of member's meter. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

The Association shall own, operate, and maintain the security lighting system using the Association's standard security lighting equipment. The energy used by these lights is unmetered.

## Monthly Rate

Designation of Lamp
Monthly Rate Per Luminaire
100 Watt High Pressure Sodium (Closed to new)
\$10.10
150 Watt High Pressure Sodium (Closed to new)
250 Watt High Pressure Sodium (Closed to new) \$15.79
Plus Applicable Taxes
Optional - For residential or farm installation requiring any extra equipment, or in the event the consumer requests the changeout of an existing light to a different size and/or type, a contribution to construction will be required to cover the extra costs incurred. Commercial installations on existing service poles only.

Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## SCHEDULE 44-1 <br> STREET LIGHTING SERVICE <br> (MEMBER - OWNED)

## Availability

Available for year-round illumination of public streets, parkways, highways, and other public ways by electric lamps mounted on standards where member owns the lighting system complete with standards, luminaries, globes, lamps, and other appurtenances, together will all necessary cables extending between standards and to point of connection to the Association's facilities as designated by the Association.

## Type of Service

The street lighting system shall be built and owned by the member. All controls will be provided by the member. The member shall also provide all easements and right-of-way to permit access to feed points. The Association shall operate and provide limited maintenance (periodic cleaning of lens, refractor, and bulb replacement) on street lighting systems.

## Monthly Rate

| Designation of Lamp | Monthly Rate Per Luminaire |
| :--- | :---: |
| 175 Watt Mercury (Closed to new) | $\$ 10.52$ |
| 250 Watt Mercury (Closed to new) | $\$ 13.46$ |
| 400 Watt Mercury (Closed to new) | $\$ 18.54$ |
|  |  |
| 100 Watt High Pressure Sodium | $\$ 7.56$ |
| 150 Watt High Pressure Sodium | $\$ 9.46$ |
| 200 Watt High Pressure Sodium | $\$ 11.41$ |
| 250 Watt High Pressure Sodium | $\$ 13.25$ |
| 400 Watt High Pressure Sodium | $\$ 17.67$ |
| Plus Applicable Taxes |  |
|  |  |
| Rate Adjustment |  |

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## SCHEDULE 44-2 <br> STREET LIGHTING SERVICE <br> (DEA - OWNED EQUIPMENT)

## Availability

Available for governmental or private year-around illumination of public or private streets, parkways, highways, and other public ways by electric lamps in luminaires supported on existing poles where secondary voltage is available and the facilities for this service are furnished by the Association.

## Type of Service

The Association shall own, operate, and maintain the overhead street lighting system using the Association's standard street lighting equipment. The energy used by these lights is unmetered.

## Monthly Rate

| Designation of Lamp | Monthly Rate Per Luminaire |
| :--- | :---: |
| 175 Watt Mercury (Closed to new) | $\$ 15.23$ |
| 250 Watt Mercury (Closed to new) | $\$ 18.16$ |
| 400 Watt Mercury (Closed to new) | $\$ 23.25$ |
|  |  |
| 100 Watt High Pressure Sodium (Closed to new) | $\$ 12.27$ |
| 150 Watt High Pressure Sodium (Closed to new) | $\$ 14.16$ |
| 250 Watt High Pressure Sodium (Closed to new) | $\$ 17.95$ |
| 400 Watt High Pressure Sodium (Closed to new) | $\$ 22.38$ |
| Plus Applicable Taxes |  |

The above rates cover only an installation where the pole with secondary voltage is existing at the light location. Contributions to construction costs will be required if additional equipment is needed or if a member requests a change to a different lamp size and/or type when costs exceed $\$ 500$.

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

SCHEDULE 44-3
CUSTOM RESIDENTIAL STREET LIGHTING
(DEA-OWNED - CONTRIBUTION BY MEMBER)

## Availability

Available for year-round illumination of public streets, parkways, highways, and other public ways by electric lamps mounted on standards and served through underground circuits, where the facilities for this service are furnished by the Association. Street lighting service under this schedule is limited to residential areas having an underground distribution area.

## Type of Service

The Association shall own, operate, and maintain the lighting system using the Association's standard street lighting equipment which includes one lamp per standard. Member shall be required to contribute an amount equal to the installation cost of the lighting system. The energy used by these lights is unmetered.

Monthly Rate

Designation of Lamp

| 175 Watt Mercury (Closed to new) | $\$ 11.37$ |
| :--- | ---: |
| 50 Watt High Pressure Sodium (Closed to new) | $\$ 6.70$ |
| 100 Watt High Pressure Sodium | $\$ 8.41$ |
| 150 Watt High Pressure Sodium (Closed to new) | $\$ 10.30$ |
| 250 Watt High Pressure Sodium (Closed to new) | $\$ 14.09$ |
| Plus Applicable Taxes |  |

Monthly Rate Per Luminaire
\$11.37
$\$ 6.70$
$\$ 8.41$
$\$ 10.30$
\$14.09

Optional - For installations requiring any extra equipment or in the event the member requests the changeout of an existing light to be a different size and/or type, the member will be required to pay all construction fees or extra charges incurred.

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

Resource and Tax Adjustment (RTA)
The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

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## SCHEDULE 44-4 <br> LED SECURITY LIGHTING SERVICE

## Availability

Available for year-around illumination for private residential, farm, or commercial lighting by Light Emitting Diode (LED) electric lamps on existing Association service poles where service poles and service wires can be connected on the utility side of the meter. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

The Association shall own, operate, and maintain the LED security lighting system using the Association's standard LED security lighting equipment. Fixtures on this rate will only be attached to an existing DEA service pole. The energy used by these lights is unmetered.

## Monthly Rate

Light Emitting Diode Security Light (LED, > 4,500 lumens) $\$ 7.63$ per month
Plus Applicable Taxes

Optional - For installations requiring any extra equipment (excluding poles), a contribution to construction will be required to cover the extra costs incurred. In the event the member requests the change out of an existing light, the member will be required to pay all construction fees and material costs for the new installation or upgrade as well as payment for the undepreciated cost of the existing light, less any salvage value.

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet $53)$. The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## SCHEDULE 44-5 <br> LED STREET LIGHTING <br> (MEMBER-OWNED)

## Availability

Available for year-round illumination of public streets, parkways, highways, and other public ways by Light Emitting Diode (LED) electric lamps served through underground or overhead circuits, where the facilities for this service are furnished and owned by the Member. Service is subject to the established rules and regulations of the Association.

## Type of Service

The member shall own, operate, and maintain the LED lighting system.
The preferred service option is metered LED lighting. Such service will be billed to the Member under the rate schedule associated with the meter.

Unmetered service will be allowed if the Association determines it is not practical for the lights to be metered. For such unmetered use:

1. Billing will be according to specified consumption groups. Dakota Electric will determine if a member qualifies for the unmetered rate and which consumption group.
2. The Member will be required to provide Dakota Electric with a notice prior to any change in equipment.
3. No other use is allowed from the fixture. (e.g. Wi-Fi attachments, holiday lights, etc.)
4. The Association will periodically inspect the unmetered fixtures to ensure compliance with requirements.
5. The Member must provide proof of lighting system rating. (i.e. data sheet or model number)

No maintenance will be included in the monthly rate from the Association for any member-owned LED street light. At the request of a Member, Dakota Electric may enter into individual contracts with a Member for the type and frequency of maintenance they may desire from the Association.

## Monthly Rate

Metered Service:
According to applicable rate schedule
Unmetered Service:

Consumption Group
A (40 to 80 watts)
B (81 to 150 watts)
C (151 to 250 watts)
D (251 to 350 watts)
E (351 to 450 watts)

Monthly Rate per Fixture
\$4.81
\$6.71
$\$ 9.66$
\$13.05
\$16.52

Plus Applicable Taxes
The range of watt ratings for the Unmetered Consumption Groups will be adjusted periodically to reflect the predominant size of lights receiving such Unmetered Service.

Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

# SCHEDULE 44-6 <br> LED STREET LIGHTING <br> (DEA-OWNED - CONTRIBUTION BY MEMBER) 

## Availability

Available for year-round illumination of public streets, parkways, highways, and other public ways by Light Emitting Diode (LED) electric lamps served through underground or overhead circuits, where the facilities for this service are furnished by the Association. Conversion of existing lighting to LED lighting may be limited to accommodate workload scheduling. Street lighting service under this schedule is limited to designated LED lighting fixtures offered by the Association in its distribution area. Service is subject to the established rules and regulations of the Association.

## Type of Service

The Association shall own, operate, and maintain the LED lighting system using the Association's standard street lighting equipment which includes one fixture per pole. Member shall be required to contribute an amount equal to the initial installation or upgrade cost of the lighting system. The energy used by these lights is unmetered.

## Monthly Rate

```
Designation of Fixture
Light Emitting Diode (LED, > 5,200 lumens) Coach Light (Post)
Light Emitting Diode (LED, > 5,200 lumens) Acorn Light (Post)
Light Emitting Diode (LED, > 7,000 lumens) Cobra Light (Mast)
Light Emitting Diode (LED, > 11,500 lumens) Shoebox Light (Mast)
Plus Applicable Taxes
```

Monthly Rate per Fixture
Standard Basic
\$ $10.60 \quad \$ 6.83$
\$ $11.24 \quad \$ 6.30$
\$ $8.31 \quad \$ 6.51$
\$ $10.71 \quad \$ 7.98$

The Coach and Acorn fixtures will be mounted on a street light post. The Cobra and Shoebox fixtures will be fastened to a mast arm on existing service poles. In the event the member requests the change out of an existing light, the member will be required to pay all construction fees and material costs for the new installation or upgrade as well as payment for the undepreciated cost of the existing light, less any salvage value.

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

DAKOTA ELECTRIC ASSOCIATION
$4300220^{\text {TH }}$ Street West
Farmington, MN 55024

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## SCHEDULE 45

LOW WATTAGE UNMETERED SERVICE

## Availability

This rate is available for low-wattage electronic devices that are: 1) Individually located at each point of delivery, 2) Rated at less than 150 watts, and 3) A determinable load level. Each individual electronic device must not in any way interfere with Association operations and service to adjacent members. This rate is also available to equipment connected to the supply side of the service disconnect such as fire and sprinkler alarms, and emergency lighting systems, if such equipment is used only during times of emergency. This will require verification from a licensed electrical contractor/electrician in the form of an affidavit.

This Low Wattage Unmetered Service is not applicable to electric service for traffic signals, civil defense, or lighting. Association reserves the right to evaluate member requests for this service to determine eligibility.

## Type of Service

Either single phase or three phase, depending on feasibility, 60 hertz, at available secondary voltages.

## Installation Charges

The member shall pay the total estimated installation charges involved to provide service.

## Monthly Rate

$\$ 10.00$ per month per service location, plus applicable sales tax.

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Taxes

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance

SCHEDULE 46

## GENERAL SERVICE

## Availability

Available to any commercial member for all uses except irrigation. Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

Type of Service
Single phase or three phase, 60 hertz, at available secondary voltages.
Monthly Rate

Fixed Charge
Demand Charge
Summer (June-Aug) @ \$12.26 per kW

Other @ \$ 9.16 per kW
Energy Charge
First 200 kWh per kW @ $\$ 0.0776$ per kWh
Next 200 kWh per kW @ $\$ 0.0676$ per kWh
Over 400 kWh per kW @ $\$ 0.0576$ per kWh

Plus Applicable Taxes
Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

Determination of Metered Demand
The Metered Demand in kilowatts shall be the greatest 15-minute demand (subject to power factor adjustment) during the month for which the bill is rendered. Demand will be read to the nearest 0.01 kilowatt.

## Determination of Energy Charge

The energy ( kWh ) billed in each rate block is determined in relation to the monthly demand ( kW ). The energy in the first block includes the first 200 kWh multiplied by the monthly metered demand. The second block includes the next 200 kWh multiplied by the monthly metered demand. All energy in excess of 400 kWh multiplied by the monthly metered demand is billed under the third block.

## Power Factor Adjustment

The member agrees to maintain as near unity ( 100 percent) power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent, the demand for billing purposes shall be the demand as recorded by the demand meter multiplied by 90 percent and divided by the percent power factor.

Minimum Monthly Charge
The Minimum Monthly Charge under the above rate shall be the Fixed Charge plus $\$ 1.00$ per kW of the highest billing demand during the preceding 11 months.

## Primary Voltage Service

A discount of $\$ 0.15 / \mathrm{kW}$ of Billing Demand will be applied to the bill when service is taken by the member at the available primary voltage. If primary metering is used, an additional discount of 2.0 percent shall be applied to the bill. The 2.0 percent discount shall be applied after the $\$ 0.15 / \mathrm{kW}$ discount.

# SCHEDULE 49 <br> GEOTHERMAL HEAT PUMP RIDER <br> <br> (Closed to new consumers.) 

 <br> <br> (Closed to new consumers.)}

Availability
Available to any commercial member for energy used by a geothermal heat pump system.
Members requesting service under this rate schedule must be taking service concurrently under Rate Schedule 41 or 46 . Service is subject to the established rules and regulations of the Association.

Type of Service
Single phase or three phase, 60 hertz, at available primary or secondary voltages.

## Rate

Energy Charge $\quad \$ 0.0940$ per kWh
Plus applicable taxes

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Metering

The geothermal heat pump system must be separately, parallel metered from all other loads at the premise. Service will not be sub-metered.

## Power Factor

The member agrees to maintain as near unity ( 100 percent) power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent, the energy for billing purposes shall be adjusted accordingly.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kWh , or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour for this service annually exceeds, or is less than, $\$ 0.0775$ per kWh sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted as necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

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## SCHEDULE 51

CONTROLLED ENERGY STORAGE

## Availability

Available to members taking service concurrently under rate schedules 31,41 and 46 . This rate is for interruptible service to energy storage loads which are remotely controlled by the Association. Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages. Service under this schedule will be available for approximately eight hours per day, normally 11:00 p.m. to 7:00 a.m., or as established by the Association.

## Monthly Rate

Energy Charge @ $\$ 0.0440$ per kWh

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The energy cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected weighted average power cost per kilowatt-hour for this service exceeds, or is less than $\$ 0.0200$ per kilowatthour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

Demand
The metered demand of loads on this rate will be subtracted from the metered demand for members receiving service under Schedule 41 and 46 when the storage load is coincident with the member's other loads. When feasible, new controlled energy storage loads should be on a separate service from Schedule 41 and 46 load.

## Taxes

The rates set fourth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 52

## CONTROLLED INTERRUPTIBLE SERVICE

## Availability

Available to member taking service concurrently under rate schedules 31,41 and 46 . This rate is for interruptible service to qualifying loads which are remotely controlled by the Association. Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

Type of Service
Single phase or three phase, 60 hertz, at available secondary voltages. Service under this schedule will be available at all times except when interrupted by the Association during times of peak system demand or system emergencies.

Monthly Rate
Energy Charge @ $\$ 0.0550$ per kWh
Plus Applicable Taxes.
Alternate Monthly Rate for Controlled Water Heaters
Where separate metering of controlled water heaters is not possible or for members on Rate 53, a direct credit of $\$ 1.50$ per 100 kWh used up to a maximum of $\$ 6.00$ per month will be applied against the monthly bill.

Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The energy cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected weighted average power cost per kilowatt-hour for this service exceeds, or is less than $\$ 0.0305$ per kilowatthour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Demand

The metered demand of loads on this rate will be subtracted from the metered demand for members receiving service under Schedule 41 and 46 when the interruptible load is coincident with the member's other loads. When feasible, new controlled interruptible services loads should be on a separate service from Schedule 41 and 46 load.

## Taxes

The rates set fourth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 53 RESIDENTIAL AND FARM SERVICE TIME-OF-DAY RATE

## Availability

Available to residential and farm members for all domestic and farm use, except irrigation pumps. Members participating in this service are not eligible for either Schedule 51 or Schedule 52. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, when economically feasible, 60 hertz, at available secondary voltages.

## Monthly Rate

Fixed Charge
$\$ 12.00$ per month
Energy Charge
Summer - (June-Aug) Peak Period @ \$0.1880 per kWh
Other - Peak Period @ $\$ 0.1740$ per kWh Off-Peak Period @ \$0.0940 per kWh
Plus Applicable Taxes
Definition of Periods
Peak Period
4:00 p.m. to 11:00 p.m., excluding holidays and weekends
Off-Peak Period 11:00 p.m. to 4:00 p.m., plus all day on holidays and weekends
Holidays include New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

Minimum Monthly Charge
The minimum monthly charge under the above rate shall be the Fixed Charge.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceed, or is less than $\$ 0.0903$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## SCHEDULE 54 <br> GENERAL SERVICE <br> OPTIONAL TIME-OF-DAY RATE

## Availability

Available to any member for general service electrical loads. Members participating in this service are not eligible for either Schedule 51 or Schedule 52. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

Type of Service
Single phase or three phase, 60 hertz, at available primary or secondary voltages.
Monthly Rate

Fixed Charge
Peak Period Demand Charge
Summer (June-Aug) @ $\$ 24.85$ per kW

Winter (Dec-Feb) @ $\$ 18.95$ per kW
Other
Maximum Demand Charge
Energy Charge
Plus Applicable Taxes

|  | $\$ 36.00$ per month |
| :--- | :--- |
| $@$ | $\$ 24.85$ per kW |
| $@$ | $\$ 18.95$ per kW |
| $@$ | $\$ 13.00$ per kW |
|  | Plus |
| $@$ | $\$ 4.75$ per kW |
| $@$ | $\$ 0.0499$ per kWh |

Definition of Periods
Peak Period
Off-Peak Period

4:00 p.m. to 11:00 p.m., excluding holidays and weekends
11:00 p.m. to 4:00 p.m., plus all day on holidays and weekends

Holidays include New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

Determination of Billing Demand

1. Peak Period - The Peak Period Billing Demand shall be the greatest 15 minute demand (subject to power factor adjustment) between $4 \mathrm{p} . \mathrm{m}$. and $11 \mathrm{p} . \mathrm{m}$. during the month for which the bill is rendered, as indicated or recorded by a demand meter. Demand will be read to the nearest 0.01 kilowatt.
2. Maximum Demand - The Maximum Billing Demand shall be the greatest 15 minute demand (subject to power factor adjustment) during the month for which the bill is rendered, as indicated or recorded by a demand meter. Demand will be read to the nearest 0.01 kilowatt.

## Minimum Monthly Charge

The minimum monthly charge under the above rate shall be the Fixed Charge plus $\$ 1.00$ per kW of the highest Maximum Billing Demand during the preceding 11 months.

## SCHEDULE 56

RESIDENTIAL AND FARM SERVICE TIME-OF-DAY RATE

## Availability

Available to residential and farm members for all domestic and farm use, except irrigation pumps. Members participating in this service are not eligible for either Schedule 51 or Schedule 52. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, when economically feasible, 60 hertz, at available secondary voltages.

## Monthly Rate

Fixed Charge $\quad \$ 12.00$ per month
Energy Charges
Peak Periods:
Summer - (June-Aug) @ $\$ 0.2710$ per kWh
Winter - (Dec-Feb) @ $\$ 0.2210$ per kWh
Spring/Fall @ $\$ 0.1750$ per kWh
Intermediate Period @ $\$ 0.0970$ per kWh
Off-Peak Period @ $\$ 0.0760$ per kWh

## Definition of Periods

Peak Periods
Intermediate Period
Off-Peak Period
4:00 p.m. to 11:00 p.m., excluding holidays and weekends
8:00 a.m. to 4:00 p.m., excluding holidays and weekends
11:00 p.m. to 8:00 a.m. Mon-Fri and all day weekends and holidays
Holidays include New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.
Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

Minimum Monthly Charge
The minimum monthly charge under the above rate shall be the Fixed Charge.
Resource and Tax Adjustment (RTA)
The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceed, or is less than $\$ 0.0903$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## SCHEDULE 60 <br> RIDER FOR STANDBY SERVICE CONTINUED

## Definitions

Contracted Standby Demand is the quantity specified in the member's Electric Service Agreement as the maximum amount of firm or non-firm standby service the Cooperative is obligated to supply and will not exceed the capacity of the member's distributed generation system.

Firm Service refers to a utility's most reliable, constant electric service. A utility would interrupt the supply of electricity to a firm service customer only as a last resort.

Non-Firm Service, also called interruptible service, refers to electric service that a utility provides only to the extent that it has capacity not being used to meet the needs of firm-service members at the moment.

All other definitions shall be as described in Cooperative's Distributed Generation Interconnection Requirements and Interconnection Process for Distributed Generation Systems.

## Charges for Service

The following Reservation Fees, Communication Fee, Usage Fees, and Wheeling Fees will be assessed as applicable in addition to all charges for service being taken under Cooperative's base rate schedule:

## Reservation Fees

Charges as specified below for the reservation of either Firm or Non-Firm generation, transmission and distribution service per Month per kW will each be applied to the member's Contracted Standby Demand as specified in member's Electric Service Agreement with Cooperative:

|  | Firm Service <br> $(\$$ per kW $)$ | Non-Firm Service <br> $(\$$ per kW $)$ |
| :--- | :---: | :---: |
| Generation | $*$ | $* *$ |
| Transmission | $*$ | $* *$ |
| Distribution - Secondary Service | $\$ 3.51$ | $\$ 3.51$ |
| Distribution - Primary Service | $\$ 3.28$ | $\$ 3.28$ |
| Distribution - Substation Service | $\$ 0.90$ | $\$ 0.90$ |

* Firm Standby Service generation and transmission Reservation Fees will be billed under the rates, terms and conditions of the Cooperative's wholesale power supplier (Great River Energy), which is available on GRE's Web site; greatriverenergy.com and DEA's Web site; dakotaelectric.com.
**Generation and transmission Reservation Fees are not applied for Non-Firm Service. However, members will be responsible for all costs associated with wholesale power supply during any times of usage.


## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Communication Fee

A monthly Communication Fee will be applied to cover the cost of transmitting data through the use of digital cellular equipment. The monthly Communication Fee is applied to each required meter with cellular data capabilities.

$$
\text { Communication Fee } \quad \$ 8.70 \text { per meter }
$$

## Usage Fees

## Demand Charge

If the member registers electrical usage from Cooperative during a billing month then such usage will result in demand charges which may vary between members contracting for Firm Standby Service or Non-Firm Standby Service.

## SCHEDULE 70 <br> INTERRUPTIBLE SERVICE <br> (FULL INTERRUPTIBLE OPTION)

## Availability

Available to any member with a minimum controllable demand of 50 kW . Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Members participating in this service are not eligible for concurrent service under any other rate schedule. Service is subject to the established rules and regulations of the Association.

Under the full interruptible control option, members agree to interrupt their entire electrical energy usage. Members may attain this full interruption through curtailment or with the use of on-site generation back-up. During the interruption, the member's load must go to zero.

## Type of Service

Single phase or three phase, 60 hertz, at available primary or secondary voltages.

Monthly Rate


Communication Fee (meters w/ digital cellular)
Coincidental Demand
Summer (June-Aug)
Winter (Dec-Feb)
Other
Non-Coincidental Demand
Energy Charge
Failure to Control Charge
Plus Applicable Taxes
$\$ 110.00$ per month $\$ 8.70$ per month
\$24.85 per kW
\$18.95 per kW
$\$ 13.00$ per kW
\$ 4.75 per kW
\$ 0.0499 per kWh
$\$ 5.00$ per kW

Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Control Period

The control period shall be defined as the period of time during which the Association is controlling these loads with the intent of minimizing demand on the Association's system.

## Coincidental Demand

The monthly Coincidental Demand under the full interruptible control option shall be defined as the member's actual hourly demand (subject to power factor adjustment) that is coincident with the wholesale power supplier (i.e. average of the four fifteen minute demand readings for the hour ending of the wholesale billing peak) when the load is directed to be controlled during the wholesale billing peak.

## Non-Coincidental Demand

The Non-Coincidental Demand shall be the maximum kilowatt demand (subject to power factor adjustment) established by the member for any period of 15 consecutive minutes during the month for which the bill is rendered, as indicated or recorded by a demand meter.

## Failure to Control

The Failure to Control Charge will be applied to the highest kilowatt demand during any one monthly control period when the member does not fully interrupt demand. The Failure to Control Charge is applied to the highest demand recorded during any one of the monthly control periods. The control period shall be defined as the period of time during which the Association is controlling these loads with the intent of minimizing demand on the Association's system. Failure to control or being unavailable for control for more than one calendar month may require the member to be removed from Schedule 70 for the remainder of the year.

## Scheduled Maintenance

Members are encouraged to schedule required periodic maintenance during the spring and fall months and coordinate such maintenance with the Association.

SCHEDULE 71
INTERRUPTIBLE SERVICE
(PARTIAL INTERRUPTIBLE OPTION)
Availability
Available to any member with a minimum controllable demand of 50 kW . Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Members participating in this service are not eligible for concurrent service under any other rate schedule. Service is subject to the established rules and regulations of the Association.

Under the partial interruptible control option, members agree to reduce a portion of their electrical energy usage. Members may attain this partial interruption through curtailment or with the use of on-site generation back-up. During the interruption, the member's load goes to a Predetermined Demand Level (PDL). If a partial interruptible member fails to control demand to the PDL, then the PDL will be adjusted to the demand occurring during such control period.
Type of Service
Single phase or three phase, 60 hertz, at available primary or secondary voltages.

## Monthly Rate

| Fixed Charge |  | \$110.00 per month |
| :---: | :---: | :---: |
| Communication Fee (meters w/ digital cellular) |  | \$8.70 per month |
| Coincidental Demand |  |  |
| Summer (June - Aug) | @ | \$24.85 per kW |
| Winter (Dec - Feb) | @ | \$18.95 per kW |
| Other | @ | \$13.00 per kW |
| Non-Coincidental Demand | @ | \$ 4.75 per kW |
| Energy Charge | @ | \$ 0.0499 per kWh |
| Excess Demand Charge | @ | \$ 5.00 per kW |
| Plus Applicable Taxes |  |  |

Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Control Period

The control period shall be shall be defined as the period of time during which the Association is controlling these loads with the intent of minimizing demand on the Association's system.

## Coincidental Demand

The monthly Coincidental Demand under the partial interruptible control option shall be defined as:

- During a month with no control period, the monthly Coincidental Demand under the partial interruptible control option will be the lesser of the member's actual hourly demand (subject to power factor adjustment) that is coincident with the wholesale power supplier (i.e. average of the four fifteen minute demand readings for the hour ending of the wholesale billing peak) or the Predetermined Demand Level. During a month with a control period, the monthly Coincidental Demand under the partial interruptible control option will be the member's actual hourly demand (subject to power factor adjustment) that is coincident with the wholesale power supplier (i.e. average of the four fifteen minute demand readings for the hour ending of the wholesale billing peak).
The partial interruptible PDL will be adjusted to any higher actual demand of the member occurring during a curtailable event for the remainder of the calendar year. In the case of members using on-site generation, the PDL may be adjusted to reflect the rated capacity of such generation that was not operational during the control period. Only one such adjustment per year will be allowed.


## Non-Coincidental Demand

The Non-Coincidental Demand shall be the maximum kilowatt demand (subject to power factor adjustment) established by the member for any period of 15 consecutive minutes during the month for which the bill is rendered, as indicated or recorded by a demand meter.

## Availability

Available to members taking service concurrently under another rate schedule. This rate is for interruptible service to central air conditioners which are remotely controlled by the Association. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages. Service under this schedule will be available at all times except when interrupted by the Association during times of peak system demand or system emergencies.

## Monthly Rate

Option No. 1 - Available to members who also take service under Schedules 51 and 52 where an existing meter and control unit may be utilized for the controlled air conditioning load.

Energy Charge per applicable Schedule 51 or 52
Option No. 2 - Available to members where a new meter and control unit must be installed to control the air conditioning load.

Energy Charge Credit @ $\$ 0.0320$ per kWh
Option No. 3 - Available to members where a control unit must be installed to control the air conditioning load.

A credit will be applied to the first $\$ 13.00$ of the member's net energy consumption charges in the months of June, July, and August. In no case will the credit exceed the sum of the monthly Energy Charge and Resource and Tax Adjustment.

Option No. 4 - Available to non-residential members where a new meter and control unit must be installed but where it is not feasible or designed to meter the air conditioning load separately. The maximum capacity of any individual air conditioning compressor is 7.5 tons. A $\$ 6.50$ per ton per month credit will be applied to member's bill in the months of June, July, and August. The aggregate monthly credit per account will not exceed $1 / 3$ of the net charges for energy and demand in each month.

## Plus Applicable Taxes

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Taxes

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## INTERIM RATE ADJUSTMENT RIDER

## Availability

The 3.0\% Interim Rate Adjustment applies to:

1. Fixed Charge
2. Energy Charge
3. Demand Charge
4. Resource and Tax Adjustment
5. Minimum Charges
6. Energy Charge Credits
7. Voltage Discounts
8. Lighting Rates per Luminaire
9. Low Wattage Unmetered Service
10. Standby Reservation Fees
11. Controlled Air Conditioning and Water Heating Discounts

The Interim Rate Adjustment does not apply to:

1. Municipal Civil Defense Sirens
2. Special Fees or Charges
3. Communication Fee
4. Competitive Service Rider
5. Franchise Fee Surcharge Rider
6. Optional Renewable Energy Rider
7. Member Energy Exchange Rider
8. Voluntary Energy Reduction Rider
9. Member Specific Discount Rider
10. Large Load High Load Factor Rider
11. Contract Rate Service
12. Advanced Grid Infrastructure Rider
13. Advanced Meter Opt-Out (AMO) Rider
14. Late Payment Charge

This temporary Interim Rate Adjustment Rider will expire when final rates become effective.

## Rate

Each rate schedule that the Interim Rate Adjustment applies to contains the following text:
Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment
Rider effective for service rendered on and after November $\qquad$ , 2019.

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SCHEDULE 31
RESIDENTIAL AND FARM SERVICE

Availability
Available to individual residential and farm members for all domestic and farm use except irrigation.
This includes service to apartment units. Service is subject to the established rules and regulations of the Association.

Type of Service
Single phase or three phase, when economically feasible, 60 hertz, at available secondary voltages.

## Monthly Rate

| Fixed Charge |  | $\$ 9.00$ per month |
| :--- | :--- | :--- |
| Energy Charge |  |  |
| $\quad$ Summer (June-Aug) | @ | $\$ 0.1308$ per kWh |
| Other | @ | $\$ 0.1168$ per kWh |
| Plus Applicable Taxes |  |  |

Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Minimum Monthly Charge

The minimum monthly charge under the above rate shall be the Fixed Charge.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 32

RESIDENTIAL AND FARM DEMAND CONTROL RATE

## Availability

Available to residential and farm members with at least 5 kW of qualifying off-peak loads as determined by the Association. This rate is subject to the rules and regulations of the Association. Members requesting service under this rate schedule must remain on this rate schedule for a minimum of twelve (12) months.

Type of Service
Single phase, 60 Hertz, at available secondary voltages.
Monthly Rate


Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Billing Demand Determination

The demand will be determined based on the peak 15-minute demand reading during control periods for the month the bill was rendered. An estimated demand will be used for new customers until the actual controlled demand is established.

## Minimum Monthly Charge

The minimum monthly charge under the above rate shall be the $\$ 12.00$ Fixed Charge plus a minimum billing demand of 3 kW .

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be increased or decreased by $\$ 0.0001$ per kilowatt-hour for each 0.1 mill or major fraction by which the energy component in the Association's purchased power cost per kilowatt-hour purchased from its power supplier exceeds, or is less than $\$ 0.0903$ per kilowatt-hour purchased. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set fourth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

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SCHEDULE EV-1
PILOT - RESIDENTIAL ELECTRIC VEHICLE SERVICE

## Availability

Available on voluntary basis as a pilot program for residential consumers taking service under Schedule 31 who also desire metered service for the sole purpose of electrically charging a licensed automobile or light truck. Service on this tariff is limited to electric vehicles that are SAE J1772 compliant and registered and operable on public highways in the State of Minnesota. Low-speed electric vehicles, including golf carts, are ineligible to take service under this tariff even if licensed to operate on public streets. The consumer may be required to provide the Association with proof of registration of the electric vehicle prior to taking service under this tariff. Service is subject to the established rules and regulations of the Association.

## Term

The pilot program will be offered for a minimum of a two year period. At the end of the initial two year pilot period, the Association will determine if this program will be continued, modified, or eliminated. If it is eliminated, the consumers participating in the pilot program will revert back to the appropriate retail rate tariff for their class of service.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages.

## Rate

Energy Charges:
Off-Peak: $\quad 6.74 \not \subset$ per $k W h$
On-Peak: $\quad 41.44 \notin$ per kWh
Other: $\quad$ Schedule 31 energy charges apply
Plus RTA and applicable sales tax

## Definition of Periods

Energy Charge time periods are defined as follows:
Off-Peak $\quad$ 9:00 pm to 8:00 am Mon. - Fri., and all day Weekends and Holidays
On-Peak $\quad$ 4:00 pm to 9:00 pm Mon. - Fri., excluding Holidays
Other $\quad$ 8:00 am to 4:00 pm Mon. - Fri., excluding Holidays
Holidays shall be: New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## SCHEDULE 36

IRRIGATION SERVICE

## Availability

Available to any member for service to irrigation pumps. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages.

## Monthly Rate

Firm Service

| Fixed Charge |  | $\$ 30.00$ per month |
| :--- | :--- | :--- |
| Demand Charge | $@$ | $\$ 26.35$ per kW |
| $\quad$ Summer (June-Aug) | $@$ | $\$ 20.95$ per kW |
| Winter (Dec-Feb) | $@$ | $\$ 15.50$ per kW |
| Other | $@$ | $\$ 0.0499$ per kWh |
| Energy Charge |  |  |

Plus Applicable Taxes
Interruptible

Fixed Charge
Demand Charge
Energy Charge
Plus Applicable Taxes
$\$ 30.00$ per month
$\$ 4.55$ per kW
$\$ 0.0499$ per kWh

Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Determination of Metered Demand

The Metered Demand in kilowatts shall be the greatest 15 -minute demand (subject to power factor adjustment) during the month for which the bill is rendered. Demand will be read to the nearest 0.01 kilowatt.

## Power Factor Adjustment

The member agrees to maintain as near unity ( 100 percent) power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent, the demand for billing purposes shall be the demand as recorded by the demand meter multiplied by 90 percent and divided by the percent power factor.

Minimum Monthly Charge
The Minimum Monthly Charge under the above rate shall be the Fixed Charge.

## SCHEDULE 41 <br> SMALL GENERAL SERVICE

## Availability

Available to any commercial member for all uses, except irrigation pumps, where the Metered Demand is 15 kW or less. If the Metered Demand exceeds 15 kW for three consecutive months, the member will be transferred to the General Service Rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages.

## Monthly Rate

| Fixed Charge |  | $\$ 14.00$ per month |
| :--- | :--- | :--- |
| Energy Charge |  |  |
| $\quad$ Summer (June-Aug) | @ | $\$ 0.1269$ per kWh |
| $\quad$ Other | @ | $\$ 0.1129$ per kWh |
| Plus Applicable Taxes |  |  |

Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Determination of Metered Demand

The Metered Demand in kilowatts shall be the greatest 15 -minute demand during the month for which the bill is rendered. Demand will be read to the nearest 0.01 kilowatt.

Minimum Monthly Charge
The Minimum Monthly Charge under the above rate shall be the Fixed Charge.

## Non-metered Option

This option has limited availability. It may be available for: devices that are located at individual points of delivery and are operated with a continuous or predetermined load level that exceeds the threshold determined for Schedule 45. The monthly energy consumption will be determined by the Association based on equipment documentation provided by the member. The maximum monthly energy allowed under this option will be 500 kWh .

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

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## SCHEDULE 44

## SECURITY LIGHTING SERVICE

## Availability

Available for year-around illumination for private residential, farm, or commercial lighting on existing Association service poles where service poles and service wires can be connected on the line side of member's meter. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

The Association shall own, operate, and maintain the security lighting system using the Association's standard security lighting equipment. The energy used by these lights is unmetered.

Monthly Rate
Designation of Lamp

100 Watt High Pressure Sodium (Closed to new)
150 Watt High Pressure Sodium (Closed to new)
250 Watt High Pressure Sodium (Closed to new) Plus Applicable Taxes

Monthly Rate Per Luminaire
$\$ 10.10$
\$11.99
\$15.79

Optional - For residential or farm installation requiring any extra equipment, or in the event the consumer requests the changeout of an existing light to a different size and/or type, a contribution to construction will be required to cover the extra costs incurred. Commercial installations on existing service poles only.

Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

# SCHEDULE 44-1 <br> STREET LIGHTING SERVICE <br> (MEMBER - OWNED) 

## Availability

Available for year-round illumination of public streets, parkways, highways, and other public ways by electric lamps mounted on standards where member owns the lighting system complete with standards, luminaries, globes, lamps, and other appurtenances, together will all necessary cables extending between standards and to point of connection to the Association's facilities as designated by the Association.

## Type of Service

The street lighting system shall be built and owned by the member. All controls will be provided by the member. The member shall also provide all easements and right-of-way to permit access to feed points. The Association shall operate and provide limited maintenance (periodic cleaning of lens, refractor, and bulb replacement) on street lighting systems.

## Monthly Rate

| Designation of Lamp | Monthly Rate Per Luminaire |
| :--- | :---: |
| 175 Watt Mercury (Closed to new) | $\$ 10.52$ |
| 250 Watt Mercury (Closed to new) | $\$ 13.46$ |
| 400 Watt Mercury (Closed to new) | $\$ 18.54$ |
|  |  |
| 100 Watt High Pressure Sodium | $\$ 7.56$ |
| 150 Watt High Pressure Sodium | $\$ 9.46$ |
| 200 Watt High Pressure Sodium | $\$ 11.41$ |
| 250 Watt High Pressure Sodium | $\$ 13.25$ |
| 400 Watt High Pressure Sodium | $\$ 17.67$ |
| Plus Applicable Taxes |  |
| Rate Adjustment |  |
| \% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment |  |
| effective for service rendered on and after November 18, 2019. |  |

INTERIM
DAKOTA ELECTRIC ASSOCIATION
SECTION:
SHEET: 11.3

Farmington, MN 55024
REVISION:

## SCHEDULE 44-2

STREET LIGHTING SERVICE
(DEA - OWNED EQUIPMENT)

## Availability

Available for governmental or private year-around illumination of public or private streets, parkways, highways, and other public ways by electric lamps in luminaires supported on existing poles where secondary voltage is available and the facilities for this service are furnished by the Association.

## Type of Service

The Association shall own, operate, and maintain the overhead street lighting system using the Association's standard street lighting equipment. The energy used by these lights is unmetered.

## Monthly Rate

| Designation of Lamp | Monthly Rate Per Luminaire |
| :--- | :---: |
| 175 Watt Mercury (Closed to new) | $\$ 15.23$ |
| 250 Watt Mercury (Closed to new) | $\$ 18.16$ |
| 400 Watt Mercury (Closed to new) | $\$ 23.25$ |
| 100 Watt High Pressure Sodium (Closed to new) | $\$ 12.27$ |
| 150 Watt High Pressure Sodium (Closed to new) | $\$ 14.16$ |
| 250 Watt High Pressure Sodium (Closed to new) | $\$ 17.95$ |
| 400 Watt High Pressure Sodium (Closed to new) | $\$ 22.38$ |
| Plus Applicable Taxes |  |

The above rates cover only an installation where the pole with secondary voltage is existing at the light location. Contributions to construction costs will be required if additional equipment is needed or if a member requests a change to a different lamp size and/or type when costs exceed $\$ 500$.

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## SCHEDULE 44-3

CUSTOM RESIDENTIAL STREET LIGHTING
(DEA-OWNED - CONTRIBUTION BY MEMBER)

## Availability

Available for year-round illumination of public streets, parkways, highways, and other public ways by electric lamps mounted on standards and served through underground circuits, where the facilities for this service are furnished by the Association. Street lighting service under this schedule is limited to residential areas having an underground distribution area.

## Type of Service

The Association shall own, operate, and maintain the lighting system using the Association's standard street lighting equipment which includes one lamp per standard. Member shall be required to contribute an amount equal to the installation cost of the lighting system. The energy used by these lights is unmetered.

## Monthly Rate

Designation of Lamp

| 175 Watt Mercury (Closed to new) | $\$ 11.37$ |
| :--- | ---: |
| 50 Watt High Pressure Sodium (Closed to new) | $\$ 6.70$ |
| 100 Watt High Pressure Sodium | $\$ 8.41$ |
| 150 Watt High Pressure Sodium (Closed to new) | $\$ 10.30$ |
| 250 Watt High Pressure Sodium (Closed to new) | $\$ 14.09$ |
| Plus Applicable Taxes |  |

100 Watt High Pressure Sodium $\quad \$ 8.41$
150 Watt High Pressure Sodium (Closed to new) \$10.30
250 Watt High Pressure Sodium (Closed to new) \$14.09 Plus Applicable Taxes

Optional - For installations requiring any extra equipment or in the event the member requests the changeout of an existing light to be a different size and/or type, the member will be required to pay all construction fees or extra charges incurred.

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53 ). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## SCHEDULE 44-4 <br> LED SECURITY LIGHTING SERVICE

## Availability

Available for year-around illumination for private residential, farm, or commercial lighting by Light Emitting Diode (LED) electric lamps on existing Association service poles where service poles and service wires can be connected on the utility side of the meter. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

The Association shall own, operate, and maintain the LED security lighting system using the Association's standard LED security lighting equipment. Fixtures on this rate will only be attached to an existing DEA service pole. The energy used by these lights is unmetered.

## Monthly Rate

Light Emitting Diode Security Light (LED, > 4,500 lumens) $\$ 7.63$ per month
Plus Applicable Taxes

Optional - For installations requiring any extra equipment (excluding poles), a contribution to construction will be required to cover the extra costs incurred. In the event the member requests the change out of an existing light, the member will be required to pay all construction fees and material costs for the new installation or upgrade as well as payment for the undepreciated cost of the existing light, less any salvage value.

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Availability

Available for year-round illumination of public streets, parkways, highways, and other public ways by Light Emitting Diode (LED) electric lamps served through underground or overhead circuits, where the facilities for this service are furnished and owned by the Member. Service is subject to the established rules and regulations of the Association.

## Type of Service

The member shall own, operate, and maintain the LED lighting system.
The preferred service option is metered LED lighting. Such service will be billed to the Member under the rate schedule associated with the meter.

Unmetered service will be allowed if the Association determines it is not practical for the lights to be metered. For such unmetered use:

1. Billing will be according to specified consumption groups. Dakota Electric will determine if a member qualifies for the unmetered rate and which consumption group.
2. The Member will be required to provide Dakota Electric with a notice prior to any change in equipment.
3. No other use is allowed from the fixture. (e.g. Wi-Fi attachments, holiday lights, etc.)
4. The Association will periodically inspect the unmetered fixtures to ensure compliance with requirements.
5. The Member must provide proof of lighting system rating. (i.e. data sheet or model number)

No maintenance will be included in the monthly rate from the Association for any member-owned LED street light. At the request of a Member, Dakota Electric may enter into individual contracts with a Member for the type and frequency of maintenance they may desire from the Association.

## Monthly Rate

Metered Service:
According to applicable rate schedule
Unmetered Service:

| Consumption Group | Monthly Rate per Fixture |
| :--- | :---: |
| A (40 to 80 watts) | $\$ 4.81$ |
| B (81 to 150 watts) | $\$ 6.71$ |
| C (151 to 250 watts) | $\$ 9.66$ |
| D (251 to 350 watts) | $\$ 13.05$ |
| E (351 to 450 watts) | $\$ 16.52$ |

Plus Applicable Taxes
The range of watt ratings for the Unmetered Consumption Groups will be adjusted periodically to reflect the predominant size of lights receiving such Unmetered Service.

Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

# SCHEDULE 44-6 <br> LED STREET LIGHTING <br> (DEA-OWNED - CONTRIBUTION BY MEMBER) 

## Availability

Available for year-round illumination of public streets, parkways, highways, and other public ways by Light Emitting Diode (LED) electric lamps served through underground or overhead circuits, where the facilities for this service are furnished by the Association. Conversion of existing lighting to LED lighting may be limited to accommodate workload scheduling. Street lighting service under this schedule is limited to designated LED lighting fixtures offered by the Association in its distribution area. Service is subject to the established rules and regulations of the Association.

## Type of Service

The Association shall own, operate, and maintain the LED lighting system using the Association's standard street lighting equipment which includes one fixture per pole. Member shall be required to contribute an amount equal to the initial installation or upgrade cost of the lighting system. The energy used by these lights is unmetered.

## Monthly Rate

Designation of Fixture
Light Emitting Diode (LED, > 5,200 lumens) Coach Light (Post)
Light Emitting Diode (LED, > 5,200 lumens) Acorn Light (Post)
Light Emitting Diode (LED, > 7,000 lumens) Cobra Light (Mast)
Light Emitting Diode (LED, > 11,500 lumens) Shoebox Light (Mast)
Plus Applicable Taxes

Monthly Rate per Fixture

| $\underline{\text { Standard }}$ | $\underline{\text { Basic }}$ |
| :--- | :--- |
| $\$ 10.60$ | $\$ 6.83$ |
| $\$ 11.24$ | $\$ 6.30$ |
| $\$ 8.31$ | $\$ 6.51$ |
| $\$ 10.71$ | $\$ 7.98$ |

The Coach and Acorn fixtures will be mounted on a street light post. The Cobra and Shoebox fixtures will be fastened to a mast arm on existing service poles. In the event the member requests the change out of an existing light, the member will be required to pay all construction fees and material costs for the new installation or upgrade as well as payment for the undepreciated cost of the existing light, less any salvage value.

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

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## SCHEDULE 45

LOW WATTAGE UNMETERED SERVICE

## Availability

This rate is available for low-wattage electronic devices that are: 1) Individually located at each point of delivery, 2) Rated at less than 150 watts, and 3) A determinable load level. Each individual electronic device must not in any way interfere with Association operations and service to adjacent members. This rate is also available to equipment connected to the supply side of the service disconnect such as fire and sprinkler alarms, and emergency lighting systems, if such equipment is used only during times of emergency. This will require verification from a licensed electrical contractor/electrician in the form of an affidavit.

This Low Wattage Unmetered Service is not applicable to electric service for traffic signals, civil defense, or lighting. Association reserves the right to evaluate member requests for this service to determine eligibility.

## Type of Service

Either single phase or three phase, depending on feasibility, 60 hertz, at available secondary voltages.

## Installation Charges

The member shall pay the total estimated installation charges involved to provide service.

## Monthly Rate

$\$ 10.00$ per month per service location, plus applicable sales tax.

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Taxes

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance

SCHEDULE 46

## GENERAL SERVICE

## Availability

Available to any commercial member for all uses except irrigation. Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

Type of Service
Single phase or three phase, 60 hertz, at available secondary voltages.
Monthly Rate

Fixed Charge
Demand Charge
Summer (June-Aug) @ \$12.26 per kW
Other @ \$9.16 perkW
Energy Charge
First 200 kWh per kW @ $\$ 0.0776$ per kWh
Next 200 kWh per kW @ $\$ 0.0676$ per kWh
Over 400 kWh per kW
Plus Applicable Taxes
$\$ 34.00$
@ $\quad \$ 0.0676$ per kWh

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

Determination of Metered Demand
The Metered Demand in kilowatts shall be the greatest 15-minute demand (subject to power factor adjustment) during the month for which the bill is rendered. Demand will be read to the nearest 0.01 kilowatt.

## Determination of Energy Charge

The energy ( kWh ) billed in each rate block is determined in relation to the monthly demand ( kW ). The energy in the first block includes the first 200 kWh multiplied by the monthly metered demand. The second block includes the next 200 kWh multiplied by the monthly metered demand. All energy in excess of 400 kWh multiplied by the monthly metered demand is billed under the third block.

## Power Factor Adjustment

The member agrees to maintain as near unity ( 100 percent) power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent, the demand for billing purposes shall be the demand as recorded by the demand meter multiplied by 90 percent and divided by the percent power factor.

Minimum Monthly Charge
The Minimum Monthly Charge under the above rate shall be the Fixed Charge plus $\$ 1.00$ per kW of the highest billing demand during the preceding 11 months.

## Primary Voltage Service

A discount of $\$ 0.15 / \mathrm{kW}$ of Billing Demand will be applied to the bill when service is taken by the member at the available primary voltage. If primary metering is used, an additional discount of 2.0 percent shall be applied to the bill. The 2.0 percent discount shall be applied after the $\$ 0.15 / \mathrm{kW}$ discount.

# SCHEDULE 49 <br> GEOTHERMAL HEAT PUMP RIDER <br> (Closed to new consumers.) 

Availability
Available to any commercial member for energy used by a geothermal heat pump system.
Members requesting service under this rate schedule must be taking service concurrently under Rate Schedule 41 or 46 . Service is subject to the established rules and regulations of the Association.

Type of Service
Single phase or three phase, 60 hertz, at available primary or secondary voltages.

## Rate

Energy Charge $\quad \$ 0.0940$ per kWh
Plus applicable taxes

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Metering

The geothermal heat pump system must be separately, parallel metered from all other loads at the premise. Service will not be sub-metered.

## Power Factor

The member agrees to maintain as near unity ( 100 percent) power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent, the energy for billing purposes shall be adjusted accordingly.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kWh , or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour for this service annually exceeds, or is less than, $\$ 0.0775$ per kWh sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted as necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

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## SCHEDULE 51

CONTROLLED ENERGY STORAGE

## Availability

Available to members taking service concurrently under rate schedules 31,41 and 46 . This rate is for interruptible service to energy storage loads which are remotely controlled by the Association. Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages. Service under this schedule will be available for approximately eight hours per day, normally 11:00 p.m. to 7:00 a.m., or as established by the Association.

## Monthly Rate

Energy Charge @ $\$ 0.0440$ per kWh
Plus Applicable Taxes.

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The energy cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected weighted average power cost per kilowatt-hour for this service exceeds, or is less than $\$ 0.0200$ per kilowatthour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Demand

The metered demand of loads on this rate will be subtracted from the metered demand for members receiving service under Schedule 41 and 46 when the storage load is coincident with the member's other loads. When feasible, new controlled energy storage loads should be on a separate service from Schedule 41 and 46 load.

## Taxes

The rates set fourth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

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## SCHEDULE 52

## CONTROLLED INTERRUPTIBLE SERVICE

Availability
Available to member taking service concurrently under rate schedules 31,41 and 46 . This rate is for interruptible service to qualifying loads which are remotely controlled by the Association. Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages. Service under this schedule will be available at all times except when interrupted by the Association during times of peak system demand or system emergencies.

## Monthly Rate

Energy Charge @ $\$ 0.0550$ per kWh Plus Applicable Taxes.

Alternate Monthly Rate for Controlled Water Heaters
Where separate metering of controlled water heaters is not possible or for members on Rate 53, a direct credit of $\$ 1.50$ per 100 kWh used up to a maximum of $\$ 6.00$ per month will be applied against the monthly bill.

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The energy cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected weighted average power cost per kilowatt-hour for this service exceeds, or is less than $\$ 0.0305$ per kilowatthour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Demand

The metered demand of loads on this rate will be subtracted from the metered demand for members receiving service under Schedule 41 and 46 when the interruptible load is coincident with the member's other loads. When feasible, new controlled interruptible services loads should be on a separate service from Schedule 41 and 46 load.

## Taxes

The rates set fourth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

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## SCHEDULE 53 RESIDENTIAL AND FARM SERVICE TIME-OF-DAY RATE

## Availability

Available to residential and farm members for all domestic and farm use, except irrigation pumps. Members participating in this service are not eligible for either Schedule 51 or Schedule 52. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, when economically feasible, 60 hertz, at available secondary voltages.

## Monthly Rate

Fixed Charge
$\$ 12.00$ per month
Energy Charge
Summer - (June-Aug) Peak Period @ \$0.1880 per kWh
Other - Peak Period @ \$0.1740 per kWh Off-Peak Period @ \$0.0940 per kWh
Plus Applicable Taxes
Definition of Periods
Peak Period
4:00 p.m. to 11:00 p.m., excluding holidays and weekends
Off-Peak Period 11:00 p.m. to 4:00 p.m., plus all day on holidays and weekends
Holidays include New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Minimum Monthly Charge

The minimum monthly charge under the above rate shall be the Fixed Charge.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceed, or is less than $\$ 0.0903$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## SCHEDULE 54 <br> GENERAL SERVICE <br> OPTIONAL TIME-OF-DAY RATE

## Availability

Available to any member for general service electrical loads. Members participating in this service are not eligible for either Schedule 51 or Schedule 52. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

Type of Service
Single phase or three phase, 60 hertz, at available primary or secondary voltages.
Monthly Rate

Fixed Charge
Peak Period Demand Charge
Summer (June-Aug) @ $\$ 24.85$ per kW

Winter (Dec-Feb) @ $\$ 18.95$ per kW
Other
Maximum Demand Charge
Energy Charge
Plus Applicable Taxes
$\$ 36.00$ per month
@ $\$ 13.00$ per kW
Plus
@ $\$ 4.75$ per kW
@ $\$ 0.0499$ per kWh

Definition of Periods
Peak Period
4:00 p.m. to 11:00 p.m., excluding holidays and weekends
Off-Peak Period
11:00 p.m. to 4:00 p.m., plus all day on holidays and weekends
Holidays include New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Determination of Billing Demand

1. Peak Period - The Peak Period Billing Demand shall be the greatest 15 minute demand (subject to power factor adjustment) between $4 \mathrm{p} . \mathrm{m}$. and $11 \mathrm{p} . \mathrm{m}$. during the month for which the bill is rendered, as indicated or recorded by a demand meter. Demand will be read to the nearest 0.01 kilowatt.
2. Maximum Demand - The Maximum Billing Demand shall be the greatest 15 minute demand (subject to power factor adjustment) during the month for which the bill is rendered, as indicated or recorded by a demand meter. Demand will be read to the nearest 0.01 kilowatt.

## Minimum Monthly Charge

The minimum monthly charge under the above rate shall be the Fixed Charge plus $\$ 1.00$ per kW of the highest Maximum Billing Demand during the preceding 11 months.

## SCHEDULE 56

RESIDENTIAL AND FARM SERVICE TIME-OF-DAY RATE

## Availability

Available to residential and farm members for all domestic and farm use, except irrigation pumps. Members participating in this service are not eligible for either Schedule 51 or Schedule 52. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, when economically feasible, 60 hertz, at available secondary voltages.

## Monthly Rate

Fixed Charge $\quad \$ 12.00$ per month
Energy Charges
Peak Periods:
Summer - (June-Aug) @ $\$ 0.2710$ per kWh
Winter - (Dec-Feb) @ $\$ 0.2210$ per kWh
Spring/Fall @ $\$ 0.1750$ per kWh
Intermediate Period @ $\$ 0.0970$ per kWh
Off-Peak Period @ $\$ 0.0760$ per kWh

## Definition of Periods

Peak Periods
Intermediate Period
Off-Peak Period
4:00 p.m. to 11:00 p.m., excluding holidays and weekends
8:00 a.m. to 4:00 p.m., excluding holidays and weekends
11:00 p.m. to 8:00 a.m. Mon-Fri and all day weekends and holidays
Holidays include New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.
Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Minimum Monthly Charge

The minimum monthly charge under the above rate shall be the Fixed Charge.
Resource and Tax Adjustment (RTA)
The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceed, or is less than $\$ 0.0903$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

|  | INTERIM |  |
| :--- | :--- | ---: |
| DAKOTA ELECTRIC ASSOCIATION | SECTION: | V |
| $4300220^{\text {th }}$ Street West | SHEET: | 31.1 |
| Farmington, Minnesota 55024 | REVISION: | 6 |

## SCHEDULE 60 <br> RIDER FOR STANDBY SERVICE CONTINUED

## Definitions

Contracted Standby Demand is the quantity specified in the member's Electric Service Agreement as the maximum amount of firm or non-firm standby service the Cooperative is obligated to supply and will not exceed the capacity of the member's distributed generation system.

Firm Service refers to a utility's most reliable, constant electric service. A utility would interrupt the supply of electricity to a firm service customer only as a last resort.

Non-Firm Service, also called interruptible service, refers to electric service that a utility provides only to the extent that it has capacity not being used to meet the needs of firm-service members at the moment.

All other definitions shall be as described in Cooperative's Distributed Generation Interconnection Requirements and Interconnection Process for Distributed Generation Systems.

## Charges for Service

The following Reservation Fees, Communication Fee, Usage Fees, and Wheeling Fees will be assessed as applicable in addition to all charges for service being taken under Cooperative's base rate schedule:

## Reservation Fees

Charges as specified below for the reservation of either Firm or Non-Firm generation, transmission and distribution service per Month per kW will each be applied to the member's Contracted Standby Demand as specified in member's Electric Service Agreement with Cooperative:

|  | Firm Service <br> $(\$$ per kW $)$ | Non-Firm Service <br> $(\$$ per kW $)$ |
| :--- | :---: | :---: |
| Generation | $*$ | $* *$ |
| Transmission | $*$ | $* *$ |
| Distribution - Secondary Service | $\$ 3.51$ | $\$ 3.51$ |
| Distribution - Primary Service | $\$ 3.28$ | $\$ 3.28$ |
| Distribution - Substation Service | $\$ 0.90$ | $\$ 0.90$ |

* Firm Standby Service generation and transmission Reservation Fees will be billed under the rates, terms and conditions of the Cooperative's wholesale power supplier (Great River Energy), which is available on GRE's Web site; greatriverenergy.com and DEA's Web site; dakotaelectric.com.
**Generation and transmission Reservation Fees are not applied for Non-Firm Service. However, members will be responsible for all costs associated with wholesale power supply during any times of usage.


## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Communication Fee

A monthly Communication Fee will be applied to cover the cost of transmitting data through the use of digital cellular equipment. The monthly Communication Fee is applied to each required meter with cellular data capabilities.

$$
\text { Communication Fee } \quad \$ 8.70 \text { per meter }
$$

## Usage Fees

## Demand Charge

If the member registers electrical usage from Cooperative during a billing month then such usage will result in demand charges which may vary between members contracting for Firm Standby Service or Non-Firm Standby Service.

## SCHEDULE 70 <br> INTERRUPTIBLE SERVICE <br> (FULL INTERRUPTIBLE OPTION)

## Availability

Available to any member with a minimum controllable demand of 50 kW . Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Members participating in this service are not eligible for concurrent service under any other rate schedule. Service is subject to the established rules and regulations of the Association.

Under the full interruptible control option, members agree to interrupt their entire electrical energy usage. Members may attain this full interruption through curtailment or with the use of on-site generation back-up. During the interruption, the member's load must go to zero.

## Type of Service

Single phase or three phase, 60 hertz, at available primary or secondary voltages.
Monthly Rate

| Fixed Charge |  | $\$ 110.00$ per month <br> $\$ 8.70$ per month |
| :--- | :--- | :--- |
| Communication Fee (meters w/ digital cellular) |  |  |
| Coincidental Demand |  | $\$ 24.85$ per kW |
| Summer (June-Aug) | @ | $\$ 18.95$ per kW |
| Winter (Dec-Feb) | @ | $\$ 13.00$ per kW |
| Other | $@$ | $\$ 4.75$ per kW |
| Non-Coincidental Demand | @ | $\$ 0.0499$ per kWh |
| Energy Charge | @ | $\$ 5.00$ per kW |
| Failure to Control Charge | @ |  |
| Plus Applicable Taxes |  |  |

Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Control Period

The control period shall be defined as the period of time during which the Association is controlling these loads with the intent of minimizing demand on the Association's system.

## Coincidental Demand

The monthly Coincidental Demand under the full interruptible control option shall be defined as the member's actual hourly demand (subject to power factor adjustment) that is coincident with the wholesale power supplier (i.e. average of the four fifteen minute demand readings for the hour ending of the wholesale billing peak) when the load is directed to be controlled during the wholesale billing peak.

## Non-Coincidental Demand

The Non-Coincidental Demand shall be the maximum kilowatt demand (subject to power factor adjustment) established by the member for any period of 15 consecutive minutes during the month for which the bill is rendered, as indicated or recorded by a demand meter.

## Failure to Control

The Failure to Control Charge will be applied to the highest kilowatt demand during any one monthly control period when the member does not fully interrupt demand. The Failure to Control Charge is applied to the highest demand recorded during any one of the monthly control periods. The control period shall be defined as the period of time during which the Association is controlling these loads with the intent of minimizing demand on the Association's system. Failure to control or being unavailable for control for more than one calendar month may require the member to be removed from Schedule 70 for the remainder of the year.

## Scheduled Maintenance

Members are encouraged to schedule required periodic maintenance during the spring and fall months and coordinate such maintenance with the Association.

SCHEDULE 71
INTERRUPTIBLE SERVICE
(PARTIAL INTERRUPTIBLE OPTION)
Availability
Available to any member with a minimum controllable demand of 50 kW . Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Members participating in this service are not eligible for concurrent service under any other rate schedule. Service is subject to the established rules and regulations of the Association.

Under the partial interruptible control option, members agree to reduce a portion of their electrical energy usage. Members may attain this partial interruption through curtailment or with the use of on-site generation back-up. During the interruption, the member's load goes to a Predetermined Demand Level (PDL). If a partial interruptible member fails to control demand to the PDL, then the PDL will be adjusted to the demand occurring during such control period.

Type of Service
Single phase or three phase, 60 hertz, at available primary or secondary voltages.
Monthly Rate

| Fixed Charge |  | $\$ 110.00$ per month <br> Communication Fee (meters w/ digital cellular) |
| :--- | :--- | :--- |
| $\$ 8.70$ per month |  |  |
| Coincidental Demand |  |  |
| Summer (June - Aug) | $@$ | $\$ 24.85$ per kW |
| Winter (Dec - Feb) | $@$ | $\$ 18.95$ per kW |
| Other | $@$ | $\$ 13.00$ per kW |
| Non-Coincidental Demand | $@$ | $\$ 4.75$ per kW |
| Energy Charge | $@$ | $\$ 0.0499$ per kWh |
| Excess Demand Charge | $@$ | $\$ 5.00$ per kW |
| Plus Applicable Taxes |  |  |

Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Control Period

The control period shall be shall be defined as the period of time during which the Association is controlling these loads with the intent of minimizing demand on the Association's system.

## Coincidental Demand

The monthly Coincidental Demand under the partial interruptible control option shall be defined as:

- During a month with no control period, the monthly Coincidental Demand under the partial interruptible control option will be the lesser of the member's actual hourly demand (subject to power factor adjustment) that is coincident with the wholesale power supplier (i.e. average of the four fifteen minute demand readings for the hour ending of the wholesale billing peak) or the Predetermined Demand Level. During a month with a control period, the monthly Coincidental Demand under the partial interruptible control option will be the member's actual hourly demand (subject to power factor adjustment) that is coincident with the wholesale power supplier (i.e. average of the four fifteen minute demand readings for the hour ending of the wholesale billing peak).
The partial interruptible PDL will be adjusted to any higher actual demand of the member occurring during a curtailable event for the remainder of the calendar year. In the case of members using on-site generation, the PDL may be adjusted to reflect the rated capacity of such generation that was not operational during the control period. Only one such adjustment per year will be allowed.


## Non-Coincidental Demand

The Non-Coincidental Demand shall be the maximum kilowatt demand (subject to power factor adjustment) established by the member for any period of 15 consecutive minutes during the month for which the bill is rendered, as indicated or recorded by a demand meter.

## SCHEDULE 80

## CYCLED AIR CONDITIONING SERVICE

## Availability

Available to members taking service concurrently under another rate schedule. This rate is for interruptible service to central air conditioners which are remotely controlled by the Association. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages. Service under this schedule will be available at all times except when interrupted by the Association during times of peak system demand or system emergencies.

## Monthly Rate

Option No. 1 - Available to members who also take service under Schedules 51 and 52 where an existing meter and control unit may be utilized for the controlled air conditioning load.

Energy Charge per applicable Schedule 51 or 52
Option No. 2 - Available to members where a new meter and control unit must be installed to control the air conditioning load.

Energy Charge Credit @ $\$ 0.0320$ per kWh
Option No. 3-Available to members where a control unit must be installed to control the air conditioning load.

A credit will be applied to the first $\$ 13.00$ of the member's net energy consumption charges in the months of June, July, and August. In no case will the credit exceed the sum of the monthly Energy Charge and Resource and Tax Adjustment.

Option No. 4 - Available to non-residential members where a new meter and control unit must be installed but where it is not feasible or designed to meter the air conditioning load separately. The maximum capacity of any individual air conditioning compressor is 7.5 tons. A $\$ 6.50$ per ton per month credit will be applied to member's bill in the months of June, July, and August. The aggregate monthly credit per account will not exceed $1 / 3$ of the net charges for energy and demand in each month.

## Plus Applicable Taxes

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Taxes

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## INTERIM RATE ADJUSTMENT RIDER

## Availability

The 3.0\% Interim Rate Adjustment applies to:

1. Fixed Charge
2. Energy Charge
3. Demand Charge
4. Resource and Tax Adjustment
5. Minimum Charges
6. Energy Charge Credits
7. Voltage Discounts
8. Lighting Rates per Luminaire
9. Low Wattage Unmetered Service
10. Standby Reservation Fees
11. Controlled Air Conditioning and Water Heating Discounts

The Interim Rate Adjustment does not apply to:

1. Municipal Civil Defense Sirens
2. Special Fees or Charges
3. Communication Fee
4. Competitive Service Rider
5. Franchise Fee Surcharge Rider
6. Optional Renewable Energy Rider
7. Member Energy Exchange Rider
8. Voluntary Energy Reduction Rider
9. Member Specific Discount Rider
10. Large Load High Load Factor Rider
11. Contract Rate Service
12. Advanced Grid Infrastructure Rider
13. Advanced Meter Opt-Out (AMO) Rider
14. Late Payment Charge

This temporary Interim Rate Adjustment Rider will expire when final rates become effective.

## Rate

Each rate schedule that the Interim Rate Adjustment applies to contains the following text:
Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment
Rider effective for service rendered on and after November $\qquad$ , 2019.

Katie Sieben
Dan Lipschultz
Valerie Means
Matt Schuerger
John Tuma
In the Matter of the Application of
DAKOTA ELECTRIC ASSOCIATION
for Authority to Increase Rates
for Electric Service in Minnesota

Chair
Commissioner
Commissioner
Commissioner
Commissioner
Docket No. E-111/GR-19-478
September 19, 2019

## NOTICE AND PETITION FOR INTERIM RATES

## A. Introduction

Dakota Electric Association ("Dakota Electric" or "Cooperative") submits to the Minnesota Public Utilities Commission ("MPUC" or the "Commission") this Petition for Interim Rates (the "Petition") for retail electric rates to members, pursuant to Minn. Stat. § 216B. 16 subd. 3; the Commission's Statement of Policy on Interim Rates dated April 14, 1982; and relevant Commission rules.

## B. Information Provided Pursuant to the Commission Statement of Policy on Interim Rates and Relevant Commission Rules

1. Name, address, and telephone number of utility and attorney. (Policy Statement, Item 1, page 2)

Utility Filing for Rate Change:
Dakota Electric Association
4300 220th Street West
Farmington, MN 55024
(651) 463-6212

Representing Attorney:
Eric F. Swanson
Winthrop \& Weinstine
225 South Sixth Street, Suite 3500
Minneapolis, Minnesota 55402-4629
(612) 604-6511
2. Date of filing and date proposed interim rates are requested to become effective. (Policy Statement, Item 2, page 2)

This Petition is filed September 19, 2019. The Petition is submitted as part of the Cooperative's Application for a General Electric Rate Increase (the "Application"), which is also being filed on September 19, 2019. Pursuant to Minn. Stat. § 216B.16,subd.3, Dakota Electric requests, if the Commission suspends the operation of the general rate schedules that accompany the Application pursuant to Minn. Stat. § 216B.16, subd. 2, that the proposed interim rates be made effective with consumption occurring on and after November 18, 2019. The interim rates will be subject to refund, pending final Commission determination on the general electric rate increase.
3. Description and need for interim rates. (Policy Statement, Item 3, page 2)

Dakota Electric proposes an interim rate increase of three percent (3.0\%), which will apply to retail rates as specified in the proposed Interim Rate Adjustment Rider. Interim rates are necessary because the Cooperative has experienced increasing costs of service as reflected in the Cooperative's general rate application. The proposed $3.0 \%$ interim rate increase is anticipated to be sufficient to maintain positive annual margins beginning in 2020. We calculated the proposed interim rates consistent with Commission requirements and precedent. Specifically, when determining the interim rate request, the overall rate of return ("ROR") requested for interim rates for Dakota Electric uses the present average cost of long-term debt and the return on equity previously authorized by the Commission in Dakota Electric's last rate case (Docket No. E-111/GR-14-482). The proportion of each component and the factor to adjust the weighted cost of capital to establish return on rate base is also consistent with the numbers approved in the final order from our last general rate case. Overall, this adjustment results in an interim revenue deficiency of about $\$ 8,460,000$ or about 4.2 percent, which is greater than the requested interim increase of $3.0 \%$ and slightly lower than the overall increase of about $4.3 \%$ requested in this proceeding.

Minn. Stat. § 216B.16, subd. 3(b) provides that unless "the commission finds that exigent circumstances exist, the interim rate schedule shall be calculated using the proposed test year cost of capital, rate base, and expenses, except that it shall include (1) a rate of return on common equity for the utility equal to that authorized by the commission in the utility's most recent rate case proceeding."

In calculating interim rates, Dakota Electric proposes an amount that is less than the amount authorized under the interim rates statute, but sufficient to meet financial metrics during the rate case proceeding while providing a transitional step to final rates. As the Commission found in the Cooperative's last two rate case proceedings, charging the Association's members more than the Association believes its operations require for interim rates would contravene the public interest. The Commission has agreed that Dakota Electric's proposed approach to interim revenue increases in past rate cases is reasonable and in the public interest. Therefore, Dakota Electric requests that the Commission find that exigent circumstances exist and not require Dakota Electric to
apply the capital structure and cost of capital set by statute when determining the interim rate increase in this rate case. The Association's request avoids collecting more revenue than necessary during this proceeding and provides a transitional increase in rates should the Commission ultimately order the rates requested.
4. Description and corresponding dollar amount of changes included in interim rates as compared with most current approved general rate case and with the most recent year for which audited data is available.
(Policy Statement, Item 4, page 2)
A comparison of the Interim Petition and Application revenue deficiencies is attached to this Petition. The difference in the two calculations relates to the overall rate of return. The Application calculates a ROR of $5.73 \%$, while the Interim Petition uses a 5.59\% percent ROR calculated as follows:

| Component | Proportion | Cost Rate | Weighted Cost |
| :--- | :---: | :---: | :---: |
| Long-Term Debt | $41.81 \%$ | $3.77 \%$ | $1.58 \%$ |
| Return on Equity | $58.19 \%$ | $4.28 \%$ | $2.49 \%$ |
| Weighted Cost of Capital | $100 \%$ |  | $4.07 \%$ |
| Return on Rate Base |  | 1.373 | $5.59 \%$ |

In any event, Dakota Electric is requesting an interim revenue increase below the revenue deficiency identified in both the Application and Interim Petition calculations.
5. Effect of the interim rates expressed in gross revenue dollars and as a percentage of test year gross revenues. (Policy Statement, Item 5, page 2).

The test year for Dakota Electric's general rate increase filing is the historical 2018 calendar year adjusted for known and measurable changes. Dakota Electric requests an interim rate adjustment that will increase Dakota Electric's base rate (distribution) revenues by about $\$ 6,000,000$ or 3.0 percent above the test year gross revenues. This interim rate adjustment will be uniformly billed as a 3.0 percent increase on the subtotal of members' bills. As noted, this interim increase is below the possible interim increase of about $\$ 8,460,000$ calculated according to Commission requirements and precedent for interim adjustments. The proposed Interim Tariff clause describes the interim rate increase and is consistent with the application of interim rates approved by the Commission in Dakota Electric's last two general rate cases (Docket No. E-111/GR-09175 and Docket No. E-111/GR-14-482). We have further refined that explanation by developing an Interim Rate Surcharge Rider, which lists those charges to which the interim rate increase applies and a list of those rates to which the interim rate increase does not apply. This Rider is identical to the Rider approved by the Commission in our last two general rate cases. Dakota Electric proposes that a uniform percentage be applied to all of the base rate elements listed in the Interim Rate Surcharge Rider, with such interim revenue being used to support our distribution operations. That is, Dakota Electric proposes to continue all present charges, including the RTA, and apply the 3.0
percent interim adjustment to the subtotal of such charges. All such interim revenue will be applied to the Cooperative's provision of electric distribution service.

## 6. Certification by Chief Executive Officer. (Policy Statement, Item 6, page 2)

This Petition contains a certificate signed by Greg Miller, President and CEO, Dakota Electric Association, affirming that this interim rate Petition complies with Minnesota Statutes and is attached to this petition.
7. Methods and procedures for refunding.

Pursuant to Minn. Stat. § 216B.16, subd. 3, Dakota Electric's Agreement and Undertaking to make appropriate refunds if required is contained in the Application.
8. Signature and title of the utility officer authorizing the proposed interim rates. (Policy Statement, Item 7, page 2)

The Petition is signed on behalf of Dakota Electric by Greg Miller, President and CEO, Dakota Electric Association.
9. Supporting schedules and workpapers. (Policy Statement, Items 1-4, page 3)

The supporting documentation described in the Commission's Policy Statement is included with this Petition and Application. These schedules include the rate base amounts; income statement amounts; revenue deficiencies; rates of return required for interim rates as compared to the same information for Dakota Electric's general rate increase Application.

## 10. Interim rate schedules, Revenue rate comparisons. (Minn. R. 7825.3600)

A summary of the revenue increases under present and proposed interim rates for all customer classes is included in this Petition. The rate schedules containing proposed interim rates are also included with this Petition. Consistent with Minn. Stat. § 216B.16, subd. 3, no change has been made in the existing rate design. A uniform percentage equal to the proposed interim rate increase needed to recover the interim revenue deficiency from base rates has been applied to all billing components as described in the Interim Rate Adjustment Rider.

## 11. Customer Notice.

(Minn. R. 7829.2400, subpt. 3; Minn. Stat. § 216B.16, subd. 1)
Pursuant to Minn. R. 7829.2400, subpt. 3, and Minn. Stat. § 216B.16, subd. 3, Dakota Electric proposes to send a notice to its members and to the counties and municipalities in our service area. In addition, Dakota Electric will publish a display advertisement in the
newspapers of general circulation in Dakota County. Pursuant to Minn. Stat. § 216B.16, subd. 1, the proposed notice to consumers, counties and municipalities is included in this filing and can be found in the transmittal information in the Application.

## 12. Interim Bills.

The Commission's Policy Statement on Interim Rates suggests that changes in interim rates be shown on customer bills as a separate line item "if practical." The interim rate amount will be shown as a separate line item stated as "Interim Rate Adjustment," and will reflect the total amount of the interim charge applied to the bill.

## C. Conclusion

Dakota Electric respectfully requests, if the Commission suspends the operation of the general rate schedules that accompany the Application pursuant to Minn. Stat. 216B.16, subd. 2, that the proposed interim rates be made effective with consumption occurring on and after November 18, 2019, subject to refund, pending final Commission action on the Cooperative's general electric rate increase Application.

Dated: September 19, 2019
Respectfully submitted,


Greg Miller
President \& CEO
Dakota Electric Association


## Statement of Operations <br> Present Rates <br> Test Year - 2018 Historical Adjusted

| (a) <br> Line <br> No. | (b) Description | $\begin{gathered} \text { (c) } \\ 2018 \\ \text { Actual } \end{gathered}$ | (d) ${ }_{\text {Adjustments }{ }^{1}}$ | (e) <br> Pro Forma Test Year |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Operating Revenue | (\$) | (\$) | (\$) |
| 2 | Rate Schedules | 202,630,477 | $(2,150,170)$ | 200,480,307 |
| 3 | Other | 508,198 | 592,593 | 1,100,791 |
| 4 | Total Operating Revenue | 203,138,675 | $(1,557,577)$ | 201,581,098 |
| 5 | Operating Expenses |  |  |  |
| 6 | Cost of Purchased Power | 149,330,034 | 1,319,432 | 150,649,466 ${ }^{3}$ |
| 7 | Transmission - O \& M | - |  | - |
| 8 | Distribution- Operation | 7,277,184 | $(383,045)$ | 6,894,139 |
| 9 | Distribution - Maintenance | 6,151,338 | 242,574 | 6,393,912 |
| 10 | Consumer Accounts | 5,312,955 | 380,854 | 5,693,809 |
| 11 | Consumer Service \& Information | 3,585,760 | $(180,461)$ | 3,405,299 |
| 12 | Sales | - |  | - |
| 13 | Administrative \& General | 11,907,838 | 71,783 | 11,979,621 |
| 14 | Depreciation \& Amortization | 10,281,975 | 404,073 | 10,686,048 |
| 15 | Taxes - Property | 3,372,283 | 178,507 | 3,550,790 |
| 16 | Taxes - Other | - |  | - |
| 17 | Other Interest Expense | 549,008 |  | 549,008 |
| 18 | Other Deductions | 6,239 | $(38,705)$ | $(32,466)$ |
| 19 | Total Operating Expenses (Before |  |  |  |
|  | Long Term Interest) | 197,774,614 | 1,995,012 | 199,769,626 |
| 20 | Net Operating Income (Before Long |  |  |  |
|  | Term Interest) | 5,364,061 | $(3,552,589)$ | 1,811,472 |

[^52]
## Summary of Consumers, Energy Sales, and Revenue Under Present Rates

(Continued)

## II. Consumer and Sales Data for Pro Forma Test Year

| (a) | (b) | (c) | (d) | (e) | (f) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Line <br> No. | Description | 2019 Budget Avg No. Cons. | Energy Sales | Billing Demand | Revenue ${ }^{3}$ |
|  |  |  | (kWh) | (kW) | (\$) |
| 1 | Residential \& Farm Service (31) | 100,202 | 838,089,528 | N.A. | 114,332,035 |
| 2 | Residential \& Farm Demand Control (32) | 15 | 378,000 | 917.2 | 42,670 |
| 3 | Electric Vehicle (33) | 88 | 300,960 | N.A. | 24,636 |
| 4 | Irrigation Service (36) Firm | 8 | 162,528 | 1,867.3 | 50,143 |
| 5 | Irrigation Service (36) Interruptible | 384 | 7,801,344 | 74,387.5 | 862,089 |
| 6 | Small General Service (41) | 4,431 | 42,537,600 | N.A. | 5,799,609 |
| 7 | Security Lighting Service (44) - Closed to New | 878 | 405,600 | N.A. | 102,369 |
| 8 | Street Lighting Service (44-2) | 2,269 | 2,405,280 | N.A. | 466,293 |
| 9 | Street Lighting System (44-1) | 470 | 521,040 | N.A. | 72,603 |
|  | Custom Residential Street Lighting (44-3) | 12,190 | 6,750,960 | N.A. | 1,334,683 |
| 11 | LED Security Lighting Service (44-4) | 356 | 64,896 | N.A. | 31,109 |
| 12 | LED Street Lighting Member Owned(44-5) | 11 | 8,712 | N.A. | 1,297 |
|  | LED Street Lighting (44-6) | 597 | 202,152 | N.A. | 59,884 |
| 14 | Low Wattage Unmetered Service (45) | 71 | - | N.A. | 8,520 |
| 15 | General Service (46) | 2,750 | 462,000,000 | 1,442,500.4 | 50,261,766 |
|  | Municipal Civil Defense Sirens (47) | 66 | - | N.A. | 3,960 |
| 17 | Geothermal Heat Pump (49) Closed to New | 3 | 172,800 | N.A. | 16,571 |
|  | Controlled Energy Storage (51) | 1,718 | 10,308,000 | N.A. | 459,736 |
|  | Controlled Interruptible Service (52) | 6,686 | 44,127,600 | N.A. | 2,634,418 |
| 20 | Residential \& Farm Time of Day (53) | 18 | 216,216 | N.A. | 29,057 |
| 21 | General Service Time of Day (54) | 6 | 1,059,984 | 6,802.3 | 126,286 |
| 22 | Standby Service (60) | 1 | - |  | 66,840 |
| 23 | Full Interruptible Service (70) | 234 | 379,080,000 | 858,880.1 | 23,144,467 |
|  | Partial Interruptible Service (71) | 28 | 27,720,000 | 111,609.5 | 2,151,089 |
| 25 | Cycled Air Conditioning Service (80) | 41,880 | 5,075,000 | N.A. | $(1,625,193)$ |
| 26 | Wellspring |  |  |  | 23,370 |
| 27 | Total ${ }^{4}$ | 108,165 | 1,824,313,200 | 2,496,964.3 | 200,480,307 |
| 28 | Actual Revenue Recorded 2018 |  |  |  | 202,630,477 |
| 29 | Adjustment |  |  |  | $(2,150,170)$ |

[^53]
## Determination of Interim <br> Revenue Requirements - Summary



## Required Increase (Decrease) --ROR Objective

| 7 | Operating Expense (excluding interest) ${ }^{1}$ | 197,774,614 | 199,769,626 | 199,769,626 |
| :---: | :---: | :---: | :---: | :---: |
| 8 | Margin Requirements |  |  |  |
| 9 | Rate Base ${ }^{5}$ | 189,064,856 | 189,064,856 | 189,064,856 |
| 10 | Rate of Return ${ }^{6}$ | 5.73\% | 5.73\% | 5.59\% |
| 11 | Required Return ${ }^{7}$ | 10,831,846 | 10,831,846 | 10,568,725 |
| 12 | Less: Non-Operating Income ${ }^{3}$ | 292,978 | 292,978 | 292,978 |
| 13 | Net Operating Income Required ${ }^{8}$ | 10,538,868 | 10,538,868 | 10,275,747 |
| 14 | Total Revenue Requirements ${ }^{9}$ | 208,313,482 | 210,308,494 | 210,045,373 |
| 15 | Revenue Present Rates |  |  |  |
| 16 | Tariff Revenue ${ }^{1}$ | 202,630,477 | 200,480,307 | 200,480,307 |
| 17 | Other Operating Revenue ${ }^{1}$ | 508,198 | 1,100,791 | 1,100,791 |
| 18 | Total Revenue ${ }^{10}$ | 203,138,675 | 201,581,098 | 201,581,098 |
| 19 | Required Increase (Decrease) ${ }^{11}$ | 5,174,807 | 8,727,396 | 8,464,275 |
| 20 | Percent Increase (Decrease) ${ }^{12}$ | 2.55 | 4.35 | 4.22 |

[^54]
## Rate Base

| (a) | (b) | (c) <br> Line <br> No. |
| :---: | :---: | ---: |
|  | Description | Proposed <br> Pest Year |
|  | Utility Plant in Service $^{1}$ | $(\$)$ |
| 2 | Construction Work in Progress $^{1}$ | $300,342,133$ |
| 3 | Less: Accumulated Provision for Deprec. $^{2}$ | $4,222,209$ |
| 4 | Net Plant $^{1}$ | $126,526,023$ |
| 5 | Materials \& Supplies - Electric $^{3}$ | $178,038,319$ |
| 6 | Working Capital $^{4}$ | $4,715,491$ |
| 7 | Subtotal $^{6}$ | $6,816,147$ |
| 8 | Less: Consumer Deposits $^{1}$ | $11,531,638$ |
| 9 | Total Rate Base | 505,101 |

1 December 31, 2018 Form 7 amount. See Workpaper 1.
2 December 31, 2018 Form 7 amount adjusted to include Depreciation adjustment . See Exhibit _ (DEA-1), page x.
${ }^{3}$ Thirteen - month average. See Exhibit__(DEA-2), page 3.

## Rate Base Calculations <br> Materials \& Supplies

| (a) | (b) | (c) <br> Line <br>  |  |
| :---: | ---: | :---: | :---: |
| No. | Month | Supplies $^{\text {Electric }}{ }^{\mathbf{1}}$ |  |
|  | Dec | 2017 | $4,472,686$ |
| 1 | Jan | 2018 | $4,649,607$ |
| 2 | Feb | 2018 | $4,676,986$ |
| 3 | Mar | 2018 | $4,753,122$ |
| 4 | Apr | 2018 | $4,953,466$ |
| 5 | May | 2018 | $5,128,406$ |
| 6 | Jun | 2018 | $4,907,896$ |
| 7 | Jul | 2018 | $5,020,268$ |
| 8 | Aug | 2018 | $4,854,970$ |
| 9 | Sep | 2018 | $4,612,252$ |
| 10 | Oct | 2018 | $4,752,223$ |
| 11 | Nov | 2018 | $4,335,261$ |
| 12 | Dec | 2018 | $4,184,242$ |
| 13 | Total | $61,301,385$ |  |
| 14 | 13 - Month Average | $4,715,491$ |  |
| 15 |  |  |  |

[^55]
## Schedule A Summary of Consumers, Energy Sales, and Revenue Under Interim Rates

(Continued)

## II. Consumer and Sales Data for Pro Forma Test Year

| (a) | (b) | (c) | (d) | (e) | (f) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Line No. | Description | 2019 Budget Avg No. Cons. | Energy Sales | Billing <br> Demand | Revenue ${ }^{3}$ |
|  |  |  | (kWh) | (kW) | (\$) |
| 1 | Residential \& Farm Service (31) | 100,202 | 838,089,528 | N/A | 117,761,996 |
| 2 | Residential \& Farm Demand Control (32) | 15 | 378,000 | 917.2 | 43,950 |
| 3 | Electric Vehicle (33) | 88 | 300,960 | N/A | 25,375 |
| 4 | Irrigation Service (36) Firm | 8 | 162,528 | 1,867.3 | 51,647 |
| 5 | Irrigation Service (36) Interruptible | 384 | 7,801,344 | 74,387.5 | 887,952 |
| 6 | Small General Service (41) | 4,431 | 42,537,600 | N/A | 5,973,597 |
| 7 | Security Lighting Service (44) - Closed to New | 831 | 405,600 | N/A | 105,440 |
| 8 | Street Lighting Service (44-2) | 2,285 | 2,405,280 | N/A | 480,282 |
| 9 | Street Lighting System (44-1) | 487 | 521,040 | N/A | 74,781 |
| 10 | Custom Residential Street Lighting (44-3) | 12,233 | 6,750,960 | N/A | 1,374,723 |
| 11 | LED Security Lighting Service (44-4) | 338 | 64,896 | N/A | 32,042 |
| 12 | LED Street Lighting Member Owned(44-5) | 11 | 8,712 | N/A | 1,336 |
| 13 | LED Street Lighting (44-6) | 521 | 202,152 | N/A | 61,681 |
| 14 | Low Wattage Unmetered Service (45) | 71 |  | N/A | 8,776 |
| 15 | General Service (46) | 2,750 | 462,000,000 | 1,442,500.4 | 51,769,619 |
| 16 | Municipal Civil Defense Sirens (47) | 66 |  | N/A | 3,960 |
| 17 | Geothermal Heat Pump (49) Closed to New |  | 172,800 | N/A | 17,068 |
| 18 | Controlled Energy Storage (51) | 1,718 | 10,308,000 | N/A | 473,528 |
| 19 | Controlled Interruptible Service (52) | 6,686 | 44,127,600 | N/A | 2,713,451 |
| 20 | Residential \& Farm Time of Day (53) | 18 | 216,216 | N/A | 29,929 |
| 21 | General Service Time of Day (54) | 6 | 1,059,984 | 6,802.3 | 130,075 |
| 22 | Standby Service (60) | 1 |  |  | 68,845 |
| 23 | Full Interruptible Service (70) | 234 | 379,080,000 | 858,880.1 | 23,838,641 |
| 24 | Partial Interruptible Service (71) | 28 | 27,720,000 | 111,609.5 | 2,215,568 |
| 25 | Cycled Air Conditioning Service (80) | 41,880 |  | N/A | $(1,673,949)$ |
| 26 | Total ${ }^{4}$ | 108,165 | 1,824,313,200 | 2,496,964.3 | 206,470,312 |

[^56]Schedule A
Summary of Consumers, Energy Sales, and
Revenue Under Interim Rates
(Continued)

## III. Estimate of Revenue Under Interim Rates

| Rate Class | Billing Determinants | Units | Rate | Revenue |
| :---: | :---: | :---: | :---: | :---: |
| Residential \& Farm Service (31) |  |  |  | (\$) |
| Fixed Charge | 100,202 | cons. | \$ 9.00 | 10,821,816 |
| Energy Charge |  |  |  |  |
| Summer | 257,025,312 | kWh | \$ 0.13080 | 33,618,911 |
| Other | 581,064,216 | kWh | \$ 0.11680 | 67,868,300 |
| RTA Charge ${ }^{1}$ | 838,089,528 | kWh | \$ 0.00250 | 2,095,224 |
| Controlled Water Heater Credit | 1,003 | units | (\$6.00) | $(72,216)$ |
|  |  |  | Subtotal | 114,332,035 |
| Interim Rate Adjustment |  |  | 3.0\% | 3,429,961 |
|  |  |  | Total | 117,761,996 |
| Residential \& Farm Demand Control (32) |  |  |  |  |
| Fixed Charge | 15 | cons. | \$ 12.00 | 2,160 |
| Demand Charge |  |  |  |  |
| Summer | 182.2 | kW | \$ 14.70 | 2,678 |
| Other | 735.0 | kW | \$ 11.10 | 8,159 |
| Energy Charge | 378,000 | kWh | \$ 0.07600 | 28,728 |
| RTA Charge ${ }^{1}$ | 378,000 | kWh | \$ 0.00250 | 945 |
|  |  |  | Subtotal | 42,670 |
| Interim Rate Adjustment |  |  | 3.0\% | 1,280 |
|  |  |  | Total | 43,950 |

## Electric Vehicle (33)

Energy Charge
Off Peak
On Peak
Other
$\quad$ Summer
Other
RTA Charge ${ }^{1}$
Interim Rate Adjustment

| 280,402 | kWh | $\$$ | 0.06740 | 18,899 |
| ---: | :--- | :---: | :--- | ---: |
| 8,554 | kWh | $\$$ | 0.41440 | 3,545 |
|  |  |  |  |  |
| 2,693 | kWh | $\$$ | 0.13080 | 352 |
| 9,311 | kWh | $\$$ | 0.11680 | 1,088 |
| 300,960 | kWh | $\$$ | 0.00250 | 752 |
|  |  | Subtotal | 24,636 |  |
|  |  |  | $3.0 \%$ | 739 |
|  |  |  |  |  |
|  |  |  |  |  |

## Irrigation Service (36)

Firm Service

| Fixed Charge | 8 | cons. | $\$$ | 30.00 | 2,880 |
| :--- | ---: | :--- | :--- | ---: | ---: |
| Demand Charge |  |  |  |  |  |
| $\quad$ Summer | 902.3 | kW | $\$$ | 26.35 | 23,776 |
| Winter | 2.5 | kW | $\$$ | 20.95 | 52 |
| Other | 962.5 | kW | $\$$ | 15.50 | 14,919 |
| Energy Charge $^{\text {RTA Charge }}{ }^{1}$ | 162,528 | kWh | $\$$ | 0.04990 | 8,110 |
| nterim Rate Adjustment | 162,528 | kWh | $\$$ | 0.00250 | 406 |

Schedule A
Summary of Consumers, Energy Sales, and
Revenue Under Interim Rates
(Continued)

## III. Estimate of Revenue Under Interim Rates

## Billing

| Rate Class | Determinants | Units | Rate | Revenue |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | (\$) |
| Irrigation Service (36) |  |  |  |  |
| Interruptible Service |  |  |  |  |
| Fixed Charge | 384 | cons. | \$ 30.00 | 138,240 |
| Demand Charge | 74,388 | kW | \$ 4.55 | 338,463 |
| Energy Charge | 7,801,344 | kWh | \$ 0.04990 | 389,287 |
| RTA Charge ${ }^{1}$ | 7,801,344 | kWh | \$ (0.00050) | $(3,901)$ |
|  |  |  | Subtotal | 862,089 |
| Interim Rate Adjustment |  |  | 3.0\% | 25,863 |
|  |  |  | Total | 887,952 |
| Small General Service (41) |  |  |  |  |
| Fixed Charge | 4,431 | cons. | \$ 14.00 | 744,408 |
| Energy Charge |  |  |  |  |
| Summer | 10,541,910 | kWh | \$ 0.12690 | 1,337,768 |
| Other | 31,995,690 | kWh | \$ 0.11290 | 3,612,313 |
| RTA Charge ${ }^{1}$ | 42,537,600 | kWh | \$ 0.00250 | 106,344 |
| Controlled Water Heater Credit | 17 | units | \$ (6.00) | $(1,224)$ |
|  |  |  | Subtotal | 5,799,609 |
| Interim Rate Adjustment |  |  | 3.0\% | 173,988 |
|  |  |  | Total | 5,973,597 |

## Security Lighting Service (44)

175 W MV
100 W HPS
150 W HPS
250 W HPS
RTA Charge ${ }^{1}$
Interim Rate Adjustment

Street Lighting Service (44-2)

| 0 | lights |  | $\mathrm{N} / \mathrm{A}$ | 0 |
| ---: | :---: | :---: | ---: | ---: |
| 819 | lights | $\$$ | 10.10 | 99,263 |
| 4 | lights | $\$$ | 11.99 | 576 |
| 8 | lights | $\$$ | 15.79 | 1,516 |
| 405,600 | kWh | $\$$ | 0.00250 | 1,014 |
|  |  | Subtotal | 102,369 |  |
|  |  |  | $3.0 \%$ | 3,071 |
|  |  |  |  |  |

175 W MV
250 W MV
400 W MV
100 W HPS
150 W HPS
250 W HPS
400 W HPS
RTA Charge ${ }^{1}$

Interim Rate Adjustment

|  |  | (\$) |  |  |
| ---: | :--- | :--- | ---: | ---: |
| - | lights | $\$$ | 15.23 | 0 |
| 3 | lights | $\$$ | 18.16 | 654 |
| - | lights | $\$$ | 23.25 | 0 |
| 38 | lights | $\$$ | 12.27 | 5,595 |
| 646 | lights | $\$$ | 14.16 | 109,768 |
| 1,597 | lights | $\$$ | 17.95 | 343,994 |
| 1 | lights | $\$$ | 22.38 | 269 |
| $2,405,280$ | kWh | $\$$ | 0.00250 | 6,013 |
|  |  | Subtotal | 466,293 |  |
|  |  | $3.0 \%$ | 13,989 |  |
|  |  | Total |  | 480,282 |
|  |  |  |  |  |

[^57]Schedule A
Summary of Consumers, Energy Sales, and Revenue Under Interim Rates
(Continued)

## III. Estimate of Revenue Under Interim Rates

## Billing

| Rate Class | Determinants | Units | Rate | Revenue |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | (\$) |
| Street Lighting System (44-1) |  |  |  |  |
| 175 W MV | - | lights | \$ 10.52 | 0 |
| 250 W MV | - | lights | \$ 13.46 | 0 |
| 400 W MV | - | lights | \$ 18.54 | 0 |
| 100 W HPS | - | lights | \$ 7.56 | 0 |
| 150 W HPS | 101 | lights | \$ 9.46 | 11,466 |
| 200 W HPS | 101 | lights | \$ 11.41 | 13,829 |
| 250 W HPS | 272 | lights | \$ 13.25 | 43,248 |
| 400 W HPS | 13 | lights | \$ 17.67 | 2,757 |
| RTA Charge ${ }^{1}$ | 521,040 | kWh | \$ 0.00250 | 1,303 |
|  |  |  | Subtotal | 72,603 |
| Interim Rate Adjustment |  |  | 3.0\% | 2,178 |
|  |  |  | Total | 74,781 |

## Custom Residential Street Lighting (44-3)

175 W MV
50 W HPS
100 W HPS
150 W HPS
250 W HPS
RTA Charge ${ }^{1}$

Interim Rate Adjustment

## LED Security Lighting (44-4)

LED, >4,500 Lumens
RTA Charge ${ }^{1}$
Interim Rate Adjustment

| - | lights | $\$$ | 11.37 | 0 |
| ---: | :--- | :--- | ---: | ---: |
| 81 | lights | $\$$ | 6.70 | 6,512 |
| 8,416 | lights | $\$$ | 8.41 | 849,343 |
| 3,732 | lights | $\$$ | 10.30 | 461,275 |
| 4 | lights | $\$$ | 14.09 | 676 |
| $6,750,960$ | kWh | $\$$ | 0.00250 | 16,877 |
|  |  | Subtotal | $1,334,683$ |  |
|  |  | $3.0 \%$ | 40,040 |  |
|  |  |  |  |  |
|  |  |  |  |  |

[^58]
# Summary of Consumers, Energy Sales, and Revenue Under Present Rates <br> (Continued) 

## III. Estimate of Revenue Under Present Rates

## Billing

| Rate Class | Determinants | Units | Rate | Revenue |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | (\$) |
| LED Street Lighting Member Owned(44-5) |  |  |  |  |
| A (40-80 watts) | - | lights | \$ 4.81 | - |
| B (81-150 watts) | - | lights | \$ 6.71 | - |
| C (151-250 watts) | 11 | lights | \$ 9.66 | 1,275 |
| D (251-350 watts) | - | lights | \$ 13.05 | - |
| E (351-450 watts) | - | lights | \$ 16.52 | - |
| RTA Charge ${ }^{1}$ | 8,712 | kWh | \$ 0.00250 | 22 |
|  |  |  | Subtotal | 1,297 |
| Interim Rate Adjustment |  |  | 3.0\% | 39 |
|  |  |  | Total | 1,336 |

## LED Street Lighting (44-6)

## Standard

$>5,200$ L, Coach (Post)
>5,200 L, Acorn (Post)
$>7,000 \mathrm{~L}$, Cobra (Mast)
>11,500 L, Shoebox
Basic
$>5,200$ L, Coach (Post)
>5,200 L, Acorn (Post)
$>7,000 \mathrm{~L}$, Cobra (Mast)
$>11,500 \mathrm{~L}$, Shoebox
RTA Charge ${ }^{1}$

Interim Rate Adjustment

| 121 | lights | $\$$ | 10.60 | 15,391 |
| ---: | :--- | :--- | ---: | ---: |
| 48 | lights | $\$$ | 11.24 | 6,474 |
| 91 | lights | $\$$ | 8.31 | 9,075 |
| 151 | lights | $\$$ | 10.71 | 19,407 |
|  |  |  |  |  |
| 41 | lights | $\$$ | 6.83 | 3,360 |
| - | lights | $\$$ | 6.30 | - |
| 53 | lights | $\$$ | 6.51 | 4,140 |
| 16 | lights | $\$$ | 7.98 | 1,532 |
| 2,152 | kWh | $\$$ | 0.00250 | 505 |
|  |  | Subtotal | 59,884 |  |
|  |  | $3.0 \%$ |  | 1,797 |
|  |  | Total |  | 61,681 |

[^59]Schedule A
Summary of Consumers, Energy Sales, and Revenue Under Interim Rates
(Continued)

## III. Estimate of Revenue Under Interim Rates

| Rate Class | Billing <br> Determinants | Units | Rate | Revenue |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | (\$) |
| Low Wattage Unmetered Service (45) |  |  |  |  |
| Fixed Charge | 71 | cons. | \$ 10.00 | 8,520 |
| Interim Rate Adjustment |  |  | 3.0\% | 256 |
|  |  |  | Total | 8,776 |
| General Service (46) |  |  |  |  |
| Fixed Charge | 2,750 | cons. | \$ 34.00 | 1,122,000 |
| Demand Charge |  |  |  |  |
| Summer | 413,627.7 | kW | \$ 12.26 | 5,071,076 |
| Other | 1,028,872.7 | kW | \$ 9.16 | 9,424,474 |
| Energy Charge |  |  |  |  |
| First $200 \mathrm{kWh} / \mathrm{kW}$ | 264,418,387 | kWh | \$ 0.07760 | 20,518,867 |
| Next $200 \mathrm{kWh} / \mathrm{kW}$ | 158,964,776 | kWh | \$ 0.06760 | 10,746,019 |
| Over $400 \mathrm{kWh} / \mathrm{kW}$ | 38,616,837 | kWh | \$ 0.05760 | 2,224,330 |
| Discounts |  |  |  |  |
| Primary Voltage |  |  |  |  |
| Primary Metering |  |  |  |  |
| RTA Charge ${ }^{1}$ | 462,000,000 |  | \$ 0.00250 | 1,155,000 |
|  |  |  | Subtotal | 50,261,766 |
| Interim Rate Adjustment |  |  | 3.0\% | 1,507,853 |
|  |  |  | Total | 51,769,619 |
| Municipal Civil Defense Sirens (47) |  |  |  |  |
| Fixed Charge | 66 | cons. | \$ 5.00 | 3,960 |
| Geothermal Heat Pump (49) |  |  |  |  |
| Energy Charge | 172,800 | kWh | \$ 0.09400 | 16,243 |
| RTA Charge ${ }^{1}$ | 172,800 | kWh | \$ 0.00190 | 328 |
|  |  |  | Subtotal | 16,571 |
| Interim Rate Adjustment |  |  | 3.0\% | 497 |
|  |  |  | Total | 17,068 |
| Controlled Off-Peak Space \& Energy Storage (51) |  |  |  |  |
| Energy Net Charge - Rate 31 |  |  |  |  |
| Summer | 2,701,434 | kWh | \$ 0.04400 | 118,863 |
| Other | 7,509,011 | kWh | \$ 0.04400 | 330,396 |
| Energy Charge - Rate 41 |  | kWh |  |  |
| Summer | 6,874.0 | kWh | \$ 0.04400 | 302 |
| Other | 39,232.0 | kWh | \$ 0.04400 | 1,726 |
| Energy Charge - Rate 46 | 51,449 | kWh | \$ 0.04400 | 2,264 |
| RTA Charge ${ }^{1}$ | 10,308,000 | kWh | \$ 0.00060 | 6,185 |
|  |  |  | Subtotal | 459,736 |
| Interim Rate Adjustment |  |  | Total 3.0\% | 13,792 |
|  |  |  |  | 473,528 |

# Schedule A <br> Summary of Consumers, Energy Sales, and Revenue Under Interim Rates 

(Continued)

## III. Estimate of Revenue Under Interim Rates

## Billing

| Rate Class | Determinants | Units | Rate | Revenue |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | (\$) |
| Interruptible Heating Service (52) |  |  |  |  |
| Energy Net Charge - Rate 31 |  |  |  |  |
| Summer | 10,488,495 | kWh | \$ 0.05500 | 576,867 |
| Other | 32,538,130 | kWh | \$ 0.05500 | 1,789,597 |
| Energy Charge - Rate 41 |  |  |  |  |
| Summer | 64,095.0 | kWh | \$ 0.05500 | 3,525 |
| Other | 386,791.0 | kWh | \$ 0.05500 | 21,274 |
| Energy Charge - Rate 46 | 650,089 | kWh | \$ 0.05500 | 35,755 |
| RTA Charge ${ }^{1}$ | 44,127,600 | kWh | \$ 0.00470 | 207,400 |
|  |  |  | Subtotal | 2,634,418 |
| Interim Rate Adjustment |  |  | 3.0\% | 79,033 |
|  |  |  | Total | 2,713,451 |

## Residential \& Farm Time of Use (53)

| Fixed Charge | 18 | cons. | \$ | 12.00 | 2,592 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Energy Charge |  |  |  |  |  |
| Peak Period |  |  |  |  |  |
| Summer | 49,267 | kWh | \$ | 0.18800 | 9,262 |
| Other | 12,117 | kWh | \$ | 0.17400 | 2,108 |
| Off-Peak Period | 154,832 | kWh | \$ | 0.09400 | 14,554 |
| RTA Charge ${ }^{1}$ | 216,216 | kWh | \$ | 0.00250 | 541 |
|  |  |  | Subtotal |  | 29,057 |
| Interim Rate Adjustment |  |  |  | 3.0\% | 872 |
|  |  |  | Total |  | 29,929 |

General Service Time of Use (54)

| Fixed Charge | 6 | cons. | \$36.00 | 2,592 |
| :---: | :---: | :---: | :---: | :---: |
| Demand Charge |  |  |  |  |
| Peak Period |  |  |  |  |
| Summer | 960.1 | kW | \$24.85 | 23,858 |
| Winter | 436.9 | kW | \$18.95 | 8,279 |
| Other | 1,253.2 | kW | \$13.00 | 16,292 |
| Maximum | 4,152.1 | kW | \$4.75 | 19,722 |
| Energy Charge | 1,059,984 | kWh | \$0.04990 | 52,893 |
| Discounts |  |  |  |  |
| Primary Voltage | - | kW | (\$0.15) |  |
| Primary Metering |  |  | (2.0\%) |  |
| RTA Charge ${ }^{1}$ | 1,059,984 | kWh | \$0.00250 | 2,650 |
|  |  |  | Subtotal | 126,286 |
| Interim Rate Adjustment |  |  | 3.0\% | 3,789 |
|  |  |  | Total | 130,075 |

1 2019 applied RTA.

Schedule A
Summary of Consumers, Energy Sales, and Revenue Under Interim Rates
(Continued)

## III. Estimate of Revenue Under Interim Rates

| Rate Class | Billing Determinants | Units | Rate | Revenue |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | (\$) |
| Standby Service Large Power General (60) |  |  |  |  |
| Generation Reservation Fee |  |  |  |  |
| Summer | 1,000 |  | \$ 3.21 | 9,630 |
| Winter | 1,000 | kW | \$ 2.47 | 7,410 |
| Other | 1,000 |  | \$ 1.74 | 10,440 |
| Distribution Reservation Fee |  |  |  |  |
| Primary | 1,000 |  | \$ 3.28 | 39,360 |
| Secondary |  | kW | \$ 3.51 | 0 |
|  |  |  |  | 66,840 |
| Interim Rate Adjustment |  |  | 3.0\% | 2,005 |
|  |  |  | Total | 68,845 |
| Full Interruptible Service (70) |  |  |  |  |
| Fixed Charge | 234 | cons. | \$ 110.00 | 308,880 |
| Communication Fee | 51 |  | \$ 8.70 | 5,324 |
| Coinc. Demand Charge |  |  |  |  |
| Summer | 1,042.8 |  | \$ 24.85 | 25,914 |
| Winter | - | kW | \$ 18.95 | 0 |
| Other | - | kW | \$ 13.00 | 0 |
| Total Coinc Demand | 1,042.80 | kW | \$ |  |
| Non-Coinc. Demand | 858,880.1 | kW | \$ 4.75 | 4,079,680 |
| Failure to Control | 1,042.8 | kW | \$ 5.00 | 5,214 |
| Energy Charge | 379,080,000 | kWh | \$ 0.05 | 18,916,092 |
| Discounts |  |  |  |  |
| Primary Voltage | 47,311 | kW | \$ (0.15) | $(\$ 7,097)$ |
| Primary Metering | 0 |  | -2.0\% | \$0 |
| RTA Charge ${ }^{1}$ | 379,080,000 | kWh | (0.00050) | $(189,540)$ |
|  |  |  | Subtotal | 23,144,467 |
| Interim Rate Adjustment |  |  | 3.0\% | 694,174 |
|  |  |  | Total | 23,838,641 |

## Schedule A <br> Summary of Consumers, Energy Sales, and Revenue Under Interim Rates <br> (Continued)

## III. Estimate of Revenue Under Interim Rates

| Rate Class | Billing Determinants | Units | Rate | Revenue |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | (\$) |
| Partial Interruptible Service (71) |  |  |  |  |
| Fixed Charge | 28 | cons. | \$110.00 | 36,960 |
| Communication Fee | 17 | cons. | \$8.70 | 1,775 |
| Coinc. Demand Charge |  |  |  |  |
| Summer | 3,212.2 | kW | \$ 24.85 | 79,823 |
| Winter | 2,980.2 | kW | \$ 18.95 | 56,475 |
| Other | 5,964.3 | kW | \$ 13.00 | 77,536 |
| Total Coinc Demand | 12,156.7 | kW | \$ |  |
| Non-Coinc. Demand | 111,609.5 | kW | \$ 4.75 | 530,145 |
| Excess Demand | 0.0 | kW | \$ 5.00 | 0 |
| Energy Charge | 27,720,000 | kWh | \$ 0.05 | 1,383,228 |
| Discounts | 0 |  |  |  |
| Primary Voltage | 6,623 | kW | \$ 0.15 | (993) |
| Primary Metering | 0 |  | 2.00\% | - |
| RTA Charge ${ }^{1}$ | 27,720,000 | kWh | \$ (0.00050) | $(13,860)$ |
|  |  |  | Subtotal | 2,151,089 |
| Interim Rate Adjustment |  |  | 3.0\% | 64,479 |
|  |  |  | Total | 2,215,568 |
| Controlled Air Conditioning Service (80) |  |  |  |  |
| Option 1 |  | kWh | \$0.00 | 0 |
| Option 2 |  |  |  |  |
| Residential Rate 81/31 | 4,858,654 | kWh | \$ (0.03200) | $(155,477)$ |
| Rate 81/41 | 216,346 | kWh | \$ (0.03200) | $(6,923)$ |
| Rate 81/46 | 0 | kWh | \$ (0.03200) | 0 |
|  | 5,075,000 | kWh |  | $(162,400)$ |
| Option 3 |  |  |  |  |
| Residential Rate 82/31 | 35,158 | cons. | \$ (13.00) | $(1,371,162)$ |
| Commercial | 0 | cons. | \$ (13.00) | 0 |
|  | 35,158 |  |  | $(1,371,162)$ |
| Option 4 |  |  |  |  |
| Rate 84/41 | 4,699 |  | \$ (6.50) | $(91,631)$ |
| Rate 84/46 | 0 | tons | \$ (6.50) | 0 |
|  | 4,699 |  |  | $(91,631)$ |
|  |  |  | Subtotal | $(1,625,193)$ |
| Interim Rate Adjustment |  |  | 3.0\% | $(48,756)$ |
|  |  |  | Total | $\underline{(1,673,949)}$ |
| Grand Total | 1,824,313,200 |  |  | 206,470,312 |

[^60]
## Comparison of Revenue Present and Interim Rates

(Continued)

| $\begin{aligned} & \text { Line } \\ & \text { No. } \\ & \hline \end{aligned}$ | (b)Rate Class | (c) <br> Revenue Present | (d) <br> Revenue Interim | Increase (Decrease) |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Rates | Rates | Amount | Percent |
|  |  | (\$) | (\$) | (\$) | (\%) |
| 1 | Residential \& Farm Service (31) | 114,332,035 | 117,761,996 | 3,429,961 | 3.00 |
| 2 | Residential \& Farm Demand Control (32) | 42,670 | 43,950 | 1,280 | 3.00 |
| 3 | Electric Vehicle (33) | 24,636 | 25,375 | 739 | 3.00 |
| 3 | Irrigation Service (36) Firm | 50,143 | 51,647 | 1,504 | 3.00 |
| 4 | Irrigation Service (36) Interruptible | 862,089 | 887,952 | 25,863 | 3.00 |
| 5 | Small General Service (41) | 5,799,609 | 5,973,597 | 173,988 | 3.00 |
| 6 | Security Lighting Service (44) - Closed to New | 102,369 | 105,440 | 3,071 | 3.00 |
| 7 | Street Lighting Service (44-2) | 466,293 | 480,282 | 13,989 | 3.00 |
| 8 | Street Lighting System (44-1) | 72,603 | 74,781 | 2,178 | 3.00 |
| 9 | Custom Residential Street Lighting (44-3) | 1,334,683 | 1,374,723 | 40,040 | 3.00 |
| 10 | LED Security Lighting Service (44-4) | 31,109 | 32,042 | 933 | 3.00 |
| 11 | LED Street Lighting Member Owned(44-5) | 1,297 | 1,336 | 39 | 3.00 |
| 12 | LED Street Lighting (44-6) | 59,884 | 61,681 | 1,797 | 3.00 |
| 13 | Low Wattage Unmetered Service (45) | 8,520 | 8,776 | 256 | 3.00 |
| 14 | General Service (46) | 50,261,766 | 51,769,619 | 1,507,853 | 3.00 |
| 15 | Municipal Civil Defense Sirens (47) | 3,960 | 3,960 | - | - |
| 16 | Geothermal Heat Pump (49) Closed to New | 16,571 | 17,068 | 497 | 3.00 |
| 17 | Controlled Energy Storage (51) | 459,736 | 473,528 | 13,792 | 3.00 |
| 18 | Controlled Interruptible Service (52) | 2,634,418 | 2,713,451 | 79,033 | 3.00 |
| 19 | Residential \& Farm Time of Day (53) | 29,057 | 29,929 | 872 | 3.00 |
| 20 | General Service Time of Day (54) | 126,286 | 130,075 | 3,789 | 3.00 |
| 21 | Standby Service (60) | 66,840 | 68,845 | 2,005 | 3.00 |
| 22 | Full Interruptible Service (70) | 23,144,467 | 23,838,641 | 694,174 | 3.00 |
| 23 | Partial Interruptible Service (71) | 2,151,089 | 2,215,568 | 64,479 | 3.00 |
| 24 | Cycled Air Conditioning Service (80) | $(1,625,193)$ | $(1,673,949)$ | $(48,756)$ | 3.00 |
| 25 | Total | 200,456,937 | 206,470,312 | 6,013,375 | 3.00 |



## DAKOTA ELECTRIC ASSOCIATION

$4300220^{\text {th }}$ Street West
Farmington, MN 55024
(651) 463-6212


#### Abstract

GREG MILLER. PRESIDENT/CEO MIKE FOSSE . . . . . . . . . . . . . . . . . . . . . . . . . VICE PRESIDENT ENERGY \& MEMBER SERVICES COREY HINTZ. . . . . . . . . . . . . . . . . . . . . . . . . . . VICE PRESIDENT FINANCIAL SERVICES / CFO

BETTY JO KIESOW $\qquad$ VICE PRESIDENT ENGINEERING SERVICES

JEFF SCHOENECKER VICE PRESIDENT UTILITY SERVICES MJYKE NELSON $\qquad$ VICE PRESIDENT INFORMATION SERVICES / CIO

DOUG LARSON VICE PRESIDENT REGULATORY SERVICES


For an emergency, after office hours, call 651-463-6201 or 1-800-430-9722.

## DAKOTA ELECTRIC ASSOCIATION <br> ELECTRIC RATE BOOK

| RATE | CLASSIFICATION | SHEET |
| :---: | :---: | :---: |
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| 32 | RESIDENTIAL AND FARM DEMAND CONTROL RATE | 3.5 |
| 33 (EV-1) | PILOT - RESIDENTIAL ELECTRIC VEHICLE SERVICE | 4.0 |
| 36 | IRRIGATION SERVICE | 5.0 |
| 41 | SMALL GENERAL SERVICE | 6.0 |
|  | VOLUNTEER FIRE DEPARTMENT RIDER | 6.5 |
| 44 | SECURITY LIGHTING SERVICE | 11 |
| 44-1 | STREET LIGHTING SERVICE (MEMBER-OWNED) | 11.1 |
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| 44-3 | CUSTOM RESIDENTIAL STREET LIGHTING (DEA-OWNED CONTRIBUTION BY MEMBER) | 11.5 |
| 44-4 | LED SECURITY LIGHTING SERVICE | 12.0 |
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| 45 | LOW WATTAGE UNMETERED SERVICE | 15 |
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| 56 | RESIDENTIAL AND FARM SERVICE TIME-OF-DAY RATE | 25.0 |
| 60 | RIDER FOR STANDBY SERVICE | 31.0 |
| 61 | RIDER FOR DISTRIBUTED GENERATION | 32.0 |
| 62 | MEMBER SPECIFIC DISCOUNT RIDER | 58.0 |
| 63 | LARGE LOAD HIGH LOAD FACTOR RIDER | 58.2 |
| 70 | INTERRUPTIBLE SERVICE (FULL INTERRUPTIBLE OPTION) | 41.0 |
| 71 | INTERRUPTIBLE SERVICE (PARTIAL INTERRUPTIBLE OPTION) | 42.0 |
| 72 | CONTRACT RATE SERVICE | 58.4 |
| 80 | CYCLED AIR CONDITIONING SERVICE | 43 |
| 90 | OPTIONAL RENEWABLE ENERGY RIDER | 44 |
|  | SPECIAL FEES OR CHARGES | 45 |
|  | RESOURCE ADJUSTMENT RIDER | 51 |
|  | ENERGY COST ADJUSTMENT RIDER | 52 |
|  | PROPERTY TAX ADJUSTMENT RIDER | 53 |
|  | FRANCHISE FEE SURCHARGE RIDER | 54.0 |
|  | COMPETITIVE SERVICE RIDER | 55.0 |
|  | MEMBER ENERGY EXCHANGE RIDER | 56.0 |
|  | VOLUNTARY ENERGY REDUCTION RIDER | 57 |
|  | ADVANCED GRID INFRASTRUCTURE RIDER | 59 |
|  | ADVANCED METER OPT-OUT (AMO) RIDER | 60.0 |

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## SCHEDULE 31 <br> RESIDENTIAL AND FARM SERVICE

Availability
Available to individual residential and farm members for all domestic and farm use except irrigation.
This includes service to individually metered apartment units and master-metered multi-tenant residential facilities. Service is subject to the established rules and regulations of the Association.
Type of Service
Single phase or three phase, when economically feasible, 60 hertz, at available secondary voltages.
Monthly Rate

| Fixed Charge |  | $\$ 10.00$ per month |
| :--- | :--- | :--- |
| Energy Charge |  |  |
| Summer (June-Aug) | @ | $\$ 0.1379$ per kWh |
| Other | $@$ | $\$ 0.1239$ per kWh |
| Plus Applicable Taxes |  |  |

## Minimum Monthly Charge

The minimum monthly charge under the above rate shall be the Fixed Charge.
Resource and Tax Adjustment (RTA)
The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53 ). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Billing for Master-Metered Multi-Tenant Residential Facilities

The monthly bill for master-metered multi-tenant residential facilities will be determined by multiplying the number of residential living units per master meter times the Fixed Charge and include the metered energy consumption times the applicable energy charge plus the Resource and Tax Adjustment.

## Taxes

The rates set forth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.
$\qquad$ /20

## SCHEDULE 32

## RESIDENTIAL AND FARM DEMAND CONTROL RATE

## Availability

Available to residential and farm members with at least 5 kW of qualifying off-peak loads as determined by the Association. This rate is subject to the rules and regulations of the Association. Members requesting service under this rate schedule must remain on this rate schedule for a minimum of twelve (12) months.

Type of Service
Single phase, 60 Hertz, at available secondary voltages.

## Monthly Rate

| Fixed Charge |  | $\$ 13.00$ per month |
| :--- | :--- | :--- |
| Energy Charge |  | $\$ 0.0810$ per kWh |
| Demand Charge | @ | $\$ 15.50$ per kW |
| $\quad$ Summer (June-Aug) | $@$ | $\$ 11.90$ per kW |
| Other |  |  |

## Billing Demand Determination

The demand will be determined based on the peak 15-minute demand reading during control periods for the month the bill was rendered. An estimated demand will be used for new customers until the actual controlled demand is established.

## Minimum Monthly Charge

The minimum monthly charge under the above rate shall be the $\$ 12.00$ Fixed Charge plus a minimum billing demand of 3 kW .

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be increased or decreased by $\$ 0.0001$ per kilowatt-hour for each 0.1 mill or major fraction by which the energy component in the Association's purchased power cost per kilowatt-hour purchased from its power supplier exceeds, or is less than $\$ 0.0939$ per kilowatt-hour purchased. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set fourth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.
$\qquad$

## SCHEDULE EV-1

RESIDENTIAL ELECTRIC VEHICLE SERVICE

## Availability

Available on voluntary basis as a pilot program for residential consumers taking service under Schedule 31 who also desire metered service for the sole purpose of electrically charging a licensed automobile or light truck. Service on this tariff is limited to electric vehicles that are SAE J1772 compliant and registered and operable on public highways in the State of Minnesota. Low-speed electric vehicles, including golf carts, are ineligible to take service under this tariff even if licensed to operate on public streets. The consumer may be required to provide the Association with proof of registration of the electric vehicle prior to taking service under this tariff. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages.

## Rate

Energy Charges:
Off-Peak: $\quad \$ 0.0756$ per kWh
On-Peak: $\quad \$ 0.4421$ per kWh
Other: $\quad$ Schedule 31 energy charges apply
Plus RTA and applicable sales tax
Definition of Periods
Energy Charge time periods are defined as follows:
Off-Peak $\quad$ 9:00 pm to 8:00 am Mon. - Fri., and all day Weekends and Holidays
On-Peak $\quad$ 4:00 pm to 9:00 pm Mon. - Fri., excluding Holidays
Other $\quad$ 8:00 am to 4:00 pm Mon. - Fri., excluding Holidays
Holidays shall be: New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.
$\qquad$

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Farmington, MN 55024

SECTION: V
SHEET: 4.1
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# SCHEDULE EV-1 <br> RESIDENTIAL ELECTRIC VEHICLE SERVICE CONTINUED 

## Metering

Electric service under this rate must be supplied through a sub-metered circuit (installed at the consumer's expense) and approved electric vehicle charging equipment. Installations must conform to the Association's specifications. The consumer shall supply, at no expense to Dakota Electric, a suitable location for meters and associated equipment used for billing and for load research. For purposes of monitoring consumer load under this pilot program, the Association may install load research metering at its expense.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Data Privacy

Participation in any load research effort as part of this schedule will be strictly voluntary. The Cooperative's use of such load research data will be strictly limited to the provision of electric service. The Cooperative will not disclose, share, rent, lease, or sell such data to any third party or affiliate for any other purpose, without the consumer's express, affirmative written informed consent.

## Taxes

The rates set fourth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 36

IRRIGATION SERVICE

## Availability

Available to any member for service to irrigation pumps. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages.

## Monthly Rate

Firm Service
Fixed Charge $\quad \$ 30.00$ per month
Demand Charge
Summer (June-Aug) @ \$26.60 per kW
Winter (Dec-Feb)
Other
Energy Charge
@ $\quad \$ 21.20$ per kW
@ $\quad \$ 15.67$ per kW
Plus Applicable Taxes
Interruptible

| Fixed Charge |  | $\$ 30.00$ per month |
| :--- | :--- | :--- |
| Demand Charge | @ | $\$ 4.55$ per kW |
| Energy Charge | @ | $\$ 0.0521$ per kWh |

Determination of Metered Demand
The Metered Demand in kilowatts shall be the greatest 15 -minute demand (subject to power factor adjustment) during the month for which the bill is rendered. Demand will be read to the nearest 0.01 kilowatt.

## Power Factor Adjustment

The member agrees to maintain as near unity (100 percent) power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent, the demand for billing purposes shall be the demand as recorded by the demand meter multiplied by 90 percent and divided by the percent power factor.

Minimum Monthly Charge
The Minimum Monthly Charge under the above rate shall be the Fixed Charge.
$\qquad$

## SCHEDULE 36

IRRIGATION SERVICE
(Continued)

## Interruptible Requirements

Members that switch from Interruptible to Firm service during the calendar year will be billed the Firm service rate during the month the change was made. The member must remain on the Firm service rate for the remainder of the calendar year. This includes members that intentionally bypass the load control equipment.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor applicable to firm irrigation shall be adjusted by $\$ 0.0001$ per kilowatt-hour, or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0939$ per kilowatt-hour sold. The energy cost factor shall be adjusted by $\$ 0.0001$ per kWh , or major fraction thereof, of which the Association's total projected power cost per kWh applicable to interruptible irrigation exceeds, or is less than, $\$ 0.0521$ per kWh sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.
$\qquad$

DAKOTA ELECTRIC ASSOCIATION<br>$4300220^{\text {th }}$ Street West<br>Farmington, MN 55024

SECTION
V
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6.0

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## SCHEDULE 41 <br> SMALL GENERAL SERVICE

## Availability

Available to any commercial member for all uses, except irrigation pumps, where the Metered Demand is 15 kW or less. If the Metered Demand exceeds 15 kW for three consecutive months, the member will be transferred to the General Service Rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages.
Monthly Rate

| Fixed Charge | $\$ 15.00$ per month |  |
| :--- | :--- | :--- |
| Energy Charge |  |  |
| $\quad$ Summer (June-Aug) | @ | $\$ 0.1375$ per kWh |
| Other | @ | $\$ 0.1235$ per kWh |

Plus Applicable Taxes
Determination of Metered Demand
The Metered Demand in kilowatts shall be the greatest 15 -minute demand during the month for which the bill is rendered. Demand will be read to the nearest 0.01 kilowatt.

Minimum Monthly Charge
The Minimum Monthly Charge under the above rate shall be the Fixed Charge.

## Non-metered Option

This option has limited availability. It may be available for: devices that are located at individual points of delivery and are operated with a continuous or predetermined load level that exceeds the threshold determined for Schedule 45. The monthly energy consumption will be determined by the Association based on equipment documentation provided by the member. The maximum monthly energy allowed under this option will be 500 kWh .

Resource and Tax Adjustment (RTA)
The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.
$\qquad$ /20

## SCHEDULE 44

SECURITY LIGHTING SERVICE

## Availability

Available for year-around illumination for private residential, farm, or commercial lighting on existing Association service poles where service poles and service wires can be connected on the line side of member's meter. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

The Association shall own, operate, and maintain the security lighting system using the Association's standard security lighting equipment. The energy used by these lights is unmetered.

## Monthly Rate

Designation of Lamp
100 Watt High Pressure Sodium (Closed to new)
Monthly Rate Per Luminaire

150 Watt High Pressure Sodium (Closed to new) \$12.01

250 Watt High Pressure Sodium (Closed to new) \$14.26

Plus Applicable Taxes
Optional - For residential or farm installation requiring any extra equipment, or in the event the consumer requests the changeout of an existing light to a different size and/or type, a contribution to construction will be required to cover the extra costs incurred. Commercial installations on existing service poles only.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.
$\qquad$

## SCHEDULE 44-1 <br> STREET LIGHTING SERVICE <br> (MEMBER - OWNED)

## Availability

Available for year-round illumination of public streets, parkways, highways, and other public ways by electric lamps mounted on standards where member owns the lighting system complete with standards, luminaries, globes, lamps, and other appurtenances, together will all necessary cables extending between standards and to point of connection to the Association's facilities as designated by the Association.

## Type of Service

The street lighting system shall be built and owned by the member. All controls will be provided by the member. The member shall also provide all easements and right-of-way to permit access to feed points. The Association shall operate and provide limited maintenance (periodic cleaning of lens, refractor, and bulb replacement) on street lighting systems.

## Monthly Rate

| Designation of Lamp | Monthly Rate Per Luminaire |
| :--- | :---: |
| 175 Watt Mercury (Closed to new) | $\$ 13.25$ |
| 250 Watt Mercury (Closed to new) | $\$ 16.74$ |
| 400 Watt Mercury (Closed to new) | $\$ 22.71$ |
|  |  |
| 100 Watt High Pressure Sodium | $\$ 9.61$ |
| 150 Watt High Pressure Sodium | $\$ 11.78$ |
| 200 Watt High Pressure Sodium | $\$ 14.18$ |
| 250 Watt High Pressure Sodium | $\$ 16.35$ |
| 400 Watt High Pressure Sodium | $\$ 21.24$ |
| Plus Applicable Taxes |  |

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## SCHEDULE 44-1

STREET LIGHTING SERVICE (MEMBER-OWNED) (Continued)

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.
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## SCHEDULE 44-2

STREET LIGHTING SERVICE
(DEA - OWNED EQUIPMENT)

## Availability

Available for governmental or private year-around illumination of public or private streets, parkways, highways, and other public ways by electric lamps in luminaires supported on existing poles where secondary voltage is available and the facilities for this service are furnished by the Association.

## Type of Service

The Association shall own, operate, and maintain the overhead street lighting system using the Association's standard street lighting equipment. The energy used by these lights is unmetered.

## Monthly Rate

Designation of Lamp
175 Watt Mercury (Closed to new)
250 Watt Mercury (Closed to new)
400 Watt Mercury (Closed to new)
100 Watt High Pressure Sodium (Closed to new)
150 Watt High Pressure Sodium (Closed to new)
250 Watt High Pressure Sodium (Closed to new)
400 Watt High Pressure Sodium (Closed to new) Plus Applicable Taxes

Monthly Rate Per Luminaire
\$17.44
\$20.93
\$26.89
\$13.80
\$15.97
\$20.54
\$25.42

The above rates cover only an installation where the pole with secondary voltage is existing at the light location. Contributions to construction costs will be required if additional equipment is needed or if a member requests a change to a different lamp size and/or type when costs exceed $\$ 500$.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53 ). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.
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## SCHEDULE 44-2

STREET LIGHTING SERVICE
(DEA - OWNED EQUIPMENT)
(Continued)

## Taxes

The rates set forth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent of $\$ 1.00$, whichever is greater, added to the balance.
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## SCHEDULE 44-3 <br> CUSTOM RESIDENTIAL STREET LIGHTING (DEA-OWNED - CONTRIBUTION BY MEMBER)

## Availability

Available for year-round illumination of public streets, parkways, highways, and other public ways by electric lamps mounted on standards and served through underground circuits, where the facilities for this service are furnished by the Association. Street lighting service under this schedule is limited to residential areas having an underground distribution area.

## Type of Service

The Association shall own, operate, and maintain the lighting system using the Association's standard street lighting equipment which includes one lamp per standard. Member shall be required to contribute an amount equal to the installation cost of the lighting system. The energy used by these lights is unmetered.

## Monthly Rate

Designation of Lamp
175 Watt Mercury (Closed to new)
50 Watt High Pressure Sodium (Closed to new)
100 Watt High Pressure Sodium (Closed to new)
150 Watt High Pressure Sodium (Closed to new)
250 Watt High Pressure Sodium (Closed to new) Plus Applicable Taxes

Monthly Rate Per Luminaire
\$14.03
\$8.45
\$10.39
\$12.63
\$17.21

Optional - For installations requiring any extra equipment or in the event the member requests the changeout of an existing light to be a different size and/or type, the member will be required to pay all construction fees or extra charges incurred.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.
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## Taxes

The rates set forth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent of $\$ 1.00$, whichever is greater, added to the balance.
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# SCHEDULE 44-4 <br> LED SECURITY LIGHTING <br> SERVICE 

## Availability

Available for year-around illumination for private residential, farm, or commercial lighting by Light Emitting Diode (LED) electric lamps on existing Association service poles where service poles and service wires can be connected on the utility side of the meter. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

The Association shall own, operate, and maintain the LED security lighting system using the Association's standard LED security lighting equipment. Fixtures on this rate will only be attached to an existing DEA service pole. The energy used by these lights is unmetered.
Monthly Rate
Light Emitting Diode Security Light (LED, > 4,500 lumens) $\$ 7.75$ per month

## Plus Applicable Taxes

Optional - For installations requiring any extra equipment (excluding poles), a contribution to construction will be required to cover the extra costs incurred. In the event the member requests the change out of an existing light, the member will be required to pay all construction fees and material costs for the new installation or upgrade as well as payment for the undepreciated cost of the existing light, less any salvage value.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

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SCHEDULE 44-5
LED STREET LIGHTING
(MEMBER-OWNED)

## Availability

Available for year-round illumination of public streets, parkways, highways, and other public ways by Light Emitting Diode (LED) electric lamps served through underground or overhead circuits, where the facilities for this service are furnished and owned by the Member. Service is subject to the established rules and regulations of the Association.

## Type of Service

The member shall own, operate, and maintain the LED lighting system.
The preferred service option is metered LED lighting. Such service will be billed to the Member under the rate schedule associated with the meter.

Unmetered service will be allowed if the Association determines it is not practical for the lights to be metered. For such unmetered use:

1. Billing will be according to specified consumption groups. Dakota Electric will determine if a member qualifies for the unmetered rate and which consumption group.
2. The Member will be required to provide Dakota Electric with a notice prior to any change in equipment.
3. No other use is allowed from the fixture. (e.g. Wi-Fi attachments, holiday lights, etc.)
4. The Association will periodically inspect the unmetered fixtures to ensure compliance with requirements.
5. The Member must provide proof of lighting system rating. (i.e. data sheet or model number)

No maintenance will be included in the monthly rate from the Association for any member-owned LED street light. At the request of a Member, Dakota Electric may enter into individual contracts with a Member for the type and frequency of maintenance they may desire from the Association.

## Monthly Rate

Metered Service: According to applicable rate schedule

| Unmetered Service: |  |
| :--- | :---: |
| Consumption Group | Monthly Rate per Fixture |
| A (40 to 80 watts) | $\$ 5.50$ |
| B (81 to 150 watts) | $\$ 7.75$ |
| C $(151$ to $250 w a t t s)$ | $\$ 11.16$ |
| D $(251$ to 350 watts) | $\$ 15.04$ |
| E $(351$ to 450 watts) | $\$ 19.07$ |

Plus Applicable Taxes
The range of watt ratings for the Unmetered Consumption Groups will be adjusted periodically to reflect the predominant size of lights receiving such Unmetered Service.
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SCHEDULE 44-5<br>LED STREET LIGHTING (MEMBER-OWNED)<br>(Continued)

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent of $\$ 1.00$, whichever is greater, added to the balance.
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# SCHEDULE 44-6 <br> LED STREET LIGHTING <br> (DEA-OWNED - CONTRIBUTION BY MEMBER) 

## Availability

Available for year-round illumination of public streets, parkways, highways, and other public ways by Light Emitting Diode (LED) electric lamps served through underground or overhead circuits, where the facilities for this service are furnished by the Association. Conversion of existing lighting to LED lighting may be limited to accommodate workload scheduling. Street lighting service under this schedule is limited to designated LED lighting fixtures offered by the Association in its distribution area. Service is subject to the established rules and regulations of the Association.

## Type of Service

The Association shall own, operate, and maintain the LED lighting system using the Association's standard street lighting equipment which includes one fixture per pole. Member shall be required to contribute an amount equal to the initial installation or upgrade cost of the lighting system. The energy used by these lights is unmetered.

## Monthly Rate

|  | Monthly Rate per Fixture |  |
| :--- | :--- | :--- |
| Designation of Fixture | $\underline{\text { Standard }}$ | $\underline{\text { Basic }}$ |
| Light Emitting Diode (LED, > 5,200 lumens) Coach Light (Post) | $\$ 9.30$ | $\$ 6.36$ |
| Light Emitting Diode (LED, > 5,200 lumens) Acorn Light (Post) | $\$ 10.85$ | $\$ 6.12$ |
| Light Emitting Diode (LED, > 7,000 lumens) Cobra Light (Mast) | $\$ 8.60$ | $\$ 6.98$ |
| Light Emitting Diode (LED, > 11,500 lumens) Shoebox Light (Mast) | $\$ 10.70$ | $\$ 8.68$ |
| Plus Applicable Taxes |  |  |

The Coach and Acorn fixtures will be mounted on a street light post. The Cobra and Shoebox fixtures will be fastened to a mast arm on existing service poles. In the event the member requests the change out of an existing light, the member will be required to pay all construction fees and material costs for the new installation or upgrade as well as payment for the undepreciated cost of the existing light, less any salvage value.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.
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SCHEDULE 44-6<br>LED STREET LIGHTING<br>(DEA-OWNED - CONTRIBUTION BY MEMBER)<br>(Continued)

## Service Included in Rate

For Standard Service, Dakota Electric will furnish all electric energy necessary to operate the street lighting system, will make all lamp and glassware renewals, clean the glassware, make all ballast and starter renewals, repair all damaged equipment, and furnish all the materials and labor necessary for these services.

For Basic Service, Dakota Electric will furnish all electric energy necessary to operate the street lighting system, clean the glassware, and repair all damaged equipment. The Member will be responsible for material and labor costs to replace failed components and fixtures not covered by manufacturers warranties. Selection of Basic Service is a "life of fixture" designation.

## Taxes

The rates set forth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent of $\$ 1.00$, whichever is greater, added to the balance.
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SCHEDULE 45
LOW WATTAGE UNMETERED SERVICE

## Availability

This rate is available for low-wattage electronic devices that are: 1) Individually located at each point of delivery, 2) Rated at less than 150 watts, and 3) A determinable load level. Each individual electronic device must not in any way interfere with Association operations and service to adjacent members. This rate is also available to equipment connected to the supply side of the service disconnect such as fire and sprinkler alarms, and emergency lighting systems, if such equipment is used only during times of emergency. This will require verification from a licensed electrical contractor/electrician in the form of an affidavit.

This Low Wattage Unmetered Service is not applicable to electric service for traffic signals, civil defense, or lighting. Association reserves the right to evaluate member requests for this service to determine eligibility.

## Type of Service

Either single phase or three phase, depending on feasibility, 60 hertz, at available secondary voltages.

## Installation Charges

The member shall pay the total estimated installation charges involved to provide service.

## Monthly Rate

$\$ 10.50$ per month per service location, plus applicable sales tax.

## Taxes

The rates set forth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance
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SCHEDULE 46 GENERAL SERVICE

## Availability

Available to any non-residential member for general service uses except irrigation. Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages.

## Monthly Rate

Fixed Charge
Demand Charge
Summer (June-Aug)
Other (Sept - May)
Energy Charge
First 200 kWh per kW
Next 200 kWh per kW
Over 400 kWh per kW
Plus Applicable Taxes
$\$ 34.00$
@ $\quad \$ 13.70$ per kW
@ $\quad \$ 10.60$ per kW
@ $\quad \$ 0.0776$ per kWh
@ $\quad \$ 0.0676$ per kWh
@ $\quad \$ 0.0576$ per kWh

## Determination of Demand

The Metered Demand in kilowatts shall be the greatest 15-minute demand (subject to power factor adjustment) during the month for which the bill is rendered. Demand will be read to the nearest 0.01 kilowatt. In no month shall the Billing Demand be greater than the value in kW determined by dividing the kWh sales for the billing month by the product of 24 hours x 0.1 load factor x days in the billing month.

## Determination of Energy Charge

The energy ( kWh ) billed in each rate block is determined in relation to the monthly demand ( kW ). The energy in the first block includes the first 200 kWh multiplied by the monthly metered demand. The second block includes the next 200 kWh multiplied by the monthly metered demand. All energy in excess of 400 kWh multiplied by the monthly metered demand is billed under the third block.

## Power Factor Adjustment

The member agrees to maintain as near unity (100 percent) power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent, the demand for billing purposes shall be the demand as recorded by the demand meter multiplied by 90 percent and divided by the percent power factor.

## Minimum Monthly Charge

The Minimum Monthly Charge under the above rate shall be the Fixed Charge plus $\$ 1.00$ per kW of the highest billing demand during the preceding 11 months.

## Primary Voltage Service

A discount of $\$ 0.15 / \mathrm{kW}$ of Billing Demand will be applied to the bill when service is taken by the member at the available primary voltage. If primary metering is used, an additional discount of 2.0 percent shall be applied to the bill. The 2.0 percent discount shall be applied after the $\$ 0.15 / \mathrm{kW}$ discount.
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## SCHEDULE 46

GENERAL SERVICE

## (Continued)

## Billing for Multi-Use Facilities

Multi-use facilities are defined as buildings or complexes that include a combination of commercial or institutional load along with some portion of residential domestic consumption. (For combined billing, commercial use does not include consumption in common areas of multitenant residential facilities.) Where service and metering are separated between residential and commercial consumption, such electrical service will be billed under the terms of Schedule 31, Schedule 41, and Schedules 46 or 54 as applicable. Where such service is combined, such electrical service will be billed under the terms of Schedules 46 or 54 as applicable.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.
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## SEASONAL MEMBER RIDER

## Availability

Available to members receiving service under rate schedules $46,54,70$ or 71 and determined by the Association to be seasonal. Seasonal members qualifying for the Seasonal Member Rider are defined as businesses (service or production) that are closed or shut down for at least three consecutive months during the year. Service is subject to the established rules and regulations of the Association.

## Rider

If an account is determined to be seasonal in nature by the Association, the minimum monthly charge shall be the fixed charge for each month of the 12 month period. Minimum monthly demand provisions will not be applied. Members who elect to be disconnected during a portion of the year and then reconnected will be charged a reconnect fee as well as the monthly fixed charge for all 12 months.
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## SCHEDULE 47

MUNICIPAL CIVIL DEFENSE SIRENS

## Availability

This rate will be available to governmental bodies for civil defense siren services where energy consumption is negligible.

Type of Service
Either single phase or three phase, depending on feasibility, 60 hertz, at available secondary voltages.

## Installation Charges

The member shall pay the total estimated installation charges involved to provide service when additional transformers are required. No initial charge will be made to run an overhead service wire from an existing transformer or for making connections to an existing underground feedpoint.

## Monthly Rate

\$5.00/Month per Installation
Plus Applicable Taxes

## Taxes

The rates set forth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.
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# SCHEDULE 49 <br> GEOTHERMAL HEAT PUMP RIDER <br> (Closed to new consumers.) 

## Availability

Available to any commercial member for energy used by a geothermal heat pump system.
Members requesting service under this rate schedule must be taking service concurrently under Rate Schedule 41 or 46 . Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available primary or secondary voltages.

## Rate

Energy Charge $\quad \$ 0.1030$ per kWh
Plus applicable taxes

## Metering

The geothermal heat pump system must be separately, parallel metered from all other loads at the premise. Service will not be sub-metered.

## Power Factor

The member agrees to maintain as near unity (100 percent) power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent, the energy for billing purposes shall be adjusted accordingly.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kWh , or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour for this service annually exceeds, or is less than, $\$ 0.0813$ per kWh sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted as necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

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## SCHEDULE 49

GEOTHERMAL HEAT PUMP RIDER
(Continued)

## Conditions of Service

If service is furnished at secondary voltage, the delivery point shall be the metering point unless otherwise specified in the contract for service. All wiring, poles, lines and other electric equipment on the load side of the delivery point shall be owned and maintained by the member.

If service is furnished at the Cooperative's primary line voltage, the delivery point shall be the point of attachment of the cooperative's primary line to member's transformer structure unless otherwise specified in the contract for service. All wiring, poles, lines and other electric equipment (except metering equipment) on the low side of the delivery point shall be owned and maintained by the member.

## Taxes

The rates set forth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution or sales of electricity are allocable to sales here under, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 51

CONTROLLED ENERGY STORAGE

## Availability

Available to members taking service concurrently under rate schedules 31,41 and 46 . This rate is for interruptible service to energy storage loads which are remotely controlled by the Association. Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages. Service under this schedule will be available for approximately eight hours per day, normally 11:00 p.m. to 7:00 a.m., or as established by the Association.

## Monthly Rate

Energy Charge @ \$0.0487 per kWh
Plus Applicable Taxes.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The energy cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected weighted average power cost per kilowatt-hour for this service exceeds, or is less than $\$ 0.0204$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Demand

The metered demand of loads on this rate will be subtracted from the metered demand for members receiving service under Schedule 41 and 46 when the storage load is coincident with the member's other loads. When feasible, new controlled energy storage loads should be on a separate service from Schedule 41 and 46 load.

## Taxes

The rates set fourth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## Availability

Available to member taking service concurrently under rate schedules 31,41 and 46 . This rate is for interruptible service to qualifying loads which are remotely controlled by the Association. Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages. Service under this schedule will be available at all times except when interrupted by the Association during times of peak system demand or system emergencies.

## Monthly Rate

Energy Charge @ \$0.0631 per kWh
Plus Applicable Taxes.

## Alternate Monthly Rate for Controlled Water Heaters

Where separate metering of controlled water heaters is not possible or for members on Rate 53, a direct credit of $\$ 1.50$ per 100 kWh used up to a maximum of $\$ 6.00$ per month will be applied against the monthly bill.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The energy cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected weighted average power cost per kilowatt-hour for this service exceeds, or is less than $\$ 0.0352$ per kilowatthour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Demand

The metered demand of loads on this rate will be subtracted from the metered demand for members receiving service under Schedule 41 and 46 when the interruptible load is coincident with the member's other loads. When feasible, new controlled interruptible services loads should be on a separate service from Schedule 41 and 46 load.

## Taxes

The rates set fourth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 53 <br> RESIDENTIAL AND FARM SERVICE TIME-OF-DAY RATE

## Availability

Available to residential and farm members for all domestic and farm use, except irrigation pumps. Members participating in this service are not eligible for either Schedule 51 or Schedule 52.
Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

Type of Service
Single phase or three phase, when economically feasible, 60 hertz, at available secondary voltages.

## Monthly Rate

Fixed Charge
Energy Charge
Summer - (June-Aug) Peak Period @ $\$ 0.21263$ per kWh Other - Peak Period @ $\$ 0.19863$ per kWh Off-Peak Period @ \$0.09450 per kWh
Plus Applicable Taxes

## Definition of Periods

Peak Period 4:00 p.m. to 11:00 p.m., excluding holidays and weekends Off-Peak Period $\quad 11: 00 \mathrm{p} . \mathrm{m}$. to 4:00 p.m., plus all day on holidays and weekends

Holidays include New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

## Minimum Monthly Charge

The minimum monthly charge under the above rate shall be the Fixed Charge.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceed, or is less than $\$ 0.0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.
$\qquad$

SCHEDULE 53<br>RESIDENTIAL AND FARM SERVICE<br>TIME-OF-DAY RATE<br>(Continued)

## Taxes

The rates set forth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.
$\qquad$

## SCHEDULE 54 <br> GENERAL SERVICE <br> OPTIONAL TIME-OF-DAY RATE

## Availability

Available to any member for general service electrical loads. Members participating in this service are not eligible for either Schedule 51 or Schedule 52. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available primary or secondary voltages.

## Monthly Rate

Fixed Charge $\quad \$ 36.00$ per month
Peak Period Demand Charge Summer (June-Aug) @ \$26.14 per kW
Winter (Dec-Feb)
@ $\$ 19.91$ per kW
Other
@ $\$ 13.67$ per kW
Plus
Maximum Demand Charge
@ $\$ 5.25$ per kW
Energy Charge @ \$0.0521 per kWh
Plus Applicable Taxes

## Definition of Periods

Peak Period 4:00 p.m. to 11:00 p.m., excluding holidays and weekends
Off-Peak Period
11:00 p.m. to 4:00 p.m., plus all day on holidays and weekends
Holidays include New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

## Determination of Billing Demand

1. Peak Period - The Peak Period Billing Demand shall be the greatest 15 minute demand (subject to power factor adjustment) between $4 \mathrm{p} . \mathrm{m}$. and $11 \mathrm{p} . \mathrm{m}$. during the month for which the bill is rendered, as indicated or recorded by a demand meter. Demand will be read to the nearest 0.01 kilowatt.
2. Maximum Demand - The Maximum Billing Demand shall be the greatest 15 minute demand (subject to power factor adjustment) during the month for which the bill is rendered, as indicated or recorded by a demand meter. Demand will be read to the nearest 0.01 kilowatt.

## Minimum Monthly Charge

The minimum monthly charge under the above rate shall be the Fixed Charge plus $\$ 1.00$ per kW of the highest Maximum Billing Demand during the preceding 11 months.
$\qquad$

SCHEDULE 54<br>GENERAL SERVICE<br>OPTIONAL TIME-OF-DAY RATE<br>(Continued)

## Power Factor Adjustment

The member agrees to maintain as near unity (100 percent) power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent, the demand for billing purposes shall be the demand as recorded by the demand meter multiplied by 90 percent and divided by the percent power factor.

## Primary Voltage Service

A discount of $\$ 0.15 / \mathrm{kW}$ will be applied to the Maximum Billing Demand when the service is taken by the member at the available primary voltage. If primary metering is used, an additional discount of 2.0 percent shall be applied to the bill. The 2.0 percent discount shall be applied after the $\$ 0.15 / \mathrm{kW}$ discount.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.
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## SCHEDULE 56

RESIDENTIAL AND FARM SERVICE TIME-OF-DAY RATE

## Availability

Available to residential and farm members for all domestic and farm use, except irrigation pumps. Members participating in this service are not eligible for either Schedule 51 or Schedule 52.
Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, when economically feasible, 60 hertz, at available secondary voltages.

## Monthly Rate

Fixed Charge
$\$ 13.00$ per month
Energy Charges
Peak Periods:
Summer - (June-Aug) @ $\$ 0.2890$ per kWh
Winter - (Dec-Feb) @ $\$ 0.2320$ per kWh
Spring/Fall @ $\$ 0.1880$ per kWh
Intermediate Period @ $\$ 0.1060$ per kWh
Off-Peak Period
Plus Applicable Taxes

## Definition of Periods

Peak Periods 4:00 p.m. to 11:00 p.m., excluding holidays and weekends
Intermediate Period 8:00 a.m. to 4:00 p.m., excluding holidays and weekends
Off-Peak Period 11:00 p.m. to 8:00 a.m. Mon-Fri and all day weekends and holidays
Holidays include New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

## Minimum Monthly Charge

The minimum monthly charge under the above rate shall be the Fixed Charge.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceed, or is less than $\$ 0.0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.
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# SCHEDULE 56 <br> RESIDENTIAL AND FARM SERVICE <br> TIME-OF-DAY RATE <br> (Continued) 

## Taxes

The rates set forth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.
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## SCHEDULE 60 <br> RIDER FOR STANDBY SERVICE CONTINUED

## Definitions

Contracted Standby Demand is the quantity specified in the member's Electric Service Agreement as the maximum amount of firm or non-firm standby service the Cooperative is obligated to supply and will not exceed the capacity of the member's distributed generation system.

Firm Service refers to a utility's most reliable, constant electric service. A utility would interrupt the supply of electricity to a firm service customer only as a last resort.
Non-Firm Service, also called interruptible service, refers to electric service that a utility provides only to the extent that it has capacity not being used to meet the needs of firm-service members at the moment.
All other definitions shall be as described in Cooperative's Distributed Generation Interconnection Requirements and Interconnection Process for Distributed Generation Systems.

## Charges for Service

The following Reservation Fees, Communication Fee, Usage Fees, and Wheeling Fees will be assessed as applicable in addition to all charges for service being taken under Cooperative's base rate schedule:

## Reservation Fees

Charges as specified below for the reservation of either Firm or Non-Firm generation, transmission and distribution service per Month per kW will each be applied to the member's Contracted Standby Demand as specified in member's Electric Service Agreement with Cooperative:

|  | Firm Service <br> $(\$$ per kW $)$ | Non-Firm Service <br> $(\$$ per kW $)$ |
| :--- | :---: | :---: |
| Generation | $*$ | $* *$ |
| Transmission | $\$ 4.02$ | $\$ *$ |
| Distribution - Secondary Service | $\$ 3.89$ | $\$ 3.89$ |
| Distribution - Primary Service | $\$ 0.81$ | $\$ 0.81$ |

* Firm Standby Service generation and transmission Reservation Fees will be billed under the rates, terms and conditions of the Cooperative's wholesale power supplier (Great River Energy), which is available on GRE's Web site; greatriverenergy.com and DEA's Web site; dakotaelectric.com.
**Generation and transmission Reservation Fees are not applied for Non-Firm Service. However, members will be responsible for all costs associated with wholesale power supply during any times of usage.


## Communication Fee

A monthly Communication Fee will be applied to cover the cost of transmitting data through the use of digital cellular equipment. The monthly Communication Fee is applied to each required meter with cellular data capabilities.

Communication Fee $\$ 8.70$ per meter

## Usage Fees

## Demand Charge

If the member registers electrical usage from Cooperative during a billing month then such usage will result in demand charges which may vary between members contracting for Firm Standby Service or Non-Firm Standby Service.

## SCHEDULE 70 <br> INTERRUPTIBLE SERVICE (FULL INTERRUPTIBLE OPTION)

Availability
Available to any member with a minimum controllable demand of 50 kW . Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Members participating in this service are not eligible for concurrent service under any other rate schedule. Service is subject to the established rules and regulations of the Association.

Under the full interruptible control option, members agree to interrupt their entire electrical energy usage. Members may attain this full interruption through curtailment or with the use of on-site generation back-up. During the interruption, the member's load must go to zero.

Type of Service
Single phase or three phase, 60 hertz, at available primary or secondary voltages.

## Monthly Rate

| Fixed Charge |  | \$130.00 per month |
| :---: | :---: | :---: |
| Communication Fee (meters w/ digital cellular) |  | \$8.70 per month |
| Coincidental Demand |  |  |
| Summer (June-Aug) | @ | \$26.14 per kW |
| Winter (Dec-Feb) | @ | \$19.91 per kW |
| Other | @ | \$13.67 per kW |
| Non-Coincidental Demand | @ | \$ 5.25 per kW |
| Energy Charge | @ | \$0.0521 per kWh |
| Failure to Control Charge | @ | \$ 5.00 per kW |
| Plus Applicable Taxes |  |  |

## Control Period

The control period shall be defined as the period of time during which the Association is controlling these loads with the intent of minimizing demand on the Association's system.

## Coincidental Demand

The monthly Coincidental Demand under the full interruptible control option shall be defined as the member's actual hourly demand (subject to power factor adjustment) that is coincident with the wholesale power supplier (i.e. average of the four fifteen minute demand readings for the hour ending of the wholesale billing peak) when the load is directed to be controlled during the wholesale billing peak.

## Non-Coincidental Demand

The Non-Coincidental Demand shall be the maximum kilowatt demand (subject to power factor adjustment) established by the member for any period of 15 consecutive minutes during the month for which the bill is rendered, as indicated or recorded by a demand meter.

## Failure to Control

The Failure to Control Charge will be applied to the highest kilowatt demand during any one monthly control period when the member does not fully interrupt demand. The Failure to Control Charge is applied to the highest demand recorded during any one of the monthly control periods. The control period shall be defined as the period of time during which the Association is controlling these loads with the intent of minimizing demand on the Association's system. Failure to control or being unavailable for control for more than one calendar month may require the member to be removed from Schedule 70 for the remainder of the year.

## Scheduled Maintenance

Members are encouraged to schedule required periodic maintenance during the spring and fall months and coordinate such maintenance with the Association.
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## SCHEDULE 70

INTERRUPTIBLE SERVICE
(FULL INTERRUPTIBLE OPTION)
(Continued)

## Minimum Billing Demand

The Minimum Billing Demand for any billing period shall be no less than 50 percent of the highest noncoincidental demand during the preceding 11 months.

## Power Factor Adjustment

The member agrees to maintain as near unity power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent; the demand for billing purposes shall be the demand as recorded by the demand meter multiplied by 90 percent and divided by the percent power factor.

## Primary Voltage Service

A discount of $\$ 0.15$ per kW of billing demand will be applied to the bill when service is taken by the member at the available primary voltage. If primary metering is used, an additional discount of 2.0 percent shall be applied to the bill. The 2.0 percent discount shall be applied after the $\$ 0.15$ per kW discount.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in wholesale power costs, Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The energy cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour applicable to this service exceeds, or is less than $\$ 0.0521$ per kilowatt-hour sold as described in the Energy Cost Adjustment Rider (ECA) (Sheet 52). The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

SCHEDULE 71
INTERRUPTIBLE SERVICE
(PARTIAL INTERRUPTIBLE OPTION)

## Availability

Available to any member with a minimum controllable demand of 50 kW . Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Members participating in this service are not eligible for concurrent service under any other rate schedule. Service is subject to the established rules and regulations of the Association.

Under the partial interruptible control option, members agree to reduce a portion of their electrical energy usage. Members may attain this partial interruption through curtailment or with the use of on-site generation back-up. During the interruption, the member's load goes to a Predetermined Demand Level (PDL). If a partial interruptible member fails to control demand to the PDL, then the PDL will be adjusted to the demand occurring during such control period.

Type of Service
Single phase or three phase, 60 hertz, at available primary or secondary voltages.

## Monthly Rate

| Fixed Charge |  | \$130.00 per month |
| :---: | :---: | :---: |
|  |  |  |
|  |  |  |
| Summer (June - Aug) | @ | \$26.14 per kW |
| Winter (Dec - Feb) | @ | \$19.91 per kW |
| Other | @ | \$13.67 per kW |
| Non-Coincidental Demand | @ | \$ 5.25 per kW |
| Energy Charge | @ | \$0.0521 per kWh |
| Excess Demand Charge | @ | \$ 5.00 per kW |

## Control Period

The control period shall be defined as the period of time during which the Association is controlling these loads with the intent of minimizing demand on the Association's system.

## Coincidental Demand

The monthly Coincidental Demand under the partial interruptible control option shall be defined as:

- During a month with no control period, the monthly Coincidental Demand under the partial interruptible control option will be the lesser of the member's actual hourly demand (subject to power factor adjustment) that is coincident with the wholesale power supplier (i.e. average of the four fifteen minute demand readings for the hour ending of the wholesale billing peak) or the Predetermined Demand Level.
During a month with a control period, the monthly Coincidental Demand under the partial interruptible control option will be the member's actual hourly demand (subject to power factor adjustment) that is coincident with the wholesale power supplier (i.e. average of the four fifteen minute demand readings for the hour ending of the wholesale billing peak).
The partial interruptible PDL will be adjusted to any higher actual demand of the member occurring during a curtailable event for the remainder of the calendar year. In the case of members using on-site generation, the PDL may be adjusted to reflect the rated capacity of such generation that was not operational during the control period. Only one such adjustment per year will be allowed.


## Non-Coincidental Demand

The Non-Coincidental Demand shall be the maximum kilowatt demand (subject to power factor adjustment) established by the member for any period of 15 consecutive minutes during the month for which the bill is rendered, as indicated or recorded by a demand meter.

## Excess Demand Charge

The Excess Demand Charge will be applied to the Coincidental Demand that exceeds the Predetermined Demand Level (PDL) for a member using the partial interruptible control option when the member does not reduce demand to the PDL during a control period. The Excess Demand Charge is applied per month.

## Minimum Billing Demand

The Minimum Billing Demand for any billing period shall be no less than 50 percent of the highest noncoincidental demand during the preceding 11 months.

## Power Factor Adjustment

The member agrees to maintain as near unity power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent; the demand for billing purposes shall be the demand as recorded by the demand meter multiplied by 90 percent and divided by the percent power factor.

## Primary Voltage Service

A discount of $\$ 0.15$ per kW of billing demand will be applied to the bill when service is taken by the member at the available primary voltage. If primary metering is used, an additional discount of 2.0 percent shall be applied to the bill. The 2.0 percent discount shall be applied after the $\$ 0.15$ per kW discount.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in wholesale power costs, Dakota Electric's conservation tracker account balance, and real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The energy cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour applicable to this service exceeds, or is less than $\$ 0.0521$ per kilowatt-hour sold as described in the Energy Cost Adjustment Rider (ECA) (Sheet 52). The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

Taxes
The rates set forth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 80 <br> CYCLED AIR CONDITIONING SERVICE

## Availability

Available to members taking service concurrently under another rate schedule. This rate is for interruptible service to central air conditioners which are remotely controlled by the Association. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages. Service under this schedule will be available at all times except when interrupted by the Association during times of peak system demand or system emergencies.

## Monthly Rate

Option No. 1 - Available to members who also take service under Schedules 51 and 52 where an existing meter and control unit may be utilized for the controlled air conditioning load.

Energy Charge per applicable Schedule 51 or 52
Option No. 2 - Available to members where a new meter and control unit must be installed to control the air conditioning load.

Energy Charge Credit @ $\$ 0.0320$ per kWh
Option No. 3-Available to members where a control unit must be installed to control the air conditioning load.

A credit will be applied to the first $\$ 13.00$ of the member's net energy consumption charges in the months of June, July, and August (prorated based on the number of qualifying calendar days in the billing month). In no case will the credit exceed the sum of the monthly Energy Charge and Resource and Tax Adjustment.

Option No. 4 - Available to non-residential members where a new meter and control unit must be installed but where it is not feasible or designed to meter the air conditioning load separately. The maximum capacity of any individual air conditioning compressor is 7.5 tons. A $\$ 6.50$ per ton per month credit will be applied to member's bill in the months of June, July, and August. The aggregate monthly credit per account will not exceed $1 / 3$ of the net charges for energy and demand in each month.

## Plus Applicable Taxes

## Taxes

The rates set forth are based on taxes as of January 1, 2019. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.
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## SPECIAL FEES OR CHARGES

1. Meter Test at Member's RequestSingle Phase$\$ 95.00$
Three Phase .....  $\$ 110.00$
2. Bad Check ..... $\$ 11.50$
3. Reconnection Charge (after disconnect, same consumer)
a. Self-contained Metering (one person, one vehicle)
1) Working hours .....  $\$ 55.00$
2) Outside normal working hours. ..... \$145.00
b. Current Transformer-rated Metering (two-person crew, one truck)
3) Working hours .....  $\$ 185.00$
4) Outside normal working hours. .....  $\$ 340.00$
4. Service Charge
(outside normal working hours when problem is not with Association's equipment) Two-person crew, one truck. ..... $\$ 340.00$
5. Load Management Service Charge
(when problem is not with Association's equipment)
1) Working hours ..... $\$ 80.00$
2) Outside normal working hours .....  $\$ 160.00$
6. Pulse Meter (materials and installation) .....  7750.00
7. Transfer/Connection Charge .....  $\$ 17.50$
8. Member Contracted Hourly Work
Dakota Electric is periodically asked to perform on-site service work. Such services will be provided at a pre-arranged hourly rate.
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## MEMBER SERVICE INFORMATION EXTENSION OF SERVICE

## General Policies Applicable to All Extensions of Service

1. It shall be the policy of Dakota Electric Association (DEA) to provide and extend electric service to any member within its service area in accordance with the rate schedules and policies established by the Association.
2. Dakota Electric Association requires that, on overhead services, the member or developer provide all necessary tree clearing of the power line route outside the public right-of-way. Clearing includes any removal of debris as a result of tree cutting as may be required. The normal width of the right-of-way corridor to be cleared is 30 feet with no less than 10 feet of clearance to any open or bare wire.

Dakota Electric Association will provide all necessary tree trimming on new overhead service extensions within the public right-of-way.

It is the goal of Dakota Electric Association to cooperate with the member to save as many trees as possible without jeopardizing the power line operation.
3. The member shall pay the cost of any subsequent relocation or rearrangement of any portion of the Association's system made to accommodate his/her needs or to accommodate alterations in grade.
4. Equipment, such as motors and generators that are operated interconnected with the Association, shall not cause objectionable voltage flicker on the distribution system and for other Association members. The member shall apply starters/controllers to the motors, as required, to limit the starting currents to levels acceptable to the Association. For generation, the member shall design and operate the generation system and the load transfer to and from the generation system so as not to cause objectionable voltage flicker.
5. Meters on all new installations shall meet the requirements of the Association's Technical Standards for Metering which are consistent with industry practices.
6. All member wiring must meet the requirements of the National Electric Code, National Electric Safety Code, State and local jurisdictions.

## Continuity of Service

Dakota Electric Association will endeavor to provide continuous service but does not guarantee an uninterrupted or undisturbed supply of electric service. The Cooperative will not be responsible for any loss or damage resulting from the interruption or disturbance of service for any cause other than gross negligence of the Cooperative. The Cooperative reserves the right, without previously notifying the member, to temporarily interrupt service for construction, inspection, repairs, emergency operations, shortages in power supply, safety, and State or National emergencies. The Cooperative will not be liable in any event for any loss of profits or other consequential damages resulting from the use of service or any interruption or disturbance of service.
$\qquad$ _20

# MEMBER SERVICE INFORMATION EXTENSION OF SERVICE CONTINUED 

## Individual Residential Extensions

1. Dakota Electric Association will serve a year-round, principle residence of an individual residential member with overhead or underground single-phase electric service at the rates and minimum charges established in applicable rate schedules. In order to ensure that the cost of the new facilities will not cause an undue burden on other members, the member will be assessed a contribution in aid of construction. The member will be charged a flat fee of $\$ 1,000.00$ plus $\$ 11.00$ per foot of line extension. The member will be assessed additional charges if above normal costs are incurred by DEA to accommodate member installation preferences or the member requests a nonstandard installation. In no event will the member be charged more than the actual costs for the extension.
2. Dakota Electric Association will furnish the overhead service triplex wire between the overhead system and the member-owned service mast. If a member desires underground service, DEA will install underground primary or secondary wire between the right-of-way and a point of connection located no closer than fifty (50) feet from the building, measured from the closest point of the building to the existing DEA facilities. The consumer will be charged the line extension costs outlined in paragraph one (1) of this section.
3. The member must install and own the underground secondary wire run between the point of connection and the meter. Dakota Electric Association will make the connection required at the point of connection.
4. For underground service, the member shall provide a right-of-way strip that is within four (4) inches, plus or minus, of the finished grade, free from obstructions and completely accessible to the Cooperative's equipment.
5. The member will be required to obtain and/or grant easements to the Cooperative for any portion of the extension that is outside a public right-of-way or easement, at no cost to the Cooperative. The Cooperative will prepare the necessary easement documents and will be reimbursed by the member for costs incurred for property title search, surveying, and recording fees.
6. The member will pay any additional installation costs incurred by the Cooperative because of:
a. delays caused by member:
b. installation of underground facilities after the ground is frozen;
c. surface and subsurface conditions that impede the installation of underground facilities, such as rock formations;
d. paving of streets, alleys or other areas prior to the installation of the underground facility;
e. above-average permit costs; or
f. DNR crossing fees.
7. The member will also be responsible for costs incurred for any relocation or rearrangement of any portion of the system made to accommodate the member after construction is underway or complete. The normal service capacity provided for overhead service will be 10 KVA per residential member and 15 KVA for underground service. Residential members requesting greater transformer capacity will be considered on an individual basis to determine if anticipated revenue justifies the additional expenditure without any further contribution in aid of construction.
$\qquad$

## MEMBER SERVICE INFORMATION EXTENSION OF SERVICE CONTINUED

## Commercial and Industrial Members, Apartment Facilities, and Seasonal Accounts

1. Dakota Electric Association will provide single-phase or three-phase electric service to commercial (including commercial developments) and industrial members and multi-tenant residential facilities in accordance with established applicable rates and charges when the anticipated revenue justifies the expenditure. Dakota Electric Association will install, own, and maintain the primary service to a point of connection designated as either a single-phase or threephase transformer. An economic analysis will be made for any service that involves abnormally high investments, and/or those with low anticipated revenue. A contribution in the aid of construction will be required if the estimated investment is not justified by the anticipated revenue, calculated as follows for service provided under the applicable rate schedule:

|  | $\underline{\text { Sched. 31 }}$ | Sched. 41 <br> Factor | Sched. 46 <br> Factors | Sched. 70/71 <br> Factors |
| :--- | :--- | :--- | :--- | :--- | :--- |
| -Estimated Extension Costs <br> Annual Sum of Monthly Non-Coincident Billing <br> Demand (kW) times applicable rate schedule factor | NA | NA | $\$ 10.09$ | $\$ 10.61$ |
| $-\quad$Annual Sum of Monthly billed energy (kWh) <br> times applicable rate schedule factor | NA | $\$ 0.15958$ | $\$ 0.03157$ | $\$ .02529$ |
| $-\quad$Credit per Residential Unit times number of <br> residential units in the complex | $\$ 1,282$ | NA | NA | NA |
| $=\quad$Required Contribution in Aid of Construction |  |  |  |  |

When underground service is requested, the member shall provide a right-of-way strip that is within four (4) inches, plus or minus, of the finished grade. The right-of-way must be free from obstructions and completely accessible to the Association's equipment.

The member shall furnish the pad for the padmounted transformer on underground systems in accordance with specifications provided by Dakota Electric Association.

The member will pay any additional installation costs incurred by the Association because of:

1. delays caused by member;
2. installation of underground facilities after ground is frozen;
3. soil conditions that impair the installation of underground facilities, such as rock formations;
4. paving of streets, alleys or other areas prior to the installation of the underground facility;
5. above-average permit costs; or
6. DNR crossing fees.

There may be situations where the member shall be required to install sections of conduit, such as underground entrance to a pad, which shall be at no cost to the Association.


## DAKOTA ELECTRIC ASSOCIATION

$4300220^{\text {th }}$ Street West<br>Farmington, MN 55024<br>(651) 463-6212

GREG MILLER. PRESIDENT/CEO
MIKE FOSSE VICE PRESIDENT ENERGY \& MEMBER SERVICESLOU ANN WEFLENCOREY HINTZ. . . . . . . . . . . VICE PRESIDENT FINANCIAL-\& INFORMATIONSERVICES / CFORANDY POULSONBETTY JO KIESOWVICE PRESIDENTENGINEERING SERVICES
DIRK ROTTYJEFF SCHOENECKER VICE PRESIDENTUTILITY SERVICESMJYKE NELSON.VICE PRESIDENT INFORMATION SERVICES / CIO
DOUG LARSON ..... VICE PRESIDENT REGULATORY SERVICES

For an emergency, after office hours, call 651-463-6201 or 1-800-430-9722.

## DAKOTA ELECTRIC ASSOCIATION <br> ELECTRIC RATE BOOK

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## SCHEDULE 31 <br> RESIDENTIAL AND FARM SERVICE

Availability
Available to individual residential and farm members for all domestic and farm use except irrigation.
This includes service to individually metered apartment units and master-metered multi-tenant residential facilities. Service is subject to the established rules and regulations of the Association.

Type of Service
Single phase or three phase, when economically feasible, 60 hertz, at available secondary voltages.
Monthly Rate

| Fixed Charge |  | \$109.00 per month |
| :---: | :---: | :---: |
| Energy Charge |  |  |
| Summer (June-Aug) | @ | \$0.137908 per kWh |
| Other | @ | \$0.1239168 per kWh |
| Plus Applicable Taxes |  |  |

## Minimum Monthly Charge

The minimum monthly charge under the above rate shall be the Fixed Charge.
Resource and Tax Adjustment (RTA)
The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903-0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Billing for Master-Metered Multi-Tenant Residential Facilities

The monthly bill for master-metered multi-tenant residential facilities will be determined by multiplying the number of residential living units per master meter times the Fixed Charge and include the metered energy consumption times the applicable energy charge plus the Resource and Tax Adjustment.

Taxes
The rates set forth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 32

RESIDENTIAL AND FARM DEMAND CONTROL RATE

## Availability

Available to residential and farm members with at least 5 kW of qualifying off-peak loads as determined by the Association. This rate is subject to the rules and regulations of the Association. Members requesting service under this rate schedule must remain on this rate schedule for a minimum of twelve (12) months.

Type of Service
Single phase, 60 Hertz, at available secondary voltages.

## Monthly Rate

Fixed Charge
Energy Charge
Demand Charge
Summer (June-Aug)
Other
Plus Applicable Taxes

```
    $132.00 per month
    $0.081760 per kWh
@ $15.504.70 per kW
@ $11.9010 per kW
```


## Billing Demand Determination

The demand will be determined based on the peak 15-minute demand reading during control periods for the month the bill was rendered. An estimated demand will be used for new customers until the actual controlled demand is established.

## Minimum Monthly Charge

The minimum monthly charge under the above rate shall be the $\$ 12.00$ Fixed Charge plus a minimum billing demand of 3 kW .

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be increased or decreased by $\$ 0.0001$ per kilowatt-hour for each 0.1 mill or major fraction by which the energy component in the Association's purchased power cost per kilowatt-hour purchased from its power supplier exceeds, or is less than $\$ 0.09030939$ per kilowatt-hour purchased. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set fourth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

# SCHEDULE EV-1 PHOT -RESIDENTIAL ELECTRIC VEHICLE SERVICE 

## Availability

Available on voluntary basis as a pilot program for residential consumers taking service under Schedule 31 who also desire metered service for the sole purpose of electrically charging a licensed automobile or light truck. Service on this tariff is limited to electric vehicles that are SAE J1772 compliant and registered and operable on public highways in the State of Minnesota. Low-speed electric vehicles, including golf carts, are ineligible to take service under this tariff even if licensed to operate on public streets. The consumer may be required to provide the Association with proof of registration of the electric vehicle prior to taking service under this tariff. Service is subject to the established rules and regulations of the Association.

## Term

The pilot program will be offered for a minimum of a two year period. At the end of the initial two year pilot period, the Association will determine if this program will be contintled, modified, or eliminated. If it is eliminated, the consumers participating in the pilot program will revert back to the appropriate retail rate tariff for their class of service.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages.

## Rate

Energy Charges:
Off-Peak: $\quad 6.74 £ \$ 0.0756$ per kWh
On-Peak: $\quad 41.44 £ \$ 0.4421$ per kWh
Other: $\quad$ Schedule 31 energy charges apply
Plus RTA and applicable sales tax
Definition of Periods
Energy Charge time periods are defined as follows:
Off-Peak 9:00 pm to 8:00 am Mon. - Fri., and all day Weekends and Holidays
On-Peak $\quad$ 4:00 pm to 9:00 pm Mon. - Fri., excluding Holidays
Other $\quad$ 8:00 am to 4:00 pm Mon. - Fri., excluding Holidays
Holidays shall be: New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

# SCHEDULE EV-1 <br> PHOT -RESIDENTIAL ELECTRIC VEHICLE SERVICE <br> CONTINUED 

## Metering

Electric service under this rate must be supplied through a sub-metered circuit (installed at the consumer's expense) and approved electric vehicle charging equipment. Installations must conform to the Association's specifications. The consumer shall supply, at no expense to Dakota Electric, a suitable location for meters and associated equipment used for billing and for load research. For purposes of monitoring consumer load under this pilot program, the Association may install load research metering at its expense.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903-0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Data Privacy

Participation in any load research effort as part of this schedule will be strictly voluntary. The Cooperative's use of such load research data will be strictly limited to the provision of electric service. The Cooperative will not disclose, share, rent, lease, or sell such data to any third party or affiliate for any other purpose, without the consumer's express, affirmative written informed consent.

## Taxes

The rates set fourth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 36

IRRIGATION SERVICE

## Availability

Available to any member for service to irrigation pumps. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages.

## Monthly Rate

Firm Service

Fixed Charge
Demand Charge
Summer (June-Aug)
Winter (Dec-Feb)
Other
Energy Charge
Plus Applicable Taxes
Interruptible

| Fixed Charge |  | $\$ 30.00$ per month |
| :--- | :--- | :--- |
| Demand Charge | $@$ | $\$ 4.55$ per kW |
| Energy Charge | $@$ | $\$ 0.0521499$ per kWh |
| Plus Applicable Taxes |  |  |

$\$ 0.0521499$ per kWh
$\$ 30.00$ per month
$\$ 26.6035$ per kW
@ $\quad \$ 21.200 .95$ per kW
@ $\quad \$ 15.6750$ per kW
@ $\quad \$ 0.0521499$ per kWh
@ $\quad \$ 26.6035$ per kW

## Determination of Metered Demand

The Metered Demand in kilowatts shall be the greatest 15 -minute demand (subject to power factor adjustment) during the month for which the bill is rendered. Demand will be read to the nearest 0.01 kilowatt.

## Power Factor Adjustment

The member agrees to maintain as near unity (100 percent) power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent, the demand for billing purposes shall be the demand as recorded by the demand meter multiplied by 90 percent and divided by the percent power factor.

Minimum Monthly Charge
The Minimum Monthly Charge under the above rate shall be the Fixed Charge.

## SCHEDULE 36

IRRIGATION SERVICE
(Continued)

## Interruptible Requirements

Members that switch from Interruptible to Firm service during the calendar year will be billed the Firm service rate during the month the change was made. The member must remain on the Firm service rate for the remainder of the calendar year. This includes members that intentionally bypass the load control equipment.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor applicable to firm irrigation shall be adjusted by $\$ 0.0001$ per kilowatt-hour, or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903-0939$ per kilowatt-hour sold. The energy cost factor shall be adjusted by $\$ 0.0001$ per kWh , or major fraction thereof, of which the Association's total projected power cost per kWh applicable to interruptible irrigation exceeds, or is less than, $\$ 0.0497 \underline{0521}$ per kWh sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

Terms of Payment
The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

DAKOTA ELECTRIC ASSOCIATION
$4300220^{\text {th }}$ Street West
Farmington, MN 55024

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## SCHEDULE 41 <br> SMALL GENERAL SERVICE

## Availability

Available to any commercial member for all uses, except irrigation pumps, where the Metered Demand is 15 kW or less. If the Metered Demand exceeds 15 kW for three consecutive months, the member will be transferred to the General Service Rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages.
Monthly Rate

| Fixed Charge | $\$ 154.00$ per month |  |
| :--- | :--- | :--- |
| Energy Charge |  |  |
| $\quad$ Summer (June-Aug) | @ $\$ 0.1 \underline{375} 269$ per kWh |  |
| $\quad$ Other | @ | $\$ 0.1 \underline{235} 129$ per kWh |

Plus Applicable Taxes
Determination of Metered Demand
The Metered Demand in kilowatts shall be the greatest 15 -minute demand during the month for which the bill is rendered. Demand will be read to the nearest 0.01 kilowatt.

## Minimum Monthly Charge

The Minimum Monthly Charge under the above rate shall be the Fixed Charge.

## Non-metered Option

This option has limited availability. It may be available for: devices that are located at individual points of delivery and are operated with a continuous or predetermined load level that exceeds the threshold determined for Schedule 45. The monthly energy consumption will be determined by the Association based on equipment documentation provided by the member. The maximum monthly energy allowed under this option will be 500 kWh .

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903-0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 44

## SECURITY LIGHTING SERVICE

## Availability

Available for year-around illumination for private residential, farm, or commercial lighting on existing Association service poles where service poles and service wires can be connected on the line side of member's meter. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

The Association shall own, operate, and maintain the security lighting system using the Association's standard security lighting equipment. The energy used by these lights is unmetered.

## Monthly Rate

Designation of Lamp
Monthly Rate Per Luminaire
100 Watt High Pressure Sodium (Closed to new)
\$12.010.10
150 Watt High Pressure Sodium (Closed to new)
\$14.261.99
250 Watt High Pressure Sodium (Closed to new)
\$18.835.79
Plus Applicable Taxes
Optional - For residential or farm installation requiring any extra equipment, or in the event the consumer requests the changeout of an existing light to a different size and/or type, a contribution to construction will be required to cover the extra costs incurred. Commercial installations on existing service poles only.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903-0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

# SCHEDULE 44-1 <br> STREET LIGHTING SERVICE <br> (MEMBER - OWNED) 

## Availability

Available for year-round illumination of public streets, parkways, highways, and other public ways by electric lamps mounted on standards where member owns the lighting system complete with standards, luminaries, globes, lamps, and other appurtenances, together will all necessary cables extending between standards and to point of connection to the Association's facilities as designated by the Association.

## Type of Service

The street lighting system shall be built and owned by the member. All controls will be provided by the member. The member shall also provide all easements and right-of-way to permit access to feed points. The Association shall operate and provide limited maintenance (periodic cleaning of lens, refractor, and bulb replacement) on street lighting systems.

## Monthly Rate

Designation of Lamp<br>175 Watt Mercury (Closed to new)<br>250 Watt Mercury (Closed to new)<br>400 Watt Mercury (Closed to new)<br>100 Watt High Pressure Sodium<br>150 Watt High Pressure Sodium<br>200 Watt High Pressure Sodium<br>250 Watt High Pressure Sodium<br>400 Watt High Pressure Sodium<br>Plus Applicable Taxes

Monthly Rate Per Luminaire
\$13.250.52
\$16.743.46
$\$ \underline{22.7118 .54}$
$\$ 9.617 .56$
$\$ 11.789 .46$
\$14.181.44
\$16.353.25
$\$ 21.2417 .67$

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## SCHEDULE 44-1

STREET LIGHTING SERVICE (MEMBER-OWNED) (Continued)

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903-0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 44-2

STREET LIGHTING SERVICE
(DEA - OWNED EQUIPMENT)

## Availability

Available for governmental or private year-around illumination of public or private streets, parkways, highways, and other public ways by electric lamps in luminaires supported on existing poles where secondary voltage is available and the facilities for this service are furnished by the Association.

Type of Service
The Association shall own, operate, and maintain the overhead street lighting system using the Association's standard street lighting equipment. The energy used by these lights is unmetered.

## Monthly Rate

Designation of Lamp
175 Watt Mercury (Closed to new)
Monthly Rate Per Luminaire
$\$ 1 \underline{7.445 .23}$
$\$ \underline{0.93} 18.16$
$\$ 2 \underline{6.89} 3.25$
400 Watt Mercury (Closed to new)
100 Watt High Pressure Sodium (Closed to new)
$\$ 13.802 .27$
150 Watt High Pressure Sodium (Closed to new)
$\$ 15.974 .16$
250 Watt High Pressure Sodium (Closed to new)
\$20.5417.95
400 Watt High Pressure Sodium (Closed to new) \$25.422.38 Plus Applicable Taxes

The above rates cover only an installation where the pole with secondary voltage is existing at the light location. Contributions to construction costs will be required if additional equipment is needed or if a member requests a change to a different lamp size and/or type when costs exceed $\$ 500$.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903-0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## SCHEDULE 44-2

STREET LIGHTING SERVICE
(DEA - OWNED EQUIPMENT)
(Continued)

## Taxes

The rates set forth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent of $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 44-3

## CUSTOM RESIDENTIAL STREET LIGHTING (DEA-OWNED - CONTRIBUTION BY MEMBER)

## Availability

Available for year-round illumination of public streets, parkways, highways, and other public ways by electric lamps mounted on standards and served through underground circuits, where the facilities for this service are furnished by the Association. Street lighting service under this schedule is limited to residential areas having an underground distribution area.

## Type of Service

The Association shall own, operate, and maintain the lighting system using the Association's standard street lighting equipment which includes one lamp per standard. Member shall be required to contribute an amount equal to the installation cost of the lighting system. The energy used by these lights is unmetered.

## Monthly Rate

Designation of Lamp
175 Watt Mercury (Closed to new)
50 Watt High Pressure Sodium (Closed to new)
100 Watt High Pressure Sodium (Closed to new)
150 Watt High Pressure Sodium (Closed to new)
250 Watt High Pressure Sodium (Closed to new) Plus Applicable Taxes

Monthly Rate Per Luminaire
\$14.031.37
$\$ 8.456 .70$
$\$ 10.398 .41$
\$12.630.30
\$17.214.09

Optional - For installations requiring any extra equipment or in the event the member requests the changeout of an existing light to be a different size and/or type, the member will be required to pay all construction fees or extra charges incurred.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903-0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent of $\$ 1.00$, whichever is greater, added to the balance.

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## SCHEDULE 44-4 <br> LED SECURITY LIGHTING <br> SERVICE

## Availability

Available for year-around illumination for private residential, farm, or commercial lighting by Light Emitting Diode (LED) electric lamps on existing Association service poles where service poles and service wires can be connected on the utility side of the meter. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

The Association shall own, operate, and maintain the LED security lighting system using the Association's standard LED security lighting equipment. Fixtures on this rate will only be attached to an existing DEA service pole. The energy used by these lights is unmetered.
Monthly Rate

## Light Emitting Diode Security Light (LED, > 4,500 lumens) <br> $\$ 7.7563$ per month Plus Applicable Taxes

Optional - For installations requiring any extra equipment (excluding poles), a contribution to construction will be required to cover the extra costs incurred. In the event the member requests the change out of an existing light, the member will be required to pay all construction fees and material costs for the new installation or upgrade as well as payment for the undepreciated cost of the existing light, less any salvage value.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903-0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

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SCHEDULE 44-5
LED STREET LIGHTING
(MEMBER-OWNED)

## Availability

Available for year-round illumination of public streets, parkways, highways, and other public ways by Light Emitting Diode (LED) electric lamps served through underground or overhead circuits, where the facilities for this service are furnished and owned by the Member. Service is subject to the established rules and regulations of the Association.

## Type of Service

The member shall own, operate, and maintain the LED lighting system.
The preferred service option is metered LED lighting. Such service will be billed to the Member under the rate schedule associated with the meter.

Unmetered service will be allowed if the Association determines it is not practical for the lights to be metered. For such unmetered use:

1. Billing will be according to specified consumption groups. Dakota Electric will determine if a member qualifies for the unmetered rate and which consumption group.
2. The Member will be required to provide Dakota Electric with a notice prior to any change in equipment.
3. No other use is allowed from the fixture. (e.g. Wi-Fi attachments, holiday lights, etc.)
4. The Association will periodically inspect the unmetered fixtures to ensure compliance with requirements.
5. The Member must provide proof of lighting system rating. (i.e. data sheet or model number)

No maintenance will be included in the monthly rate from the Association for any member-owned LED street light. At the request of a Member, Dakota Electric may enter into individual contracts with a Member for the type and frequency of maintenance they may desire from the Association.

## Monthly Rate

Metered Service:
According to applicable rate schedule
Unmetered Service:
Consumption Group
A ( 40 to 80 watts)
B (81 to 150 watts)
C (151 to 250 watts)
D (251 to 350 watts)
E (351 to 450 watts)
Monthly Rate per Fixture
$\$ 5.504 .81$
$\$ \underline{7.756 .71}$
$\$ \underline{11.169 .66}$
$\$ 15.043 .05$
$\$ 1 \underline{9.076 .52}$

Plus Applicable Taxes
The range of watt ratings for the Unmetered Consumption Groups will be adjusted periodically to reflect the predominant size of lights receiving such Unmetered Service.

# SCHEDULE 44-5 <br> LED STREET LIGHTING (MEMBER-OWNED) <br> (Continued) 

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903-0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent of $\$ 1.00$, whichever is greater, added to the balance.

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## SCHEDULE 44-6 <br> LED STREET LIGHTING <br> (DEA-OWNED - CONTRIBUTION BY MEMBER)

## Availability

Available for year-round illumination of public streets, parkways, highways, and other public ways by Light Emitting Diode (LED) electric lamps served through underground or overhead circuits, where the facilities for this service are furnished by the Association. Conversion of existing lighting to LED lighting may be limited to accommodate workload scheduling. Street lighting service under this schedule is limited to designated LED lighting fixtures offered by the Association in its distribution area. Service is subject to the established rules and regulations of the Association.

## Type of Service

The Association shall own, operate, and maintain the LED lighting system using the Association's standard street lighting equipment which includes one fixture per pole. Member shall be required to contribute an amount equal to the initial installation or upgrade cost of the lighting system. The energy used by these lights is unmetered.

## Monthly Rate

|  | Monthly Rate per Fixture |  |
| :--- | :--- | :--- |
| Designation of Fixture | $\underline{\text { Standard }}$ | $\underline{\text { Basic }}$ |
| Light Emitting Diode (LED, > 5,200 lumens) Coach Light (Post) | $\$ \underline{9.3010 .60}$ | $\$ 6.3683$ |
| Light Emitting Diode (LED, > 5,200 lumens) Acorn Light (Post) | $\$ 1 \underline{0.851 .24}$ | $\$ 6 . \underline{1230}$ |
| Light Emitting Diode (LED, > 7,000 lumens) Cobra Light (Mast) | $\$ 8.6031$ | $\$ 6.9851$ |
| Light Emitting Diode (LED, > 11,500 lumens) Shoebox Light (Mast) | $\$ 10.7 \underline{01}$ | $\$ \underline{8.687 .98}$ |
| Plus Applicable Taxes |  |  |

The Coach and Acorn fixtures will be mounted on a street light post. The Cobra and Shoebox fixtures will be fastened to a mast arm on existing service poles. In the event the member requests the change out of an existing light, the member will be required to pay all construction fees and material costs for the new installation or upgrade as well as payment for the undepreciated cost of the existing light, less any salvage value.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903-0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

SCHEDULE 44-6<br>LED STREET LIGHTING<br>(DEA-OWNED - CONTRIBUTION BY MEMBER)<br>(Continued)

## Service Included in Rate

For Standard Service, Dakota Electric will furnish all electric energy necessary to operate the street lighting system, will make all lamp and glassware renewals, clean the glassware, make all ballast and starter renewals, repair all damaged equipment, and furnish all the materials and labor necessary for these services.

For Basic Service, Dakota Electric will furnish all electric energy necessary to operate the street lighting system, clean the glassware, and repair all damaged equipment. The Member will be responsible for material and labor costs to replace failed components and fixtures not covered by manufacturers warranties. Selection of Basic Service is a "life of fixture" designation.

## Taxes

The rates set forth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent of $\$ 1.00$, whichever is greater, added to the balance.

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SCHEDULE 45
LOW WATTAGE UNMETERED SERVICE

## Availability

This rate is available for low-wattage electronic devices that are: 1) Individually located at each point of delivery, 2) Rated at less than 150 watts, and 3) A determinable load level. Each individual electronic device must not in any way interfere with Association operations and service to adjacent members. This rate is also available to equipment connected to the supply side of the service disconnect such as fire and sprinkler alarms, and emergency lighting systems, if such equipment is used only during times of emergency. This will require verification from a licensed electrical contractor/electrician in the form of an affidavit.

This Low Wattage Unmetered Service is not applicable to electric service for traffic signals, civil defense, or lighting. Association reserves the right to evaluate member requests for this service to determine eligibility.

## Type of Service

Either single phase or three phase, depending on feasibility, 60 hertz, at available secondary voltages.

## Installation Charges

The member shall pay the total estimated installation charges involved to provide service.

## Monthly Rate

$\$ 10.5000$ per month per service location, plus applicable sales tax.

## Taxes

The rates set forth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance

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## Availability

Available to any eommereial-non-residential member for all general service uses except irrigation. Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

Type of Service
Single phase or three phase, 60 hertz, at available secondary voltages.

## Monthly Rate

Fixed Charge
Demand Charge
Summer (June-Aug)
Other (Sept - May)
Energy Charge
First 200 kWh per kW
Next 200 kWh per kW
Over 400 kWh per kW
Plus Applicable Taxes
$\$ 34.00$
@ $\quad \$ 13.702 .26$ per kW
@ $\quad \$ 10.609 .16$ per kW
@ $\quad \$ 0.0776$ per kWh
@ $\quad \$ 0.0676$ per kWh
@ $\quad \$ 0.0576$ per kWh

Determination of Metered-Demand
The Metered Demand in kilowatts shall be the greatest 15-minute demand (subject to power factor adjustment) during the month for which the bill is rendered. Demand will be read to the nearest 0.01 kilowatt. In no month shall the Billing Demand be greater than the value in kW determined by dividing the kWh sales for the billing month by the product of 24 hours x 0.1 load factor x days in the billing month.

## Determination of Energy Charge

The energy ( kWh ) billed in each rate block is determined in relation to the monthly demand ( kW ). The energy in the first block includes the first 200 kWh multiplied by the monthly metered demand. The second block includes the next 200 kWh multiplied by the monthly metered demand. All energy in excess of 400 kWh multiplied by the monthly metered demand is billed under the third block.

## Power Factor Adjustment

The member agrees to maintain as near unity (100 percent) power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent, the demand for billing purposes shall be the demand as recorded by the demand meter multiplied by 90 percent and divided by the percent power factor.

## Minimum Monthly Charge

The Minimum Monthly Charge under the above rate shall be the Fixed Charge plus $\$ 1.00$ per kW of the highest billing demand during the preceding 11 months.

## Primary Voltage Service

A discount of $\$ 0.15 / \mathrm{kW}$ of Billing Demand will be applied to the bill when service is taken by the member at the available primary voltage. If primary metering is used, an additional discount of 2.0 percent shall be applied to the bill. The 2.0 percent discount shall be applied after the $\$ 0.15 / \mathrm{kW}$ discount.

## SCHEDULE 46

GENERAL SERVICE
(Continued)

Billing for Multi-Use Facilities
Multi-use facilities are defined as buildings or complexes that include a combination of commercial or institutional load along with some portion of residential domestic consumption. (For combined billing, commercial use does not include consumption in common areas of multitenant residential facilities.) Where service and metering are separated between residential and commercial consumption, such electrical service will be billed under the terms of Schedule 31, Schedule 41, and Schedules 46 or 54 as applicable. Where such service is combined, such electrical service will be billed under the terms of Schedules 46 or 54 as applicable.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903-0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SEASONAL MEMBER RIDER

## Availability

Available to members receiving service under rate schedules $46,54,70$ or 71 and determined by the Association to be seasonal. Seasonal members qualifying for the Seasonal Member Rider are defined as businesses (service or production) that are closed or shut down for at least three consecutive months during the year. Service is subject to the established rules and regulations of the Association.

## Rider

If an account is determined to be seasonal in nature by the Association, the minimum monthly charge shall be the fixed charge for each month of the 12 month period. Minimum monthly demand provisions will not be applied. Members who elect to be disconnected during a portion of the year and then reconnected will be charged adiseonnect and-a reconnect fee as well as the monthly fixed charge for all 12 months.

## SCHEDULE 47

MUNICIPAL CIVIL DEFENSE SIRENS

## Availability

This rate will be available to governmental bodies for civil defense siren services where energy consumption is negligible.

Type of Service
Either single phase or three phase, depending on feasibility, 60 hertz, at available secondary voltages.

## Installation Charges

The member shall pay the total estimated installation charges involved to provide service when additional transformers are required. No initial charge will be made to run an overhead service wire from an existing transformer or for making connections to an existing underground feedpoint.

## Monthly Rate

\$5.00/Month per Installation
Plus Applicable Taxes

## Taxes

The rates set forth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 49 <br> GEOTHERMAL HEAT PUMP RIDER <br> (Closed to new consumers.)

## Availability

Available to any commercial member for energy used by a geothermal heat pump system.
Members requesting service under this rate schedule must be taking service concurrently under Rate Schedule 41 or 46 . Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available primary or secondary voltages.

## Rate

Energy Charge
$\$ 0.1030940$ per kWh
Plus applicable taxes

## Metering

The geothermal heat pump system must be separately, parallel metered from all other loads at the premise. Service will not be sub-metered.

## Power Factor

The member agrees to maintain as near unity (100 percent) power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent, the energy for billing purposes shall be adjusted accordingly.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kWh , or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour for this service annually exceeds, or is less than, $\$ 0.0775-0813 \mathrm{per} \mathrm{kWh}$ sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted as necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

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## SCHEDULE 49

GEOTHERMAL HEAT PUMP RIDER
(Continued)

## Conditions of Service

If service is furnished at secondary voltage, the delivery point shall be the metering point unless otherwise specified in the contract for service. All wiring, poles, lines and other electric equipment on the load side of the delivery point shall be owned and maintained by the member.

If service is furnished at the Cooperative's primary line voltage, the delivery point shall be the point of attachment of the cooperative's primary line to member's transformer structure unless otherwise specified in the contract for service. All wiring, poles, lines and other electric equipment (except metering equipment) on the low side of the delivery point shall be owned and maintained by the member.

## Taxes

The rates set forth are based on taxes as of January 1, 20124. The amount of any increase in existing or new taxes on the transmission, distribution or sales of electricity are allocable to sales here under, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.
$\qquad$

## SCHEDULE 51

CONTROLLED ENERGY STORAGE

## Availability

Available to members taking service concurrently under rate schedules 31,41 and 46. This rate is for interruptible service to energy storage loads which are remotely controlled by the Association. Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages. Service under this schedule will be available for approximately eight hours per day, normally 11:00 p.m. to 7:00 a.m., or as established by the Association.

## Monthly Rate

Energy Charge @ $\$ 0.04 \underline{8740}$ per kWh
Plus Applicable Taxes.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53 ). The energy cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected weighted average power cost per kilowatt-hour for this service exceeds, or is less than $\$ 0.0200-0204$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Demand

The metered demand of loads on this rate will be subtracted from the metered demand for members receiving service under Schedule 41 and 46 when the storage load is coincident with the member's other loads. When feasible, new controlled energy storage loads should be on a separate service from Schedule 41 and 46 load.

## Taxes

The rates set fourth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

Availability
Available to member taking service concurrently under rate schedules 31, 41 and 46. This rate is for interruptible service to qualifying loads which are remotely controlled by the Association. Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages. Service under this schedule will be available at all times except when interrupted by the Association during times of peak system demand or system emergencies.

## Monthly Rate

Energy Charge
Plus Applicable Taxes.

## Alternate Monthly Rate for Controlled Water Heaters

Where separate metering of controlled water heaters is not possible or for members on Rate 53, a direct credit of $\$ 1.50$ per 100 kWh used up to a maximum of $\$ 6.00$ per month will be applied against the monthly bill.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The energy cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected weighted average power cost per kilowatt-hour for this service exceeds, or is less than $\$ 0.03050352$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Demand

The metered demand of loads on this rate will be subtracted from the metered demand for members receiving service under Schedule 41 and 46 when the interruptible load is coincident with the member's other loads. When feasible, new controlled interruptible services loads should be on a separate service from Schedule 41 and 46 load.

## Taxes

The rates set fourth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 53 <br> RESIDENTIAL AND FARM SERVICE TIME-OF-DAY RATE

## Availability

Available to residential and farm members for all domestic and farm use, except irrigation pumps. Members participating in this service are not eligible for either Schedule 51 or Schedule 52. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

Type of Service
Single phase or three phase, when economically feasible, 60 hertz, at available secondary voltages.
Monthly Rate
Fixed Charge
Energy Charge

| Summer $-($ June-Aug $)$ Peak Period | $@$ | $\$ 0.212631880$ per kWh |
| :--- | :--- | :--- |
| Other - Peak Period | $@$ | $\$ 0.198631740$ per kWh |
| Off-Peak Period | $@$ | $\$ 0.094540$ per kWh |

Plus Applicable Taxes

## Definition of Periods

Peak Period 4:00 p.m. to 11:00 p.m., excluding holidays and weekends
Off-Peak Period 11:00 p.m. to 4:00 p.m., plus all day on holidays and weekends
Holidays include New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

## Minimum Monthly Charge

The minimum monthly charge under the above rate shall be the Fixed Charge.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceed, or is less than $\$ 0.0903-0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

# SCHEDULE 53 <br> RESIDENTIAL AND FARM SERVICE <br> TIME-OF-DAY RATE <br> (Continued) 

Taxes
The rates set forth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 54 <br> GENERAL SERVICE OPTIONAL TIME-OF-DAY RATE

## Availability

Available to any member for general service electrical loads. Members participating in this service are not eligible for either Schedule 51 or Schedule 52. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available primary or secondary voltages.

## Monthly Rate

Fixed Charge $\$ 36.00$ per month
Peak Period Demand Charge Summer (June-Aug) @ $\$ 26.144 .85$ per kW
Winter (Dec-Feb)
@ $\$ 19.918 .95$ per kW
Other
@ $\$ 13 . \underline{67} \theta 0$ per kW
Plus
Maximum Demand Charge
@ $\$ 5.254 .75$ per kW
Energy Charge @ $\$ 0.0521499$ per kWh
Plus Applicable Taxes

## Definition of Periods

Peak Period 4:00 p.m. to 11:00 p.m., excluding holidays and weekends
Off-Peak Period
11:00 p.m. to 4:00 p.m., plus all day on holidays and weekends
Holidays include New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

## Determination of Billing Demand

1. Peak Period - The Peak Period Billing Demand shall be the greatest 15 minute demand (subject to power factor adjustment) between $4 \mathrm{p} . \mathrm{m}$. and $11 \mathrm{p} . \mathrm{m}$. during the month for which the bill is rendered, as indicated or recorded by a demand meter. Demand will be read to the nearest 0.01 kilowatt.
2. Maximum Demand - The Maximum Billing Demand shall be the greatest 15 minute demand (subject to power factor adjustment) during the month for which the bill is rendered, as indicated or recorded by a demand meter. Demand will be read to the nearest 0.01 kilowatt.

## Minimum Monthly Charge

The minimum monthly charge under the above rate shall be the Fixed Charge plus $\$ 1.00$ per kW of the highest Maximum Billing Demand during the preceding 11 months.

# SCHEDULE 54 <br> GENERAL SERVICE <br> OPTIONAL TIME-OF-DAY RATE <br> (Continued) 

## Power Factor Adjustment

The member agrees to maintain as near unity (100 percent) power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent, the demand for billing purposes shall be the demand as recorded by the demand meter multiplied by 90 percent and divided by the percent power factor.

## Primary Voltage Service

A discount of $\$ 0.15 / \mathrm{kW}$ will be applied to the Maximum Billing Demand when the service is taken by the member at the available primary voltage. If primary metering is used, an additional discount of 2.0 percent shall be applied to the bill. The 2.0 percent discount shall be applied after the $\$ 0.15 / \mathrm{kW}$ discount.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903-0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

Terms of Payment
The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 56 <br> RESIDENTIAL AND FARM SERVICE TIME-OF-DAY RATE

## Availability

Available to residential and farm members for all domestic and farm use, except irrigation pumps. Members participating in this service are not eligible for either Schedule 51 or Schedule 52. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, when economically feasible, 60 hertz, at available secondary voltages.

## Monthly Rate

Fixed Charge
Energy Charges
Peak Periods: Summer - (June-Aug) @ $\$ 0.2890710$ per kWh
Winter - (Dec-Feb) @ \$0.2320210 per kWh
Spring/Fall
Intermediate Period
Off-Peak Period
Plus Applicable Taxes

## Definition of Periods

Peak Periods 4:00 p.m. to 11:00 p.m., excluding holidays and weekends
Intermediate Period
Off-Peak Period
\$132.00 per month
@ $\$ 0.1880750$ per kWh
@ $\$ 0.10600970$ per kWh
@ $\$ 0.0 \underline{820760}$ per kWh

Holidays include New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.
Minimum Monthly Charge
The minimum monthly charge under the above rate shall be the Fixed Charge.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceed, or is less than $\$ 0.0903-0939$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

SCHEDULE 56<br>RESIDENTIAL AND FARM SERVICE<br>TIME-OF-DAY RATE<br>(Continued)

Taxes
The rates set forth are based on taxes as of January 1, 20124. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 60 <br> RIDER FOR STANDBY SERVICE CONTINUED

## Definitions

Contracted Standby Demand is the quantity specified in the member's Electric Service Agreement as the maximum amount of firm or non-firm standby service the Cooperative is obligated to supply and will not exceed the capacity of the member's distributed generation system.

Firm Service refers to a utility's most reliable, constant electric service. A utility would interrupt the supply of electricity to a firm service customer only as a last resort.
Non-Firm Service, also called interruptible service, refers to electric service that a utility provides only to the extent that it has capacity not being used to meet the needs of firm-service members at the moment.
All other definitions shall be as described in Cooperative's Distributed Generation Interconnection Requirements and Interconnection Process for Distributed Generation Systems.

## Charges for Service

The following Reservation Fees, Communication Fee, Usage Fees, and Wheeling Fees will be assessed as applicable in addition to all charges for service being taken under Cooperative's base rate schedule:

## Reservation Fees

Charges as specified below for the reservation of either Firm or Non-Firm generation, transmission and distribution service per Month per kW will each be applied to the member's Contracted Standby Demand as specified in member's Electric Service Agreement with Cooperative:

|  | Firm Service (\$ per kW) | Non-Firm Service (\$ per kW) |
| :---: | :---: | :---: |
| Generation | * | ** |
| Transmission | * | ** |
| Distribution - Secondary Service | \$4.023.51 | \$4.023.51 |
| Distribution - Primary Service | \$3.8928 | \$3.8928 |
| Distribution - Substation Service | \$0.8190 | \$0.8190 |

* Firm Standby Service generation and transmission Reservation Fees will be billed under the rates, terms and conditions of the Cooperative's wholesale power supplier (Great River Energy), which is available on GRE's Web site; greatriverenergy.com and DEA's Web site; dakotaelectric.com.
**Generation and transmission Reservation Fees are not applied for Non-Firm Service. However, members will be responsible for all costs associated with wholesale power supply during any times of usage.


## Communication Fee

A monthly Communication Fee will be applied to cover the cost of transmitting data through the use of digital cellular equipment. The monthly Communication Fee is applied to each required meter with cellular data capabilities.

Communication Fee $\$ 8.70$ per meter

## Usage Fees

## Demand Charge

If the member registers electrical usage from Cooperative during a billing month then such usage will result in demand charges which may vary between members contracting for Firm Standby Service or Non-Firm Standby Service.

## SCHEDULE 70 <br> INTERRUPTIBLE SERVICE (FULL INTERRUPTIBLE OPTION)

Availability
Available to any member with a minimum controllable demand of 50 kW . Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Members participating in this service are not eligible for concurrent service under any other rate schedule. Service is subject to the established rules and regulations of the Association.

Under the full interruptible control option, members agree to interrupt their entire electrical energy usage. Members may attain this full interruption through curtailment or with the use of on-site generation back-up. During the interruption, the member's load must go to zero.

Type of Service
Single phase or three phase, 60 hertz, at available primary or secondary voltages.

## Monthly Rate

Fixed Charge
Communication Fee (meters w/ digital cellular)
Coincidental Demand
Summer (June-Aug)
Winter (Dec-Feb)
Other
Non-Coincidental Demand
Energy Charge
Failure to Control Charge
Plus Applicable Taxes
$\$ 1 \underline{3010.00}$ per month
$\$ 8.70$ per month
Coincidental Demand
Summer (June-Aug) @ \$26.144.85 per kW
Winter (Dec-Feb)
\$19.918.95 per kW
$\$ 13.6700$ per kW
Non-Coincidental Demand
\$ 5.254.75 per kW
$\$ 0.0521499$ per kWh
Failure to Control Charge
\$ 5.00 per kW
Plus Applicable Taxes

## Control Period

The control period shall be defined as the period of time during which the Association is controlling these loads with the intent of minimizing demand on the Association's system.

## Coincidental Demand

The monthly Coincidental Demand under the full interruptible control option shall be defined as the member's actual hourly demand (subject to power factor adjustment) that is coincident with the wholesale power supplier (i.e. average of the four fifteen minute demand readings for the hour ending of the wholesale billing peak) when the load is directed to be controlled during the wholesale billing peak.

## Non-Coincidental Demand

The Non-Coincidental Demand shall be the maximum kilowatt demand (subject to power factor adjustment) established by the member for any period of 15 consecutive minutes during the month for which the bill is rendered, as indicated or recorded by a demand meter.

## Failure to Control

The Failure to Control Charge will be applied to the highest kilowatt demand during any one monthly control period when the member does not fully interrupt demand. The Failure to Control Charge is applied to the highest demand recorded during any one of the monthly control periods. The control period shall be defined as the period of time during which the Association is controlling these loads with the intent of minimizing demand on the Association's system. Failure to control or being unavailable for control for more than one calendar month may require the member to be removed from Schedule 70 for the remainder of the year.

## Scheduled Maintenance

Members are encouraged to schedule required periodic maintenance during the spring and fall months and coordinate such maintenance with the Association.

## SCHEDULE 70

INTERRUPTIBLE SERVICE
(FULL INTERRUPTIBLE OPTION)
(Continued)

## Minimum Billing Demand

The Minimum Billing Demand for any billing period shall be no less than 50 percent of the highest noncoincidental demand during the preceding 11 months.

## Power Factor Adjustment

The member agrees to maintain as near unity power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent; the demand for billing purposes shall be the demand as recorded by the demand meter multiplied by 90 percent and divided by the percent power factor.

## Primary Voltage Service

A discount of $\$ 0.15$ per kW of billing demand will be applied to the bill when service is taken by the member at the available primary voltage. If primary metering is used, an additional discount of 2.0 percent shall be applied to the bill. The 2.0 percent discount shall be applied after the $\$ 0.15$ per kW discount.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in wholesale power costs, Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The energy cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour applicable to this service exceeds, or is less than $\$ 0.0497 \underline{0521}$ per kilowatt-hour sold as described in the Energy Cost Adjustment Rider (ECA) (Sheet 52). The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

SCHEDULE 71
INTERRUPTIBLE SERVICE
(PARTIAL INTERRUPTIBLE OPTION)

## Availability

Available to any member with a minimum controllable demand of 50 kW . Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Members participating in this service are not eligible for concurrent service under any other rate schedule. Service is subject to the established rules and regulations of the Association.

Under the partial interruptible control option, members agree to reduce a portion of their electrical energy usage. Members may attain this partial interruption through curtailment or with the use of on-site generation back-up. During the interruption, the member's load goes to a Predetermined Demand Level (PDL). If a partial interruptible member fails to control demand to the PDL, then the PDL will be adjusted to the demand occurring during such control period.

Type of Service
Single phase or three phase, 60 hertz, at available primary or secondary voltages.
Monthly Rate
Fixed Charge
Communication Fee (meters w/ digital cellular)
Coincidental Demand
Summer (June - Aug)
Winter (Dec - Feb)
Other
Non-Coincidental Demand
Energy Charge
Excess Demand Charge
Plus Applicable Taxes
$\$ 13010.00$ per month
$\$ 8.70$ per month
$\$ 2 \underline{1} .144 .85$ per kW
$\$ 19.918 .95$ per kW
$\$ 13 . \underline{67} \theta 0$ per kW
$\$ \underline{5.254 .75}$ per kW
00.0521499 per kWh
$\$ 5.00$ per kW

## Control Period

The control period shall be-shall be defined as the period of time during which the Association is controlling these loads with the intent of minimizing demand on the Association's system.

## Coincidental Demand

The monthly Coincidental Demand under the partial interruptible control option shall be defined as:

- During a month with no control period, the monthly Coincidental Demand under the partial interruptible control option will be the lesser of the member's actual hourly demand (subject to power factor adjustment) that is coincident with the wholesale power supplier (i.e. average of the four fifteen minute demand readings for the hour ending of the wholesale billing peak) or the Predetermined Demand Level.
During a month with a control period, the monthly Coincidental Demand under the partial interruptible control option will be the member's actual hourly demand (subject to power factor adjustment) that is coincident with the wholesale power supplier (i.e. average of the four fifteen minute demand readings for the hour ending of the wholesale billing peak).
The partial interruptible PDL will be adjusted to any higher actual demand of the member occurring during a curtailable event for the remainder of the calendar year. In the case of members using on-site generation, the PDL may be adjusted to reflect the rated capacity of such generation that was not operational during the control period. Only one such adjustment per year will be allowed.


## Non-Coincidental Demand

The Non-Coincidental Demand shall be the maximum kilowatt demand (subject to power factor adjustment) established by the member for any period of 15 consecutive minutes during the month for which the bill is rendered, as indicated or recorded by a demand meter.

SCHEDULE 71
INTERRUPTIBLE SERVICE (PARTIAL INTERRUPTIBLE OPTION) (Continued)

## Excess Demand Charge

The Excess Demand Charge will be applied to the Coincidental Demand that exceeds the Predetermined Demand Level (PDL) for a member using the partial interruptible control option when the member does not reduce demand to the PDL during a control period. The Excess Demand Charge is applied per month.

## Minimum Billing Demand

The Minimum Billing Demand for any billing period shall be no less than 50 percent of the highest noncoincidental demand during the preceding 11 months.

## Power Factor Adjustment

The member agrees to maintain as near unity power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent; the demand for billing purposes shall be the demand as recorded by the demand meter multiplied by 90 percent and divided by the percent power factor.

## Primary Voltage Service

A discount of $\$ 0.15$ per kW of billing demand will be applied to the bill when service is taken by the member at the available primary voltage. If primary metering is used, an additional discount of 2.0 percent shall be applied to the bill. The 2.0 percent discount shall be applied after the $\$ 0.15$ per kW discount.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in wholesale power costs, Dakota Electric's conservation tracker account balance, and real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The energy cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour applicable to this service exceeds, or is less than $\$ 0.0497 \underline{0521}$ per kilowatt-hour sold as described in the Energy Cost Adjustment Rider (ECA) (Sheet 52). The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

Taxes
The rates set forth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 80 <br> CYCLED AIR CONDITIONING SERVICE

## Availability

Available to members taking service concurrently under another rate schedule. This rate is for interruptible service to central air conditioners which are remotely controlled by the Association. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages. Service under this schedule will be available at all times except when interrupted by the Association during times of peak system demand or system emergencies.

## Monthly Rate

Option No. 1 - Available to members who also take service under Schedules 51 and 52 where an existing meter and control unit may be utilized for the controlled air conditioning load.

Energy Charge per applicable Schedule 51 or 52
Option No. 2 - Available to members where a new meter and control unit must be installed to control the air conditioning load.

Energy Charge Credit @ $\$ 0.0320$ per kWh
Option No. 3-Available to members where a control unit must be installed to control the air conditioning load.

A credit will be applied to the first $\$ 13.00$ of the member's net energy consumption charges in the months of June, July, and August (prorated based on the number of qualifying calendar days in the billing month). In no case will the credit exceed the sum of the monthly Energy Charge and Resource and Tax Adjustment.

Option No. 4 - Available to non-residential members where a new meter and control unit must be installed but where it is not feasible or designed to meter the air conditioning load separately. The maximum capacity of any individual air conditioning compressor is 7.5 tons. A $\$ 6.50$ per ton per month credit will be applied to member's bill in the months of June, July, and August. The aggregate monthly credit per account will not exceed $1 / 3$ of the net charges for energy and demand in each month.
Plus Applicable Taxes

## $\underline{\text { Taxes }}$

The rates set forth are based on taxes as of January 1, 20194. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SPECIAL FEES OR CHARGES

1. Meter Test at Member's Request

Single Phase
. $\$ 8595.00$
Three Phase................................................................................................. $\$ 100110.00$
2. Bad Check ...................................................................................................\$15.0011.50
3. Reconnection Charge (after disconnect, same consumer)
a. Self-contained Metering (one person, one vehicle)

b. Current Transformer-rated Metering (two-person crew, one truck)

1) Working hours ................................................................................. $\$ 175185.00$
2) Outside normal working hours......................................................... $\$ 315340.00$
4. Service Charge
(outside normal working hours when problem is not with Association's equipment)
Two-person crew, one truck.
.$\$ 280340.00$
5. Load Management Service Charge
(when problem is not with Association's equipment)
1) Working hours.
.. $\$ 7080.00$
2) Outside normal working hours.
.$\$ 140 \underline{160.00}$
6. Pulse Meter (materials and installation)
.$\$ 500750.00$
7. Temperary Service
a. Non-Winter Menths..................................................................................... $\$ 205.00$
b. Winter Months (Oct 15_Apr 15) ............................................................... $\$ 340.00$
8. Transfer/Connection Charge ................................................................................ $\$ 17.50$
9. Member Contracted Hourly Work

Dakota Electric is periodically asked to perform on-site service work. Such services will be provided at a pre-arranged hourly rate.

## MEMBER SERVICE INFORMATION EXTENSION OF SERVICE

## General Policies Applicable to All Extensions of Service

1. It shall be the policy of Dakota Electric Association (DEA) to provide and extend electric service to any member within its service area in accordance with the rate schedules and policies established by the Association.
2. Dakota Electric Association requires that, on overhead services, the member or developer provide all necessary tree clearing of the power line route outside the public right-of-way. Clearing includes any removal of debris as a result of tree cutting as may be required. The normal width of the right-of-way is-corridor to be cleared 10 feet on each side of the power lineis 30 feet with no less than 10 feet of clearance to any open or bare wire.

Dakota Electric Association will provide all necessary tree trimming on new overhead service extensions within the public right-of-way.

It is the goal of Dakota Electric Association to cooperate with the member to save as many trees as possible without jeopardizing the power line operation.
3. The member shall pay the cost of any subsequent relocation or rearrangement of any portion of the Association's system made to accommodate his/her needs or to accommodate alterations in grade.
4. Equipment, such as motors and generators that are operated interconnected with the Association, shall not cause objectionable voltage flicker on the distribution system and for other Association members. The member shall apply starters/controllers to the motors, as required, to limit the starting currents to levels acceptable to the Association. For generation, the member shall design and operate the generation system and the load transfer to and from the generation system so as not to cause objectionable voltage flicker.
5. Meters on all new installations shall meet the requirements of the Association's Technical Standards for Metering which are consistent with industry practices.
6. All member wiring must meet the requirements of the National Electric Code, National Electric Safety Code, State and local jurisdictions.

## Continuity of Service

Dakota Electric Association will endeavor to provide continuous service but does not guarantee an uninterrupted or undisturbed supply of electric service. The Cooperative will not be responsible for any loss or damage resulting from the interruption or disturbance of service for any cause other than gross negligence of the Cooperative. The Cooperative reserves the right, without previously notifying the member, to temporarily interrupt service for construction, inspection, repairs, emergency operations, shortages in power supply, safety, and State or National emergencies. The Cooperative will not be liable in any event for any loss of profits or other consequential damages resulting from the use of service or any interruption or disturbance of service.

# MEMBER SERVICE INFORMATION EXTENSION OF SERVICE CONTINUED 

## Individual Residential Extensions

1. Dakota Electric Association will serve a year-round, principle residence of an individual residential member with overhead or underground single-phase electric service at the rates and minimum charges established in applicable rate schedules. In order to ensure that the cost of the new facilities will not cause an undue burden on other members, the member will be assessed a contribution in aid of construction. The member will be charged a minimum of $\$ 500.00$ for an extension of 75 feet or less. For extensions longer than 75 feet, the member will be chargedflat fee of $\$ 5001,000.00$ plus $\$ 8.3011 .00$ per foot for each foot that theof line extension-exceeds 75 feet. The member will be assessed additional charges if above normal costs are incurred by DEA to accommodate member installation preferences or the member requests a nonstandard installation. In no event will the member be charged more than the actual costs for the extension.
2. Dakota Electric Association will furnish the overhead service triplex wire between the overhead system and the member-owned service mast. If a member desires underground service, DEA will install underground primary or secondary wire between the right-of-way and a point of connection located no closer than fifty (50) feet from the building, measured from the closest point of the building to the existing DEA facilities. The consumer will be charged the line extension costs outlined in paragraph one (1) of this section.
3. The member must install and own the underground secondary wire run between the point of connection and the meter. Dakota Electric Association will make the connection required at the point of connection.
4. For underground service, the member shall provide a right-of-way strip that is within four (4) inches, plus or minus, of the finished grade, free from obstructions and completely accessible to the Cooperative's equipment.
5. The member will be required to obtain and/or grant easements to the Cooperative for any portion of the extension that is outside a public right-of-way or easement, at no cost to the Cooperative. The Cooperative will prepare the necessary easement documents and will be reimbursed by the member for costs incurred for property title search, surveying, and recording fees.
6. The member will pay any additional installation costs incurred by the Cooperative because of:
a. delays caused by member:
b. installation of underground facilities after the ground is frozen;
c. surface and subsurface conditions that impede the installation of underground facilities, such as rock formations;
d. paving of streets, alleys or other areas prior to the installation of the underground facility;
e. above-average permit costs; or
f. DNR crossing fees.
7. The member will also be responsible for costs incurred for any relocation or rearrangement of any portion of the system made to accommodate the member after construction is underway or complete. The normal service capacity provided for overhead service will be 10 KVA per residential member and 15 KVA for underground service. Residential members requesting greater transformer capacity will be considered on an individual basis to determine if anticipated revenue justifies the additional expenditure without any further contribution in aid of construction.

# MEMBER SERVICE INFORMATION EXTENSION OF SERVICE CONTINUED 

Commercial and Industrial Members, Apartment ComplexesFacilities, and Seasonal Accounts

1. Dakota Electric Association will provide overhead or underground,single-phase or three-phase electric service to commercial (including commercial developments) and industrial members and apartment complexesmulti-tenant residential facilities in accordance with established applicable rates and charges when the anticipated revenue justifies the expenditure. Dakota Electric Association will install, own, and maintain the underground-primary service to a point of connection designated as either a single-phase or three-phase padmounted-transformer. An economic analysis will be made for any service that involves abnormally high investments, and/or those with low anticipated revenue. A contribution in the aid of construction will be required if the estimated investment is not justified by the anticipated revenue, calculated as follows for service provided under the applicable rate schedule:


When underground service is requested, the member shall provide a right-of-way strip that is within four (4) inches, plus or minus, of the finished grade. The right-of-way must be free from obstructions and completely accessible to the Association's equipment.

The member shall furnish the pad for the padmounted transformer on underground systems in accordance with specifications provided by Dakota Electric Association.

The member will pay any additional installation costs incurred by the Association because of:

1. delays caused by member;
2. installation of underground facilities after ground is frozen;
3. soil conditions that impair the installation of underground facilities, such as rock formations;
4. paving of streets, alleys or other areas prior to the installation of the underground facility;
5. above-average permit costs; or
6. DNR crossing fees.

There may be situations where the member shall be required to install sections of conduit, such as underground entrance to a pad, which shall be at no cost to the Association.

Docket No. E-111/GR-19-478


DAKOTA ELECTRIC ASSOCIATION
SECTION:
$4300220^{\text {th }}$ Street West
SHEET:
REVISION:

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DAKOTA ELECTRIC ASSOCIATION
SECTION:
II
$4300220^{\text {th }}$ Street West
SHEET:
Farmington, MN 55024
REVISION:

CONTACT LIST

DAKOTA ELECTRIC ASSOCIATION
SECTION:

DAKOTA ELECTRIC ASSOCIATION<br>$4300220^{\text {th }}$ Street West<br>Farmington, MN 55024<br>(651) 463-6212


#### Abstract

GREG MILLER. PRESIDENT/CEO MIKE FOSSE VICE PRESIDENT ENERGY \& MEMBER SERVICES LOU ANN WEFLEN VICE PRESIDENT FINANCIAL \& INFORMATION SERVICES RANDY POULSON $\qquad$ VICE PRESIDENT ENGINEERING DIRK ROTTY. .VICE PRESIDENT UTILITY SERVICES

DOUG LARSON VICE PRESIDENT REGULATORY SERVICES


For an emergency, after office hours, call 651-463-6201 or 1-800-430-9722.

DAKOTA ELECTRIC ASSOCIATION
SECTION:
III
$4300220^{\text {th }}$ Street West
SHEET:
Farmington, MN 55024
REVISION:

INDEX OF SERVICE AREAS

DAKOTA ELECTRIC ASSOCIATION
SECTION: III
$4300220^{\text {th }}$ Street West
SHEET:
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Farmington, MN 55024
REVISION: 4

## INDEX OF SERVICE AREAS

## (All areas are in Dakota County unless otherwise indicated.)

## Incorporated Areas

## Apple Valley

Burnside - Goodhue County
Burnsville
Cannon Falls
Coates
Eagan
Farmington
Hastings
Inver Grove Heights
Lakeville
Miesville
New Trier
Rosemount
Vermillion

## Unincorporated Areas

Cannon Falls - Township - Goodhue County
Castle Rock Township
Credit River Township - Scott County
Douglas Township
Empire Township
Eureka Township
Greenvale Township
Hampton Township
Marshan Township
New Market Township - Scott County
Nininger Township
Randolph Township
Ravenna Township
Sciota Township
Stanton Township - Rice County
Vermillion Township
Waterford Township
Webster Township - Rice County
Welch Township - Goodhue County

DAKOTA ELECTRIC ASSOCIATION
SECTION:
$4300220^{\text {th }}$ Street West
SHEET:
Farmington, MN 55024
REVISION:

## DEFINITIONS

## TERMS AND ABBREVIATIONS

| Association | Dakota Electric Association |
| :---: | :---: |
| Billing Period | Time between two successive electric bills -- as near as practicable to 30 days |
| Commission | Minnesota Public Utilities Commission |
| Cooperative. | Dakota Electric Association |
| Member-Owner, Consumer, Consumer/Member Member-Owner/Consumer, Customer | Any person, firm, or corporation receiving electric service from Dakota Electric Association |
| Seasonal | Designated consumer/member who receives electric service part-time or only during certain months of the year |
| Year round | On a regular, daily basis, all months of the year |

Other terms used are standard throughout the electric industry.

## RATE SCHEDULES

## DAKOTA ELECTRIC ASSOCIATION <br> ELECTRIC RATE BOOK

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## SCHEDULE 31

RESIDENTIAL AND FARM SERVICE
Availability
Available to individual residential and farm members for all domestic and farm use except irrigation.
This includes service to apartment units. Service is subject to the established rules and regulations of the Association.

Type of Service
Single phase or three phase, when economically feasible, 60 hertz, at available secondary voltages.
Monthly Rate

| Fixed Charge <br> Energy Charge |  | $\$ 9.00$ per month |
| :--- | :--- | :--- |
| Summer (June-Aug) @ $\$ 0.1308$ per kWh <br> Other $@$ $\$ 0.1168$ per kWh |  |  |

## Minimum Monthly Charge

The minimum monthly charge under the above rate shall be the Fixed Charge.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 32

RESIDENTIAL AND FARM DEMAND CONTROL RATE

## Availability

Available to residential and farm members with at least 5 kW of qualifying off-peak loads as determined by the Association. This rate is subject to the rules and regulations of the Association. Members requesting service under this rate schedule must remain on this rate schedule for a minimum of twelve (12) months.

Type of Service
Single phase, 60 Hertz, at available secondary voltages.

## Monthly Rate

Fixed Charge
Energy Charge
Demand Charge

| Summer (June-Aug) | @ $\quad$$\$ 14.70$ per kW <br> Other | @ |
| :--- | :--- | :--- |
| $\$ 11.10$ per kW |  |  |

Plus Applicable Taxes

## Billing Demand Determination

The demand will be determined based on the peak 15-minute demand reading during control periods for the month the bill was rendered. An estimated demand will be used for new customers until the actual controlled demand is established.

## Minimum Monthly Charge

The minimum monthly charge under the above rate shall be the $\$ 12.00$ Fixed Charge plus a minimum billing demand of 3 kW .

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be increased or decreased by $\$ 0.0001$ per kilowatt-hour for each 0.1 mill or major fraction by which the energy component in the Association's purchased power cost per kilowatt-hour purchased from its power supplier exceeds, or is less than $\$ 0.0903$ per kilowatt-hour purchased. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set fourth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

```
SECTION: V

\title{
SCHEDULE EV-1 \\ PILOT - RESIDENTIAL ELECTRIC VEHICLE SERVICE
}

\section*{Availability}

Available on voluntary basis as a pilot program for residential consumers taking service under Schedule 31 who also desire metered service for the sole purpose of electrically charging a licensed automobile or light truck. Service on this tariff is limited to electric vehicles that are SAE J1772 compliant and registered and operable on public highways in the State of Minnesota. Low-speed electric vehicles, including golf carts, are ineligible to take service under this tariff even if licensed to operate on public streets. The consumer may be required to provide the Association with proof of registration of the electric vehicle prior to taking service under this tariff. Service is subject to the established rules and regulations of the Association.

\section*{Term}

The pilot program will be offered for a minimum of a two year period. At the end of the initial two year pilot period, the Association will determine if this program will be continued, modified, or eliminated. If it is eliminated, the consumers participating in the pilot program will revert back to the appropriate retail rate tariff for their class of service.

\section*{Type of Service}

Single phase or three phase, 60 hertz, at available secondary voltages.

\section*{Rate}

Energy Charges:
Off-Peak: \(\quad 6.74 \not \subset\) per kWh
On-Peak: \(\quad 41.44 \phi\) per kWh
Other: \(\quad\) Schedule 31 energy charges apply
Plus RTA and applicable sales tax
Definition of Periods
Energy Charge time periods are defined as follows:
Off-Peak \(\quad\) 9:00 pm to 8:00 am Mon. - Fri., and all day Weekends and Holidays
On-Peak \(\quad\) 4:00 pm to 9:00 pm Mon. - Fri., excluding Holidays
Other \(\quad 8: 00\) am to \(4: 00 \mathrm{pm}\) Mon. - Fri., excluding Holidays
Holidays shall be: New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

\title{
SCHEDULE EV-1 \\ PILOT - RESIDENTIAL ELECTRIC VEHICLE SERVICE \\ CONTINUED
}

\section*{Metering}

Electric service under this rate must be supplied through a sub-metered circuit (installed at the consumer's expense) and approved electric vehicle charging equipment. Installations must conform to the Association's specifications. The consumer shall supply, at no expense to Dakota Electric, a suitable location for meters and associated equipment used for billing and for load research. For purposes of monitoring consumer load under this pilot program, the Association may install load research metering at its expense.
Resource and Tax Adjustment (RTA)
The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by \(\$ 0.0001\) per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than \(\$ 0.0903\) per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

\section*{Data Privacy}

Participation in any load research effort as part of this schedule will be strictly voluntary. The Cooperative's use of such load research data will be strictly limited to the provision of electric service. The Cooperative will not disclose, share, rent, lease, or sell such data to any third party or affiliate for any other purpose, without the consumer's express, affirmative written informed consent.

\section*{Taxes}

The rates set fourth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

\section*{Terms of Payment}

The above charges are net. Balances over \(\$ 10.00\) not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or \(\$ 1.00\), whichever is greater, added to the balance.

\section*{SCHEDULE 36}

IRRIGATION SERVICE

\section*{Availability}

Available to any member for service to irrigation pumps. Service is subject to the established rules and regulations of the Association.

Type of Service
Single phase or three phase, 60 hertz, at available secondary voltages.

\section*{Monthly Rate}

Firm Service
Fixed Charge \(\quad \$ 30.00\) per month
Demand Charge
Summer (June-Aug) @ \$26.35 per kW
Winter (Dec-Feb)
Other
Energy Charge
@ \(\quad \$ 20.95\) per kW

Plus Applicable Taxes
Interruptible
\begin{tabular}{lll} 
Fixed Charge & & \(\$ 30.00\) per month \\
Demand Charge & @ & \(\$ 4.55\) per kW \\
Energy Charge & @ & \(\$ 0.0499\) per kWh
\end{tabular}

Plus Applicable Taxes
Determination of Metered Demand
The Metered Demand in kilowatts shall be the greatest 15 -minute demand (subject to power factor adjustment) during the month for which the bill is rendered. Demand will be read to the nearest 0.01 kilowatt.

\section*{Power Factor Adjustment}

The member agrees to maintain as near unity (100 percent) power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent, the demand for billing purposes shall be the demand as recorded by the demand meter multiplied by 90 percent and divided by the percent power factor.

Minimum Monthly Charge
The Minimum Monthly Charge under the above rate shall be the Fixed Charge.

\section*{SCHEDULE 36}

IRRIGATION SERVICE (Continued)

\section*{Interruptible Requirements}

Members that switch from Interruptible to Firm service during the calendar year will be billed the Firm service rate during the month the change was made. The member must remain on the Firm service rate for the remainder of the calendar year. This includes members that intentionally bypass the load control equipment.

\section*{Resource and Tax Adjustment (RTA)}

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor applicable to firm irrigation shall be adjusted by \(\$ 0.0001\) per kilowatt-hour, or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than \(\$ 0.0903\) per kilowatt-hour sold. The energy cost factor shall be adjusted by \(\$ 0.0001\) per kWh , or major fraction thereof, of which the Association's total projected power cost per kWh applicable to interruptible irrigation exceeds, or is less than, \(\$ 0.0497\) per kWh sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

\section*{Taxes}

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

Terms of Payment
The above charges are net. Balances over \(\$ 10.00\) not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or \(\$ 1.00\), whichever is greater, added to the balance.

\section*{SCHEDULE 41 \\ SMALL GENERAL SERVICE}

\section*{Availability}

Available to any commercial member for all uses, except irrigation pumps, where the Metered Demand is 15 kW or less. If the Metered Demand exceeds 15 kW for three consecutive months, the member will be transferred to the General Service Rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

\section*{Type of Service}

Single phase or three phase, 60 hertz, at available secondary voltages.

\section*{Monthly Rate}
\[
\begin{array}{lll}
\text { Fixed Charge } \\
\text { Energy Charge }
\end{array} \quad \text { \$14.00 per month }
\]

Plus Applicable Taxes
Determination of Metered Demand
The Metered Demand in kilowatts shall be the greatest 15-minute demand during the month for which the bill is rendered. Demand will be read to the nearest 0.01 kilowatt.

\section*{Minimum Monthly Charge}

The Minimum Monthly Charge under the above rate shall be the Fixed Charge.

\section*{Non-metered Option}

This option has limited availability. It may be available for: devices that are located at individual points of delivery and are operated with a continuous or predetermined load level that exceeds the threshold determined for Schedule 45. The monthly energy consumption will be determined by the Association based on equipment documentation provided by the member. The maximum monthly energy allowed under this option will be 500 kWh .

\section*{Resource and Tax Adjustment (RTA)}

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by \(\$ 0.0001\) per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than \(\$ 0.0903\) per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

\section*{Taxes}

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

\section*{Terms of Payment}

The above charges are net. Balances over \(\$ 10.00\) not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or \(\$ 1.00\), whichever is greater, added to the balance.

\title{
VOLUNTEER FIRE DEPARTMENT RIDER FOR \\ SMALL GENERAL SERVICE
}

\section*{Availability}

Available to a volunteer fire department located in a municipality that does not have a municipal water system and is required to operate a water pump for fire fighting purposes.

\section*{Rider}

The three consecutive month demand-threshold of 15 kW will be waived for service to qualifying water pumps that meet the above availability clause and all of the following terms and conditions. Qualifying members will be required to pay all applicable monthly fixed charges, energy charges, and taxes according to the terms of Schedule 41.

\section*{Terms and Conditions}
1. A qualifying volunteer fire department must use a single motor of 50 horsepower or less to operate the single qualifying water pump.
2. Service to any qualifying water pump must be used for the exclusive purpose of responding to fire emergency incidents and training of volunteer firefighters.
3. If the water pump is used for purposes other than responding to fire emergency incidents and training of volunteer firefighters and the monthly demand exceed 15 kW , then the customer will be subject to transfer to the General Service Rate Schedule 46, which includes a demand charge.

\section*{SCHEDULE 44}

SECURITY LIGHTING SERVICE

\section*{Availability}

Available for year-around illumination for private residential, farm, or commercial lighting on existing Association service poles where service poles and service wires can be connected on the line side of member's meter. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

\section*{Type of Service}

The Association shall own, operate, and maintain the security lighting system using the Association's standard security lighting equipment. The energy used by these lights is unmetered.

\section*{Monthly Rate}

Designation of Lamp
100 Watt High Pressure Sodium (Closed to new)
Monthly Rate Per Luminaire

150 Watt High Pressure Sodium (Closed to new)
\$10.10
250 Watt High Pressure Sodium (Closed to new) \$11.99

Plus Applicable Taxes
Optional - For residential or farm installation requiring any extra equipment, or in the event the consumer requests the changeout of an existing light to a different size and/or type, a contribution to construction will be required to cover the extra costs incurred. Commercial installations on existing service poles only.

\section*{Resource and Tax Adjustment (RTA)}

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by \(\$ 0.0001\) per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than \(\$ 0.0903\) per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

\section*{Taxes}

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

\section*{SCHEDULE 44-1}

\section*{STREET LIGHTING SERVICE \\ (MEMBER - OWNED)}

\section*{Availability}

Available for year-round illumination of public streets, parkways, highways, and other public ways by electric lamps mounted on standards where member owns the lighting system complete with standards, luminaries, globes, lamps, and other appurtenances, together will all necessary cables extending between standards and to point of connection to the Association's facilities as designated by the Association.

\section*{Type of Service}

The street lighting system shall be built and owned by the member. All controls will be provided by the member. The member shall also provide all easements and right-of-way to permit access to feed points. The Association shall operate and provide limited maintenance (periodic cleaning of lens, refractor, and bulb replacement) on street lighting systems.

\section*{Monthly Rate}
\begin{tabular}{lc} 
Designation of Lamp & Monthly Rate Per Luminaire \\
175 Watt Mercury (Closed to new) & \(\$ 10.52\) \\
250 Watt Mercury (Closed to new) & \(\$ 13.46\) \\
400 Watt Mercury (Closed to new) & \(\$ 18.54\) \\
& \\
100 Watt High Pressure Sodium & \(\$ 7.56\) \\
150 Watt High Pressure Sodium & \(\$ 9.46\) \\
200 Watt High Pressure Sodium & \(\$ 11.41\) \\
250 Watt High Pressure Sodium & \(\$ 13.25\) \\
400 Watt High Pressure Sodium & \(\$ 17.67\) \\
Plus Applicable Taxes &
\end{tabular}
\begin{tabular}{llr} 
DAKOTA ELECTRIC ASSOCIATION & SECTION: & V \\
\(4300220^{\text {th }}\) Street West & SHEET: & 11.2 \\
Farmington, MN 55024 & REVISION: & 14
\end{tabular}

\section*{SCHEDULE 44-1}

\section*{STREET LIGHTING SERVICE}
(MEMBER-OWNED) (Continued)

\section*{Resource and Tax Adjustment (RTA)}

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by \(\$ 0.0001\) per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than \(\$ 0.0903\) per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

\section*{Taxes}

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

\section*{Terms of Payment}

The above charges are net. Balances over \(\$ 10.00\) not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or \(\$ 1.00\), whichever is greater, added to the balance.

\section*{SCHEDULE 44-2}

STREET LIGHTING SERVICE
(DEA - OWNED EQUIPMENT)

\section*{Availability}

Available for governmental or private year-around illumination of public or private streets, parkways, highways, and other public ways by electric lamps in luminaires supported on existing poles where secondary voltage is available and the facilities for this service are furnished by the Association.

Type of Service
The Association shall own, operate, and maintain the overhead street lighting system using the Association's standard street lighting equipment. The energy used by these lights is unmetered.

\section*{Monthly Rate}

Designation of Lamp
175 Watt Mercury (Closed to new)
250 Watt Mercury (Closed to new)
400 Watt Mercury (Closed to new)
100 Watt High Pressure Sodium (Closed to new)
150 Watt High Pressure Sodium (Closed to new)
250 Watt High Pressure Sodium (Closed to new)
400 Watt High Pressure Sodium (Closed to new) Plus Applicable Taxes

Monthly Rate Per Luminaire
\$15.23
\$18.16
\$23.25
\(\$ 12.27\)
\$14.16
\$17.95
\$22.38

The above rates cover only an installation where the pole with secondary voltage is existing at the light location. Contributions to construction costs will be required if additional equipment is needed or if a member requests a change to a different lamp size and/or type when costs exceed \(\$ 500\).

\section*{Resource and Tax Adjustment (RTA)}

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by \(\$ 0.0001\) per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than \(\$ 0.0903\) per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

\section*{SCHEDULE 44-2}

STREET LIGHTING SERVICE
(DEA - OWNED EQUIPMENT)
(Continued)

\section*{Taxes}

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

\section*{Terms of Payment}

The above charges are net. Balances over \(\$ 10.00\) not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent of \(\$ 1.00\), whichever is greater, added to the balance.

\section*{SCHEDULE 44-3}

CUSTOM RESIDENTIAL STREET LIGHTING (DEA-OWNED - CONTRIBUTION BY MEMBER)

\section*{Availability}

Available for year-round illumination of public streets, parkways, highways, and other public ways by electric lamps mounted on standards and served through underground circuits, where the facilities for this service are furnished by the Association. Street lighting service under this schedule is limited to residential areas having an underground distribution area.

\section*{Type of Service}

The Association shall own, operate, and maintain the lighting system using the Association's standard street lighting equipment which includes one lamp per standard. Member shall be required to contribute an amount equal to the installation cost of the lighting system. The energy used by these lights is unmetered.

Monthly Rate
Designation of Lamp
Monthly Rate Per Luminaire

175 Watt Mercury (Closed to new)
50 Watt High Pressure Sodium (Closed to new)
100 Watt High Pressure Sodium
150 Watt High Pressure Sodium (Closed to new)
250 Watt High Pressure Sodium (Closed to new) Plus Applicable Taxes
\$11.37
\(\$ 6.70\)
\(\$ 8.41\)
\$10.30
\$14.09

Optional - For installations requiring any extra equipment or in the event the member requests the changeout of an existing light to be a different size and/or type, the member will be required to pay all construction fees or extra charges incurred.

\section*{Resource and Tax Adjustment (RTA)}

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by \(\$ 0.0001\) per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than \(\$ 0.0903\) per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.
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SECTION: & V \\
SHEET: & 11.6 \\
REVISION. & 10
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\section*{SCHEDULE 44-3}

CUSTOM RESIDENTIAL STREET LIGHTING (DEA - OWNED CONTRIBUTION BYMEMBER)
(Continued)

\section*{Taxes}

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

\section*{Terms of Payment}

The above charges are net. Balances over \(\$ 10.00\) not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent of \(\$ 1.00\), whichever is greater, added to the balance.

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}
SECTION: V
SHEET: 12.0
REVISION: 1

\section*{SCHEDULE 44-4 \\ LED SECURITY LIGHTING \\ SERVICE}

\begin{abstract}
Availability
Available for year-around illumination for private residential, farm, or commercial lighting by Light Emitting Diode (LED) electric lamps on existing Association service poles where service poles and service wires can be connected on the utility side of the meter. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.
\end{abstract}

\section*{Type of Service}

The Association shall own, operate, and maintain the LED security lighting system using the Association's standard LED security lighting equipment. Fixtures on this rate will only be attached to an existing DEA service pole. The energy used by these lights is unmetered.
Monthly Rate
Light Emitting Diode Security Light (LED, > 4,500 lumens) \(\$ 7.63\) per month

\section*{Plus Applicable Taxes}

Optional - For installations requiring any extra equipment (excluding poles), a contribution to construction will be required to cover the extra costs incurred. In the event the member requests the change out of an existing light, the member will be required to pay all construction fees and material costs for the new installation or upgrade as well as payment for the undepreciated cost of the existing light, less any salvage value.

\section*{Resource and Tax Adjustment (RTA)}

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by \(\$ 0.0001\) per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than \(\$ 0.0903\) per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

\section*{Taxes}

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

SECTION: V
SHEET: 12.1
REVISION: Original

SCHEDULE 44-5
LED STREET LIGHTING
(MEMBER-OWNED)

\section*{Availability}

Available for year-round illumination of public streets, parkways, highways, and other public ways by Light Emitting Diode (LED) electric lamps served through underground or overhead circuits, where the facilities for this service are furnished and owned by the Member. Service is subject to the established rules and regulations of the Association.

\section*{Type of Service}

The member shall own, operate, and maintain the LED lighting system.
The preferred service option is metered LED lighting. Such service will be billed to the Member under the rate schedule associated with the meter.

Unmetered service will be allowed if the Association determines it is not practical for the lights to be metered. For such unmetered use:
1. Billing will be according to specified consumption groups. Dakota Electric will determine if a member qualifies for the unmetered rate and which consumption group.
2. The Member will be required to provide Dakota Electric with a notice prior to any change in equipment.
3. No other use is allowed from the fixture. (e.g. Wi-Fi attachments, holiday lights, etc.)
4. The Association will periodically inspect the unmetered fixtures to ensure compliance with requirements.
5. The Member must provide proof of lighting system rating. (i.e. data sheet or model number)

No maintenance will be included in the monthly rate from the Association for any member-owned LED street light. At the request of a Member, Dakota Electric may enter into individual contracts with a Member for the type and frequency of maintenance they may desire from the Association.

\section*{Monthly Rate}

Metered Service: \(\quad\) According to applicable rate schedule

Unmetered Service: Consumption Group
A ( 40 to 80 watts)
B (81 to 150 watts)
C (151 to 250 watts)
D (251 to 350 watts)
E (351 to 450 watts)

Monthly Rate per Fixture
\(\$ 4.81\)
\(\$ 6.71\)
\(\$ 9.66\)
\(\$ 13.05\)
\$16.52

\section*{Plus Applicable Taxes}

The range of watt ratings for the Unmetered Consumption Groups will be adjusted periodically to reflect the predominant size of lights receiving such Unmetered Service.

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SECTION: V
SHEET: 12.2
REVISION: Original

\section*{SCHEDULE 44-5 \\ LED STREET LIGHTING (MEMBER-OWNED) \\ (Continued)}

\section*{Resource and Tax Adjustment (RTA)}

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by \(\$ 0.0001\) per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than \(\$ 0.0903\) per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

\section*{Taxes}

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

\section*{Terms of Payment}

The above charges are net. Balances over \(\$ 10.00\) not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent of \(\$ 1.00\), whichever is greater, added to the balance.

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SECTION: V
SHEET: 12.3
REVISION: 2

\author{
SCHEDULE 44-6 \\ LED STREET LIGHTING \\ (DEA-OWNED - CONTRIBUTION BY MEMBER)
}

\section*{Availability}

Available for year-round illumination of public streets, parkways, highways, and other public ways by Light Emitting Diode (LED) electric lamps served through underground or overhead circuits, where the facilities for this service are furnished by the Association. Conversion of existing lighting to LED lighting may be limited to accommodate workload scheduling. Street lighting service under this schedule is limited to designated LED lighting fixtures offered by the Association in its distribution area. Service is subject to the established rules and regulations of the Association.

\section*{Type of Service}

The Association shall own, operate, and maintain the LED lighting system using the Association's standard street lighting equipment which includes one fixture per pole. Member shall be required to contribute an amount equal to the initial installation or upgrade cost of the lighting system. The energy used by these lights is unmetered.

\section*{Monthly Rate}
\begin{tabular}{|c|c|c|}
\hline \multirow[b]{2}{*}{Designation of Fixture} & \multicolumn{2}{|l|}{Monthly Rate per Fixture} \\
\hline & Standard & Basic \\
\hline Light Emitting Diode (LED, > 5,200 lumens) Coach Light (Post) & \$ 10.60 & \$6.83 \\
\hline Light Emitting Diode (LED, > 5,200 lumens) Acorn Light (Post) & \$ 11.24 & \$6.30 \\
\hline Light Emitting Diode (LED, > 7,000 lumens) Cobra Light (Mast) & \$ 8.31 & \$6.51 \\
\hline Light Emitting Diode (LED, > 11,500 lumens) Shoebox Light (Mast) & \$ 10.71 & \$7.98 \\
\hline Plus Applicable Taxes & & \\
\hline
\end{tabular}

The Coach and Acorn fixtures will be mounted on a street light post. The Cobra and Shoebox fixtures will be fastened to a mast arm on existing service poles. In the event the member requests the change out of an existing light, the member will be required to pay all construction fees and material costs for the new installation or upgrade as well as payment for the undepreciated cost of the existing light, less any salvage value.

\section*{Resource and Tax Adjustment (RTA)}

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by \(\$ 0.0001\) per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than \(\$ 0.0903\) per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

SCHEDULE 44-6
LED STREET LIGHTING
(DEA-OWNED - CONTRIBUTION BY MEMBER)
(Continued)

\section*{Service Included in Rate}

For Standard Service, Dakota Electric will furnish all electric energy necessary to operate the street lighting system, will make all lamp and glassware renewals, clean the glassware, make all ballast and starter renewals, repair all damaged equipment, and furnish all the materials and labor necessary for these services.

For Basic Service, Dakota Electric will furnish all electric energy necessary to operate the street lighting system, clean the glassware, and repair all damaged equipment. The Member will be responsible for material and labor costs to replace failed components and fixtures not covered by manufacturers warranties. Selection of Basic Service is a "life of fixture" designation.

\section*{Taxes}

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

\section*{Terms of Payment}

The above charges are net. Balances over \(\$ 10.00\) not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent of \(\$ 1.00\), whichever is greater, added to the balance.

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\section*{SECTION: V}

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SCHEDULE 45
LOW WATTAGE UNMETERED SERVICE

\section*{Availability}

This rate is available for low-wattage electronic devices that are: 1) Individually located at each point of delivery, 2) Rated at less than 150 watts, and 3) A determinable load level. Each individual electronic device must not in any way interfere with Association operations and service to adjacent members. This rate is also available to equipment connected to the supply side of the service disconnect such as fire and sprinkler alarms, and emergency lighting systems, if such equipment is used only during times of emergency. This will require verification from a licensed electrical contractor/electrician in the form of an affidavit.

This Low Wattage Unmetered Service is not applicable to electric service for traffic signals, civil defense, or lighting. Association reserves the right to evaluate member requests for this service to determine eligibility.

\section*{Type of Service}

Either single phase or three phase, depending on feasibility, 60 hertz, at available secondary voltages.

\section*{Installation Charges}

The member shall pay the total estimated installation charges involved to provide service.

\section*{Monthly Rate}
\(\$ 10.00\) per month per service location, plus applicable sales tax.

\section*{Taxes}

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder shall be added to the above rate as appropriate.

\section*{Terms of Payment}

The above charges are net. Balances over \(\$ 10.00\) not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or \(\$ 1.00\), whichever is greater, added to the balance
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SECTION: & V \\
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REVISION:: & 3
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SCHEDULE 46 GENERAL SERVICE

\section*{Availability}

Available to any commercial member for all uses except irrigation. Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

\section*{Type of Service}

Single phase or three phase, 60 hertz, at available secondary voltages.

\section*{Monthly Rate}

Fixed Charge
Demand Charge Summer (June-Aug)
Other
Energy Charge
First 200 kWh per kW
Next 200 kWh per kW
Over 400 kWh per kW
Plus Applicable Taxes
\(\$ 34.00\)
(a) \(\$ 12.26\) per kW
@ \(\quad \$ 9.16\) per kW
(a) \(\$ 0.0776\) per kWh
(a) \(\$ 0.0676\) per kWh
(a) \(\quad \$ 0.0576\) per kWh

\section*{Determination of Metered Demand}

The Metered Demand in kilowatts shall be the greatest 15-minute demand (subject to power factor adjustment) during the month for which the bill is rendered. Demand will be read to the nearest 0.01 kilowatt.

\section*{Determination of Energy Charge}

The energy ( kWh ) billed in each rate block is determined in relation to the monthly demand ( kW ). The energy in the first block includes the first 200 kWh multiplied by the monthly metered demand. The second block includes the next 200 kWh multiplied by the monthly metered demand. All energy in excess of 400 kWh multiplied by the monthly metered demand is billed under the third block.

\section*{Power Factor Adjustment}

The member agrees to maintain as near unity (100 percent) power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent, the demand for billing purposes shall be the demand as recorded by the demand meter multiplied by 90 percent and divided by the percent power factor.

\section*{Minimum Monthly Charge}

The Minimum Monthly Charge under the above rate shall be the Fixed Charge plus \(\$ 1.00\) per kW of the highest billing demand during the preceding 11 months.

\section*{Primary Voltage Service}

A discount of \(\$ 0.15 / \mathrm{kW}\) of Billing Demand will be applied to the bill when service is taken by the member at the available primary voltage. If primary metering is used, an additional discount of 2.0 percent shall be applied to the bill. The 2.0 percent discount shall be applied after the \(\$ 0.15 / \mathrm{kW}\) discount.
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SCHEDULE 46
GENERAL SERVICE
(Continued)

\section*{Optional Communication Fee}

A monthly Communication Fee of \(\$ 8.70\) will be applied to accounts that participate in riders that require the collection and storage of energy and demand consumption data that is transmitted to the Association by means of digital cellular modem communication.

\section*{Resource and Tax Adjustment (RTA)}

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by \(\$ 0.0001\) per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than \(\$ 0.0903\) per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

\section*{Taxes}

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

\section*{Terms of Payment}

The above charges are net. Balances over \(\$ 10.00\) not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or \(\$ 1.00\), whichever is greater, added to the balance.

\section*{SEASONAL MEMBER RIDER}

\section*{Availability}

Available to members receiving service under rate schedules \(46,54,70\) or 71 and determined by the Association to be seasonal. Seasonal members qualifying for the Seasonal Member Rider are defined as businesses (service or production) that are closed or shut down for at least three consecutive months during the year. Service is subject to the established rules and regulations of the Association.

\section*{Rider}

If an account is determined to be seasonal in nature by the Association, the minimum monthly charge shall be the fixed charge for each month of the 12 month period. Minimum monthly demand provisions will not be applied. Members who elect to be disconnected during a portion of the year and then reconnected will be charged a disconnect and a reconnect fee as well as the monthly fixed charge for all 12 months.

\section*{SCHEDULE 47}

MUNICIPAL CIVIL DEFENSE SIRENS

\section*{Availability}

This rate will be available to governmental bodies for civil defense siren services where energy consumption is negligible.

\section*{Type of Service}

Either single phase or three phase, depending on feasibility, 60 hertz, at available secondary voltages.

\section*{Installation Charges}

The member shall pay the total estimated installation charges involved to provide service when additional transformers are required. No initial charge will be made to run an overhead service wire from an existing transformer or for making connections to an existing underground feedpoint.

\section*{Monthly Rate}
\$5.00/Month per Installation
Plus Applicable Taxes

\section*{Taxes}

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder shall be added to the above rate as appropriate.

\section*{Terms of Payment}

The above charges are net. Balances over \(\$ 10.00\) not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or \(\$ 1.00\), whichever is greater, added to the balance.

\title{
SCHEDULE 49 \\ GEOTHERMAL HEAT PUMP RIDER \\ (Closed to new consumers.)
}

\section*{Availability}

Available to any commercial member for energy used by a geothermal heat pump system.
Members requesting service under this rate schedule must be taking service concurrently under Rate Schedule 41 or 46 . Service is subject to the established rules and regulations of the Association.

\section*{Type of Service}

Single phase or three phase, 60 hertz, at available primary or secondary voltages.

\section*{Rate}

Energy Charge \(\quad \$ 0.0940\) per kWh
Plus applicable taxes

\section*{Metering}

The geothermal heat pump system must be separately, parallel metered from all other loads at the premise. Service will not be sub-metered.

\section*{Power Factor}

The member agrees to maintain as near unity ( 100 percent) power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent, the energy for billing purposes shall be adjusted accordingly.

\section*{Resource and Tax Adjustment (RTA)}

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by \(\$ 0.0001\) per kWh, or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour for this service annually exceeds, or is less than, \(\$ 0.0775\) per kWh sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted as necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

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SCHEDULE 49
GEOTHERMAL HEAT PUMP RIDER
(Continued)

\section*{Conditions of Service}

If service is furnished at secondary voltage, the delivery point shall be the metering point unless otherwise specified in the contract for service. All wiring, poles, lines and other electric equipment on the load side of the delivery point shall be owned and maintained by the member.

If service is furnished at the Cooperative's primary line voltage, the delivery point shall be the point of attachment of the cooperative's primary line to member's transformer structure unless otherwise specified in the contract for service. All wiring, poles, lines and other electric equipment (except metering equipment) on the low side of the delivery point shall be owned and maintained by the member.

\section*{Taxes}

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution or sales of electricity are allocable to sales here under, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

\section*{Terms of Payment}

The above charges are net. Balances over \(\$ 10.00\) not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or \(\$ 1.00\), whichever is greater, added to the balance.

\section*{SCHEDULE 51}

CONTROLLED ENERGY STORAGE

\section*{Availability}

Available to members taking service concurrently under rate schedules 31,41 and 46. This rate is for interruptible service to energy storage loads which are remotely controlled by the Association. Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

\section*{Type of Service}

Single phase or three phase, 60 hertz, at available secondary voltages. Service under this schedule will be available for approximately eight hours per day, normally 11:00 p.m. to 7:00 a.m., or as established by the Association.

\section*{Monthly Rate}

Energy Charge @ \(\$ 0.0440\) per kWh
Plus Applicable Taxes.

\section*{Resource and Tax Adjustment (RTA)}

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The energy cost factor shall be adjusted by \(\$ 0.0001\) per kilowatt-hour or major fraction thereof, of which the Association's total projected weighted average power cost per kilowatt-hour for this service exceeds, or is less than \(\$ 0.0200\) per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

\section*{Demand}

The metered demand of loads on this rate will be subtracted from the metered demand for members receiving service under Schedule 41 and 46 when the storage load is coincident with the member's other loads. When feasible, new controlled energy storage loads should be on a separate service from Schedule 41 and 46 load.

\section*{Taxes}

The rates set fourth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

\section*{Terms of Payment}

The above charges are net. Balances over \(\$ 10.00\) not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or \(\$ 1.00\), whichever is greater, added to the balance.

\section*{Availability}

Available to member taking service concurrently under rate schedules 31,41 and 46 . This rate is for interruptible service to qualifying loads which are remotely controlled by the Association. Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

\section*{Type of Service}

Single phase or three phase, 60 hertz, at available secondary voltages. Service under this schedule will be available at all times except when interrupted by the Association during times of peak system demand or system emergencies.

Monthly Rate
Energy Charge @ \(\$ 0.0550\) per kWh
Plus Applicable Taxes.
Alternate Monthly Rate for Controlled Water Heaters
Where separate metering of controlled water heaters is not possible or for members on Rate 53, a direct credit of \(\$ 1.50\) per 100 kWh used up to a maximum of \(\$ 6.00\) per month will be applied against the monthly bill.

\section*{Resource and Tax Adjustment (RTA)}

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The energy cost factor shall be adjusted by \(\$ 0.0001\) per kilowatt-hour or major fraction thereof, of which the Association's total projected weighted average power cost per kilowatt-hour for this service exceeds, or is less than \(\$ 0.0305\) per kilowatthour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

\section*{Demand}

The metered demand of loads on this rate will be subtracted from the metered demand for members receiving service under Schedule 41 and 46 when the interruptible load is coincident with the member's other loads. When feasible, new controlled interruptible services loads should be on a separate service from Schedule 41 and 46 load.

\section*{Taxes}

The rates set fourth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

\section*{Terms of Payment}

The above charges are net. Balances over \(\$ 10.00\) not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or \(\$ 1.00\), whichever is greater, added to the balance.

\section*{SCHEDULE 53 \\ RESIDENTIAL AND FARM SERVICE TIME-OF-DAY RATE}

\section*{Availability}

Available to residential and farm members for all domestic and farm use, except irrigation pumps. Members participating in this service are not eligible for either Schedule 51 or Schedule 52.
Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

\section*{Type of Service}

Single phase or three phase, when economically feasible, 60 hertz, at available secondary voltages.

\section*{Monthly Rate}

Fixed Charge \(\quad \$ 12.00\) per month
Energy Charge
Summer - (June-Aug) Peak Period @ \(\$ 0.1880\) per kWh
Other - Peak Period @ \(\$ 0.1740\) per kWh
Off-Peak Period @ \(\$ 0.0940\) per kWh

Plus Applicable Taxes

\section*{Definition of Periods}

Peak Period 4:00 p.m. to 11:00 p.m., excluding holidays and weekends
Off-Peak Period 11:00 p.m. to 4:00 p.m., plus all day on holidays and weekends
Holidays include New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

\section*{Minimum Monthly Charge}

The minimum monthly charge under the above rate shall be the Fixed Charge.

\section*{Resource and Tax Adjustment (RTA)}

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by \(\$ 0.0001\) per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceed, or is less than \(\$ 0.0903\) per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

\section*{SCHEDULE 53}

RESIDENTIAL AND FARM SERVICE
TIME-OF-DAY RATE
(Continued)

\section*{Taxes}

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

Terms of Payment
The above charges are net. Balances over \(\$ 10.00\) not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or \(\$ 1.00\), whichever is greater, added to the balance.

\section*{SCHEDULE 54 \\ GENERAL SERVICE OPTIONAL TIME-OF-DAY RATE}

\section*{Availability}

Available to any member for general service electrical loads. Members participating in this service are not eligible for either Schedule 51 or Schedule 52. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

\section*{Type of Service}

Single phase or three phase, 60 hertz, at available primary or secondary voltages.

\section*{Monthly Rate}

Fixed Charge \(\$ 36.00\) per month
Peak Period Demand Charge
Summer (June-Aug) @ \$24.85 per kW

Winter (Dec-Feb) @ \(\$ 18.95\) per kW
Other
(a) \(\$ 13.00\) per kW

Plus
Maximum Demand Charge
(a) \(\$ 4.75\) per kW

Energy Charge @ \$0.0499 per kWh
Plus Applicable Taxes

\section*{Definition of Periods}

Peak Period \(\quad 4: 00 \mathrm{p} . \mathrm{m}\). to 11:00 p.m., excluding holidays and weekends
Off-Peak Period 11:00 p.m. to 4:00 p.m., plus all day on holidays and weekends

Holidays include New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

\section*{Determination of Billing Demand}
1. Peak Period - The Peak Period Billing Demand shall be the greatest 15 minute demand (subject to power factor adjustment) between \(4 \mathrm{p} . \mathrm{m}\). and \(11 \mathrm{p} . \mathrm{m}\). during the month for which the bill is rendered, as indicated or recorded by a demand meter. Demand will be read to the nearest 0.01 kilowatt.
2. Maximum Demand - The Maximum Billing Demand shall be the greatest 15 minute demand (subject to power factor adjustment) during the month for which the bill is rendered, as indicated or recorded by a demand meter. Demand will be read to the nearest 0.01 kilowatt.

\section*{Minimum Monthly Charge}

The minimum monthly charge under the above rate shall be the Fixed Charge plus \(\$ 1.00\) per kW of the highest Maximum Billing Demand during the preceding 11 months.

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\title{
SCHEDULE 54 \\ GENERAL SERVICE \\ OPTIONAL TIME-OF-DAY RATE \\ (Continued)
}

Power Factor Adjustment
The member agrees to maintain as near unity ( 100 percent) power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent, the demand for billing purposes shall be the demand as recorded by the demand meter multiplied by 90 percent and divided by the percent power factor.

\section*{Primary Voltage Service}

A discount of \(\$ 0.15 / \mathrm{kW}\) will be applied to the Maximum Billing Demand when the service is taken by the member at the available primary voltage. If primary metering is used, an additional discount of 2.0 percent shall be applied to the bill. The 2.0 percent discount shall be applied after the \(\$ 0.15 / \mathrm{kW}\) discount.

\section*{Optional Communication Fee}

A monthly Communication Fee of \(\$ 8.70\) will be applied to accounts that participate in riders that require the collection and storage of energy and demand consumption data that is transmitted to the Association by means of digital cellular modem communication.

\section*{Resource and Tax Adjustment (RTA)}

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by \(\$ 0.0001\) per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than \(\$ 0.0903\) per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

\section*{Taxes}

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

\section*{Terms of Payment}

The above charges are net. Balances over \(\$ 10.00\) not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or \(\$ 1.00\), whichever is greater, added to the balance.

\section*{SCHEDULE 56}

RESIDENTIAL AND FARM SERVICE

\section*{Availability}

Available to residential and farm members for all domestic and farm use, except irrigation pumps. Members participating in this service are not eligible for either Schedule 51 or Schedule 52.
Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

\section*{Type of Service}

Single phase or three phase, when economically feasible, 60 hertz, at available secondary voltages.

\section*{Monthly Rate}

Fixed Charge
Energy Charges
Peak Periods:
Summer - (June-Aug) @ \(\$ 0.2710\) per kWh
Winter - (Dec-Feb) @ \(\$ 0.2210\) per kWh
Spring/Fall
Intermediate Period
Off-Peak Period
Plus Applicable Taxes

\section*{Definition of Periods}

Peak Periods 4:00 p.m. to 11:00 p.m., excluding holidays and weekends
Intermediate Period
Off-Peak Period
\(\$ 12.00\) per month
(a) \(\$ 0.1750\) per kWh
(a) \(\$ 0.0970\) per kWh
@ \(\$ 0.0760\) per kWh

8:00 a.m. to 4:00 p.m., excluding holidays and weekends
11:00 p.m. to 8:00 a.m. Mon-Fri and all day weekends and holidays

Holidays include New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

\section*{Minimum Monthly Charge}

The minimum monthly charge under the above rate shall be the Fixed Charge.

\section*{Resource and Tax Adjustment (RTA)}

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by \(\$ 0.0001\) per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceed, or is less than \(\$ 0.0903\) per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

SCHEDULE 56
RESIDENTIAL AND FARM SERVICE
TIME-OF-DAY RATE
(Continued)

\section*{Taxes}

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

Terms of Payment
The above charges are net. Balances over \(\$ 10.00\) not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or \(\$ 1.00\), whichever is greater, added to the balance.

\section*{SCHEDULE 60}

RIDER FOR STANDBY SERVICE

\section*{Application}

The Rider for Standby Service is applicable to any member who uses a distributed generation system that serves all or a portion of the member's electric energy requirements and where the member chooses to use the Cooperative's electric system to serve that load when the distributed generation system is either partly or wholly unavailable. When the member uses electric service from the Cooperative, such service will be provided under one of the Cooperative's firm retail electric rate schedules to which this Rider is attached.

The member must enter into a contract with Cooperative for the interconnection and operation of an on-site distributed generation system. The distributed generation system at the member site shall not operate in parallel with the Cooperative's system until the installation has been inspected by an authorized Cooperative representative and final written approval is received from the Cooperative to commence parallel operation.

The minimum term of service taken under this Rider shall be one (1) year or such longer period as may be required under an Electric Service Agreement. Following this initial minimum term, a member receiving standby service may terminate standby service and establish service under a firm service tariff schedule within the same time frame as would be required of a new member with a similar firm service load.

Exceptions to this Application include:
A. Any member taking service under Cooperative's Rider for Parallel Generation as established under Minnesota Rules 7835 shall not be required to take service under this Rider for standby services required to temporarily back up distributed generation systems rated at less than 40 kW ;
B. Any member taking service under Cooperative's Rider for Distributed Generation Service shall not be required to pay for service under this Rider for standby services required to temporarily back up distributed generation systems rated at 60 kW or less. For any member with distributed generation systems rated at 60 kW or less, standby service will be available to members through their base rates;
C. Any member, in lieu of service under this Rider, may provide physical assurance to ensure that standby service is not taken. A member requesting physical assurance shall agree to furnish and install an approved load limiting device which shall be set and sealed by Cooperative so that member's use of service will not exceed member's contracted demand. The installed cost of the load limiting device shall be paid by member.
D. Any member using on-site distributed generation to participate in Interruptible Service (Schedules 70 and 71) and generation installed for emergency backup during utility outages.

\section*{SCHEDULE 60 \\ RIDER FOR STANDBY SERVICE CONTINUED}

\section*{Definitions}

Contracted Standby Demand is the quantity specified in the member's Electric Service Agreement as the maximum amount of firm or non-firm standby service the Cooperative is obligated to supply and will not exceed the capacity of the member's distributed generation system.

Firm Service refers to a utility's most reliable, constant electric service. A utility would interrupt the supply of electricity to a firm service customer only as a last resort.
Non-Firm Service, also called interruptible service, refers to electric service that a utility provides only to the extent that it has capacity not being used to meet the needs of firm-service members at the moment.
All other definitions shall be as described in Cooperative's Distributed Generation Interconnection Requirements and Interconnection Process for Distributed Generation Systems.

\section*{Charges for Service}

The following Reservation Fees, Communication Fee, Usage Fees, and Wheeling Fees will be assessed as applicable in addition to all charges for service being taken under Cooperative's base rate schedule:

\section*{Reservation Fees}

Charges as specified below for the reservation of either Firm or Non-Firm generation, transmission and distribution service per Month per kW will each be applied to the member's Contracted Standby Demand as specified in member's Electric Service Agreement with Cooperative:
\begin{tabular}{lcc} 
& \begin{tabular}{c} 
Firm Service \\
\((\$\) per kW\()\)
\end{tabular} & \begin{tabular}{c} 
Non-Firm Service \\
\((\$\) per kW\()\)
\end{tabular} \\
Generation & \(*\) & \(* *\) \\
Transmission & \(* * 51\) & \(\$ 3.51\) \\
Distribution - Secondary Service & \(\$ 3.51\) \\
Distribution - Primary Service & \(\$ 3.28\) & \(\$ 3.28\) \\
Distribution - Substation Service & \(\$ 0.90\) & \(\$ 0.90\)
\end{tabular}
* Firm Standby Service generation and transmission Reservation Fees will be billed under the rates, terms and conditions of the Cooperative's wholesale power supplier (Great River Energy), which is available on GRE's Web site; greatriverenergy.com and DEA's Web site; dakotaelectric.com.
**Generation and transmission Reservation Fees are not applied for Non-Firm Service. However, members will be responsible for all costs associated with wholesale power supply during any times of usage.

\section*{Communication Fee}

A monthly Communication Fee will be applied to cover the cost of transmitting data through the use of digital cellular equipment. The monthly Communication Fee is applied to each required meter with cellular data capabilities.

Communication Fee \(\$ 8.70\) per meter

\section*{Usage Fees}

\section*{Demand Charge}

If the member registers electrical usage from Cooperative during a billing month then such usage will result in demand charges which may vary between members contracting for Firm Standby Service or Non-Firm Standby Service.
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SCHEDULE 60
RIDER FOR STANDBY SERVICE
CONTINUED

If a firm standby member has usage in a billing month, then the demand of such usage will be charged at the demand rate as contained in the base tariff to which this Rider is attached. If the usage demand exceeds the Contracted Standby Demand level, the member's Contracted Standby Demand will be adjusted upward as specified in the Billing Demand clause of this Rider. If the member registers electrical usage that coincides with the Cooperative's wholesale power supplier's applicable billing peak, then additional demand charges may be applied by Cooperative to ensure that the member fully compensates Cooperative for such wholesale power costs.

If there is usage by a non-firm standby member, then the demand of such usage will be charged at no less than the demand rate as contained in the base tariff to which this Rider is attached. (Any higher demand charges for non-firm demand use will reflect higher wholesale demand costs incurred to provide such service.) If the usage demand exceeds the Contracted Standby Demand level, the member's Contracted Standby Demand will be adjusted upward as specified in the Billing Demand clause of this Rider. If the member registers electric use that coincides with the Cooperative's wholesale power supplier's applicable billing peak, then additional demand charges may be applied by Cooperative to ensure that the member fully compensates Cooperative for such wholesale power costs. If additional costs are incurred to provide wholesale power during any time of usage by a non-firm standby member, then the nonfirm standby member will be responsible for all such costs.

\section*{Energy Charge}

Energy consumed by a standby member under this Rider will be charged at the same energy rate contained in the base tariff to which this Rider is attached.

\section*{Wheeling Fee}

Members requiring delivery of energy over the Cooperative's distribution system to a third party will be charged each month, when such distribution wheeling service is available and provided, at a rate equal to the applicable distribution standby reservation fee specified in this rider. If firm wheeling service is required, then arrangements will be made to ensure that distribution system facilities are adequate to provide such firm wheeling service. The cost of any required system modifications will be the responsibility of the entity requesting the firm wheeling service.

\section*{Rate Adjustments}

Bills shall be subject to all adjustments applicable to consumption under the base schedule to which this Rider is attached.

\section*{Billing Demand}

The member shall contract for a specific kilowatt demand of standby service with the maximum being the amount of load served by the member's distributed generation system. In the event the Contracted Standby Demand is exceeded in any month, such higher demand shall be considered the new Contracted Standby Demand. Such adjustment of the Contracted Standby Demand applicable to Reservation Fees will recognize circumstances where on-going utility firm service is being provided in addition to standby service.
The billing demand for applying Distribution Reservation Fees for standby service to on-site distributed generation will be determined by subtracting the billing demand for usage supplied by the Cooperative during the same time period as the highest total member electrical demand in the billing month (supplied by the Cooperative and the member's distributed generation system). The billing demand for applying Distribution Reservation Fees for standby service to wholesale generation will be determined by subtracting the billing demand for usage supplied by the Cooperative from the Contracted Standby Demand. The billing demand for applying Generation and Transmission Reservation Fees will be determined according to the terms and conditions of the Cooperative's wholesale power supplier.
The billing demand(s) for usage will be determined and applied as specified in the base tariff to which this rider is attached.
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Farmington, Minnesota 55024 & REVISION:
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SCHEDULE 60
RIDER FOR STANDBY SERVICE CONTINUED

\section*{Stranded Investment}

Any member who installs load limiting equipment to ensure that standby service is not taken (physical assurance) and does not intend to deliver power into the distribution system will have the option of making a lump sum payment to Cooperative for stranded distribution investment. Dakota Electric shall provide support for the one-time charge to recover stranded distribution investments to physical assurance members before it begins collecting the charge. If such lump sum payment is not made, then the member will be subject to distribution standby charges based on the member's typical demands incurred prior to requesting physical assurance status.

\section*{Billing and Terms of Payment}

Billing and terms of payment shall be governed as set forth in the Cooperative's applicable base rate schedule.

\section*{Terms and Conditions of Service}
1. The member shall execute an Electric Service Agreement with the Cooperative which shall specify:
a. Standard rate schedule (to which this Rider is attached);
b. Contracted Standby Demand;
c. Generator Nameplate Rating; and
d. Type of Standby Service (firm or non-firm).
2. Service hereunder is subject to Cooperative's Interconnection Process for Distributed Generation Systems and Distributed Generation Interconnection Requirements as may be modified from time-to-time. Current documents are available on DEA's Web site at dakotaelectric.com.
3. Cooperative will install all metering equipment necessary to monitor services provided to ensure adequate measurements are obtained to support necessary application of charges. The member will be charged an up-front lump sum for the installed cost of such metering equipment.
4. The member shall make provision for on-site metering. All energy received from and delivered to the Cooperative shall be separately metered. The Cooperative may require metering of the generation output.
5. The member shall pay for all interconnection costs incurred by the Cooperative made necessary by the installation of the distributed generation system.
6. The Cooperative reserves the right to disconnect the member's generator from the distribution system if it interferes with the operation of the Cooperative's equipment or with the equipment of other Cooperative members.
7. The Cooperative shall not be obligated to supply standby service for a member's load in excess of the capacity for which the member has contracted.
8. The member shall be liable for all damages or costs caused by member's use of power in excess of contracted for capacity.
9. Cooperative may require the member to furnish and install an approved load limiting device which shall be set and sealed by Cooperative so that the member's use of service will not exceed the number of kilowatts contracted for by member.
10. The member shall furnish updated documentation to the Cooperative if there are changes to the maximum capacity and reliability of the power source for which the member requires Standby Service.
11. Cooperative and the member will coordinate the planning and determining of a schedule for performance of periodic maintenance of the member's facilities, such maintenance shall be scheduled to avoid wholesale power billing peaks or as agreed upon in the contract. Cooperative will require the member to provide reasonable notice of its proposed schedule for maintenance. The duration of the agreed maintenance schedule may thereafter be extended only with the consent of the Cooperative in response to the member's request received prior to the end of the maintenance period.

\section*{SCHEDULE 60 \\ RIDER FOR STANDBY SERVICE CONTINUED}
12. The Cooperative reserves the right to establish a minimum charge in order to recover the costs of facilities required to serve such load. Said charge shall be specified in the Electric Service Agreement.
13. Cooperative may be reimbursed by the member for costs which are incurred, or which have been previously incurred, in providing facilities which are used principally or exclusively in supplying service for any portion of the member's requirements which are to be normally supplied from a source of power other than the Cooperative's electric system.
14. All electricity delivered shall be for the exclusive use of the member and shall not be resold.
15. Member shall indemnify Cooperative against all liability which may result from any and all claims for damages to property and injury or death to persons which may arise out of or be caused by the erection, maintenance, presence, or operation of the co-generation facility or by any related act or omission of the member, its employees, agents, contractors or subcontractors.

\section*{SCHEDULE 61 RIDER FOR DISTRIBUTED GENERATION}

\section*{Application}

The Rider for Distributed Generation is applicable as follows to any member taking service under one of the Cooperative's standard electric rate schedules and who has entered into an Electric Service Agreement with Cooperative for the interconnection and operation of an on-site extended parallel distributed generation system:
1. The distributed generation system must be an operable, permanently installed or mobile generation facility connected in parallel to the utility distribution system serving the member receiving retail electric service at the same site.
2. The distributed generation system must be fueled by either natural gas, a renewable fuel, or another similarly clean fuel or combination of fuels.
3. The distributed generation system can not have more than 10 MW of interconnected capacity at a point of common coupling to Cooperative's distribution system.
4. The interconnection and operation of the distributed generation system at each point of common coupling shall be considered as a separate application of the Rider.
5. All provisions of the applicable standard service schedule shall apply to distributed generation service under this Rider except as noted below.

In lieu of service under this Rider, the member and Cooperative may pursue reasonable transactions outside the Rider; or member may take service, as applicable, under Cooperative's Rider for Parallel Generation as established under Minnesota Rules 7835 - Cogeneration and Small Power Production.

\section*{Definitions}

Member is an entity receiving retail electric service from Cooperative at the same site as the distributed generation system.

Extended Parallel means the distributed generation system is designed to remain connected with the Cooperative's distribution system for an extended period of time.

Scheduled Maintenance service is energy, or energy and capacity, supplied by the Cooperative during scheduled maintenance of the member's non-utility source of electric energy supply (distributed generation system).

SCHEDULE 61
RIDER FOR DISTRIBUTED GENERATION CONTINUED

Supplemental service is electric energy, or energy and capacity, supplied by the Cooperative to the member when the member's non-utility source of electricity (distributed generation system) is insufficient to meet the member's own load. Supplemental Service can take two forms: residual retail service and load-following service. Residual Retail Service is intended for a Dakota Electric member who has an alternate source of electric energy supply which normally supplies only a portion of the member's electrical load requirements and who requires firm service for the remaining portion of the member's electrical requirements. Such Residual Retail Service is available under the Cooperative's firm retail electric rate schedule to which this rider is attached. Load Following Service is intended for a Dakota Electric retail member who has an alternate source of electric energy supply which has an output that is variable and dependent on the thermal load characteristics of the retail member and therefore, serves all or a portion of the member's electrical load requirements for a portion of the time and requires use of utility service for supply of energy at all other times. This load following service will be evaluated and contracted for on an individual basis with a member based on the specific variable load requirements of the member. Since a member may have control over the thermal load characteristics that affect the output of distributed generation facilities in this situation, we believe the best way of providing service is on an individual contracted basis. This will recognize that some members may rely on utility service during high cost on-peak periods while other members may require such utility service only during lower cost off-peak periods.

Unscheduled Outage service is energy, or energy and capacity, supplied by the Cooperative during unscheduled outages of the member's non-utility source of electric energy supply (distributed generation system).

All other definitions shall be as described in Cooperative's Distributed Generation Interconnection Requirements and Interconnection Process for Distributed Generation Systems.

\section*{Services}

Services provided under this Rider may include services from the Cooperative to member and from member to Cooperative. The following rates, charges, credits and payments are applicable for such services in addition to all applicable charges for service being taken under Cooperative's standard rate schedule:

\section*{Services from Cooperative to Member}

A monthly service charge to recover incremental metering, operation, and maintenance costs may be applied upon Commission approval.

\section*{Services from Cooperative to Member}

Interconnection Services
Interconnection services include services such as engineering/design studies, Cooperative system upgrades and testing as further described in Cooperative's Distributed Generation Interconnection Requirements and Interconnection Process for Distributed Generation Systems. Charges for such interconnection services shall be as described in the Cooperative's Distributed Generation Interconnection Requirements and Interconnection Process for Distributed Generation Systems.

\section*{Supply Services}

Supply services include standby services such as scheduled maintenance and unscheduled outages as provided under Cooperative's Rider for Standby Service. Supplemental service is available under the Cooperative's firm retail electric rate schedule to which this Rider is attached.

\section*{Transmission Services}

Transmission services include reservation and delivery of capacity and energy on either a firm or non-firm basis and those ancillary services that are necessary to support the transmission of capacity and energy from resources to loads while maintaining reliable operation over Transmission Providers' Transmission System. These ancillary services include services such as Scheduling, System Control and Dispatch Service, Reactive Supply and Voltage Control from Generation Sources, Regulation and Frequency Response, Generator Imbalance, Operating Reserve - Spinning Reserve and Operating Reserve - Supplemental Reserve. Transmission Services are provided as applicable under Cooperative's wholesale power supplier's approved Open Access Transmission Tariff (OATT).

\section*{Distribution Services}

Distribution services include reservation and delivery of capacity and energy and those indirect services that are necessary to support the delivery of capacity and energy over Cooperative's distribution system. These indirect services include allocated support services or expenses such as operation and maintenance, member accounts, member service and information, administrative and general, depreciation, interest and taxes. Members requiring contracted distribution standby service of more than 60 kW and/or delivery of energy and capacity over Cooperative's distribution system to a third party will be charged for such distribution services at a rate equal to the distribution charge specified in the Cooperative's Rider for Standby and Supplemental Service.

SCHEDULE 61
RIDER FOR DISTRIBUTED GENERATION CONTINUED

\section*{Services from Member to Cooperative}

\section*{Capacity/Energy}

Member may sell all of the energy produced by the distributed generation system to the Cooperative, use all the distributed generation energy to meet its own electrical requirements, or use a portion of the energy from the distributed generation system to meet its own electrical needs and sell the remaining energy to the Cooperative.

If the member offers to sell energy to the Cooperative, then such energy and capacity shall be purchased by the Cooperative's wholesale power supplier under the rates, terms and conditions for such purchases as established by the wholesale power supplier. Great River Energy Rate Rider T is available on GRE's Web site; greatriverenergy.com, and on DEA's Web site; dakotaelectric.com.

\section*{Distribution Credits}

A distribution credit may be given if the distributed generation system allows the Cooperative to defer or avoid distribution system upgrades. Distribution credits to the member should equal the Cooperative's avoided distribution costs resulting from the installation and operation of the distributed generation system. The Cooperative shall provide, upon member's written request, areas of the distribution system that could be likely candidates for distribution credits as determined through the Cooperative's normal planning process. The Cooperative shall also provide to the member the minimum size distributed generation system required in each of the areas to qualify for the distribution credit along with general operational requirements necessary for the distributed generation system to meet, so as to be able to receive distribution credits.

Upon receiving an interconnection application from the member for a distributed generation interconnection, along with a written request for distribution credits, the Cooperative will complete an initial screening study to determine if the project has the potential to receive distribution credits. The member shall be responsible for the cost of the screening study. If the Cooperative's study shows that there exists potential for distribution credit, the Cooperative shall, at its own expense, pursue further study to determine the distribution credit, as part of its annual distribution planning study. If distribution credits are identified, then such credits will be paid in conjunction with an agreement with the member to supply distribution support utilizing the member's generation system.

\section*{Line Loss Credits}

If the member requests the Cooperative to provide a specific line loss study, at the member's expense regardless of the study's outcome, the member may be eligible for additional line loss credits if the study supports such credits.
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Farmington, Minnesota 55024 & REVISION:
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SCHEDULE 61
RIDER FOR DISTRIBUTED GENERATION
CONTINUED

\section*{Renewable Credits}

If the member installs a renewable distributed generation system and the Cooperative's wholesale power supplier's purchase of energy and capacity from such facility allows the wholesale power supplier to avoid the need to purchase renewable energy elsewhere, then the purchase of such renewable energy and capacity will equal the avoided cost of renewable purchases as provided under the wholesale power supplier's applicable rates, terms and conditions for such purchases In the event that the member producing the power receives renewable energy credits - that is, the member is paid by the purchasing company the avoided cost of renewable energy purchases then this transaction will constitute a transfer from the member to the purchasing company of the property rights for those renewable attributes specific to the renewable energy generated by the member and for which the purchasing company paid renewable energy credits. The member may receive renewable credits or tradable emission credits but not both.

\section*{Tradable Emissions Credits}

If the purchase of energy and capacity by the Cooperative's wholesale power supplier under the "must buy" provision described above results in the wholesale power supplier receiving an economic value associated with tradable emissions, then tradable emissions credits will be provided to the member under terms established by the wholesale power supplier that equal the credit revenues associated with the DG facilities of such emission credits received by the wholesale power supplier. The member may receive either renewable credits or tradable emissions credits but not both.

\section*{Terms and Conditions of Service}

The following terms and conditions apply to this Rider:
1. Service hereunder is subject to Cooperative's Interconnection Process for Distributed Generation Systems and Distributed Generation Interconnection Requirements as may be modified from time-to-time. Current documents are available on DEA's Web site: dakotaelectric.com.
2. Cooperative will install all metering equipment necessary to monitor services provided to ensure adequate measurements are obtained to support necessary application of rates, charges, credits and payments. The member will be charged an up-front lump sum for the installed cost of such metering equipment.
3. The member will be compensated monthly for all energy delivered to Cooperative's wholesale power supplier. The timing for these payments is subject to annual review.
4. The member shall make provision for on-site metering. All energy received from and delivered to the Cooperative shall be separately metered. The Cooperative may require metering of the generation output.

SCHEDULE 61
RIDER FOR DISTRIBUTED GENERATION CONTINUED
5. The member shall pay for all interconnection costs incurred by the Cooperative made necessary by the installation of the distributed generation system.
6. Power and energy purchased by the member from the Cooperative shall be under the applicable retail rates for the purchase of electricity.
7. The Cooperative reserves the right to disconnect the member's generator from its system if it interferes with the operation of the Cooperative's equipment or with the equipment of other Cooperative members.
8. The member shall execute an Electric Service Agreement with the Cooperative which may include, among other provisions, a minimum term of service.

\section*{Billing and Terms of Payment}

Billing and terms of payment shall be governed as set forth in the Cooperative's applicable base rate schedule.

To the extent that Cooperative receives service from a member under this Rider, payment for such services shall be netted against any charges for Cooperative-supplied services hereunder.

\section*{Availability}

Available to any member with a minimum controllable demand of 50 kW . Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Members participating in this service are not eligible for concurrent service under any other rate schedule. Service is subject to the established rules and regulations of the Association.

Under the full interruptible control option, members agree to interrupt their entire electrical energy usage. Members may attain this full interruption through curtailment or with the use of on-site generation back-up. During the interruption, the member's load must go to zero.

\section*{Type of Service}

Single phase or three phase, 60 hertz, at available primary or secondary voltages.
Monthly Rate

Fixed Charge
Communication Fee (meters w/ digital cellular)
Coincidental Demand
Summer (June-Aug)
Winter (Dec-Feb)
Other
Non-Coincidental Demand
Energy Charge
Failure to Control Charge
Plus Applicable Taxes
\(\$ 110.00\) per month \(\$ 8.70\) per month
\$24.85 per kW
\(\$ 18.95\) per kW
\(\$ 13.00\) per kW
\$ 4.75 per kW
\$ 0.0499 per kWh
\$ 5.00 per kW

Control Period
The control period shall be defined as the period of time during which the Association is controlling these loads with the intent of minimizing demand on the Association's system.

\section*{Coincidental Demand}

The monthly Coincidental Demand under the full interruptible control option shall be defined as the member's actual hourly demand (subject to power factor adjustment) that is coincident with the wholesale power supplier (i.e. average of the four fifteen minute demand readings for the hour ending of the wholesale billing peak) when the load is directed to be controlled during the wholesale billing peak.

\section*{Non-Coincidental Demand}

The Non-Coincidental Demand shall be the maximum kilowatt demand (subject to power factor adjustment) established by the member for any period of 15 consecutive minutes during the month for which the bill is rendered, as indicated or recorded by a demand meter.

\section*{Failure to Control}

The Failure to Control Charge will be applied to the highest kilowatt demand during any one monthly control period when the member does not fully interrupt demand. The Failure to Control Charge is applied to the highest demand recorded during any one of the monthly control periods. The control period shall be defined as the period of time during which the Association is controlling these loads with the intent of minimizing demand on the Association's system. Failure to control or being unavailable for control for more than one calendar month may require the member to be removed from Schedule 70 for the remainder of the year.

\section*{Scheduled Maintenance}

Members are encouraged to schedule required periodic maintenance during the spring and fall months and coordinate such maintenance with the Association.

SCHEDULE 70
INTERRUPTIBLE SERVICE
(FULL INTERRUPTIBLE OPTION)
(Continued)

\section*{Minimum Billing Demand}

The Minimum Billing Demand for any billing period shall be no less than 50 percent of the highest noncoincidental demand during the preceding 11 months.

\section*{Power Factor Adjustment}

The member agrees to maintain as near unity power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent; the demand for billing purposes shall be the demand as recorded by the demand meter multiplied by 90 percent and divided by the percent power factor.

\section*{Primary Voltage Service}

A discount of \(\$ 0.15\) per kW of billing demand will be applied to the bill when service is taken by the member at the available primary voltage. If primary metering is used, an additional discount of 2.0 percent shall be applied to the bill. The 2.0 percent discount shall be applied after the \(\$ 0.15\) per kW discount.

\section*{Resource and Tax Adjustment (RTA)}

The Energy Charge shall be adjusted for incremental changes in wholesale power costs, Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The energy cost factor shall be adjusted by \(\$ 0.0001\) per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour applicable to this service exceeds, or is less than \(\$ 0.0497\) per kilowatt-hour sold as described in the Energy Cost Adjustment Rider (ECA) (Sheet 52). The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

\section*{Taxes}

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

\section*{Terms of Payment}

The above charges are net. Balances over \(\$ 10.00\) not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or \(\$ 1.00\), whichever is greater, added to the balance.
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SCHEDULE 71
INTERRUPTIBLE SERVICE
(PARTIAL INTERRUPTIBLE OPTION)
Availability
Available to any member with a minimum controllable demand of 50 kW . Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Members participating in this service are not eligible for concurrent service under any other rate schedule. Service is subject to the established rules and regulations of the Association.

Under the partial interruptible control option, members agree to reduce a portion of their electrical energy usage. Members may attain this partial interruption through curtailment or with the use of on-site generation back-up. During the interruption, the member's load goes to a Predetermined Demand Level (PDL). If a partial interruptible member fails to control demand to the PDL, then the PDL will be adjusted to the demand occurring during such control period.

\section*{Type of Service}

Single phase or three phase, 60 hertz, at available primary or secondary voltages.

\section*{Monthly Rate}
Fixed Charge
Communication Fee (meters w/ digital cellular)
Coincidental Demand
Summer (June - Aug)
Winter (Dec - Feb)
Other
Non-Coincidental Demand
Energy Charge
Excess Demand Charge
Plus Applicable Taxes
\(\$ 110.00\) per month \(\$ 8.70\) per month
\$24.85 per kW
\$18.95 per kW
\$13.00 per kW
\$ 4.75 per kW
\$ 0.0499 per kWh
\$ 5.00 per kW

\section*{Control Period}

The control period shall be shall be defined as the period of time during which the Association is controlling these loads with the intent of minimizing demand on the Association's system.

\section*{Coincidental Demand}

The monthly Coincidental Demand under the partial interruptible control option shall be defined as:
- During a month with no control period, the monthly Coincidental Demand under the partial
interruptible control option will be the lesser of the member's actual hourly demand (subject to power factor adjustment) that is coincident with the wholesale power supplier (i.e. average of the four fifteen minute demand readings for the hour ending of the wholesale billing peak) or the Predetermined Demand Level.
During a month with a control period, the monthly Coincidental Demand under the partial interruptible control option will be the member's actual hourly demand (subject to power factor adjustment) that is coincident with the wholesale power supplier (i.e. average of the four fifteen minute demand readings for the hour ending of the wholesale billing peak).
The partial interruptible PDL will be adjusted to any higher actual demand of the member occurring during a curtailable event for the remainder of the calendar year. In the case of members using on-site generation, the PDL may be adjusted to reflect the rated capacity of such generation that was not operational during the control period. Only one such adjustment per year will be allowed.

\section*{Non-Coincidental Demand}

The Non-Coincidental Demand shall be the maximum kilowatt demand (subject to power factor adjustment) established by the member for any period of 15 consecutive minutes during the month for which the bill is rendered, as indicated or recorded by a demand meter.

SCHEDULE 71
INTERRUPTIBLE SERVICE (PARTIAL INTERRUPTIBLE OPTION) (Continued)

\section*{Excess Demand Charge}

The Excess Demand Charge will be applied to the Coincidental Demand that exceeds the Predetermined Demand Level (PDL) for a member using the partial interruptible control option when the member does not reduce demand to the PDL during a control period. The Excess Demand Charge is applied per month.

\section*{Minimum Billing Demand}

The Minimum Billing Demand for any billing period shall be no less than 50 percent of the highest noncoincidental demand during the preceding 11 months.

\section*{Power Factor Adjustment}

The member agrees to maintain as near unity power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent; the demand for billing purposes shall be the demand as recorded by the demand meter multiplied by 90 percent and divided by the percent power factor.

\section*{Primary Voltage Service}

A discount of \(\$ 0.15\) per kW of billing demand will be applied to the bill when service is taken by the member at the available primary voltage. If primary metering is used, an additional discount of 2.0 percent shall be applied to the bill. The 2.0 percent discount shall be applied after the \(\$ 0.15\) per kW discount.

\section*{Resource and Tax Adjustment (RTA)}

The Energy Charge shall be adjusted for incremental changes in wholesale power costs, Dakota Electric's conservation tracker account balance, and real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The energy cost factor shall be adjusted by \(\$ 0.0001\) per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour applicable to this service exceeds, or is less than \(\$ 0.0497\) per kilowatt-hour sold as described in the Energy Cost Adjustment Rider (ECA) (Sheet 52). The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

\section*{Taxes}

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

\section*{Terms of Payment}

The above charges are net. Balances over \(\$ 10.00\) not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or \(\$ 1.00\), whichever is greater, added to the balance.

\section*{SCHEDULE 80 \\ CYCLED AIR CONDITIONING SERVICE}

\section*{Availability}

Available to members taking service concurrently under another rate schedule. This rate is for interruptible service to central air conditioners which are remotely controlled by the Association. Service is subject to the established rules and regulations of the Association.

\section*{Type of Service}

Single phase or three phase, 60 hertz, at available secondary voltages. Service under this schedule will be available at all times except when interrupted by the Association during times of peak system demand or system emergencies.

\section*{Monthly Rate}

Option No. 1 - Available to members who also take service under Schedules 51 and 52 where an existing meter and control unit may be utilized for the controlled air conditioning load.

Energy Charge per applicable Schedule 51 or 52
Option No. 2-Available to members where a new meter and control unit must be installed to control the air conditioning load.

Energy Charge Credit @ \(\$ 0.0320\) per kWh
Option No. 3-Available to members where a control unit must be installed to control the air conditioning load.

A credit will be applied to the first \(\$ 13.00\) of the member's net energy consumption charges in the months of June, July, and August. In no case will the credit exceed the sum of the monthly Energy Charge and Resource and Tax Adjustment.
Option No. 4 - Available to non-residential members where a new meter and control unit must be installed but where it is not feasible or designed to meter the air conditioning load separately. The maximum capacity of any individual air conditioning compressor is 7.5 tons. A \(\$ 6.50\) per ton per month credit will be applied to member's bill in the months of June, July, and August. The aggregate monthly credit per account will not exceed \(1 / 3\) of the net charges for energy and demand in each month.

\section*{Plus Applicable Taxes}

\section*{Taxes}

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder shall be added to the above rate as appropriate.

\section*{Terms of Payment}

The above charges are net. Balances over \(\$ 10.00\) not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or \(\$ 1.00\), whichever is greater, added to the balance.

SCHEDULE 90
OPTIONAL RENEWABLE ENERGY RIDER
(Wellspring Wind and Wellspring Solar)

\section*{Availability}

Available to any member taking service concurrently under another rate schedule. This rate is for the purchase of energy from wind and solar renewable sources. Members requesting service under this optional rider must remain on the rider for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

Subscription Requirement
Members desiring to participate in the Optional Renewable Energy Rider will specify the type of resource and either a fixed or a variable monthly amount of renewable energy (in one or more 100 kWh blocks) that they will purchase. The fixed monthly subscription level may not exceed a member's lowest actual or estimated monthly consumption level. Under the variable monthly subscription, the member will automatically purchase the maximum number of 100 kWh blocks or renewable energy each month that does not exceed the member's actual consumption level for that month.

\section*{Monthly Rate}
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Wind Renewable Energy (per 100 kWh) \$0.20
Solar Renewable Energy (per 100 kWh)

The monthly renewable energy rate will consist of the wholesale power cost for this service plus any over- or under-recovery balance from the prior year. This monthly renewable energy rate will be shown as a separate line item on a member's bill. This charge per 100 kWh is in addition to the applicable rate schedule currently serving the member.

## Rate Adjustments

The monthly rate will be adjusted under the following two circumstances. First, the rate will change to reflect changes in wholesale power costs associated with this service. Dakota Electric will file such wholesale rate adjustment calculations with the Minnesota Public Utilities Commission prior to implementing the rate revision. Second, the monthly rate will include any over- or under-recovery of renewable energy costs approved for recovery under this rider. In early January each year, Dakota Electric will submit a filing to the PUC documenting any change in wholesale power costs and any overor under-recovery of renewable energy costs for the prior calendar year.

## Taxes

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

SCHEDULE 90
OPTIONAL RENEWABLE ENERGY RIDER
(Wellspring C\&I)

## Availability

Wellspring C\&I is available to commercial and industrial member-consumers receiving service under Schedules $46,54,70$, or 71 . Participating members may purchase the retirement of any quantity of Renewable Energy Certificates (RECs) by Dakota Electric's wholesale power supplier, specified in kWh , in relation to either a designated annual percentage of load (\%), or monthly energy amount ( kWh ) up to their total annual energy usage supplied by Dakota Electric. Service is subject to the established rules and regulations of the Association.

## Subscription Requirements

A retail agreement between Dakota Electric and the member-consumer is required that reflects a five (5) to ten (10) year commitment and conforms to specifications set forth in the annual program guide of Dakota Electric's wholesale power supplier. C\&I member-consumer purchases must meet one of the following minimum thresholds:
a) $1,500,000 \mathrm{kWh}$ annually per participant; or
b) corporate aggregation level at $5,000,000 \mathrm{kWh}$ annually.

Any retail sale to an individual member-consumer or multi-site entity that is expected to exceed $10,000,000$ kWh annually, anytime during the term, requires Dakota Electric to receive prior approval from our wholesale power supplier.
To be eligible for Wellspring C\&I, retail and wholesale agreements must:
a) be executed prior to September $1^{\text {st }}$,
b) be for full calendar year terms,
c) commence on either the preceding, or next occurring, January $1^{\text {st }}$, and
d) have a copy provided to the wholesale power supplier within fifteen (15) days of execution.

## Monthly Rate

Wellspring C\&I will be billed as a specified rate per kWh for the entire five (5) to ten (10) year term of the agreement between Dakota Electric and the individual member-consumer. The rate per kWh for Wellspring C\&I reflects a pass-through of charges from the wholesale power supplier. The rate for each agreement is established at the time the agreement is signed. This monthly renewable energy rate will be shown as a separate line item on a member's bill. This charge is in addition to the applicable charges for the rate schedule currently serving the member.

## Termination Penalties

Early termination penalties will apply to agreements that are terminated early for convenience or otherwise voluntary reasons. Early termination penalty shall equal the last 12 months purchase amount multiplied times the purchase rate as specified in the agreement. Early termination penalties may be waived for agreements that are terminated early for involuntary reasons such as facility closings, ownership change, bankruptcy, etc.

## Taxes

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

Terms of Payment
The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SPECIAL FEES OR CHARGES

1. Meter Test at Member's RequestSingle Phase $\$ 85.00$
Three Phase ..... \$100.00
2. Bad Check ..... $\$ 15.00$
3. Reconnection Charge (after disconnect, same consumer)
a. Self-contained Metering (one person, one vehicle)
1) Working hours ..... $\$ 50.00$
2) Outside normal working hours ..... $\$ 130.00$
b. Current Transformer-rated Metering (two-person crew, one truck)
3) Working hours ..... $\$ 175.00$
4) Outside normal working hours .....  $\$ 315.00$
4. Service Charge
(outside normal working hours when problem is not with Association's equipment) Two-person crew, one truck ..... $\$ 280.00$
5. Load Management Service Charge
(when problem is not with Association's equipment)
1) Working hours .....  $\$ 70.00$
2) Outside normal working hours ..... \$140.00
6. Pulse Meter (materials and installation) ..... $\$ 500.00$
7. Temporary Service
a. Non-Winter Months ..... \$205.00
b. Winter Months (Oct 15 - Apr 15) ..... $\$ 340.00$
8. Transfer/Connection Charge .....  $\$ 17.50$9. Member Contracted Hourly WorkDakota Electric is periodically asked to perform on-site service work. Such services will beprovided at a pre-arranged hourly rate.

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## RESOURCE ADJUSTMENT RIDER

## Application

Applicable to all bills for retail electric service that include a purchased power cost adjustment clause.

## Resource Adjustment (RA)

Monthly member energy charges shall be adjusted for changes in purchased power costs and changes in Dakota Electric's Tracker Account balance. These two changes shall be reflected on member bills through a Resource Adjustment. The applicable RA factor shall be determined annually as described below.

## Determination of the Resource Adjustment Factor

The Resource Adjustment factor shall be determined by adding the annualized power cost adjustment factor to the most recent year-ending Tracker Account factor. The Tracker Account factor shall be the quotient of the recoverable Tracker balance, divided by projected retail energy sales that are applied in the power cost adjustment factor
The year used for the annualized Resource Adjustment will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RA shall be filed with the Public Utilities Commission each year before implementation.

All costs appropriately charged to Dakota Electric's Tracker Account shall be eligible for recovery through this adjustment. Revenues received from the application of the RA shall be applied toward power costs and the Tracker Account in a manner consistent with the determination of the RA factor.

## ENERGY COST ADJUSTMENT RIDER

## Application

Applicable to service provided under Interruptible Service Schedule 70, Schedule 71 and Interruptible Irrigation (Schedule 36).

## Determination

The Energy Cost Adjustment (ECA) will increase/decrease by $\$ 0.0001$ per kilowatt-hour for every corresponding $\$ 0.0001$ increase/decrease in Dakota Electric's projected wholesale cost per kilowatt-hour sold applicable to Schedule 70, Schedule 71, and Interruptible Irrigation. Total projected energy costs for this service will include all energy costs for energy supply excluding costs for load management programs and including applicable wholesale energy cost adjustments. This adjustment will be calculated annually and applied monthly on member bills.

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## PROPERTY TAX ADJUSTMENT RIDER

## Application

Applicable to all bills for retail electric service under Dakota Electric's retail rate schedules.

## Rider

There shall be included on each member's bill a Property Tax Adjustment which shall be the applicable Property Tax Adjustment factor multiplied by the member's energy usage before any applicable city surcharge or sales tax. The Property Tax Adjustment factor shall be reflected on member bills through a "Resource and Tax Adjustment" line item on member bills. The applicable Property Tax Adjustment factor shall be determined annually as described below.

## Determination of the Property Tax Adjustment Factor

The Property Tax Adjustment factor shall be determined by first allocating the incremental annual property tax expense to each class according to each class' relative responsibility for property taxes as determined in the most recent general rate case class cost of service study. Each class allocation will then be divided by projected retail energy sales applicable to each class to determine the property tax adjustment factor for each class.

Calendar-year property tax adjustment factors will be recovered during the period from January 1 through December 31. The property tax adjustment factor shall be filed with the Public Utilities Commission each year before implementation.

## Recoverable Property Tax Expenses

Recoverable Property Tax expenses shall be the incremental property tax expense not recovered through base rates as estimated for the designated projected twelve month recovery period, plus unrecovered or less over-recovered Recoverable Property Tax expenses for a prior designated twelve month recovery period.

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## FRANCHISE FEE SURCHARGE RIDER

## Application

A surcharge will be included in the monthly bills computed under the indicated rate schedules effective in the following Minnesota Communities.
The Cooperative remits $100 \%$ of the franchise fees collected to the local government.

| Rate Schedules |  | Apple Valley ${ }^{\text {a }}$ (2.0\%) | Burnsville ${ }^{\text {b }}$ | Inver <br> Grove <br> Heights ${ }^{\text {c }}$ |
| :---: | :---: | :---: | :---: | :---: |
| Residential and Farm Service | (Schedule 31) | X | \$1.00 | \$2.75 |
| Residential and Farm Demand Control Rate | (Schedule 32) | X | \$1.00 | \$2.75 |
| Residential Electric Vehicle Service | (Schedule 33) | X | NA | NA |
| Irrigation Service | (Schedule 36) | X | \$3.00 | \$3.00 |
| Small General Service | (Schedule 41) | X | \$3.00 | \$3.00 |
| Security Lighting Service | (Schedule 44) | X | NA | NA |
| Street Lighting Service | (Schedule 44-1) | X | NA | NA |
| Street Lighting Service | (Schedule 44-2) | X | NA | NA |
| Custom Residential Street Lighting | (Schedule 44-3) | X | NA | NA |
| Low Wattage Unmetered Service | (Schedule 45) | X | NA | NA |
| General Service $<75 \mathrm{~kW}$ | (Schedule 46) | X | \$10.00 | \$25.00 |
| General Service $\geq 75 \mathrm{~kW}$ | (Schedule 46) | X | \$45.00 | \$25.00 |
| Municipal Civil Defense Sirens | (Schedule 47) | X | NA | NA |
| Geothermal Heat Pump | (Schedule 49) | X | NA | NA |
| Controlled Energy Storage | (Schedule 51) | X | NA | NA |
| Controlled Interruptible Service | (Schedule 52) | X | NA | NA |
| Residential and Farm Time-of-Day Service | (Schedule 53) | X | \$1.00 | \$2.75 |
| General Service Optional TOD $<75 \mathrm{~kW}$ | (Schedule 54) | X | \$10.00 | \$25.00 |
| General Service Optional TOD $\geq 75 \mathrm{~kW}$ | (Schedule 54) | X | \$45.00 | \$25.00 |
| Residential and Farm Time-of-Day Service | (Schedule 56) | X | \$1.00 | \$2.75 |
| Standby Service Rider | (Schedule 60) | X | NA | NA |
| Distributed Generation Rider | (Schedule 61) | X | NA | NA |
| Interruptible Service (Full Interruptible) | (Schedule 70) | X | \$45.00 | \$25.00 |
| Interruptible Service (Partial Interruptible) | (Schedule 71) | X | \$45.00 | \$25.00 |
| Cycled Air Conditioning Service | (Schedule 80) | X | NA | NA |
| Renewable Energy Rider | (Schedule 90) | X | NA | NA |

a. The maximum fee that will be applied to any account will not exceed $\$ 25.00$ per month.
b. Effective July 2016.
c. Effective with the January 2018 billing month.

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## FRANCHISE FEE SURCHARGE RIDER (Continued)

## Notification

The Cooperative will notify the Minnesota Public Utilities Commission of any new, renewed, expired, or changed fee, authorized by Minn. Stat. § 216B. 36 to raise revenue, at least 60 days prior to its implementation. If the Cooperative receives less than 60 days' notice of a repealed or reduced fee from a city, the Cooperative will notify the Minnesota Public Utilities Commission within 10 business days of receiving notice. Notification to the Minnesota Public Utilities Commission will include a copy of the relevant franchise fee ordinance, or other operative document authorizing imposition of, or change in, the fee.

When a new franchise fee is implemented, the Cooperative will notify affected consumers through a joint letter mailed on behalf of the Cooperative and local government entity imposing the franchise fee. Such joint letters will be submitted to the Commission along with other relevant documentation referenced above and will at least include the following statement:

The Cooperative provides electric service within the City limits under the terms of a Franchise Agreement with MUNICIPALITY. An electric Franchise Fee of X\% OF GROSS REVENUES/\$X PER METER/\$ PER KWH will be imposed on consumers effective MM/DD/YYYY. The line item will appear on your bill as "City Fee." The Cooperative remits $100 \%$ of this fee to the MUNICIPALITY."

The franchise fee will be labeled as "City Fee" on monthly bills.

## COMPETITIVE SERVICE RIDER

## Availability

Available at Association's discretion to Commercial and Industrial members that have electric service requirements which are subject to effective competition. Effective competition exists if a member is located in Association's service territory and has the ability to obtain its energy requirements from an energy supplier not rate-regulated by the Minnesota Public Utilities Commission.

## Rate

Standard service rate provisions apply except the level of the demand and/or energy charges may be decreased for each member based on a consideration of member's load characteristics and lowest cost competitive energy supply.

## Terms and Conditions of Service

1. Members must provide Association with information which documents that member is not likely to take service provided by any other electric tariff available from Association.
2. Minimum load served under this Rider is 500 kW .
3. Member must execute an electric service agreement with Association which will include:
a. The minimum rate under this Rider, which will recover at least the incremental cost of providing service, including the cost of incremental capacity that is to be added while the rate is in effect and any applicable on-peak or off-peak differential.
b. The maximum rate reduction possible under this Rider, which will not exceed the difference between the standard tariff and the cost to the member of the lowest cost competitive energy supply.
c. The term of service under this Rider, which must be no less than one year and no longer than five years.
d. The size of the load served under this Rider
e. Verification that member has been fully informed of the availability of an electric energy review. If no electric energy review is performed for member, an explanation of why an electric energy review was not necessary will be included.

## COMPETITIVE SERVICE RIDER (Continued)

4. The Association within a general rate case is allowed to seek recovery of the difference between the standard tariff and this Rider times the usage level during the test year period.
5. A rate under this Rider shall meet the conditions of Minnesota Statutes, Section 216B.03, Reasonable Rate, for other members in this same member class.
6. Unless the Commission determines that it would be in the public interest, a rate under this Rider shall not compete with district heating and cooling provided by a district utility defined by Minnesota Statutes, Section 216B.166, Subdivision 2, paragraph (c).
7. A rate offered under this Rider may not be offered to a member in which the Association has a financial interest greater than 50 percent.

## Regulatory Review

This rate offered under this Rider will be effective on an interim basis after filing by Association of the proposed rate with the Commission and upon the date specified in the electric service agreement. If the Commission does not approve the rate, Association may seek to recover the difference in revenues between the interim competitive rate and the standard tariff from the member who was offered the competitive rate.

The Commission has the authority to approve, modify or reject a rate under this Rider. If the Commission approves the competitive rate, it becomes effective as agreed to by the Association and member. If the competitive rate is modified by the Commission, the Commission shall issue an order modifying the competitive rate subject to the approval of the Association and the member. Each party has ten days in which to reject the proposed modification. If no party rejects the proposed modifications, the Commission's order becomes final. If either party rejects the Commission's proposed modifications, the Association on its behalf or on the behalf of the member, may submit to the Commission a modified version of the Commission's proposal. The Commission shall accept or reject the modified version within 30 days. If the Commission rejects the competitive rate, it shall issue an order indicating the reasons for the rejection.

## MEMBER ENERGY EXCHANGE RIDER

## Availability

The Member Energy Exchange Program is available to any general service member with 100 kW minimum demand reduction capability taking service concurrently under either rate schedule 46, 70 or 71. This rider provides Dakota Electric and its power supplier(s) with the opportunity to pay members for reducing their energy needs during certain peak periods. Member participation during each individual exchange period is strictly voluntary. Members may elect to participate in an individual exchange period or decline without explanation. This rider is available at the Cooperative's discretion.

## Participation Requirements

The following participation requirements apply:

1. Member must provide a minimum electrical demand reduction of 100 kW ;
2. Member loads covered by a load management program or rate are not eligible;
3. Member must reduce energy requirements for a minimum of two hours; and
4. Member may be required to reduce energy requirements for a maximum of six hours in any 24-hour period.

## Notification and Pricing

Two options are available for customers participating in the Member Energy Exchange Program
Option A - This option is for a member requiring a 24-hour advance notice. Option A notification and pricing is as follows:

1. Member receives a day-ahead posted price;
2. Member indicates intended action plans for the next day;
3. Member receives a two-hour notification prior to the beginning of the energy reduction period;
4. Member curtails energy usage; and
5. Member receives a separate payment or a credit on the electric bill.

# MEMBER ENERGY EXCHANGE RIDER 

(Continued)

## Notification and Pricing (continued)

Option B - This option is for a member that can respond to a maximum two-hour notice. Option B notification and pricing is as follows:

1. Member receives a two-hour notification that includes the posted price prior to the beginning of the energy reduction period (Option B will be valued higher than Option A);
2. Member curtails energy usage; and
3. Member receives a separate payment or a credit on the electric bill.

## Validation

The following metering and validation provisions will apply for participation in this program:

1. Member must have electronic 15 -minute interval metering, interrogation software and telephone line;
2. An assessment of the verifiable energy reduction capability will be performed before a member may participate; and
3. The member's ability to reduce demand to the agreed-upon level will be tested and verified.

## VOLUNTARY ENERGY REDUCTION RIDER

## Availability

The Voluntary Energy Reduction Rider is available to any General Service member that is demand metered. This rider provides Dakota Electric and its power supplier(s) with the opportunity to pay members for reducing their energy needs during certain peak periods. Member participation is strictly voluntary. This rider is available at the Cooperative's discretion.

## Participation Requirements

The following participation requirements apply:

1. Member must be demand metered by Dakota Electric;
2. Member loads covered by a load management program or rate are not eligible; and
3. Member must reduce energy requirements for a minimum of two hours.

## Notification and Pricing

Dakota Electric will contact members and determine their interest in participating in the Voluntary Energy Reduction Program. The offer to participate in this rider will include:

1. An estimate of the member's demand reduction based on historical patterns;
2. Indication of duration of voluntary reduction;
3. Identification of beginning hour and ending hour of voluntary reduction; and
4. Offer price per kWh .

Participating members will curtail specified energy usage during identified voluntary reduction periods. Members will then receive compensation through a separate payment or a credit on the electric bill.

## MEMBER SPECIFIC DISCOUNT RIDER

## Availability

Available to Commercial and Industrial members receiving service under Schedules 46 and 54 that have electric load that qualifies for a targeted wholesale capacity rate discount from the Association's wholesale power supplier. Service will be provided under the terms of a memberspecific contract.

## Rate

Standard rate provisions for Schedules 46 and 54 apply, except that a discount will be applied to the monthly bill based on the member's demand during the wholesale coincident billing peak and the qualifying discount level. The monthly billing discount is available for up to five (5) consecutive years measured from the date electric service is first provided to the qualifying new retail load, or under other terms as offered by the Association's wholesale power supplier.
A monthly Communication Fee of $\$ 8.70$ per meter will be charged for digital cellular modem communication.

## Terms and Conditions of Service

1. Available to new retail load with monthly coincident billing peak demand greater than or equal to 750 kW .
2. Monthly non-coincident load factor must be greater than or equal to $40 \%$.
3. Dakota Electric must supply all $(100 \%)$ of the retail load's electric requirements. On-site generation is not allowed.
4. Load will be ineligible for Interruptible Commercial and Industrial Service (Schedules 70 and 71) during the term of the agreement and, upon expiration, for an additional three years.
5. Each month that the metered coincident billing peak demand of the qualifying load is greater than or equal to 750 kW , a discount will be applied to the demand of the qualifying load as specified by Dakota Electric's wholesale power supplier.
6. No discount will be applied to the demand of the member's load in a month where the metered coincident billing peak demand of the load is less than 750 kW .
7. A Member Specific Rate may not be offered to a member in whom the Association has a financial interest greater than 50 percent.
8. Member must provide Association with information which documents that the member electrical load from the Association will qualify for the targeted wholesale capacity rate discount from Dakota Electric's power supplier.

## MEMBER SPECIFIC DISCOUNT RIDER (Continued)

9. Member must execute an electric service agreement with Association which will at least include:
a. The billing rate components, specified as credits or charges as applicable.
b. The term in years for firm service.
c. The size of the load served under this Rider.
d. Verification that member has been fully informed of the availability of an electric energy review. If no electric energy review is performed for member, an explanation of why an electric energy review was not necessary will be included.
10. The Association will track the wholesale power cost credits associated with each Member Specific Discount and exclude them from both the calculation of the base cost of power in future rate cases and the calculation of the Power Cost Adjustment Charges in the Resource and Tax Adjustment filings to the Minnesota Public Utilities Commission. This will ensure that the credits Dakota Electric receives from its wholesale power supplier are not double-counted.

## Regulatory Review

Each Member Specific Discount will be filed with the Public Utilities Commission (as a confidential information filing) before implementation. These confidential information filings will provide an overview of the discount being provided and confirm that the discount is a passthrough from Dakota Electric's wholesale power supplier.

## LARGE LOAD HIGH LOAD FACTOR RIDER

## Availability

Available to Commercial and Industrial members receiving service under Schedules 46 and 54 that have electric load at an individual site that meets the qualifying demand and load factor thresholds of the Association's wholesale power supplier.

## Rate

Standard service rate provisions for Schedules 46 and 54 apply, except that a discount will be applied to the member's monthly bill based on the member's calculated load factor. Qualifying loads may move between load factor tiers monthly based on a changing ANCLF (or PNCLF). Credits will be issued monthly for the following load factor tiers:

| Tier | ANCLF $/$ PNCLF |
| :---: | :---: |
| 1 | $62.00 \%$ to $74.99 \%$ |
| 2 | $75.00 \%$ to $89.99 \%$ |
| 3 | $90.00 \%$ to $100.00 \%$ |

A monthly Communication Fee of $\$ 8.70$ per meter will be charged for digital cellular modem communication.

## Terms and Conditions of Service

1. Dakota Electric must supply all (100\%) of the member's electric requirements. On-site generation is not allowed.
2. The member will not receive a credit under both the LLHLF rate and any other load management program.
3. The member's qualifying load at an individual site must achieve a Non-Coincident Peak Demand (NCPD) of at least $1,000 \mathrm{~kW}$ in any period of sixty (60) consecutive minutes at least one time in the preceding $12-$ month period.
a. NCPD shall be the highest actual metered demand and not an estimated, average or calculated value.
4. The member's qualifying load at an individual site must have an Annual Non-Coincident Load Factor (ANCLF) in the preceding 12-month period that is greater than or equal to 62\%.
a. All Load Factor calculations will be based only on the individual member's actual demand and energy recorded during the preceding twelve (12) months at an individual site.
b. No adjustments will be made for any load management programs, abnormal weather, member load anomaly, or member growth (expected or actual).

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## LARGE LOAD HIGH LOAD FACTOR RIDER (Continued)

5. New metered loads with less than twelve (12) months of actual load data may substitute a Partial-Year Non-Coincident Load Factor (PNCLF) for the ANCLF qualification requirement, only during the first eleven (11) months of electric service.
a. If a member has a significant expansion of load at the site and the member's NCPD increases by more than $50 \%$ over the previous year's average monthly Peak Demand, then the member shall have the ability to use the PNCLF as the basis for the credit that applies to the entire member load.
b. Once a member "resets" the load factor calculation and begins using the PNCLF, the member may not revert to the historical ANCLF for the next 11 months.
c. Transfer of ownership alone does not qualify load to be considered "new".
6. No loads will qualify for the LLHLF credit retroactively. Monthly calculations will be made for qualification in the previous month.
7. Dakota Electric will automatically adjust the LLHLF credit provided to members to pass through any future changes made by its wholesale power supplier.
8. The Association will track the wholesale power costs associated with all Large Load High Load Factor credits and exclude them from both the calculation of the base cost of power in future rate cases and the calculation of the Power Cost Adjustment Charges in the Resource and Tax Adjustment filings to the Minnesota Public Utilities Commission. This will ensure that the credits Dakota Electric receives from its wholesale power supplier are not double-counted.

## SCHEDULE 72 <br> CONTRACT RATE SERVICE

## Availability

Available at Association's discretion, within its assigned service territory, to large Commercial and Industrial members that are subject to effective competition and have electric service requirements as described in the Terms and Conditions of Service clause. Effective competition exists if the member has the ability to obtain its energy requirements from an energy supplier not rate-regulated by the Minnesota Public Utilities Commission (Commission). Service will be provided under the terms of a memberspecific electric service agreement.

## Rate

Applicable charges will be detailed in an electric service agreement.

## Terms and Conditions of Service

1. Individual contract rates will only be offered in coordination with Dakota Electric's wholesale power supplier.
2. Minimum load served under this Contract Service is 10 MW.
3. Distribution and/or transmission facilities to serve the Contract Service load will be provided as specified in the electric service agreement with the member. A contribution in aid of construction (CIAC) will be required if the estimated investment in distribution and/or transmission facilities is not justified by the anticipated revenue.
4. Member must execute an electric service agreement with Association which will at a minimum include:
a. Location of the consumer site within the Cooperative's service territory.
b. Affirmation that 1 ) the consumer is able to locate the load/facility at another site and obtain energy requirements from an energy supplier that is not regulated by the Commission and 2) that the consumer is not likely to take service from the Cooperative if the consumer was charged the Cooperative's standard tariffed rate.
c. Identification of billing components and rates to be applied to each component.
d. The term of service under this Contract Service.
e. The size of the load (in MW) served under this Contract Service.
f. Identification of any distribution and/or transmission facilities that must be installed to serve the Contract Rate Service load and the responsibility for installation and future maintenance costs.
g. Verification that member has been fully informed of the availability of an electric energy review. If no electric energy review is performed for the member, an explanation of why an electric energy review was not necessary will be included.

## SCHEDULE 72

CONTRACT RATE SERVICE
(Continued)

1. Each member receiving service under the Contract Rate Service will be responsible for all wholesale power costs associated with their electric service. The Association will track the wholesale power costs associated with all contract rates and exclude them from both the calculation of the base cost of power in future rate cases and the calculation of the Power Cost Adjustment Charges in the Resource and Tax Adjustment filings to the Commission.
2. A rate under this Contract Service will meet the conditions of Minnesota Statutes, Section 216B.03, Reasonable Rate, for other members in this same member class.
3. A rate under this Contract Service will not compete with district heating and cooling provided by a district utility defined by Minnesota Statutes, Section 216B.166, Subdivision 2, paragraph (c).
4. A rate offered under this Contract Service will not be offered to a member in whom the Association has a financial interest greater than 50 percent.
5. Contract rates must be approved by the Commission before becoming effective.

## Regulatory Review

Dakota Electric must file any proposed contract rates for individual members with the Commission. Such filings will clearly identify all confidential information as trade secret with designations as specified in Minnesota Rules. The Association will at a minimum include the following information in Contract Rate filings:

1. Information required in "Miscellaneous Filings" to the Commission as specified in applicable Minnesota Rules.
2. Information included in the electric service agreement.
3. Identification of wholesale power costs and responsibility of the member for all such costs.
4. Documentation of incremental cost recovery for service to the contract rate consumer and evaluation of impact on other Cooperative members.

The Commission will approve, modify, or reject the contract rate filing under this Contract Rate Service within 90 days. If the Commission approves the contract rate, it becomes effective as agreed to by the Association and member. If the contract rate is modified by the Commission, the Commission shall issue an order modifying the contract rate subject to the approval of the Association and the member. Each party has ten days in which to reject the proposed modification. If no party rejects the proposed modifications, the Commission's order becomes final. If either party rejects the Commission's proposed modifications, the Association on its behalf or on behalf of the member, may submit to the Commission a modified version of the Commission's proposal. The Commission shall accept or reject the modified version within 30 days. If the Commission rejects the contract rate, it shall issue an order indicating the reasons for the rejection.

## ADVANCED GRID INFRASTRUCTURE RIDER

## Application

Applicable to bills for electric service provided under the Association's metered retail rate schedules.

Rider
There shall be included on each member's monthly bill an Advanced Grid Infrastructure (AGi) Rider adjustment. The AGi Adjustment shall be applied on a per-meter basis before any city surcharge and sales tax.

## Determination of AGi Adjustment

The AGi Adjustment shall be the quotient obtained by dividing the forecasted balance of the AGi Tracker Account for each member class by the applicable meters in each member class. The AGi Adjustment may be changed annually upon a filing with the Minnesota Public Utilities Commission (Commission). The AGi Adjustment shall apply to bills rendered on and after January $1^{\text {st }}$ of the year.

The AGi Adjustment for each metered retail rate schedule is:

| Member Class | Monthly Fixed Charge <br> per Meter |
| :--- | :---: |
| Residential (Schedules 31, 32, 53, 56) | $\$ 0.00$ |
| Irrigation (Schedule 36) | $\$ 0.00$ |
| Lighting (Schedule 44-5) | $\$ 0.00$ |
| Small General (Schedule 41) | $\$ 0.00$ |
| General (Schedules 46, 54) | $\$ 0.00$ |
| C\&I Interruptible (Schedules 70, 71) | $\$ 0.00$ |

Opt-Out Members will not be subject to charges under the Advanced Grid Infrastructure (AGi) Rider, See Section V, Sheet 60.0-6 0.1 for the Advanced Meter Opt-Out (AMO) Rider.

Recoverable AGi Costs shall be the annual revenue requirements associated with AGi capital costs (a) not recovered through base rates, (b) recorded in the AGi Tracker Account for the designated period, and (c) determined by the Commission to be eligible for recovery under this Rider. A standard model will be used to calculate the total forecasted revenue requirements for eligible projects for the designated period. All costs appropriately charged to the AGi Tracker Account shall be eligible for recovery through this Rider, and all revenues recovered from the AGi Adjustment shall be credited to the AGi Tracker Account.

## True-Up

For each 12-month period ending December 31, a true-up adjustment to the AGi Tracker Account will be calculated reflecting the difference between the AGi Adjustment recoveries and the revenue requirements for such period. The true-up adjustment shall be calculated and included in the AGi recovery filing submitted to the Commission for the following calendar year. No carrying cost shall be applied to the AGi Tracker.

## ADVANCED METER OPT-OUT (AMO) RIDER

## Applicability

Applicable for residential electric service provided under the Association's metered retail rate schedules for residential members who do not want an advanced, wireless, communicating meter installed at their residence ("Opt-Out Members").

## Rate

Advanced Meter Opt-Out Members are subject to a recurring monthly fee after enrollment, regardless of the quantity of meters per premise. The applicable fees for participating in Advanced Meter Opt-Out will be shown as separate line items on the Member's bill as follows:

## Monthly Charge $\quad \$ 11.45$ per month

The Monthly Charge will be applied following the meter exchange. Where a meter exchange is not required, charges will be applied following affirmative Opt-Out option election or action by the Member as described in the Terms and Conditions.

Opt-Out Members will not be subject to charges under the Advanced Grid Infrastructure (AGi) Rider, See Section V, Sheet 59 for the Advanced Grid Infrastructure Rider.

## Terms and Conditions

1. The Cooperative shall have the right to refuse to provide advanced meter opt-out service in either of the following circumstances:
a) If such a service creates a safety hazard to Members or their premises, the public, or the electric utility's personnel or facilities.
b) If a Member does not allow the Cooperative's employees or agents access to the meter at the Member's premises.
c) If the Member has a history of meter tampering.
2. Opt-Out Provisions:
a) Opt-Out Election: A Member must affirmatively elect to opt-out of having electric consumption metered through an advanced meter to obtain service under this AMO Rider. Members shall default to an advanced meter absent such an election. Members who do not provide reasonable access to their meter or affirmatively prevent the installation of an advanced meter shall be deemed to have elected this AMO Rider.
b) Frequency of Election: A Member may only enroll in this AMO Rider once per twelvemonth period at the same residence.
c) Opt-In Election: At any time, Opt-Out Members may opt back into electric service with an advanced meter.
d) Local governments and entities such as condominiums and other multi-unit dwellings are not allowed to exercise the Opt-Out option on behalf of individually metered residents.

## ADVANCED METER OPT-OUT (AMO) RIDER (Continued)

3. Metering Equipment: A non-communicating meter will be used to provide electric service for Members who elect this option.
4. Members enrolled in a load management program or other service requiring an advanced meter will be notified that the Member must discontinue participation in the load management program.
5. Estimated Meter Reading: Opt-Out Members may receive bills based on estimated meter reads if circumstances prevent reading a meter in a given month.
6. Billing: Members will be billed for charges incurred for electric consumption under the applicable metered retail rate schedule, plus the Monthly Charge described in this AMO Rider.

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GENERAL RULES AND REGULATIONS

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## MEMBER SERVICE INFORMATION EXTENSION OF SERVICE

General Policies Applicable to All Extensions of Service

1. It shall be the policy of Dakota Electric Association (DEA) to provide and extend electric service to any member within its service area in accordance with the rate schedules and policies established by the Association.
2. Dakota Electric Association requires that, on overhead services, the member or developer provide all necessary tree clearing of the power line route outside the public right-of-way. Clearing includes any removal of debris as a result of tree cutting as may be required. The normal width of the right-of-way is to be cleared 10 feet on each side of the power line.

Dakota Electric Association will provide all necessary tree trimming on new overhead service extensions within the public right-of-way.

It is the goal of Dakota Electric Association to cooperate with the member to save as many trees as possible without jeopardizing the power line operation.
3. The member shall pay the cost of any subsequent relocation or rearrangement of any portion of the Association's system made to accommodate his/her needs or to accommodate alterations in grade.
4. Equipment, such as motors and generators that are operated interconnected with the Association, shall not cause objectionable voltage flicker on the distribution system and for other Association members. The member shall apply starters/controllers to the motors, as required, to limit the starting currents to levels acceptable to the Association. For generation, the member shall design and operate the generation system and the load transfer to and from the generation system so as not to cause objectionable voltage flicker.
5. Meters on all new installations shall meet the requirements of the Association's Technical Standards for Metering which are consistent with industry practices.
6. All member wiring must meet the requirements of the National Electric Code, National Electric Safety Code, State and local jurisdictions.

## Continuity of Service

Dakota Electric Association will endeavor to provide continuous service but does not guarantee an uninterrupted or undisturbed supply of electric service. The Cooperative will not be responsible for any loss or damage resulting from the interruption or disturbance of service for any cause other than gross negligence of the Cooperative. The Cooperative reserves the right, without previously notifying the member, to temporarily interrupt service for construction, inspection, repairs, emergency operations, shortages in power supply, safety, and State or National emergencies. The Cooperative will not be liable in any event for any loss of profits or other consequential damages resulting from the use of service or any interruption or disturbance of service.

# MEMBER SERVICE INFORMATION EXTENSION OF SERVICE CONTINUED 

## Individual Residential Extensions

1. Dakota Electric Association will serve a year-round, principle residence of an individual residential member with overhead or underground single-phase electric service at the rates and minimum charges established in applicable rate schedules. In order to ensure that the cost of the new facilities will not cause an undue burden on other members, the member will be assessed a contribution in aid of construction. The member will be charged a minimum of $\$ 500.00$ for an extension of 75 feet or less. For extensions longer than 75 feet, the member will be charged $\$ 500.00$ plus $\$ 8.30$ per foot for each foot that the extension exceeds 75 feet. The member will be assessed additional charges if above normal costs are incurred by DEA to accommodate member installation preferences or the member requests a nonstandard installation.
2. Dakota Electric Association will furnish the overhead service triplex wire between the overhead system and the member-owned service mast. If a member desires underground service, DEA will install underground primary or secondary wire between the right-of-way and a point of connection located no closer than fifty (50) feet from the building, measured from the closest point of the building to the existing DEA facilities. The consumer will be charged the line extension costs outlined in paragraph one (1) of this section.
3. The member must install and own the underground secondary wire run between the point of connection and the meter. Dakota Electric Association will make the connection required at the point of connection.
4. For underground service, the member shall provide a right-of-way strip that is within four (4) inches, plus or minus, of the finished grade, free from obstructions and completely accessible to the Cooperative's equipment.
5. The member will be required to obtain and/or grant easements to the Cooperative for any portion of the extension that is outside a public right-of-way or easement, at no cost to the Cooperative. The Cooperative will prepare the necessary easement documents and will be reimbursed by the member for costs incurred for property title search, surveying, and recording fees.
6. The member will pay any additional installation costs incurred by the Cooperative because of:
a. delays caused by member:
b. installation of underground facilities after the ground is frozen;
c. surface and subsurface conditions that impede the installation of underground facilities, such as rock formations;
d. paving of streets, alleys or other areas prior to the installation of the underground facility;
e. above-average permit costs; or
f. DNR crossing fees.
7. The member will also be responsible for costs incurred for any relocation or rearrangement of any portion of the system made to accommodate the member after construction is underway or complete. The normal service capacity provided for overhead service will be 10 KVA per residential member and 15 KVA for underground service. Residential members requesting greater transformer capacity will be considered on an individual basis to determine if anticipated revenue justifies the additional expenditure without any further contribution in aid of construction.

## MEMBER SERVICE INFORMATION <br> EXTENSION OF SERVICE CONTINUED

8. If a member requests an individual residential service extension to a location with no permanent residence, the member will pay the full cost of installation. If a permanent residence is constructed within five (5) years, the member will be refunded the amount less the normal line extension charge at the time the permanent residence is constructed.
9. Dakota Electric Association will not install a transformer within 50 feet of the house. If the closest point of the member's house is within 150 feet of the distribution system in the public right-of-way, the member must install their own secondaries.

## Residential Developments (Multiple Lot Plats)

1. To encourage orderly development and to avoid investment in idle facilities, it shall be Dakota Electric Association's policy to examine all residential developments whether served overhead or underground for justification to install electric distribution facilities. When the anticipated revenue justifies the expenditure, Dakota Electric Association will install the facilities at its expense. When the anticipated revenue does not justify the expenditure, the installation will be made only if the developer pays Dakota Electric Association that portion of the facility cost not justified by the anticipated revenue prior to commencement of the electric utility installation.
2. For developments of small lots, one acre or smaller, when underground electric service is desired by a developer or required by a regulatory body or by local ordinance, Dakota Electric Association requires the developer to sign and follow the provisions of the "Residential Underground Distribution Agreement" (RUDA-1).
3. Underground service shall be made available to platted areas with large lots by employing individual transformers for each home. Large lots are defined as being larger than one acre or any lot requiring an individual transformer.

The developer shall also be subject to a payment in accordance with the provisions of paragraph 1 (Residential Developments) of this policy and as outlined in the Residential Underground Distribution Agreement (RUDA-1) for standard-sized lots.

Developers of large lot plats must sign and follow the provisions of the Residential Underground Distribution Agreement for Large Lot Developments (RUDA-2).
4. The normal transformer capacity provided for large lot plats will be 15 KVA with additional capacity considered on an individual basis as outlined under paragraph 1, "Individual Overhead Service."

## Lighting

The member will be charged for installation costs that exceed allowances specified in the applicable lighting rate schedule.

## MEMBER SERVICE INFORMATION <br> EXTENSION OF SERVICE CONTINUED

## Commercial and Industrial Members, Apartment Complexes, and Seasonal Accounts

1. Dakota Electric Association will provide overhead or underground, single-phase or threephase electric service to commercial (including commercial developments) and industrial members and apartment complexes in accordance with established applicable rates and charges when the anticipated revenue justifies the expenditure. Dakota Electric Association will install, own, and maintain the underground primary service to a point of connection designated as either a single-phase or three-phase padmounted transformer. An economic analysis will be made for any service that involves abnormally high investments, and/or those with low anticipated revenue. A contribution in the aid of construction will be required if the estimated investment is not justified by the anticipated revenue, calculated as follows:


When underground service is requested, the member shall provide a right-of-way strip that is within four (4) inches, plus or minus, of the finished grade. The right-of-way must be free from obstructions and completely accessible to the Association's equipment.

The member shall furnish the pad for the padmounted transformer on underground systems in accordance with specifications provided by Dakota Electric Association.

The member will pay any additional installation costs incurred by the Association because of:

1. delays caused by member;
2. installation of underground facilities after ground is frozen;
3. soil conditions that impair the installation of underground facilities, such as rock formations;
4. paving of streets, alleys or other areas prior to the installation of the underground facility;
5. above-average permit costs; or
6. DNR crossing fees.

There may be situations where the member shall be required to install sections of conduit, such as underground entrance to a pad, which shall be at no cost to the Association.

SECTION: VI

# MEMBER SERVICE INFORMATION <br> EXTENSION OF SERVICE CONTINUED 

The 2000 KVA distribution transformer is the largest size that Dakota Electric Association will install. Multiple transformers and service entrances will be required when service capacity requirements exceed 2000 KVA . The member cannot parallel multiple transformer services without written Dakota Electric approval of the design.
2. Irrigation Members

Dakota Electric Association will provide service to irrigation members in accordance with established applicable irrigation rates and in the "Agreement for Electric Service (Irrigation and Other Seasonal Loads). An economic analysis will be made for extensions to irrigation service. A contribution in aid of construction will be required if the estimated investment is not justified by the anticipated revenue.

The member shall furnish the pad for the padmounted transformer on underground systems in accordance with specifications provided by Dakota Electric Association.
3. Primary Metered Installations

Depending on the configuration of the Dakota Electric primary system, the member may have the option of installing primary metering on the 12.5 kV system. Credits for primary service may be available as specified in applicable rate schedules. Many times this option is not available without the installation of additional 12.5 kV facilities so as to allow for proper metering and so as not to negatively impact the reliability of other Dakota Electric member loads interconnected with the Dakota Electric distribution system.
A. The member is responsible for all integration and installation costs for the primary metering system.
B. The member is responsible for purchasing, owning and operating, all 12.5 kV electrical facilities on the member's side of the primary metering installation(s). This includes responsibility for routine and emergency maintenance of those purchased primary facilities, which includes emergency transformer replacement and emergency primary facility repairs.
C. Primary Metering is required for all primary wires feeding the facilities/complex.
D. Dakota Electric, the National Electric Code, or both may require special protection for the member's primary system. The member is required to provide any necessary protection. This protection is required to be coordinated with the DEA distribution system's protection.

# MEMBER SERVICE INFORMATION <br> EXTENSION OF SERVICE SPECIAL FACILITIES 

## A. Definitions

1. Municipality is defined as any one of the following entities: a county, a city, a township or any other unit of local government.
2. City is defined as either a statutory city or home rule charter city consistent with Minn. Stat. sections 410.015 and 216B.02, subd. 9.
3. Special facilities are defined as non-standard facilities, non-standard design or nonstandard location of facilities.
4. Special facilities are the type of services that results in costs in excess of the Association designated service installation. Common examples are duplicate service facilities, special switching equipment, special service voltage, three phase service where single phase service is adequate, excess capacity, underground installations to wood poles, conversion from overhead to underground service, specific area undergrounding, other special undergrounding, and relocation or replacement of existing Association facilities.

## B. General Rule

When requested by the member, group of members, developer, or municipality to provide types of service that result in an expenditure in excess of the Association designated service installation the requesting member, group of members, developer, or municipality will be responsible for such excess expenditure. Common examples of these requests are duplicate service facilities, special switching equipment, special service voltage, three phase service where single phase service is adequate, excess capacity, capacity for intermittent equipment, trailer park distribution systems, underground installations to wood poles, conversion from overhead to underground, urban renewal undergrounding, other special undergrounding, and relocation or replacement of existing Association facilities.

## C. Public Right-of-Way

1. Replacement, Modification or Relocation Due to Construction.

Whenever a governing body that manages a public right-of-way orders the Association to replace, modify or relocate its existing distribution facilities due to construction on said public right-of-way, such facilities will be relocated at Association expense, provided the construction is the most economical, industry accepted installation designated by the Association. If the governing body or municipality requests a type of construction with

# MEMBER SERVICE INFORMATION EXTENSION OF SERVICE SPECIAL FACILITIES (Continued) 

costs in excess of the Association designated construction, such excess expenditures will be the responsibility of the municipality or the Association's members residing within the municipality. However, if the governing body issuing the order requiring construction on the public right-of-way does not pay the excess cost, the Association may seek Commission approval to recover such excess expenditures from the ratepayers residing in the governing body's territory.

## 2. Replacement, Modification or Relocation Due to Vacation of Public Right-of-Way.

Whenever a governing body of public right-of-way orders the Association to replace, modify or relocate its existing distribution facilities due to a vacation of a public right-ofway, the Association will be responsible for such expenditure. The Association may request that the governing body pay for the aforementioned expenditure. However, if the governing body chooses not to pay, the Association may seek approval from the Commission to recover this expenditure from the ratepayers residing in the governing body's territory.

## D. Construction Requirements for Special Facilities

The Association will initially install special distribution facilities (which may include installation of standard facilities at a location/route deemed non-standard by the company) or the Association will replace, modify or relocate to an Association-approved location/route its existing distribution facilities upon a request of a member, group of members, developer, or upon order or request of a municipality. The benefited member, group of members, developer or municipality will be responsible for all costs in excess of standard installation for new facilities plus the value of the undepreciated life of existing facilities being removed minus the salvage value. However, if the municipality does not pay for the excess expenditure, the Association may seek Commission approval to recover such expenditure from the requesting municipality.

## E. Underground Facilities Requirements

The following provisions apply when replacing overhead facilities with underground facilities:

1. The member, at their expense, must engage an electrician to adapt their electrical facilities to accept service from Association underground facilities.

# MEMBER SERVICE INFORMATION EXTENSION OF SERVICE SPECIAL FACILITIES (Continued) 

2. The Association will allow reasonable time for the member to make the necessary alterations to their facilities, before removal of the existing overhead facilities.
3. Perpetual easements will be granted to Association at no cost to the Association whenever any portion of the underground distribution system is located on private land. Said private easements also will allow the Association access for inspection, maintenance, and repair of Association facilities.
4. The Association will have full access to its facilities installed underground for the purpose of inspection, maintenance, and repair of such facilities, such right of access to include the right to open streets and alleys.
5. When undergrounding is the result of a municipal project, the municipality will designate and reserve a definite area within the public ways for the installation and location of Association underground facilities. Once the Association facilities have been installed in such designated and reserved areas, if the municipality requires removal or relocation of such facilities for any reason, the municipality will reimburse the Association for the cost of such removal or relocation. However, if the municipality does not pay for the aforementioned expenditure, the Association may seek approval from the Commission to recover this expenditure from the ratepayers residing in the municipality's territory.
6. The municipality will give sufficient notice and will allow the Association sufficient time to place its facilities beneath public ways while the same are torn up for resurfacing. The municipality shall provide Association with access to the torn up public ways during such period so that Association will have unobstructed use of sufficiently large sections of the public ways to allow installation of the underground facilities in an economic manner.
7. Secondary voltage service supplied from an underground distribution lateral installation will require that the member install, own, and maintain necessary conduits and secondary service conductors or bus duct to a point designated by Association within or adjacent to the secondary compartment of the transformer or vault. Association will make final connection of member's secondary service conductors or bus duct to Association's facilities.
8. Secondary voltage service supplied from underground secondary service conductors may require that the member install, own, or maintain necessary conduits on private property to a point designated by the Association at or near the property line. The secondary service conductors usually will be installed by the member in his conduit,

# MEMBER SERVICE INFORMATION EXTENSION OF SERVICE SPECIAL FACILITIES <br> (Continued) 

However, in some installations it may be preferred to have Association provide a continuous installation from the Association facilities through the member conduit to his service equipment. In these installations the member must pay the total installed cost of the Association's cable installed on private property. The Association will make the final connection of member's secondary service connectors to Association's facilities.

## F. Special Facilities Payments

The requesting party shall execute an agreement or service form pertaining to the installation, operation and maintenance, and payment of the facilities. Payments required will be made on a non-refundable basis and may be required in advance of construction unless other arrangements are agreed to in writing by the Association. The facilities installed by the Association shall be the property of the Association. Any payment by a member, group of members, developer or municipality shall not entitle him to any ownership interest or rights therein.

Payment for special facilities may be required by either, or a combination, of the following methods as prescribed by the Association: a single charge for the costs incurred or to be incurred by the Association due to such a special installation or a monthly charge being one-twelfth of Association's annual fixed costs necessary to provide such a special installation. The monthly charge will be discontinued if the special facilities are removed. When special distribution facilities are requested by a municipality and payment is not made by the municipality, the Association may seek approval from the Commission to recover its excess expenditure from the municipality's ratepayers.

# MEMBER SERVICE INFORMATION TEMPORARY SERVICE 

Temporary service installation will be permitted during the period of construction, remodeling, maintenance, repair, or demolition of buildings, structures, equipment, or similar activities. When installing temporary service to a member, Dakota Electric Association will require that the member bear the cost of the installation and removal of service in excess of any salvage realized.

The member receiving temporary service will be charged the regular rates applicable to the service rendered.

Dakota Electric Association may require that advance payment be made to cover the estimated cost of the temporary service.

MEMBER SERVICE INFORMATION
BILLING AND PAYMENT OF ELECTRIC BILLS

## Meter Reading and Billing Periods

The reading of all meters used for determining charges to members shall be made each month unless otherwise specified by Dakota Electric Association.

The term "month" for meter reading and billing purposes is the period between successive meter readings, which shall be as near as practicable to 30 days.

Dakota Electric Association requires access to meters monthly unless other arrangements are made to obtain monthly meter readings.

If a billing period is longer or shorter than a normal billing period by five (5) days, the billings shall be prorated on a daily basis.

## Estimated Billings

When access to a meter cannot be gained, an estimated bill may be rendered. In cases of emergency, the Dakota Electric Association may render estimated bills without reading meters. Estimated bills shall be based on the member's normal consumption for a corresponding period during the preceding months.

Only in unusual cases, or when approval is obtained from the member, shall more than two (2) consecutive estimated bills be rendered.

If an estimated bill seems to be abnormal when a subsequent reading is obtained, the bill, or bills, for the entire estimated period shall be recalculated and a corrected bill generated. If there is reasonable evidence that the use occurred during only one (1) billing period, the bill shall be so computed.

# MEMBER SERVICE INFORMATION BILLING AND PAYMENT OF ELECTRIC BILLS <br> (Continued) 

## Payment of Electric Bills

Residential Members. Residential bills shall be due not less than 25 days from the current billing date. The current billing date shall be no more than three working days before the date of mailing. Balances over $\$ 10.00$ not received by Dakota Electric by the due date will have a monthly late fee of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

All Other Members. Bills for all other members shall be rendered monthly and shall be due not less than 15 days from the billing date. The current billing date shall be no more than three (3) working days before the date of mailing. Balances over $\$ 10.00$ not received by Dakota Electric by the due date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## Payment of Bills by Check

It will be the policy of the Association to accept checks in payment of the electric bill. When a question arises as to the validity of a personal check, cash or money order may be required. No second party or postdated checks will be accepted.

If a check is not honored because of "insufficient funds" or for any other reason, a service charge will be assessed, and the status of the account will be the same as if no payment had been made.

When a payment is made by personal check in order to avoid termination of service, and the check is not honored, service may be disconnected without further notice.

Payment by check or debit card will not be honored for reconnection after disconnection for nonpayment. Payment for reconnection after disconnection for non-payment must be made by cash, credit card, or money order.

# MEMBER SERVICE INFORMATION BILLING AND PAYMENT OF ELECTRIC BILLS (Continued) 

## Budget Payment Plan

Dakota Electric Association shall have a budget payment plan available to residential and farm members designed to level monthly billings. The Association will establish a fixed monthly billing based on previous usage. Each monthly bill will show the relationship of budget payments made to the amount due based on actual usage.

Late charges will be assessed to the lesser of the outstanding account balance or the scheduled monthly payment.

Dakota Electric Association will review all budget payment accounts at least annually.

## Electronic Funds Transfer

Dakota Electric Association has an Electronic Funds Transfer program (EFT) available to all members. Members may authorize monthly withdrawals for their electric bills directly from their designated financial institutions.

If a presented payment is not honored, late fees and service charges will be billed in accordance with existing policies. EFT can be terminated in writing by either the Association or the member at any time.

## Credit Card Payment

Through a third-party vendor, Dakota Electric Association offers all members the option to pay their electric bill by credit card. The member opts to pay a transaction fee based on the amount of the payment. The transaction fee is collected and retained entirely by the third-party vendor.

If a presented payment is not honored, late fees and service charges will be billed to the member in accordance with existing policies.

## QuikPay Online Payment

Dakota Electric offers members the option of making either a one-time online payment or regular online monthly payments through "QuikPay". QuikPay provides multiple payment options. Members may manually enter payments online each month from a checking, savings, or credit card (credit card payments subject to a convenience fee). Members may also have funds automatically deducted from checking or savings accounts.

## MEMBER SERVICE INFORMATION <br> SERVICE CHARGE

When Dakota Electric Association sends a two-man crew or larger to a consumer's premise on a service call outside normal working hours, and they find the trouble is not with Dakota Electric's equipment, a service charge may be assessed.

Every effort to clarify the trouble by telephone shall be made by Dakota Electric Association personnel before they make the trip out to the consumer's premise.

# MEMBER SERVICE INFORMATION 

## Meter Testing

The Cooperative will maintain and test its metering equipment in accordance with the Public Utilities Commission's rules. In the event the Cooperative's test shows a meter to have an average error of more than $2 \%$ fast or slow, the Cooperative shall make an adjustment of the bills for service during the period of registration error if known, but not longer than a period of one year. If the period of registration error is not known, the refund or charge for both fast and slow meters shall be based on corrected meter readings for a period equal to one-half the time elapsed since the last test but not to exceed six months. If the amount of the average meter error cannot be determined because of failure of part or all of the metering equipment, the consumer shall pay an amount based upon registration of check metering equipment or an estimated amount based upon the consumer's consumption for comparable operations over a similar period.

If a consumer has called to the Cooperative's attention doubts as to the meter's accuracy and the Cooperative has failed within a reasonable time to check it, there shall be no back billing for the period between the date of the consumer's notification and the date the meter was checked.

## Billing Corrections

When a consumer has been overcharged/undercharged as a result of an incorrect reading of the meter, incorrect application of the rate schedule, incorrect connection of the meter, application of an incorrect multiplier or constant, or other similar reasons, the amount of the overcharge/undercharge shall be adjusted, refunded, or credited to the consumer as follows:

Remedy for Overcharge:
Dakota Electric shall calculate the difference between the amount collected for service and the amount the Cooperative should have collected for service, plus interest, for the period beginning three years before the date of discovery. Interest will be calculated as prescribed by Minnesota Statutes $\S 325$ E.02(b). If the recalculated bills indicate that more than $\$ 1$ is due an existing consumer, or $\$ 2$ is due a person no longer a consumer of the Cooperative, the full amount of the calculated difference between the amount paid and the recalculated amount shall be refunded to the consumer. Refunds to an existing consumer may be in cash or credit on a bill. Credits shall be shown separately and identified. If a refund is due a person no longer a consumer of the Cooperative, the Cooperative shall mail to the consumer's last known address either the refund or a notice that the consumer has three months in which to request a refund from the Cooperative.

Remedy for Undercharge:
Dakota Electric shall calculate the difference between the amount collected for service and the amount the Cooperative should have collected for service for the period beginning one year before the date of discovery. If the recalculated bills indicate that the amount due the Cooperative exceeds $\$ 10$, the Cooperative may bill the consumer for the amount due. Dakota Electric must not bill for any undercharge incurred after the date of a consumer inquiry or complaint if the Cooperative failed to begin investigating the matter within a reasonable time and the inquiry or complaint ultimately resulted in the discovery of the undercharge. The billing for undercharges shall be separated from the regular bill and the charges explained in detail.

Exception if error date is known:
If the date the error occurred can be fixed with reasonable certainty, the remedy shall be calculated on the basis of payments for service after that date, but in no event for a period beginning more than three years before the discovery of an overcharge or one year before the discovery of an undercharge.

# MEMBER SERVICE INFORMATION 

## General Payment Arrangements

In compliance with Minn. Stat. §216B.098, the Cooperative shall offer a payment agreement for the payment of arrears. Payment agreements will consider a consumer's financial circumstances and any extenuating circumstances of the household. No additional service deposit may be charged as a consideration to continue service to a consumer who has entered and is reasonably on time under an accepted payment agreement.

Undercharges:
a. In compliance with Minn. Stat. §216B.098, the Cooperative shall offer a payment arrangement to consumers who have been undercharged if no culpable conduct by the consumer or resident of the consumer's household caused the undercharge. The agreement may cover a period equal to the time over which the undercharge occurred, or a different time period that is mutually agreeable to the consumer and the Cooperative, except that the duration of a payment agreement offered by the Cooperative to a consumer whose household income is at or below 50 percent of state median household income must consider the financial circumstances of the consumer's household. b. No interest or delinquency fee will be charged for payment arrangements resulting from under charges.
c. If a consumer inquiry or complaint results in the Cooperative's discovery of the undercharge, the Cooperative may bill for undercharges incurred after the date of the inquiry or complaint only if the Cooperative began investigating the inquiry or complaint within a reasonable time after when it was made.

## Medically Necessary Equipment

The Cooperative shall reconnect or continue service to a consumer's residence where a medical emergency exists, or where medical equipment requiring electricity necessary to sustain life is in use, provided that the Cooperative receives: (1) written certification, or initial certification by telephone and written certification within five business days, from a medical doctor that failure to reconnect or continue service will impair or threaten the health or safety of a resident of the consumer's household; and (2) the consumer's consent to a payment arrangement for the amount in arrears. Certification must be renewed annually. Because some interruptions in service are unavoidable and in some cases may last longer than some members can be without power, we urge members with special medical needs to make necessary arrangements for auxiliary power for any vital life-support equipment.

## MEMBER SERVICE INFORMATION DISCONNECTION OF SERVICE

## Disconnection Without Notice

Without notice Dakota Electric may disconnect service to any consumer:
A. in the event of an unauthorized use of or tampering with the Association's equipment; or
B. in the event of a condition determined to be hazardous to the consumer, to other members of the Association, to the Association's equipment, or to the public.

## Unlawful Use of Service

In any case of tampering with meter installation or interfering with the proper functioning thereof or any other unlawful use or diversion of service by any person, or evidence of any such tampering, interfering, unlawful use or service diversion, consumer is liable to immediate discontinuance of service, without notice, and to prosecution under applicable laws, and Association shall be entitled to collect from consumer at the appropriate rate for all power and energy not recorded on the meter by reason of such tampering, interfering, or other unlawful use or service diversion (the amount of which may be estimated by Association from the best available data), and also for all expenses incurred by the Association on account of such unauthorized act or acts.

## Disconnection for Nonpayment

All Accounts
Dakota Electric shall credit all payments received against the oldest outstanding account balance before the application of any late charge.

## Residential Accounts

In the case of a resident on either a budget billing plan or a payment schedule, delinquent amount means the lesser of the outstanding account balance or the outstanding scheduled payments. To avoid disconnecting residential accounts as much as possible, Dakota Electric will advise delinquent residential members of the various alternatives available to them, such as protection of the Cold Weather Rule when applicable (see below) and the various assistance programs available through state and local agencies. When no satisfactory payment schedule can be agreed to or maintained, Dakota Electric will proceed with disconnection. The schedule will be as follows:

Balances over $\$ 10.00$ not received by Dakota Electric at the time of the next scheduled billing date (approximately 30 days after initial billing and never less than 25 days later) will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance. A disconnect notice may be sent shortly after the second bill is mailed. Disconnection will be scheduled for not less than five (5) days after the date of the disconnect notice. At the time of disconnection, the residential account will have unpaid use of electricity for not less than 50 days.

## Commercial and Irrigation Accounts

Balances over \$10.00 not received by Dakota Electric at the time of the next scheduled billing date (approximately 30 days after initial billing and never less than 25 days later) will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance. A disconnect notice will be sent shortly after the second bill is mailed. Disconnection will be scheduled for five (5) days after the date of the disconnect notice. At the time of disconnection, the commercial account will have unpaid use of electricity for approximately 50 days.

## MEMBER SERVICE INFORMATION DISCONNECTION OF SERVICE

## Notice of Disconnection

Dakota Electric Association shall send notices to disconnect service by first class mail. A specific date will be given for the time when a payment must be received or service may be disconnected.

If Dakota Electric Association is not contacted by the consumer, at least one attempt will be made to contact the consumer by telephone. If no contact is made, an Association employee will make a final attempt to contact the consumer at the place of service, and if no contact is made, or if contact is made but no payment agreement can be reached, service may be disconnected.

## Reconnection of Service

In the event that service has been disconnected because of nonpayment of the electric bill, service charges, based on the cost to restore service will be assessed before service is restored. This cost will necessarily be higher during an overtime period.

If service has been disconnected, payment must be in the office before the order will be given to restore service. Cash or money order may be required at any time. Dakota Electric will not restore service until all arrears are paid in full and a deposit is made by cash, credit card, or money order according to the Association's deposit requirements, or until other satisfactory credit arrangement is made.

In the event the order has been issued to disconnect service, and the collector arrives at the premises, he/she must accept cash, credit card, or money order payment of the delinquent bill. This payment will avoid the necessity of terminating service.

## Notice to Cities of Utility Disconnection

Upon written request from a statutory or home rule charter city and consistent with Minnesota Statute 216B.0976, the Cooperative will provide reports of currently disconnected properties or newly disconnected properties for consumers located within the city's boundaries.

# DISCONNECTION DURING COLD WEATHER (Page 1 of 6) 

## 1. Scope

This section applies only to residential consumers of the Cooperative.

## 2. Definitions

The following definitions apply in this section:

1. "Cold weather period" means the period from October 15 through April 15 of the following year.
2. "Consumer" means a residential consumer of the Cooperative.
3. "Disconnection" means the involuntary loss of utility heating service as a result of a physical act by the Cooperative to discontinue service. Disconnection includes installation of a service or load limiter or any device that limits or interrupts utility service in any way.
4. "Household income" means the combined income, as defined in section 290A.03, subdivision 3 , of all residents of the consumer's household, computed on an annual basis. Household income does not include any amount received for energy assistance.
5. "Reasonably timely payment" means payment within five working days of agreed-upon due dates.
6. "Reconnection" means the restoration of utility heating service after it has been disconnected.
7. "Summary of rights and responsibilities" means a notice approved by the Minnesota Public Utilities Commission that contains, at a minimum, the following:
a) an explanation of the provisions of Section 5 and Minn. Stat. 216B.096, subd. 5;
b) an explanation of no-cost and low-cost methods to reduce the consumption of energy;
c) a third-party notice;
d) ways to avoid disconnection;
e) information regarding payment agreements;
f) an explanation of the consumer's right to appeal a determination of income by the Cooperative and the right to appeal if the Cooperative and the consumer cannot arrive at a mutually acceptable payment agreement; and
g) a list of names and telephone numbers for county and local energy assistance and weatherization providers in each county served by the Cooperative.

## DISCONNECTION DURING COLD WEATHER (Page 2 of 6)

1. "Third-party notice" means a Minnesota Public Utilities Commission-approved notice containing, at a minimum, the following information:
a) a statement that the Cooperative will send a copy of any future notice of proposed disconnection of Cooperative service to a third party designated by the residential consumer;
a) instructions on how to request this service; and
b) a statement that the residential consumer should contact the person the consumer intends to designate as the third-party contact before providing the Cooperative with the party's name.
2. "Cooperative" means Dakota Electric Association.
3. "Utility heating service" means natural gas or electricity used as a primary heating source, including electricity service necessary to operate gas heating equipment, for the consumer's primary residence.
4. "Working days" means Mondays through Fridays, excluding legal holidays. The day of receipt of a personally served notice and the day of mailing of a notice shall not be counted in calculating working days.

## 3. Cooperative obligations before cold weather period

Each year, between September 1 and October 15, the Cooperative must provide all consumers, personally or by first class mail, a summary of rights and responsibilities. The summary must also be provided to all new residential consumers when service is initiated.

## 4. Notice before disconnection during cold weather period

Before disconnecting utility heating service during the cold weather period, the Cooperative must provide, personally or by first class mail, a Minnesota Public Utilities Commission-approved notice to a consumer, in easy-to-understand language, that contains, at a minimum, the date of the scheduled disconnection, the amount due, and a summary of rights and responsibilities.

# DISCONNECTION DURING COLD WEATHER (Page 3 of 6) 

## 5. Cold weather rule

During the cold weather period, the Cooperative may not disconnect and must reconnect utility heating service of a consumer whose household income is at or below 50 percent of the state median income if the consumer enters into and makes reasonably timely payments under a mutually acceptable payment agreement with the Cooperative that is based on the financial resources and circumstances of the household; provided that, the Cooperative may not require a consumer to pay more than ten percent of the household income toward current and past utility bills for utility heating service.

The Cooperative may accept more than ten percent of the household income as the payment arrangement amount if agreed to by the consumer.

The consumer or a designated third party may request a modification of the terms of a payment agreement previously entered into if the consumer's financial circumstances have changed or the consumer is unable to make reasonably timely payments.

The payment agreement terminates at the expiration of the cold weather period unless a longer period is mutually agreed to by the consumer and the Cooperative.

The Cooperative shall use reasonable efforts to restore service within 24 hours of an accepted payment agreement, taking into consideration consumer availability, employee availability, and construction-related activity.

## 6. Verification of income

In verifying a consumer's household income, the Cooperative may:
(1) accept the signed statement of a consumer that the consumer is income eligible;
(2) obtain income verification from a local energy assistance provider or a government agency;
(3) consider one or more of the following:
a) the most recent income tax return filed by members of the consumer's household;
b) for each employed member of the consumer's household, paycheck stubs for the last two months or a written statement from the employer reporting wages earned during the preceding two months;

## DISCONNECTION DURING COLD WEATHER (Page 4 of 6)

a) documentation that the consumer receives a pension from the Department of Human Services, the Social Security Administration, the Veteran's Administration, or other pension provider;
b) a letter showing the consumer's dismissal from a job or other documentation of unemployment; or
c) other documentation that supports the consumer's declaration of income eligibility.

A consumer who receives energy assistance benefits under any federal, state, or county government programs in which eligibility is defined as household income at or below 50 percent of state median income is deemed to be automatically eligible for protection under this section and no other verification of income may be required.

## 7. Prohibitions and requirements

This section applies during the cold weather period.
The Cooperative may not charge a deposit or delinquency charge to a consumer who has entered into a payment agreement or a consumer who has appealed to the Minnesota Public Utilities Commission under Section 8 and Minn. Stat. 216B.096, subd. 8.

The Cooperative may not disconnect service during the following periods:
(1) during the pendency of any appeal under Section 8 and Minn. Stat. 216B.096, subd. 8;
(2) earlier than ten working days after the Cooperative has deposited in first class mail, or seven working days after the Cooperative has personally served, the notice required under Section 4 to a consumer in an occupied dwelling;
(3) earlier than ten working days after the Cooperative has deposited in first class mail the notice required under Section 4 and Minn. Stat. 216B.096, subd. 4 to the recorded billing address of the consumer, if the Cooperative has reasonably determined from an on-site inspection that the dwelling is unoccupied;
(4) on a Friday, unless the Cooperative makes personal contact with, and offers a payment agreement consistent with this section to the consumer;
(5) on a Saturday, Sunday, holiday, or the day before a holiday;
(6) when Cooperative offices are closed;

## DISCONNECTION DURING COLD WEATHER <br> (Page 5 of 6)

(7) when no Cooperative personnel are available to resolve disputes, enter into payment agreements, accept payments, and reconnect service; or
(8) when the Minnesota Public Utilities Commission offices are closed.

The Cooperative may not discontinue service until the Cooperative investigates whether the dwelling is actually occupied. At a minimum, the investigation must include one visit by the Cooperative to the dwelling during normal working hours. If no contact is made and there is reason to believe that the dwelling is occupied, the Cooperative must attempt a second contact during nonbusiness hours. If personal contact is made, the Cooperative representative must provide notice required under Section 4 and Minn. Stat. 216B.096, subd. 4 and, if the Cooperative representative is not authorized to enter into a payment agreement, the telephone number the consumer can call to establish a payment agreement.

The Cooperative must reconnect utility service if, following disconnection, the dwelling is found to be occupied and the consumer agrees to enter into a payment agreement or appeals to the Minnesota Public Utilities Commission because the consumer and the Cooperative are unable to agree on a payment agreement.

## 8. Disputes; consumer appeals

The Cooperative must provide the consumer and any designated third party with a Minnesota Public Utilities Commission-approved written notice of the right to appeal:
(1) a Cooperative determination that the consumer's household income is more than 50 percent of state median household income; or
(2) when the Cooperative and consumer are unable to agree on the establishment or modification of a payment agreement.

A consumer's appeal must be filed with the Minnesota Public Utilities Commission no later than seven working days after the consumer's receipt of a personally served appeal notice, or within ten working days after the Cooperative has deposited a first class mail appeal notice.

# DISCONNECTION DURING COLD WEATHER (Page 6 of 6) 

Notwithstanding any other law, following an appeals decision adverse to the consumer, the Cooperative may not disconnect utility heating service for seven working days after the Cooperative has personally served a disconnection notice, or for ten working days after the Cooperative has deposited a first class mail notice. The notice must contain, in easy-to-understand language, the date on or after which disconnection will occur, the reason for disconnection, and ways to avoid disconnection.

## 9. Consumers above 50 percent of state median income

During the cold weather period, a consumer whose household income is above 50 percent of state median income:
(1) has the right to a payment agreement that takes into consideration the consumer's financial circumstances and any other extenuating circumstances of the household; and
(2) may not be disconnected and must be reconnected if the consumer makes timely payments under a payment agreement accepted by the Cooperative.

The second sentence of Section 7 does not apply to consumers whose household income is above 50 percent of state median income.

## 10. Reporting

Annually on November 1, the Cooperative must electronically file with the Minnesota Public Utilities Commission a report, in a format specified by the Minnesota Public Utilities Commission, specifying the number of utility heating service consumers whose service is disconnected or remains disconnected for nonpayment as of October 1 and October 15. If consumers remain disconnected on October 15, the Cooperative must file a report each week between November 1 and the end of the cold weather period specifying:
(1) the number of utility heating service consumers that are or remain disconnected from service for nonpayment; and
(2) the number of utility heating service consumers that are reconnected to service each week. The Cooperative may discontinue weekly reporting if the number of utility heating service consumers that are or remain disconnected reaches zero before the end of the cold weather period.

The data reported under this Section and Minn. Stat. 216B. 096 are presumed to be accurate upon submission and must be made available through the commission's electronic filing system.

## MEMBER SERVICE INFORMATION DEPOSITS

It will be the policy of Dakota Electric Association to collect a deposit not to exceed an estimated two months' gross bill or existing two months' average bill where applicable if the service has been terminated because of nonpayment or when a bankruptcy is filed. Any existing deposit must be applied to the delinquent bill, and then the new deposit will be assessed and must be paid prior to the time the service is restored.

When a member returns to Dakota Electric Association after leaving with an unpaid balance or other credit problems, a deposit equal to two average months' electric bills of the most recent occupant at that address may be assessed. This deposit is in addition to payment in full for the previously unpaid balance.

Dakota Electric shall not require a deposit for a new member with no prior service from the Association unless the credit history of the new member demonstrates that payment cannot be assured. The determination of the new member's credit history shall be made only by credit reports reflecting the purchase of utility service, unless permission in writing is received from the new member to use other credit reports, and such reports mailed to the new member. Refusal of a new member to permit use of a credit rating or credit service, other than that of a utility, shall not affect the Association's determination of that new member's credit history. Satisfactory credit shall be 12 consecutive months of on-time payments with no remaining unpaid balance.

If a member has maintained a good payment record for one year, the deposit will be refunded. A good payment record is defined as payment of the electric bill within 25 days of the due date each of the preceding 12 months.

Deposits shall earn interest at an annual rate as specified by Minnesota Statute 325E.02. This interest will be credited to the electric bill printed in December or will be credited to the final bill, whichever occurs first.

Deposits, plus interest, will be applied to the final bill, and any credit balance remaining will be refunded within forty-five (45) days from the date service is terminated.

Dakota Electric shall not require a deposit of any member without explaining in writing why that deposit or guarantee is required.

# MEMBER SERVICE INFORMATION DEMAND-SIDE MANAGEMENT PROGRAM 

Any Dakota Electric Association member allowing Demand-Side Management (DSM) controls on approved interruptible loads will receive an off-peak energy kilowatt-hour and/or demand kilowatt charge for that electricity as listed in the rates.

## General Rules and Policies

1. Dakota Electric Association shall supply additional meters and the DSM receivers at no cost to the member. All other requirements, such as the meter sockets, wiring, and installation shall be the responsibility of the member. The DSM receivers will remain the property of Dakota Electric Association. Only authorized DEA employees shall have the authority to break the seals for any reason, including repair of the DSM receivers or metering equipment.
2. DSM receivers and submeters shall be mounted adjacent to the existing kilowatt-hour meter. The meter shall be mounted on the outside of the building and shall be accessible to the Association at all times and comply with the Association meter socket requirements. Any alternate locations must be approved by the Association prior to installation.
3. Dakota Electric will make a final inspection after all of the necessary work has been done. At that time, if all equipment is functioning properly, the second meter will be installed, if required, and the controlled rate will apply. All installations must have an electrical inspection affidavit filed with the Minnesota State Board of Electricity and DEA.
4. All trouble calls dealing with the controlled loads shall be made to DEA. DEA will determine whether to send out a DEA service technician or request that the member call a service company on his/her own behalf. If the member's service technician determines that DEA's DSM receiver was malfunctioning and a DEA service technician verifies that, Dakota Electric Association will reimburse the member for the service call. If the problem is with the member's wiring or equipment, then the member will be responsible for costs incurred which may include a Load Management Service Charge.
5. All members with DSM-controlled loads shall allow periodic inspections of the controlled loads by Dakota Electric.
6. If any part of the controlled system is tampered with, the member is subject to being removed from the controlled rate for at least one (1) year.
7. Eligibility of participating loads will be guided by Great River Energy program requirements.

# MEMBER SERVICE INFORMATION DEMAND-SIDE MANAGEMENT PROGRAM CONTINUED 

## Controlled Water Heaters

1. The member may choose to have service under either Schedule 51, "Controlled Energy Storage," or Schedule 52, "Controlled Interruptible Service."
2. Under Schedule 51, "Controlled Energy Storage":
a. Typically, the water heater will be energized from 11 p.m. to 7 a.m.
b. There is no restriction on the size of the water heater, but Dakota Electric recommends an energy factor of .90 or greater and a minimum capacity of 80 gallons and larger capacity when usage and/or family size requires. DEA will assist members with sizing water heaters.
c. All kilowatt-hours shall be submetered. If the member has other qualifying loads, these kilowatt-hours may be combined on one meter.
3. Under Schedule 52, "Controlled Interruptible Service":
a. The member should recognize that the water heater may be off daily for extended periods, and this may result in occasional lack of sufficient hot water. The member must have an electric water heater with a minimum capacity of at least 40 gallons. Dakota Electric recommends an energy factor of .90 or greater.
b. All kilowatt-hours shall be submetered, where feasible, or a monthly credit will be given, as listed in Schedule 52, at DEA's option. If the member also has a dual fuel heating installation, these kilowatt-hours may be combined on one submeter.

# MEMBER SERVICE INFORMATION DEMAND-SIDE MANAGEMENT PROGRAM CONTINUED 

## Interruptible Installations

1. Schedule 52, "Controlled Interruptible Service," is available to members who use electricity as a heating source or other qualifying loads. Connected fixed electric space heating must be sized according to space heating requirements. Cord and plug electric space heating does not qualify.
2. Dakota Electric Association requires that a backup heat source capable of keeping the residence at a minimum of 55 degrees be present. Dakota Electric does not specify what the heat source should be except that it shall not be uncontrolled electric heat.
3. Heat pumps qualify for the interruptible rate. All electric resistance heat associated with the heat pumps must also be controlled. Heat pumps will be controlled both winter and summer in accordance with Dakota Electric's load control requirements.
4. All kilowatt-hours shall be submetered. If the member also has a water heater or other interruptible load on Schedule 52, these kilowatt-hours may be combined on one submeter. If the member has both Interruptible and Storage loads these loads may be combined under the rate schedule with the largest load.

## Energy Storage Installations

1. Schedule 51, "Controlled Energy Storage," is available to members who normally use electricity between 11 p.m. and $7 \mathrm{a} . \mathrm{m}$. (or as established by the Association) to charge equipment which will retain the energy for use during the remaining hours. Water, ice, slab storage, storage bricks, storage batteries, or other materials that qualify may be used for energy storage.
2. All kilowatt-hours shall be submetered. If the member also has a water heater or other energy storage load on Schedule 51, these kilowatt-hours may be combined on one submeter. If the consumer has both Interruptible and Storage loads, these loads may be combined under the rate schedule with the largest load.

# MEMBER SERVICE INFORMATION DEMAND-SIDE MANAGEMENT PROGRAM CONTINUED 

## Irrigation Loads

1. The controlled rate, as listed under Schedule 36, "Irrigation Service," is available to members who have DSM equipment installed. New installations may qualify for this rate when installed.
2. Members that switch from Interruptible to Firm service during the calendar year will be billed the Firm service rate during the month the change was made. The member must remain on the Firm service rate for the remainder of the calendar year. This includes members that intentionally bypass the load control equipment.
3. The Demand-Side Management receivers will interrupt power to the pump motor, and the motor will require manual restart. Any additional equipment necessary to shut down other parts of the irrigation system must be installed by the member at their cost.
4. The typical number of hours to be controlled during any 24 -hour period will be approximately six (6) hours. It may be longer based on electric system requirements.

## Controlled Central Air Conditioners

1. The member may choose to have service under Schedule 80, "Cycled Air Conditioning Service," Schedule 51, "Controlled Energy Storage," or Schedule 52, "Controlled Interruptible Service,"
2. Under Schedule 80 "Cycled Air Conditioning Service"
a. For members without other interruptible or controllable loads, such as an electric water heater, electric heat, heat pump, etc.
b. The central air conditioner will be cycled on and off when a peak or critical situation is reached.
c. Energy consumption may be submetered.
d. The member should recognize that the central air conditioner may be cycled for extended periods and this may result in a temperature rise within the home.
3. Under Schedule 51 "Controlled Energy Storage" or Schedule 52 "Controlled Interruptible Service"
a. All kilowatt-hours will be submetered. If the member also has an interruptible water heater or heat installation, these kilowatt-hours may be combined on one submeter.
b. The central air conditioner will be cycled on and off when a peak or critical situation is reached.
c. The member should recognize that the central air conditioner may be cycled for extended periods and this may result in a temperature rise within the home.

# MEMBER SERVICE INFORMATION STANDBY SERVICE RIDER 

## STANDBY, SUPPLEMENTARY, EMERGENCY AND INCIDENTAL SERVICES

 Unless otherwise specifically provided, the Association's rate schedules require that the member will take their entire electrical requirements from the Association. The Association's service is not available for standby, supplementary, emergency or incidental service with respect to any other source of power except when contracted for under a rate schedule providing for these services.
## A. Definitions:

1. Standby service is defined as service continuously available through a permanent connection to provide power and energy for use by a member in case of failure of another mechanical or electrical source of power.
2. Supplementary service is defined as service continuously available through a permanent connection to supplement or augment directly or indirectly another independent source of power.
3. Emergency service is defined as service supplied through a temporary connection for the member's use when their usual source of supply has failed.
4. Incidental service is defined as service continuously available through a permanent connection to provide power and energy for use by a member where such use is merely incidental to members operations and essentially for their convenience; e.g. (without limiting the generality of the foregoing), for voltage or frequency control, for partial lighting of selected or limited areas, or for the operation of controls, battery chargers, starting devices, electric clocks, or other equipment requiring relatively small quantities of energy as compared with member's total energy usage.
B. Parallel Operations. If a member has an independent source of power that will be operated in parallel with the Association's system, such source of power must be operated as provided below. Any member who operates their facility in non-compliance with these provisions will be subject to immediate discontinuance of service.

## MEMBER SERVICE INFORMATION <br> STANDBY SERVICE RIDER CONTINUED

1. No member may connect an independent source of power in parallel with the Association's system without prior written consent of the Association. Any member desiring to generate in parallel shall execute a contract with the Association that contains terms and provisions regarding metering, billing, technical and operating parameters for the member's independent source of power.
2. The interconnection of member's facilities with the Association's system shall not interfere with the quality of the Association's service to any of its other members.
3. The member will provide the necessary equipment as approved by the Association to enable the member to operate their independent source of power in parallel with the Association's system. The member's independent source of power will be designed so that the interconnection circuit breaker or load break switch between the Association and the member will open under the following conditions:
a. De-energized Association system
b. Sustained line faults on Association's system
c. Faults on member's system

A member shall consult with the Association regarding these minimum requirements, additional protection recommended, proper operation of interconnect circuit breaker or load break switch, and member's independent source of power disconnecting device.
4. Since the power factor and the voltage at which the Association's system and a member's system are operated will vary, each party agrees to operate their system at a power factor as near unity as possible in such manner as to absorb their share of the reactive power, and voltage as conducive to the best operating standards.
5. The Association reserves the right to discontinue service if continued parallel operation by the member results in trouble on the Association's system, such as interruptions, ground faults, radio or telephone interference, surges, or objectionable voltage fluctuations, where such trouble is caused by a member and the member fails to remedy the causes thereof within a reasonable time.

## MEMBER SERVICE INFORMATION INTERRUPTIBLE SERVICE (SCHEDULES 70 AND 71)

## A. General Rules and Policies for Interruptible Service (Schedules 70 and 71)

Participation in interruptible service, with or without a generator, must comply with the following requirements as applicable. If a generation system is used for curtailing a member's electrical requirements, the generation interconnection must comply with the requirements specified in the "Dakota Electric Association Distributed Generation Interconnection Requirements" document. The process for interconnecting with the Dakota Electric systems is documented in the "Distributed Generation Interconnection Process" document. Both the technical requirements and process documents follow the State of Minnesota Distributed Generation Interconnection standards. These document requirements include, but are not limited to the following.

1. The member is responsible for reducing load from electrical service provided by the Association during control periods to be eligible for an interruptible rate.
2. The Association will make every effort to give the member one-half hour notice prior to the start of a control period, but it is not guaranteed. Notices will be given in the form of an email, text message, or load control signal.
3. The duration and frequency of control periods shall be at the discretion of the Association. Control periods will normally occur at such times when the Association expects peak load conditions or when, in the Association's opinion, the reliability of the system is endangered.
4. The member is obligated to remain on the Interruptible rate for a minimum period of one year.
5. For Schedule 71 only, field tests will be conducted during normal peak demand hours to determine the amount of controllable demand and thereby establish the initial coincidental demand level for billing purposes.
6. The minimum controllable demand to qualify for this service shall be 50 kW .
7. The Association shall not be liable for any loss or damage caused by or resulting from testing any other interruption of service.
8. The member must allow the Association to inspect and test the load control installation and equipment provided by the member.
9. The member must notify the Association of any modifications or changes that are made to the original load control installation and equipment provided by the member.

The Association will supply a single dry contact to a member to initiate the load control. The member is responsible for any wiring from the Association provided dry contact to the member owned equipment. The member must provide and maintain a dial in direct (DID) telephone line to the Association's metering equipment. (PBX DID lines are acceptable.) The exact location of the phone line shall be verified with the Association. Alternatively, the member may select cellular meter and pay applicable communication fee.
10. Generator must be available for control at all times or the member will/may be removed from the rate, unless prior written approval is given by Dakota Electric.

MEMBER SERVICE INFORMATION INTERRUPTIBLE SERVICE (SCHEDULES 70 AND 71)

## (Continued)

B. General Rules and Policies for Distributed Generation Interconnection

1. The generation system installation must meet all of the applicable local and national standards for generation interconnection as well as the Dakota Electric Association Distributed Generation Interconnection Requirements. Any member that operates their generation system in noncompliance with these interconnection requirements will be subject to discontinuance of service. Current interconnection documents are available on the Association's Web site at http://light.dakotaelectric.com/Handbook/Pages $1 /$ Interconnecting Generation.aspx. The main topics covered in the Interconnection Requirements document include, but are not limited to:
a. Types of Interconnection
b. Interconnection Issues and Technical Requirements
c. Generation Metering, Monitoring, and Control
d. Protective Devices and Systems
e. Agreements
f. Metering Requirements
2. The member is responsible for all status point wiring from the on-site generation system to the Association's monitoring equipment. The generation status points typically include but are not limited to:
a. Generator and Utility switch or breaker positions
b. Generator Status - running or not running
c. Generator Trouble Alarm Status
d. Lock Out Relay Status - if applicable
3. The member retains responsibility for compliance with local and national standards in addition to the Dakota Electric Interconnection Requirements as they may change over time.
No consumer may connect on-site generation in parallel with the Association's system without prior written consent of the Association.
4. The interconnection of member's facilities with the Association's system shall not interfere with the quality of the Association's service to any of its other members.
5. The member's operation of on-site generators, shall be restricted to control periods, periodic maintenance, equipment testing, severe weather conditions, and power supply outages only.
6. The generator fuel supply must be adequate for at least ten (10) hours of operation at full load. The Association recommends a fuel supply of at least 24 hours to cover normal daily loads.
7. The Association's operation of the member's generation or curtailment systems will normally be during control periods, but the Association reserves the right to further control on-site generators or curtailment systems as needed to promote efficient and reliable operation of the Association's system.
8. The member will provide the necessary equipment as approved by the Association to enable the member to operate the on-site generation in parallel with the Association's system as specified in Dakota Electric Association's Interconnection Requirements document.
9. The Association reserves the right to discontinue service if continued parallel operations by the member results in trouble on the Association's system, such as interruptions, ground faults, radio or telephone interference, surges, or objectionable frequency and voltage fluctuations, where such trouble is caused by a member, and the member fails to remedy the causes thereof within a reasonable time.

Docket No. E-111/GR-19-478


## Dakota Electric Association <br> Residential TOU Rate (Schedule 56) <br> Residential Billing Determinants \& COS Results

Residential Billing Determinants

| 100,235 | Consumers |
| :--- | :--- |
| 838,684 | Energy Sales - All (MWh) |
| 281,636 | Energy Sales - On-Peak (MWh) |
| 557,048 | Energy Sales - Off-Peak (MWh) |

Summary of Residential Revenue Requirements
Power Supply
Wholesale Power

| 10,370,341 | Demand Related - Summer |
| :---: | :---: |
| 5,458,423 | Demand Related - Winter |
| 4,952,367 | Demand Related - Other |
| 20,781,131 | Subtotal - Demand |
| - | Energy Related - Critical Peak |
| 17,333,391 | Energy Related - On-Peak |
| 26,723,916 | Energy Related - Off-Peak |
| 44,057,307 | Subtotal Energy |
|  | Revenue Related |
| 64,838,438 | Subtotal - Wholesale |
|  | Allocated Overhead \& Margin |
| - | Direct Related |
| - | Revenue Related |
| 198,146 | Demand Related |
| 420,872 | Energy Related |
| 619,018 | Subtotal - Allocated |
| 65,457,456 | Subtotal - Power Supply |

Transmission
Direct Assigned
13,696,762 Demand Related
Energy Related

| - |
| :---: |
| $13,696,762$ | | Energy Related |
| :---: |
| Subtotal - Transmission |

Allocated Overhead \& Margin
Direct Related
Revenue Related
Demand Related
Energy Related
Subtotal - Allocated
13,696,762 Subtotal - Transmission

## Distribution

3,010,588 Dist. Sub. - Capacity
6,733,215 Primary Line - Capacity

11,552,938 Primary Line - Consumer
369,821 Line Transf. - Capacity
1,946,450 Line Transf. - Consumer
165,079 Sec. \& Serv.
5,150,000 Meter
11,393,185 Acct. \& Serv.
Revenue Related
Direct Assigned

| $40,321,276$ | Subtotal - Distribution |
| :--- | :--- |
| $3,608,460$ | Additional TOU Metering |
| $123,083,954$ | Total |

Dakota Electric Association
Residential TOU Rate (Schedule 56)

## Cost Assignment

Residential Distribution Revenue

|  | $15,636,660$ | Fixed Charge Revenue |
| ---: | ---: | :--- |
|  | $28,912,094$ | Energy Revenue |
|  | $44,548,754$ | Distribution Total |
| $\$ \quad 0.03450$ | Distribution Revenue per kWh |  |


|  | Transmission | D-Summer | $\underline{\text { D-Winter }}$ | D-Spr/Fall | Energy - CP | E-On-Peak | E-Off-Peak | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| On-Peak Summer | 4,080,601 | 9,506,146 |  |  | - | 2,722,337 | 1,231,580 | 17,540,664 |
| On-Peak Winter | 3,011,023 |  | 5,003,554 |  |  | 2,242,233 | 1,030,336 | 11,287,145 |
| On-Peak Spr/Fall | 5,463,742 |  |  | 4,539,670 |  | 4,080,950 | 1,906,150 | 15,990,512 |
| Int Peak | 1,141,397 | 864,195 | 454,869 | 412,697 |  | 8,287,871 | 3,686,195 | 14,847,224 |
| Off-Peak |  |  |  |  |  |  | 18,869,655 | 18,869,655 |
|  | 13,696,762 | 10,370,341 | 5,458,423 | 4,952,367 | - | 17,333,391 | 26,723,916 | 78,535,200 |


|  | GRE On-Peak <br> Energy | GRE Off-Peak <br> Energy |
| :--- | :---: | :---: |
| On-Peak Summer | $15.7 \%$ | $4.6 \%$ |
| On-Peak Winter | $12.9 \%$ | $3.9 \%$ |
| On-Peak Spr/Fall | $23.5 \%$ | $7.1 \%$ |
| Int Peak | $47.8 \%$ | $13.8 \%$ |
| Off-Peak |  | $70.6 \%$ |
|  | $100.0 \%$ | $100.0 \%$ |


| Coincident Demand |  |  |
| :--- | ---: | ---: |
| Summer | 608.3 | $32.5 \%$ |
| Winter | 448.9 | $24.0 \%$ |
| Other | 814.5 | $43.5 \%$ |
|  | 1871.8 | $100.0 \%$ |

## Dakota Electric Association

Residential TOU Rate (Schedule 56)
kWh Billing Unit Estimates

Test Year Forecast (2019)

| Month | kWh | \% |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 753 | 9.0\% |  |  |
| 2 | 623 | 7.4\% | 25.5\% | 25\% |
| 3 | 618 | 7.4\% |  |  |
| 4 | 533 | 6.4\% | 21.0\% | 21\% |
| 5 | 604 | 7.2\% |  |  |
| 6 | 765 | 9.1\% |  |  |
| 7 | 975 | 11.7\% | 31.0\% | 31\% |
| 8 | 854 | 10.2\% |  |  |
| 9 | 659 | 7.9\% |  |  |
| 10 | 619 | 7.4\% | 22.6\% | 23\% |
| 11 | 610 | 7.3\% |  |  |
| 12 | 756 | 9.0\% |  |  |
|  | 8,369 | 100.0\% |  |  |

Rate 31 Energy Sales

| Summer | $257,025,312$ | $30.7 \%$ |
| :--- | :--- | :--- |
| Other | $581,064,216$ | $69.3 \%$ |
|  | $838,089,528$ |  |

Hours

| On-Peak $(3-11)$ | $23.8 \%$ | $25 \%$ |
| :--- | ---: | ---: |
| Int Peak $(7-3)$ | $23.8 \%$ | $25 \%$ |
| Off-Peak $(11-7)$ | $52.4 \%$ | $50 \%$ |
|  | $100.0 \%$ | $100 \%$ |

## Period Hours \& kWh Billing Unit Estimates

| On-Peak Summer | $8.2 \%$ | $68,882,180$ |
| :--- | ---: | ---: |
| On-Peak Winter | $6.8 \%$ | $57,053,538$ |
| On-Peak S/F | $12.5 \%$ | $104,468,100$ |
| Int Peak | $24.9 \%$ | $208,412,955$ |
| Off-Peak | $47.6 \%$ | $399,272,755$ |
|  | $100 \%$ | $838,089,528$ |

## Dakota Electric Association

Residential TOU Rate (Schedule 56)
Rate Design

Rate Design

| Fixed Charge | 100,235 | cons. | $\$$ | 13.00 | $15,636,660$ |
| :--- | ---: | :--- | :--- | :--- | ---: |
| Energy Charge <br> Peak Period |  |  |  |  |  |
| Summer | $68,882,180$ | kWh | $\$$ | 0.289 | $19,916,935$ |
| Winter | $57,053,538$ | kWh | $\$$ | 0.232 | $13,255,357$ |
| Spring/Fall | $104,468,100$ | kWh | $\$$ | 0.188 | $19,594,413$ |
| Int. Period | $208,412,955$ | kWh | $\$$ | 0.106 | $22,036,975$ |
| Off-Peak Period | $399,272,755$ | kWh | $\$$ | 0.082 | $32,643,615$ |
|  | $838,089,528$ | kWh | Total |  | $123,083,954$ |

Definitions
Summer = June, July, Aug
Winter = Dec, Jan, Feb
Spring/Fall = Mar. Apr, May, Sept, Oct, Nov
Peak Period $=3 \mathrm{pm}$ to 11 pm M-F excl holidays
Intermediate Peak $=7$ am to 3 pm M-F excl holidays
Off-Peak $=$ all other hours

Docket No. E-111/GR-19-478


# Dakota Electric Association Residential Electric Vehicle Rate Wholesale Power Costs 

## 1. Assumptions

2.5\% Distribution Line Loss

80\% Coincidence Factor
Level 2 Charger
6.6 kW Demand
2.9 Hours to Full Charge
10.96 kWh Energy per Day
2. Wholesale Power Rates (GRE 2019)

Energy Charge

| Off Peak Energy Rate | $@$ | $\$ 0.04646$ | $/ \mathrm{kWh}$ |
| :--- | :--- | :--- | :--- |
| On Peak Energy Rate | $@$ | $\$ 0.05939$ | $/ \mathrm{kWh}$ |
| Critical Peak Energy Rate | $@$ | $\$ 0.05939$ | $/ \mathrm{kWh}$ |

Capacity Charge
Summer (Jun-Aug) @ \$18.24 /kW/mo.
Winter (Dec-Feb)
Other
Average
Transmission Charge
Ancillary Charge

## 3. Annual Energy

> | 12,000 | Annual Miles per Year |
| ---: | :--- |
| 3.65 | Average Miles per kWh |
| 3,288 | Annual Energy (kWh) |

## 4. Peak Charging

Level 2:
Demand (charging from 4 pm to 9 pm ):
6.6 kW Demand

80\% Coincidence Factor
5.28 Diversified Demand

| $\$$ | 17.90 | Average Monthly Coincident Charges per kW |
| :--- | :--- | :--- |
|  |  | 94.51 |
| Subtotal |  |  |

12 Months
\$ 1,134.14 Subtotal
2.5\% Line Loss
\$ 1,162.50 Annual Demand Cost



Exhibit_(DEA-15)
Page 2 of 3

# Dakota Electric Association Residential Electric Vehicle Rate Rate Design 

```
Line
    Off-Peak
    $ 0.0756 Page 2 of 3
    On-Peak
3 $ 0.05939 Wholesale On-Peak Energy (see Page 1 of 3)
4 - $ 0.04646 Wholesale Off-Peak Energy (see Page 1 of 3)
5 = $ 0.01293 Additional Cost of On-Peak Wholesale Energy
6 $ 1,162.50 Annual Demand Cost (see Page 1 of 3)
7 % 3,288 Annual Energy - kWh (see Page 1 of 3)
8=$0.35356 Demand Cost per kWh
9 $ 0.4421 Total On-Peak Rate (sum of lines 2,5 and 8)
```


## Present Billed Rates

```
    0.0674 Off-Peak Tariffed Rate
+ 0.0025 RTA
= 0.0699 Off-Peak Billed Energy Charges
    0.4144 On-Peak Tariffed Rate
+ 0.0025 RTA
= 0.4169 On-Peak Billed Energy Charges
```

Docket No. E-111/GR-19-478


## Standby Analysis <br> Cost of Service Summary




# Dakota Electric Association Cycled Air Conditioning Credit 

Assume: $\quad$ 2.5 Tons AC Capacity<br>14.0 Average SEER Rating<br>65.0\% Average Peak Diversity Factor 50.0\% Control Cycle

## Cost Analysis (2019 GRE wholesale rates)

```
    $ 18.24 Summer Capacity (per kW month)
+ $ 6.57 Transmission (per kW month)
+ $ 0.69 Ancillary Service (per kW month)
=$ 25.50 Subtotal
x 3 Summer Months
= $ 76.50 Capacity Savings per Coincident kW
x 0.70 Estimated Coincident Demand Reduction (kW)
=$ 53.28 Power Cost Capacity Savings
+ $ - Estimated Critical Peak Energy Savings
+ $ 15.00 GRE Credit ($5 per unit times 3 months)
= $ 68.28 Estimated Net Power Cost Savings (Summer Season)
- $ 23.38 Control Equipment and Program Costs
- $ 39.00 Controlled Credits for Summer Season
= $ 5.89 Net Annual Revenue
```


## Control Equipment and Program Costs:

\$ 116.00 Receiver

+ \$ 118.00 Electrician and Permit
+ \$ 17.00 Meter Technician
+ \$ (100.00) GRE Reimbursement
$=\$ 151.00$ Net installed cost of control equipment
x $\quad 14.7 \%$ Annualizing Factor *
$=\$ 22.18$ Subtotal
$+\$ \quad 1.20$ Program marketing and Administration **
$=\$ 23.38$ Control Equipment and Program Costs
* Annualizing factor includes interest, depreciation, and O\&M.
** Program marketing and administration estimated at 0.1 ¢ per kWh times typical annual AC consumption of $1,200 \mathrm{kWh}$.



## Dakota Electric Association

## Base Calculation for Resource \& Tax Adjustment Components

## Energy Cost Adjustment (ECA)

| Average Wholesale Energy Cost per kWh | $\$$ | 0.0521 |
| :--- | :---: | ---: |
| Rate 70 \& 71 Energy Sales |  | $406,800,000$ |
| Rate 36 Interruptible Energy Sales | $=\$$ | $21,801,344$ |
| Interruptible Wholesale Energy Cost |  |  |
|  |  | $\mathbf{\$}$ |
| ECA Base per kWh Sold | $\mathbf{0 . 0 5 2 1}$ |  |

## Load Management Rates

Rate 51
GRE Wholesale Cost - ETS Water Heating
Rate 51 - ETS Water Heating Sales
Rate 51 - ETS Water Heating Power Cost
GRE Wholesale Cost - ETS Space Heating
Rate 51 - ETS Space Heating Sales
Rate 51 - ETS Space Heating Power Cost
GRE Wholesale Cost - ETS Electric Vehicle
Rate 51 - ETS Electric Vehicle Sales
Rate 51 - ETS Electric Vehicle Power Cost
Rate 51 Power Costs
Rate 51 Energy Sales
Rate 51 Weighted Power Cost Base per kWh Sold

|  | \$ | 0.0200 |
| :---: | :---: | :---: |
| x |  | 8,491,977 |
| = | \$ | 169,840 |
|  | \$ | 0.0225 |
| x |  | 1,816,023 |
| = | \$ | 40,861 |
|  | \$ | 0.0200 |
| x |  | 300,960 |
| $=$ | \$ | 6,019 |
|  | \$ | 216,720 |
| $\div$ |  | 10,608,960 |
| $=$ | \$ | 0.0204 |

Rate 52
GRE Wholesale Cost - Peak Shave Water Heating
Rate 52 - Peak Shave Water Heating Sales
Rate 52 - Peak Shave Water Heating Power Cost
GRE Wholesale Cost - Dual Fuel Space Heating
Rate 52 - Dual Fuel Space Heating Sales
Rate 52 - Dual Fuel Space Heating Power Cost
Rate 52 Power Costs
Rate 52 Energy Sales
Rate 52 Weighted Power Cost Base per kWh Sold

| \$ | 0.0340 |
| :---: | :---: |
| x | 23,557,907 |
| \$ | 800,969 |
| \$ | 0.0365 |
| x | 20,569,693 |
| $=\$$ | 750,794 |
| \$ | 1,551,763 |
| $\div$ | 44,127,600 |
| $=\$$ | 0.0352 |

## Dakota Electric Association

## Base Calculation for Resource \& Tax Adjustment Components

## Geothermal

Rate 49
GRE Wholesale Cost - Geothermal

|  |  |
| :--- | ---: |
| K | $\$$ |
| x | 0.0813 |
| $=$ | 172,800 |

Rate 49 Power Cost Base per kWh Sold
\$
0.0813

## Power Cost Adjustment (PCA)

| Total Wholesale Power Cost | $\$ \$$ | $150,649,466{ }^{\text {A }}$ |
| :--- | ---: | ---: |
| ECA Power Cost | - | $21,600,730$ |
| Rate 51 Power Cost | - | 216,720 |
| Rate 52 Power Cost | - | $1,551,763$ |
| Rate 49 Power Cost | - | 14,049 |
| Wellspring (wholesale pass-through) | - | 23,370 |
| Member Specific Discount (wholesale pass-through) | - | $(45,040)$ |
| Large Load High Load Factor Credit (wholesale pass-through) | - | - |
| Contract Rate Service (wholesale pass-through) | - | - |
| Standby (wholesale pass-through) | $=$ | $127,260,814$ |
| Firm Wholesale Power Cost | $\div$ | $1,354,802,496$ |
| Firm kWh Energy Sales | $\mathbf{-}$ | $\mathbf{0 . 0 9 3 9}$ |


| Total Wholesale Power Cost |  | $\$$ | $150,649,466$ |
| :--- | :--- | :--- | ---: |
| Total Energy Sales | $\div$ | $1,824,313,200$ |  |
| Total System Power Cost per kWh Sold | $=\$$ | $\mathbf{0 . 0 8 2 6}$ |  |

Notes:
$\begin{array}{ll}\text { A } & \text { See Exhibit__(DEA-1), page } 22 \text { of } 22 . \\ \text { B } & \text { See Exhibit__(DEA-1), page } 12 \text { of } 22 .\end{array}$

## Dakota Electric Association <br> Base Calculation for Resource \& Tax Adjustment Components

## Conservation \& DSM Spending Base Calculation

| 2019 Budget Conservation \& DSM Spending | $\$$ | $2,206,789^{\text {C }}$ |
| :--- | ---: | ---: |
| Test Year MWh Sales | $1,824,313$ |  |
| Conservation \& DSM Base per kWh | $\$ 0$ | $\mathbf{0 . 0 0 1 2}$ |

Property Tax Recovery Base Calculation
Test Year Real \& Personal Property Taxes
Test Year MWh Sales
Property \& R/E Tax Recovery Base per kWh


| Allocation to Rate Classes Using Cost of Service Method |  |  |
| :---: | :---: | :---: |
| Class \& Rate | Property \& Real Estate Taxes in Base Rates ${ }^{\mathrm{E}}$ | \% of Taxes |
| Residential \& Farm Service <br> 31 Residential <br> 32 Res'l Demand Control <br> 53 Res'l Time of Day | \$ 2,223,454 | 62.62\% |
| Irrigation - 36 | 25,070 | 0.71\% |
| Small General Service - 41 | 116,013 | 3.27\% |
| General Service - 46 <br> 46 - General Service <br> 49 - Geothermal <br> 54 - General Service Time of Day | 614,089 | 17.29\% |
| Interruptible Service - 70 \& 71 | 449,646 | 12.66\% |
| Lighting - 44, 44-1, 44-2, 44-3 | 122,518 | 3.45\% |
| TOTAL | \$ 3,550,790 | 100.00\% |

Notes:
C See Workpaper \#9
D Per Summary of Test Year Adjustments, Exhibit__(DEA_1) Page 2 of 22.
E Per Allocation of Revenue Requirements to Rate Classes, Exhibit__(DEA-3).
Page 22 of 42.

Dakota Electric Association
Residential Line Extension Analysis


| PROJECT | Direct <br> Labor | Labor Overheads | Contract Labor | Materials, Tools, Supp | Undefined | Total before CIAC | Length <br> (Feet) |  | Total <br> $t$ per Ft <br> re CIAC |  | resent <br> CIAC <br> harges |  | oposed <br> CIAC <br> Method |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 118039 | 2,655.61 | 1,327.82 | 7,042.05 | 2,348.02 | 1,460.59 | 14,834.09 | 195 | \$ | 76.07 | \$ | 1,496 | \$ | 3,145 |
| 128798 | 429.36 | 214.70 | 0.00 | 124.87 | 236.15 | 1,005.08 | - |  | NA | \$ | 500 | \$ | 1,000 |
| 129137 | 4,054.75 | 2,487.39 | 2,062.30 | 6,594.29 | 2,230.10 | 17,428.83 | 620 | \$ | 28.11 | \$ | 5,024 | \$ | 7,820 |
| 129398 | 3,456.87 | 1,728.45 | 17,769.67 | 8,834.64 | 1,901.28 | 33,690.91 | 2,153 | \$ | 15.65 | \$ | 10,614 | \$ | 24,683 |
| 130963 | 1,534.41 | 767.21 | 1,512.15 | 2,378.05 | 843.93 | 7,035.75 | 275 | \$ | 25.58 | \$ | 2,160 | \$ | 4,025 |
| 131747 | 497.46 | 248.73 | 3,876.23 | 3,899.88 | 273.60 | 8,795.90 | 150 | \$ | 58.64 | \$ | 1,123 | \$ | 2,650 |
| 132939 | 3,832.37 | 1,916.21 | 2,636.92 | 2,104.75 | 2,107.81 | 12,598.06 | 90 | \$ | 139.98 | \$ | 625 | \$ | 1,990 |
| 133275 | 1,655.35 | 987.67 | 2,891.62 | 3,280.08 | 910.45 | 9,725.17 | 75 | \$ | 129.67 | \$ | 500 | \$ | 1,825 |
| 133908 | 2,276.56 | 1,130.80 | 2,008.81 | 2,963.36 | 1,252.12 | 9,631.65 | 442 | \$ | 21.79 | \$ | 3,546 | \$ | 5,862 |
| 134735 | 2,438.94 | 1,219.47 | 0.00 | 708.47 | 1,341.42 | 5,708.30 | - |  | NA | \$ | 500 | \$ | 1,000 |
| 134795 | 2,039.50 | 987.71 | 9,635.73 | 4,706.63 | 1,121.72 | 18,491.29 | 209 | \$ | 88.48 | \$ | 1,612 | \$ | 3,299 |
| 134963 | 1,927.67 | 720.29 | 6,230.14 | 3,285.81 | 1,060.23 | 13,224.14 | 380 | \$ | 34.80 | \$ | 3,032 | \$ | 5,180 |
| 135498 | 957.98 | 235.45 | 1,364.93 | 2,068.57 | 526.89 | 5,153.82 | 140 | \$ | 36.81 | \$ | 1,040 | \$ | 2,540 |
| 135680 | 1,239.68 | 619.86 | 2,710.17 | 3,135.59 | 681.82 | 8,387.12 | 475 | \$ | 17.66 | \$ | 3,820 | \$ | 6,225 |
| 135885 | 2,207.10 | 1,103.55 | 0.00 | 1,480.77 | 1,213.91 | 6,005.33 | - |  | NA | \$ | 500 | \$ | 1,000 |
| 135973 | 1,149.39 | 882.70 | 0.00 | 1,609.97 | 632.16 | 4,274.22 | - |  | NA | \$ | 500 | \$ | 1,000 |
| 136252 | 1,298.65 | 704.33 | 1,815.17 | 2,981.63 | 714.26 | 7,514.04 | 300 | \$ | 25.05 | \$ | 2,368 | \$ | 4,300 |
| 137790 | 274.42 | 181.22 | 0.00 | 1,415.44 | 150.92 | 2,022.00 | - |  | NA | \$ | 500 | \$ | 1,000 |
| 138306 | 1,103.55 | 551.78 | 0.00 | 1,338.55 | 606.95 | 3,600.83 | - |  | NA | \$ | 500 | \$ | 1,000 |
| 139509 | 767.70 | 383.85 | 0.00 | 282.01 | 422.24 | 1,855.80 | - |  | NA | \$ | 213 | \$ | 1,000 |
| 142657 | 1,454.27 | 727.17 | 0.00 | 1,642.55 | 799.86 | 4,623.85 | $-$ |  | NA | \$ | 500 | \$ | 1,000 |
|  | \$ 37,252 | \$ 19,126 | \$ 61,556 | \$ 57,184 | \$ 20,488 | \$ 195,606 | 5,504 | 30.25 |  | \$ | 40,670 |  | 81,544 |

Additional DEA Revenue
$42 \%$
$\$ \quad 40,874$
$\begin{array}{lll} & \$ & 3,637\end{array}$ Avg Cost for Extensions with No Footage



Exhibit __(DEA-11)
Class Line Extension Cost Analysis

| Line | Description |  | Resid. \& Farm | Small <br> General Service |  | Irrigation |  | General Service |  | C\&I <br> Interruptible |  | Lighting |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | I. Class Load Data |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | Number of Customers |  | 100,235 |  | 4,431 |  | 392 |  | 2,756 |  | 262 |  | 16,771 |
| 4 | Energy (kWh) |  | 838,683,744 |  | 42,537,600 |  | 7,963,872 |  | 463,059,984 |  | 406,800,000 |  | ,358,640 |
| 5 | Billing Demand (kW) |  | - |  | - |  | 76,255 |  | 1,449,303 |  | 970,490 |  | - |
| 6 | Base Revenue Per Cons. (Rev-PS) | \$ | 336 | \$ | 383 | \$ | 1,154 | \$ | 2,584 | \$ | 10,215 | \$ | 76 |
| 7 7 7 l |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | II. Allocation of Plant |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 | A. Distribution Extension Items |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 | Poles, towers | \$ | 11,800,477 | \$ | 612,764 | \$ | 103,966 | \$ | 2,210,293 | \$ | 1,519,012 | \$ | 74,064 |
| 11 | OH Cond | \$ | 15,474,059 | \$ | 812,987 | \$ | 106,739 | \$ | 1,411,713 | \$ | 732,940 | \$ | 67,527 |
| 12 | UG Conduit | \$ |  | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| 13 | UG Cond | \$ | 66,119,564 | \$ | 3,366,400 | \$ | 791,973 | \$ | 22,906,645 | \$ | 17,421,660 | \$ | 624,437 |
| 16 | Net Plant | \$ | 93,394,100 | \$ | 4,792,151 | \$ | 1,002,678 | \$ | 26,528,652 | \$ | 19,673,611 | \$ | 766,027 |
| 17 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 18 | Average Plant Invest. / Customer | \$ | 931.75 | \$ | 1,081.51 | \$ | 2,557.85 | \$ | 9,625.78 | \$ | 75,090.12 | \$ | 45.68 |
| 19 | Average Plant Invest. / kWh | \$ | 0.11136 | \$ | 0.11266 | \$ | 0.12590 | \$ | 0.05729 | \$ | 0.04836 | \$ | 0.07395 |
| 20 | Average Plant Invest. / kW |  | n/a |  | n/a | \$ | 13.15 | \$ | 18.30 | \$ | 20.27 |  | n/a |
| 21 | Multiple of Base Revenue |  | 2.8 |  | 2.8 |  | 2.2 |  | 3.7 |  | 7.4 |  | 0.6 |
| 22 B. Service Extenion tom |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 23 | B. Service Extension Items |  |  |  |  |  |  |  |  |  |  |  |  |
| 24 | Transf | \$ | 29,061,904 | \$ | 1,661,843 | \$ | 310,808 | \$ | 2,312,468 | \$ | 761,492 | \$ | 98,727 |
| 25 | Services | \$ | 2,401,440 | \$ | 115,874 | \$ | 11,602 | \$ | 80,186 | \$ | 7,918 | \$ | 8,036 |
| 26 | Meters | \$ | 3,602,323 | \$ | 218,184 | \$ | 40,621 | \$ | 314,124 | \$ | 138,790 | \$ | 12,055 |
| 27 | Cons Premise | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 123,745 |
| 28 | Leased Prop | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| 29 | St. Light | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |  | ,800,721 |
| 32 | Net Plant | \$ | 35,065,667 | \$ | 1,995,901 | \$ | 363,031 | \$ | 2,706,778 | \$ | 908,201 |  | \#\#\#\#\#\#\#\# |
| 33 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 34 | Average Plant Invest. / Customer | \$ | 349.83 | \$ | 450.44 | \$ | 926.10 | \$ | 982.14 | \$ | 3,466.41 | \$ | 598.85 |
| 35 | Average Plant Invest. / kWh | \$ | 0.04181 | \$ | 0.04692 | \$ | 0.04558 | \$ | 0.00585 | \$ | 0.00223 | \$ | 0.96956 |
| 36 | Average Plant Invest. / kW |  | n/a |  | n/a | \$ | 4.76 | \$ | 1.87 | \$ | 0.94 |  | $\mathrm{n} / \mathrm{a}$ |
| 37 | Multiple of Base Revenue |  | 1.0 |  | 1.2 |  | 0.8 |  | 0.4 |  | 0.3 |  | 7.9 |
| 38 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 39 | C. Total Extension Items | \$ | 1,282 | \$ | 1,532 | \$ | 3,484 | \$ | 10,608 | \$ | 78,557 | \$ | 645 |

Docket No. E-111/GR-19-478


## Dakota Electric Association Special Fees and Charges Proposed Fee Changes

|  | Current <br> Charge |  | Current <br> Actual Cost |  | Proposed Charge |  | $2018$ <br> Frequency |  | Add'l <br> Revenue |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Meter test at customer's request |  |  |  |  |  |  |  |  |  |
| Single phase | \$ | 85.00 | \$ | 98.40 | \$ | 95.00 | - | \$ | - |
| Three phase | \$ | 100.00 | \$ | 116.34 | \$ | 110.00 | - |  | - |
| Bad check | \$ | 15.00 | \$ | 11.47 | \$ | 11.50 | 2,259 |  | $(7,907)$ |
| Reconnection charge <br> (after disconnect, same customer) |  |  |  |  |  |  |  |  |  |
| Self contained meter |  |  |  |  |  |  |  |  |  |
| Normal working hours | \$ | 50.00 | \$ | 57.52 | \$ | 55.00 | 741 |  | 3,705 |
| After hours | \$ | 130.00 | \$ | 148.09 | \$ | 145.00 | 28 |  | 420 |
| Transformer rated meter |  |  |  |  |  |  |  |  |  |
| Normal working hours | \$ | 175.00 | \$ | 189.77 | \$ | 185.00 | 14 |  | 140 |
| After hours | \$ | 315.00 | \$ | 349.15 | \$ | 340.00 | 1 |  | 25 |
| Service charge (outside normal working hours when problem is not with DEA | \$ | 280.00 | \$ | 349.15 | \$ | 340.00 | 1 |  | 60 |
| Load Management Service Charge |  |  |  |  |  |  |  |  |  |
| Normal working hours | \$ | 70.00 | \$ | 80.46 | \$ | 80.00 |  |  | - |
| After hours | \$ | 140.00 | \$ | 161.47 | \$ | 160.00 | 1 |  | 20 |
| Pulse meter | \$ | 500.00 | \$ | 752.26 | \$ | 750.00 | - |  | - |
| Temporary service |  |  |  |  |  |  |  |  |  |
| Non-winter months | \$ | 205.00 |  | N/A | \$ | - | 8 |  | $(1,640)$ |
| Winter months | \$ | 340.00 |  | N/A | \$ | - | 5 |  | $(1,700)$ |
| Transfer/connection | \$ | 17.50 | \$ | 19.15 | \$ | 17.50 | 18,760 |  | - |
|  |  |  |  |  |  |  |  | \$ | $(6,877)$ |

## Dakota Electric Association

## Cost Justification for Proposed Special Fees and Charges



## Dakota Electric Association

Cost Justification for Proposed Special Fees and Charges (Continued)

Service Charge - two person crew, one truck
(service trouble calls after working hours, when the problem is not with DEA's equipment)

| After hours | Task | Item | Job Title | Overtime rate |  | Payroll |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | @ 1.5x | Hours | Tax | Only |  | Total |
|  |  | Labor | Crew Chief | \$ | 77.55 | 2.00 |  | 7.74\% | \$ | 167.10 |
|  |  | Labor | Power Line Specialist | \$ | 69.83 | 2.00 |  | 7.74\% | \$ | 150.47 |
|  |  | Bucket Truck |  | \$ | 31.58 | 1.00 |  |  | \$ | 31.58 |
|  |  |  |  |  |  |  | Total |  | \$ | 349.15 |




Dakota Electric Association
Cost Justification for Proposed Special Fees and Charges (Continued)

Transfer/Connection Charge Analysis

| Task | Employees | Job Title |
| :---: | :---: | :---: |
| Inside Clerical |  |  |
| Telephone \& resolution | 12 | Member Service Reps |
| Supervision | 2 | MSR Leads |
| Outside Field Personnel |  |  |
|  | 1 | Transfer representative |
|  | 1 | Chief meter reader |
|  | 1 | Meter reader |
| Vehicle Expense | Mileage | Transfer representative |
|  |  | Chief meter reader |
|  |  | Meter reader |
|  |  | Mileage Rate |
| Data Processing |  |  |
| Itineris Support |  | Monthly Support |
| PC \& 2 monitors |  | Annual cost |
| Mailing | Kubra cost | item including postage |


| Hourly Rate |  | (\% of 2080) |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Hours | Overhead |  |  |
| \$ | 26.80 | 8.8\% | 61.0\% | \$ | 94,773.72 |
| \$ | 31.20 | 1.5\% | 61.0\% | \$ | 3,134.48 |
| \$ | 36.47 | 70\% | 61.0\% | \$ | 85,491.52 |
| \$ | 36.47 | 39\% | 61.0\% | \$ | 47,630.99 |
| \$ | 36.47 | 65\% | 61.0\% | \$ | 79,384.98 |
|  | 25,400 | 70.00\% | 17,780 |  |  |
|  | 17,700 | 39.00\% | 6,903 |  |  |
|  | 16,600 | 65.00\% | 10,790 |  |  |
|  |  | Subtotal | 35,473 |  |  |
| \$ | 0.58 |  |  | \$ | 20,574.34 |
| \$ | 18,180.00 | 10.00\% |  | \$ | 21,816.00 |
| \$ | 430.00 | 8.80\% |  | \$ | 454.00 |
| Number |  |  |  |  |  |
|  |  | \$ 0.63 |  |  |  |
| Subtotal |  | \$ 0.63 | 9,380 | \$ | 5,909.40 |
|  |  |  | Total | \$ | 359,169.43 |
|  |  |  | Transfers |  | 18,760 |
|  |  |  | \$/Transfer | \$ | 19.15 |

## Dakota Electric Association <br> Special Fees and Charges <br> Frequency Analysis

|  | $\underline{2013}$ | 2018 |
| :---: | :---: | :---: |
| Meter test at customer's request |  |  |
| Single phase | 4 | - |
| Three phase | - |  |
| Bad check | 1,476 | 2,259 |
| Reconnection charge (after disconnect, same customer) |  |  |
| Self contained meter |  |  |
| Normal working hours | 1,241 | 741 |
| After hours | 131 | 28 |
| Transformer rated meter |  |  |
| Normal working hours | 6 | 14 |
| After hours | 2 | 1 |
| Service charge <br> (outside normal working hours when problem is not with DEA equipment) | 1 | 1 |
| Pulse meter | - |  |
| Temporary service | 34 | 13 |
| Transfer/connection | 13,722 | 18,760 |

# Dakota Electric Association <br> Special Fees and Charges <br> Payroll Overhead Calculation 

|  | Future <br> Test <br> Year |
| :---: | :---: |
| Pension | 16.71\% |
| Savings (401k) | 6.77\% |
| FICA Tax ${ }^{2}$ | 7.60\% |
| Life Insurance | 0.60\% |
| Workers' Compensation | 1.32\% |
| Medical Insurance | 12.87\% |
| State \& Federal Unemployment | 0.14\% |
| Other-Retirement Health Benefits | 0.93\% |
| Benefits excluding time-off | 46.94\% |
| Vacation/Sick/Holiday (assumed 269 hrs) | 14.04\% |
| Total overhead allocation | 60.98\% |
| Payroll taxes only | 7.74\% |

[^61]Dakota Electric Association
Summary of Lead Lag Analysis
Cash Working Capital Analysis
Twelve Months Ending December 31, 2018

®
$\stackrel{\infty}{\sim}$
$\stackrel{9}{\dot{m}}$
$6 \varepsilon$ て'Z

|  | Test Year <br> Expense |
| :--- | ---: |
| $\$$ | $149,356,821$ |
|  | $15,112,543$ |
| $6,003,178$ |  |
|  | $9,484,952$ |
| 570,291 |  |
|  | $1,334,808$ |
|  | 26,186 |
|  | $3,432,442$ |
|  |  |
|  |  |
|  | $185,321,221$ |
|  |  |

范

(A) Operating payroll is estimated to be $86 \%$ of total payroll
(B) Revenue Collection or Customer Payment Lag
(A) Operating payroll is estimated to be $86 \%$ of total payroll
(B) Revenue Collection or Customer Payment Lag
 Property Taxes
Total Expenses
Sales Tax
Working Capital Required/ (Provided)


# Dakota Electric Association Calculation of Coincidental Demand Charges 

C\&I Interruptible (Rates 70 and 71)

1. Summer (June, July, August)
\$ $25.50 \quad$ GRE Summer $\$ / \mathrm{kW}$-mo.
$+\quad 2.50 \%$ DEA Line Loss
\$26.14 Coincidental Demand Charge
2. Winter (January, February, December)
\$ 19.42 GRE Winter \$/kW-mo.
$+\quad$ 2.50\% DEA Line Loss
\$19.91 Coincidental Demand Charge
3. Other Months
\$ 13.34 GRE Winter \$/kW-mo.
$+\quad 2.50 \%$ DEA Line Loss
\$13.67 Coincidental Demand Charge

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$\qquad$
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DEA

## Customer Related Cost

## Cost of Service Breakdown

| Primary Line | \$/cons./mo. |  | \$/cons./mo. |  | Excluding Primary Line \$/cons./mo. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| Depreciation | \$ | 1.89 |  |  |  |  |
| Interest | \$ | 0.63 |  |  |  |  |
| O\&M | \$ | 3.49 |  |  |  |  |
| A\&G | \$ | 1.68 |  |  |  |  |
| Subtotal |  |  | \$ | 7.70 |  |  |
| Transformer |  |  |  |  |  |  |
| Depreciation | \$ | 0.68 |  |  |  |  |
| Interest | \$ | 0.23 |  |  |  |  |
| O\&M | \$ | 0.03 |  |  |  |  |
| A\&G | \$ | 0.01 |  |  |  |  |
| Subtotal |  |  | \$ | 0.96 | \$ | 0.96 |
| Meter \& Service |  |  |  |  |  |  |
| Depreciation | \$ | 0.18 |  |  |  |  |
| Interest | \$ | 0.06 |  |  |  |  |
| O\&M | \$ | 2.66 |  |  |  |  |
| A\&G | \$ | 1.28 |  |  |  |  |
| Subtotal |  |  | \$ | 4.19 | \$ | 4.19 |
| Direct Investment |  |  |  |  |  |  |
| Depreciation | \$ | - |  |  |  |  |
| Interest | \$ | - |  |  |  |  |
| O\&M | \$ | - |  |  |  |  |
| A\&G | \$ | - |  |  |  |  |
| Subtotal |  |  | \$ | - | \$ | - |
| Customer Accounting Expense | \$ | 9.34 |  |  | \$ | 9.34 |
| Taxes \& Miscellaneous | \$ | 1.21 |  |  | \$ | 0.15 |
| Margins | \$ | 1.72 |  |  | \$ | 0.38 |
| Subtotal |  |  | \$ | 12.27 |  |  |
| Total |  |  | \$ | 25.11 | \$ | 15.01 |

__(DEA-7)
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DEA
Customer Related Cost

## Cost of Service Breakdown



Exhibit
__(DEA-7)
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## DEA

## Customer Related Cost

## Cost of Service Breakdown

|  | \$/cons./mo. | \$/cons./mo. |  | Excluding Primary Line \$/cons./mo. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Primary Line |  |  |  |  |  |
| Depreciation | \$ 2.85 |  |  |  |  |
| Interest | \$ 0.95 |  |  |  |  |
| O\&M | \$ 5.25 |  |  |  |  |
| A\&G | \$ 2.53 |  |  |  |  |
| Subtotal |  | \$ | 11.58 |  |  |
| Transformer |  |  |  |  |  |
| Depreciation | \$ 1.29 |  |  |  |  |
| Interest | \$ 0.43 |  |  |  |  |
| O\&M | \$ 0.06 |  |  |  |  |
| A\&G | \$ 0.02 |  |  |  |  |
| Subtotal |  | \$ | 1.80 | \$ | 1.80 |
| Meter \& Service |  |  |  |  |  |
| Depreciation | \$ 0.43 |  |  |  |  |
| Interest | \$ 0.14 |  |  |  |  |
| O\&M | \$ 7.67 |  |  |  |  |
| A\&G | \$ 3.70 |  |  |  |  |
| Subtotal |  | \$ | 11.94 | \$ | 11.94 |
| Direct Investment |  |  |  |  |  |
| Depreciation | \$ |  |  |  |  |
| Interest | \$ |  |  |  |  |
| O\&M | \$ |  |  |  |  |
| A\&G | \$ - |  |  |  |  |
| Subtotal |  | \$ | - | \$ | - |
| Customer Accounting Expense | \$ 26.92 |  |  | \$ | 26.92 |
| Taxes \& Miscellaneous | \$ 2.22 |  |  | \$ | 0.15 |
| Margins | \$ 2.85 |  |  | \$ | 0.38 |
| Subtotal |  | \$ | 31.99 |  |  |
| Total |  | \$ | 57.31 | \$ | 41.19 |

Monthly Fixed Charge Analysis

Exhibit
__(DEA-7)
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## DEA

## Customer Related Cost

## Cost of Service Breakdown

|  | \$/cons./mo. | \$/cons./mo. |  | Excluding Primary Line \$/cons./mo. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Primary Line |  |  |  |  |  |
| Depreciation | \$ 2.76 |  |  |  |  |
| Interest | \$ 0.93 |  |  |  |  |
| O\&M | \$ 5.09 |  |  |  |  |
| A\&G | \$ 2.46 |  |  |  |  |
| Subtotal |  | \$ | 11.24 |  |  |
| Transformer |  |  |  |  |  |
| Depreciation | \$ 1.23 |  |  |  |  |
| Interest | \$ 0.41 |  |  |  |  |
| O\&M | \$ 0.05 |  |  |  |  |
| A\&G | \$ 0.02 |  |  |  |  |
| Subtotal |  | \$ | 1.72 | \$ | 1.72 |
| Meter \& Service |  |  |  |  |  |
| Depreciation | \$ 0.46 |  |  |  |  |
| Interest | \$ 0.15 |  |  |  |  |
| O\&M | \$ 8.44 |  |  |  |  |
| A\&G | \$ 4.07 |  |  |  |  |
| Subtotal |  | \$ | 13.12 | \$ | 13.12 |
| Direct Investment |  |  |  |  |  |
| Depreciation | \$ |  |  |  |  |
| Interest | \$ |  |  |  |  |
| O\&M | \$ |  |  |  |  |
| A\&G | \$ - |  |  |  |  |
| Subtotal |  | \$ | - | \$ | - |
| Customer Accounting Expense | \$ 29.61 |  |  | \$ | 29.61 |
| Taxes \& Miscellaneous | \$ 2.23 |  |  | \$ | 0.15 |
| Margins | \$ 2.78 |  |  | \$ | 0.38 |
| Subtotal |  | \$ | 34.63 |  |  |
| Total |  | \$ | 60.71 | \$ | 44.99 |

$\qquad$
Page 5 of 5
DEA
Customer Related Cost
Cost of Service Breakdown

| Primary Line | \$/cons./mo. | \$/cons./mo. |  | Excluding Primary Line \$/cons./mo. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| Depreciation | \$ 2.95 |  |  |  |  |
| Interest | \$ 0.99 |  |  |  |  |
| O\&M | \$ 5.44 |  |  |  |  |
| A\&G | \$ 2.63 |  |  |  |  |
| Subtotal |  | \$ | 12.01 |  |  |
| Transformer |  |  |  |  |  |
| Depreciation | \$ 1.35 |  |  |  |  |
| Interest | \$ 0.45 |  |  |  |  |
| O\&M | \$ 0.06 |  |  |  |  |
| A\&G | \$ 0.02 |  |  |  |  |
| Subtotal |  | \$ | 1.89 | \$ | 1.89 |
| Meter \& Service |  |  |  |  |  |
| Depreciation | \$ 1.88 |  |  |  |  |
| Interest | \$ 0.63 |  |  |  |  |
| O\&M | \$ 39.21 |  |  |  |  |
| A\&G | \$ 18.91 |  |  |  |  |
| Subtotal |  | \$ | 60.63 | \$ | 60.63 |
| Direct Investment |  |  |  |  |  |
| Depreciation | \$ - |  |  |  |  |
| Interest | \$ - |  |  |  |  |
| O\&M | \$ - |  |  |  |  |
| A\&G | \$ - |  |  |  |  |
| Subtotal |  | \$ | - | \$ | - |
| Customer Accounting Expense | \$ 137.64 |  |  |  | 37.64 |
| Taxes \& Miscellaneous | \$ 5.04 |  |  | \$ | 0.15 |
| Margins | \$ 3.86 |  |  | \$ | 0.38 |
| Subtotal |  | \$ | 146.54 |  |  |
| Total |  | \$ | 221.08 |  | 00.69 |



## Comparison of Present and Proposed Rate Schedules

## Present Rates Proposed Rates

| Residential \& Farm Service (31) |  |  |  | Residential \& Farm Service (31) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fixed Charge | @ | \$9.00 | /month | Fixed Charge | @ | \$10.00 | /month |
| Energy Charge |  |  |  | Energy Charge |  |  |  |
| Summer | @ | \$0.13080 | $/ \mathrm{kWh}$ | Summer | @ | \$0.13790 | /kWh |
| Other | @ | \$0.11680 | /kWh | Other | @ | \$0.12390 | /kWh |


| Residential \& Farm Demand Control (32) |  |  |  |
| :--- | :---: | :---: | :--- |
|  |  |  |  |
| Fixed Charge | $@$ | $\$ 12.00$ | $/ \mathrm{month}$ |
| Demand Charge |  |  |  |
| $\quad$ Summer | $@$ | $\$ 14.70$ | $/ \mathrm{kW}$ |
| Other | $@$ | $\$ 11.10$ | $/ \mathrm{kW}$ |
| Energy Charge | $@$ | $\$ 0.07600$ | $/ \mathrm{kWh}$ |

Residential \& Farm Demand Control (32)

| Fixed Charge | $@$ | $\$ 13.00$ | $/ \mathrm{month}$ |
| :--- | :--- | :--- | :--- |
| Demand Charge |  |  |  |
| $\quad$ Summer | $@$ | $\$ 15.50$ | $/ \mathrm{kW}$ |
| Other | $@$ | $\$ 11.90$ | $/ \mathrm{kW}$ |
| Energy Charge | $@$ | $\$ 0.08100$ | $/ \mathrm{kWh}$ |


| $\frac{\text { Electric Vehicle (33) }}{\text { Energy Charge }}$ |  |  |  |
| :--- | :--- | :--- | :--- |
| $\quad$ Off Peak | @ | $\$ 0.06740$ | $/ \mathrm{kWh}$ |
| On Peak | $@$ | $\$ 0.41440$ | $/ \mathrm{kWh}$ |
| Other |  |  |  |
| $\quad$ Summer | $@$ | $\$ 0.13080$ | $/ \mathrm{kWh}$ |
| Other | @ | $\$ 0.11680$ | $/ \mathrm{kWh}$ |

## Electric Vehicle (33)

| Energy Charge |  |  |  |
| :--- | :--- | :--- | :--- |
| Off Peak | $@$ | $\$ 0.07560$ | $/ \mathrm{kWh}$ |
| On Peak | $@$ | $\$ 0.44210$ | $/ \mathrm{kWh}$ |
| Other |  |  |  |
| $\quad$ Summer | $@$ | $\$ 0.13790$ | $/ \mathrm{kWh}$ |
| $\quad$ Other | $@$ | $\$ 0.12390$ | $/ \mathrm{kWh}$ |


| Irrigation Service (36) |  |  |  | Irrigation Service (36) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Firm Service |  |  |  | Firm Service |  |  |  |
| Fixed Charge | @ | \$30.00 | /month | Fixed Charge | @ | \$30.00 | /month |
| Demand Charge |  |  |  | Demand Charge |  |  | /kW/mo. |
| Summer | @ | \$26.35 | /kW/mo. | Summer | @ | \$26.60 | /kW/mo. |
| Winter | @ | \$20.95 | /kW/mo. | Winter | @ | \$21.20 |  |
| Other | @ | \$15.50 | /kW/mo. | Other | @ | \$15.67 | /kW/mo. |
| Energy Charge | @ | \$0.04990 | $/ \mathrm{kWh}$ | Energy Charge | @ | \$0.05210 | $/ \mathrm{kWh}$ |
| Interruptible Service |  |  |  | Interruptible Service |  |  |  |
| Fixed Charge | @ | \$30.00 | /month | Fixed Charge | @ | \$30.00 | /month |
| Demand Charge | @ | \$4.55 | /kW/mo. | Demand Charge | @ | \$4.55 | /kW/mo |
| Energy Charge | @ | \$0.04990 | $/ \mathrm{kWh}$ | Energy Charge | @ | \$0.05210 | /kWh |
| Small General Service (41) |  |  |  | Small General Service (41) |  |  |  |
| Fixed Charge | @ | \$14.00 | /month | Fixed Charge | @ | \$15.00 | /month |
| Energy Charge |  |  |  | Energy Charge |  |  |  |
| Summer | @ | \$0.12690 | /kWh | Summer | @ | \$0.13750 | /kWh |
| Other | @ | \$0.11290 | /kWh | Other | @ | \$0.12350 | /kWh |

# Comparison of <br> Present and Proposed Rate Schedules <br> (Continued) 

| Present Rates |  |  |  |
| :---: | :---: | :---: | :---: |
| Security Lighting Service (44) - Closed to New |  |  |  |
| 175 W MV | @ | N/A | /month |
| 100 W HPS | @ | \$10.10 | /month |
| 150 W HPS | @ | \$11.99 | /month |
| 250 W HPS | @ | \$15.79 | /month |
| Street Lighting System (44-1) |  |  |  |
| 175 W MV (Clsd to New) | @ | \$10.52 | /month |
| 250 W MV (Clsd to New) | @ | \$13.46 | /month |
| 400 W MV (Clsd to New) | @ | \$18.54 | /month |
| 100 W HPS (Clse to New) | @ | \$7.56 | /month |
| 150 W HPS | @ | \$9.46 | /month |
| 200 W HPS | @ | \$11.41 | /month |
| 250 W HPS | @ | \$13.25 | /month |
| 400 W HPS | @ | \$17.67 | /month |
| Street Lighting Service (44-2) |  |  |  |
| 175 W MV (Clsd to New) | @ | \$15.23 | /month |
| 250 W MV (Clsd to New) | @ | \$18.16 | /month |
| 400 W MV (Clsd to New) | @ | \$23.25 | /month |
| 100 W HPS (Clsd to New) | @ | \$12.27 | /month |
| 150 W HPS (Clsd to New) | @ | \$14.16 | /month |
| 250 W HPS (Clsd to New) | @ | \$17.95 | /month |
| 400 W HPS (Clsd to New) | @ | \$22.38 | /month |


| Custom Residential Street Lighting (44-3) |  |  |  |
| :---: | :---: | ---: | :--- |
|  |  |  |  |
| 175 W MV (Clsd to New) | @ | $\$ 11.37$ | /month |
| 50 W HPS (Clsd to New) | $@$ | $\$ 6.70$ | $/$ month |
| 100 W HPS | $@$ | $\$ 8.41$ | $/$ month |
| 150 W HPS (Clsd to New) | $@$ | $\$ 10.30$ | /month |
| 250 W HPS (Clsd to New) | $@$ | $\$ 14.09$ | $/$ month |

LED Security Lighting Service (44-4)
LED, >4,500 Lumens @ 7.63 /month

| Proposed Rates <br> Security Lighting Service (44) |  |  |  |
| :---: | :---: | :---: | :---: |
| Closed to New |  |  |  |
| 175 W MV | $@$ | N/A | /month |
| 100 W HPS | $@$ | $\$ 12.01$ | $/$ month |
| 150 W HPS | @ | $\$ 14.26$ | $/$ month |
| 250 W HPS | $@$ | $\$ 18.83$ | $/$ month |


| Street Lighting System (44-1) |  |  |  |
| :---: | :---: | :---: | :---: |
| 175 W MV (Clsd to New) | @ | \$13.25 | /month |
| 250 W MV (Clsd to New) | @ | \$16.74 | /month |
| 400 W MV (Clsd to New) | @ | \$22.71 | /month |
| 100 W HPS (Clse to New) | @ | \$9.61 | /month |
| 150 W HPS | @ | \$11.78 | /month |
| 200 W HPS | @ | \$14.18 | /month |
| 250 W HPS | @ | \$16.35 | /month |
| 400 W HPS | @ | \$21.24 | /month |


| Street Lighting Service (44-2)   <br> 175 W MV (Clsd to New)  $@$ <br> 250 W MV (Clsd to New)  $\$ 17.44$ <br> /month   <br> 400 W MV (Clsd to New)  $\$ 20.93$ | /month |  |  |
| :---: | :--- | :--- | :--- | :--- |
| 100 W HPS (Clsd to New) |  | $\$ 26.89$ | /month |
| 150 W HPS (Clsd to New) | @ | $\$ 13.80$ | /month |
| 250 W HPS (Clsd to New) | @ | $\$ 20.54$ | /month |
| 400 W HPS (Clsd to New) | @ | $\$ 25.42$ | /month |



LED Security Lighting Service (44-4)
LED, >4,500 Lumens @ \$7.75 /month

## Comparison of Present and Proposed Rate Schedules

(Continued)

## Present Rates

LED Street Lighting Member Owned(44-5)

| A (40-80 watts) | @ | 4.81 | /month |
| :--- | :--- | ---: | :--- |
| B (81-150 watts) | @ | $\$ 6.71$ | /month |
| C (151-250 watts) | $@$ | $\$ 9.66$ | /month |
| D (251-350 watts) | @ | $\$ 13.05$ | /month |
| E (351-450 watts) | @ | $\$ 16.52$ | /month |

LED Street Lighting Member Owned(44-5)

| A (40-80 watts) | $@$ | $\$ 5.50$ | /month |
| :--- | :--- | ---: | :--- |
| B $(81-150$ watts $)$ | $@$ | $\$ 7.75$ | /month |
| C $(151-250$ watts $)$ | $@$ | $\$ 11.16$ | /month |
| D (251-350 watts) | $@$ | $\$ 15.04$ | /month |
| E (351-450 watts) |  | $\$ 19.07$ | /month |


| LED Street Lighting (44-6) |  |  |  |
| :---: | :---: | :---: | :---: |
| Standard |  |  |  |
| >5,200 L, Coach (Post) | @ | \$10.60 | /month |
| >5,200 L, Acorn (Post) | @ | \$11.24 | /month |
| >7,000 L, Cobra (Mast) | @ | \$8.31 | /month |
| >11,500 L, Shoebox | @ | \$10.71 | /month |
| Basic |  |  |  |
| >5,200 L, Coach (Post) | @ | \$6.83 | /month |
| >5,200 L, Acorn (Post) | @ | \$6.30 | /month |
| >7,000 L, Cobra (Mast) | @ | \$6.51 | /month |
| >11,500 L, Shoebox | @ | \$7.98 | /month |

## LED Street Lighting (44-6)

| $>5,200 \mathrm{~L}$, Coach (Post) | $@$ | $\$ 9.30$ | /month |
| :--- | :--- | ---: | :--- |
| $>5,200 \mathrm{~L}$, Acorn (Post) | $@$ | $\$ 10.85$ | $/$ month |
| $>7,000 \mathrm{~L}$, Cobra (Mast) | $@$ | $\$ 8.60$ | $/$ month |
| $>11,500 \mathrm{~L}$, Shoebox | $@$ | $\$ 10.70$ | $/$ month |
|  |  |  |  |
| $>5,200 \mathrm{~L}$, Coach (Post) | $@$ | $\$ 6.36$ | $/$ month |
| $>5,200 \mathrm{~L}$, Acorn (Post) | $@$ | $\$ 6.12$ | $/$ month |
| $>7,000 \mathrm{~L}$, Cobra (Mast) | $@$ | $\$ 6.98$ | $/$ month |
| $>11,500 \mathrm{~L}$, Shoebox | $@$ | $\$ 8.68$ | $/$ month |

## Low Wattage Unmetered Service (45)

Fixed Charge
General Service (46)

| Fixed Charge | $@$ | $\$ 34.00$ | $/ \mathrm{month}$ |
| :--- | :--- | ---: | :--- |
| Demand Charge |  |  |  |
| $\quad$ Summer | $@$ | $\$ 12.26$ | $/ \mathrm{kW}$ |
| $\quad$ Other | $@$ | $\$ 9.16$ | $/ \mathrm{kW}$ |
| Energy Charge |  |  |  |
| $\quad$ First 200 kWh/kW | $@$ | $\$ 0.07760$ | $/ \mathrm{kWh}$ |
| Next 200 kWh/kW | $@$ | $\$ 0.06760$ | kWh |
| Over 400 kWh/kW | $@$ | $\$ 0.05760$ | $/ \mathrm{kWh}$ |
| Primary Voltage Disc. | $@$ | $\$ 0.15$ | $/ \mathrm{kW}$ |
| Primary Metering Disc. | $@$ | $2.00 \%$ |  |

Low Wattage Unmetered Service (45)
Fixed Charge
@ $\quad \$ 10.50 \quad / m o n t h$

General Service (46)

| Fixed Charge | $@$ | $\$ 34.00$ | $/$ month |
| :--- | :--- | :--- | :--- |
| Demand Charge |  |  |  |
| Summer | $@$ | $\$ 13.70$ | $/ \mathrm{kW}$ |
| Other | $@$ | $\$ 10.60$ | $/ \mathrm{kW}$ |

## Energy Charge

Next $200 \mathrm{kWh} / \mathrm{kW}$ @ $\$ 0.06760 / \mathrm{kWh}$
Over $400 \mathrm{kWh} / \mathrm{kW}$ @ $\$ 0.05760$ /kWh
Primary Voltage Disc.
@
Primary Metering Disc.
$\$ 0.15 / \mathrm{kW}$
2.00\%
$\qquad$

# Comparison of <br> Present and Proposed Rate Schedules 

(Continued)

| Present Rates |  |  |  | Proposed Rates |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Municipal Civil Defense Sirens (47) |  |  |  | Municipal Civil Defense Sirens (47) |  |  |  |
| Fixed Charge | @ | \$5.00 | /month | Fixed Charge | @ | \$5.00 | /month |
| Geothermal Heat Pump (49) Closed to New |  |  |  | Geothermal Heat Pump (49) Closed to New |  |  |  |
| Energy Charge | @ | \$0.09400 | /kWh | Energy Charge | @ | \$0.10300 | /kWh |
| Controlled Energy Storage (51) |  |  |  | Controlled Energy Storage (51) |  |  |  |
| Net Energy Charge | @ | \$0.04400 | /kWh | Net Energy Charge | @ | \$0.04870 | /kWh |
| Controlled Interruptible Service (52) |  |  |  | Controlled Interruptible Service (52) |  |  |  |
| Net Energy Charge | @ | \$0.05500 | /kWh | Net Energy Charge | @ | \$0.06310 | /kWh |
| Alternate Rate for Water |  |  |  | Alternate Rate for Water |  |  |  |
| Heaters |  | (\$6.00) | /month | Heaters |  | (\$6.00) | /month |
| $\underline{\text { Residential \& Farm Time of Day (53) }}$ |  |  |  | $\underline{\text { Residential \& Farm Time of Day (53) }}$ |  |  |  |
| Fixed Charge | @ | \$12.00 | /month | Fixed Charge | @ | \$13.00 | /month |
| Energy Charge |  |  |  | Energy Charge |  |  |  |
| Peak Period |  |  |  | Peak Period |  |  |  |
| Summer | @ | \$0.18800 | /kWh | Summer | @ | \$0.21263 | /kWh |
| Other | @ | \$0.17400 | /kWh | Other | @ | \$0.19863 | /kWh |
| Off-Peak | @ | \$0.09400 | /kWh | Off-Peak | @ | \$0.09450 | /kWh |
| General Service Time of Day (54) |  |  |  | General Service Time of Day (54) |  |  |  |
| Fixed Charge | @ | \$36.00 | /month | Fixed Charge | @ | \$36.00 | /month |
| Demand Charge |  |  |  | Demand Charge |  |  |  |
| Peak Period |  |  |  | Peak Period |  |  |  |
| Summer | @ | \$24.85 | /kW/mo. | Summer | @ | \$26.14 | /kW/mo. |
| Winter | @ | \$18.95 | /kW/mo. | Winter | @ | \$19.91 | /kW/mo. |
| Other | @ | \$13.00 | /kW/mo. | Other | @ | \$13.67 | /kW/mo. |
| Maximum | @ | \$4.75 | /kW | Maximum | @ | \$5.25 | /kW |
| Energy Charge | @ | \$0.04990 | /kWh | Energy Charge | @ | \$0.05210 | /kWh |
| Primary Voltage Disc. | @ | \$0.15 | /kW | Primary Voltage Disc. | @ | \$0.15 | /kW |
| Primary Metering Disc. | @ | 2.00\% |  | Primary Metering Disc. | @ | 2.00\% |  |

# Comparison of <br> Present and Proposed Rate Schedules 

(Continued)

Present Rates
Residential \& Farm Service Time of Day (56)

| Fixed Charge <br> Energy Charges | $@$ | $\$ 12.00$ | $/ \mathrm{month}$ |
| :--- | :--- | :--- | :--- |
| $\quad$ Peak Period |  |  |  |
| $\quad$ Summer | $@$ | $\$ 0.2710$ | $/ \mathrm{kWh}$ |
| $\quad$ Winter | $@$ | $\$ 0.2210$ | $/ \mathrm{kWh}$ |
| $\quad$ Other | $@$ | $\$ 0.1750$ | $/ \mathrm{kWh}$ |
| Intermediate Period | $@$ | $\$ 0.0970$ | $/ \mathrm{kWh}$ |
| Off-Peak Period | $@$ | $\$ 0.0760$ | $/ \mathrm{kWh}$ |

Residential \& Farm Service Time of Day (56)

| Fixed Charge <br> Energy Charges | $@$ | $\$ 13.00$ | $/ \mathrm{month}$ |
| :--- | :--- | :--- | :--- |
| $\quad$ Peak Period |  |  |  |
| $\quad$ Summer | $@$ | $\$ 0.2890$ | $/ \mathrm{kW} / \mathrm{mo}$. |
| $\quad$ Winter | $@$ | $\$ 0.2320$ | $/ \mathrm{kW} / \mathrm{mo}$. |
| $\quad$ Other | $@$ | $\$ 0.1880$ | $/ \mathrm{kW} / \mathrm{mo}$. |
| Intermediate Period | $@$ | $\$ 0.1060$ | $/ \mathrm{kWh}$ |
| Off-Peak Period | $@$ | $\$ 0.0820$ | $/ \mathrm{kWh}$ |


| Standby Service (60) |  |  |  |
| :---: | :---: | :---: | :---: |
| Generation Reservation Fee |  |  |  |
| Summer | @ | \$3.21 | /kW |
| Winter | @ | \$2.47 | /kW |
| Other | @ | \$1.74 | /kW |
| Distribution Reservation Fee |  |  |  |
| Primary | @ | \$3.28 | /kW |
| Secondary | @ | \$3.51 | /kW |
| Substation | @ | \$0.90 | /kW |

Full Interruptible Service (70)

| Fixed Charge | $@$ | $\$ 110.00$ | $/ \mathrm{month}$ |
| :--- | :--- | ---: | :--- |
| Communication Fee | $@$ | $\$ 8.70$ | $/ \mathrm{month}$ |
| Coinc. Demand Charge |  |  |  |
| $\quad$ Summer | $@$ | $\$ 24.85$ | $/ \mathrm{kW}$ |
| Winter | $@$ | $\$ 18.95$ | $/ \mathrm{kW}$ |
| $\quad$ Other | $@$ | $\$ 13.00$ | $/ \mathrm{kW}$ |
| Non-Coinc. Demand | $@$ | $\$ 4.75$ | $/ \mathrm{kW}$ |
| Failure to Control |  | $\$ 5.00$ | $/ \mathrm{kW}$ |
| Energy Charge | $@$ | $\$ 0.04990$ | $/ \mathrm{kWh}$ |
| Primary Voltage Disc. | $@$ | $\$ 0.15$ | $/ \mathrm{kW}$ |
| Primary Metering Disc. | $@$ | $2.00 \%$ |  |


| Partial Interruptible Service (71) |  |  |  |
| :--- | :---: | ---: | :--- |
| Fixed Charge | $@$ | $\$ 110.00$ | $/$ month |
| Communication Fee | $@$ | $\$ 8.70$ | $/$ month |
| Coinc. Demand Charge |  |  |  |
| $\quad$ Summer | $@$ | $\$ 24.85$ | $/ \mathrm{kW}$ |
| Winter | $@$ | $\$ 18.95$ | $/ \mathrm{kW}$ |
| Other | $@$ | $\$ 13.00$ | $/ \mathrm{kW}$ |
| Non-Coinc. Demand | $@$ | $\$ 4.75$ | $/ \mathrm{kW}$ |
| Excess Demand | $@$ | $\$ 5.00$ | $/ \mathrm{kW}$ |
| Energy Charge | $@$ | $\$ 0.04990$ | $/ \mathrm{kWh}$ |
| Primary Voltage Disc. | $@$ | $\$ 0.15$ | $/ \mathrm{kW}$ |
| Primary Metering Disc. | $@$ | $2.00 \%$ |  |


| Standby Service (60) |  |  |
| :--- | :--- | :--- |
| Generation Reservation Fee |  |  |
|  |  |  |
| Summer | $@$ | $\$ 3.21$ |
| $/ \mathrm{kW}$ |  |  |
| Winter | $@$ | $\$ 2.47$ |
| $/ \mathrm{kW}$ |  |  |
| Other | $@$ | $\$ 1.74$ |
| $/ \mathrm{kW}$ |  |  |
| Distribution Reservation Fee |  |  |
| Primary | $@$ | $\$ 3.89$ |
| Secondary | $@$ | $\$ 4.02$ |
| kW |  |  |
| Substation | $@$ | $\$ 0.81$ | kW

## Full Interruptible Service (70)

Fixed Charge

| @ | $\$ 130.00$ | $/ \mathrm{month}$ |
| ---: | ---: | :--- |
| $@$ | $\$ 8.70$ | $/ \mathrm{month}$ |
|  |  |  |
| $@$ | $\$ 26.14$ | $/ \mathrm{kW} / \mathrm{mo}$. |
| $@$ | $\$ 19.91$ | $/ \mathrm{kW} / \mathrm{mo}$. |
| $@$ | $\$ 13.67$ | $/ \mathrm{kW} / \mathrm{mo}$. |
| $@$ | $\$ 5.25$ | $/ \mathrm{kW}$ |
| $@$ | $\$ 5.00$ | $/ \mathrm{kW}$ |
| $@$ | $\$ 0.05210$ | $/ \mathrm{kWh}$ |
| $@$ | $\$ 0.15$ | $/ \mathrm{kW}$ |
| $@$ | $2.00 \%$ |  |

## Partial Interruptible Service (71)

| Fixed Charge | $@$ | $\$ 130.00$ | $/ \mathrm{month}$ |
| :--- | :--- | ---: | :--- |
| Communication Fee | $@$ | $\$ 8.70$ | $/ \mathrm{month}$ |
| Coinc. Demand Charge |  |  |  |
| $\quad$ Summer | $@$ | $\$ 26.14$ | $/ \mathrm{kW} / \mathrm{mo}$. |
| Winter | $@$ | $\$ 19.91$ | $/ \mathrm{kW} / \mathrm{mo}$. |
| $\quad$ Other | $@$ | $\$ 13.67$ | $/ \mathrm{kW} / \mathrm{mo}$. |
| Non-Coinc. Demand | $@$ | $\$ 5.25$ | $/ \mathrm{kW}$ |
| Excess Demand | $@ 5.00$ | $/ \mathrm{kW}$ |  |
| Energy Charge | $@$ | $\$ 0.05210$ | $/ \mathrm{kWh}$ |
| Primary Voltage Disc. | $@$ | $\$ 0.15$ | $/ \mathrm{kW}$ |
| Primary Metering Disc. | $@$ | $2.00 \%$ |  |

# Comparison of Present and Proposed Rate Schedules <br> (Continued) 

## Present Rates

## Cycled Air Conditioning Service (80)

Option 1
Option 2
Option 3
Option 4
@
(\$0.03200) /kWh
@ (\$13.00) /month
@ (\$6.50) /ton/mo

## Cycled Air Conditioning Service (80)

Option 1 @
@ /kWh
Option 2 @ (\$0.03200) /kWh
Option 3 @ (\$13.00) /month
Option 4 @ (\$6.50) /ton/mo.

## Comparison of Revenue Present and Proposed Rates

| (a) | (b) | (c) | (d) | (e) | (f) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Revenue | Revenue |  |  |
| Line <br> No. | Rate Class | Present | Proposed | Increase (Decrease) |  |
|  |  | Rates | Rates | Amount | Percent |
|  |  | (\$) | (\$) | (\$) | (\%) |
| 1 | Residential \& Farm Service (31) | 114,332,035 | 119,389,671 | 5,057,636 | 4.42 |
| 2 | Residential \& Farm Demand Control (32) | 42,670 | 44,529 | 1,859 | 4.36 |
| 3 | Electric Vehicle (33) | 24,636 | 26,505 | 1,869 | 7.59 |
| 4 | Irrigation Service (36) Firm | 50,143 | 50,484 | 341 | 0.68 |
| 5 | Irrigation Service (36) Interruptible | 862,089 | 883,153 | 21,064 | 2.44 |
| 6 | Small General Service (41) | 5,799,609 | 6,197,337 | 397,728 | 6.86 |
| 7 | Security Lighting Service (44) - Closed to New | 102,369 | 120,526 | 18,157 | 17.74 |
| 8 | Street Lighting Service (44-2) | 466,293 | 524,779 | 58,486 | 12.54 |
| 9 | Street Lighting System (44-1) | 72,603 | 88,142 | 15,539 | 21.40 |
| 10 | Custom Residential Street Lighting (44-3) | 1,334,683 | 1,623,968 | 289,285 | 21.67 |
| 11 | LED Security Lighting Service (44-4) | 31,109 | 31,434 | 325 | 1.04 |
| 12 | LED Street Lighting Member Owned(44-5) | 1,297 | 1,473 | 176 | 13.57 |
| 13 | LED Street Lighting (44-6) | 59,884 | 57,768 | $(2,116)$ | (3.53) |
| 14 | Low Wattage Unmetered Service (45) | 8,520 | 8,946 | 426 | 5.00 |
| 15 | General Service (46) | 50,261,766 | 51,183,966 | 922,200 | 1.83 |
| 16 | Municipal Civil Defense Sirens (47) | 3,960 | 3,960 | - | - |
| 17 | Geothermal Heat Pump (49) Closed to New | 16,571 | 17,798 | 1,227 | 7.40 |
| 18 | Controlled Energy Storage (51) | 459,736 | 502,001 | 42,265 | 9.19 |
| 19 | Controlled Interruptible Service (52) | 2,634,418 | 2,784,452 | 150,034 | 5.70 |
| 20 | Residential \& Farm Time of Day (53) | 29,057 | 30,323 | 1,266 | 4.36 |
| 21 | General Service Time of Day (54) | 126,286 | 130,543 | 4,257 | 3.37 |
| 22 | Standby Service (60) | 66,840 | 74,160 | 7,320 | 10.95 |
| 23 | Full Interruptible Service (70) | 23,144,467 | 24,654,929 | 1,510,462 | 6.53 |
| 24 | Partial Interruptible Service (71) | 2,151,089 | 2,299,459 | 148,370 | 6.90 |
| 25 | Cycled Air Conditioning Service (80) | $(1,625,193)$ | $(1,625,193)$ | 1 | (0.00) |
| 26 | Wellspring | 23,370 | 23,370 | - | - |
| 27 | Total | 200,480,307 | 209,128,484 | 8,648,177 | 4.31 |


Comparison of Present and Proposed
Small General Service (41)

| Present |  | Proposed |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Service Char |  | \$14.00 | mo. |  | Fixed Charge |  |  | \$15.00 /mo. |  |  | /mo. |  |
| Energy Charge |  |  |  |  | Energy Charge |  |  |  |  |  |  |  |
| Summer |  | \$0.12690 | Wh |  | Summer $\quad \$ 0.13750$ |  |  |  | kWh |  |  |  |
| Other |  | \$0.11290 | Wh |  | Other |  |  | \$0.12350 kWh |  |  |  |  |
| RTA Charge $\quad \$ 0.00250 \mathrm{~kW}$ |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | Present vs. Proposed |  |  |  | Average Rate |  |  |  |
| kWh/ | Present |  | Proposed Billing |  | Summer |  |  |  | Present |  | Proposed |  |
| Mo. | Summer | Other | Summer | Other | Incr./(D |  |  | ecr.) | Summer | Other | Summer | Other |
| (kWh/mo) | (\$) | (\$) | (\$) | (\$) | (\$) | (\%) | (\$) | (\%) | ( $¢ / \mathrm{kWh}$ ) | ( $¢ / \mathrm{kWh}$ ) | ( $¢ / \mathrm{kWh}$ ) | ( $¢ / \mathrm{kWh}$ ) |
| 100 | 26.94 | 25.54 | 28.75 | 27.35 | 1.81 | 6.72 | 1.81 | 6.72 | 26.94 | 25.54 | 28.75 | 27.35 |
| 200 | 39.88 | 37.08 | 42.50 | 39.70 | 2.62 | 6.57 | 2.62 | 6.57 | 19.94 | 18.54 | 21.25 | 19.85 |
| 300 | 52.82 | 48.62 | 56.25 | 52.05 | 3.43 | 6.49 | 3.43 | 6.49 | 17.61 | 16.21 | 18.75 | 17.35 |
| 400 | 65.76 | 60.16 | 70.00 | 64.40 | 4.24 | 6.45 | 4.24 | 6.45 | 16.44 | 15.04 | 17.50 | 16.10 |
| 500 | 78.70 | 71.70 | 83.75 | 76.75 | 5.05 | 6.42 | 5.05 | 6.42 | 15.74 | 14.34 | 16.75 | 15.35 |
| 600 | 91.64 | 83.24 | 97.50 | 89.10 | 5.86 | 6.39 | 5.86 | 6.39 | 15.27 | 13.87 | 16.25 | 14.85 |
| 700 | 104.58 | 94.78 | 111.25 | 101.45 | 6.67 | 6.38 | 6.67 | 6.38 | 14.94 | 13.54 | 15.89 | 14.49 |
| 800 | 117.52 | 106.32 | 125.00 | 113.80 | 7.48 | 6.36 | 7.48 | 6.36 | 14.69 | 13.29 | 15.63 | 14.23 |
| 900 | 130.46 | 117.86 | 138.75 | 126.15 | 8.29 | 6.35 | 8.29 | 6.35 | 14.50 | 13.10 | 15.42 | 14.02 |
| 1,000 | 143.40 | 129.40 | 152.50 | 138.50 | 9.10 | 6.35 | 9.10 | 6.35 | 14.34 | 12.94 | 15.25 | 13.85 |
| 1,100 | 156.34 | 140.94 | 166.25 | 150.85 | 9.91 | 6.34 | 9.91 | 6.34 | 14.21 | 12.81 | 15.11 | 13.71 |
| 1,200 | 169.28 | 152.48 | 180.00 | 163.20 | 10.72 | 6.33 | 10.72 | 6.33 | 14.11 | 12.71 | 15.00 | 13.60 |
| 1,300 | 182.22 | 164.02 | 193.75 | 175.55 | 11.53 | 6.33 | 11.53 | 6.33 | 14.02 | 12.62 | 14.90 | 13.50 |
| 1,400 | 195.16 | 175.56 | 207.50 | 187.90 | 12.34 | 6.32 | 12.34 | 6.32 | 13.94 | 12.54 | 14.82 | 13.42 |
| 1,500 | 208.10 | 187.10 | 221.25 | 200.25 | 13.15 | 6.32 | 13.15 | 6.32 | 13.87 | 12.47 | 14.75 | 13.35 |
| 2,000 | 272.80 | 244.80 | 290.00 | 262.00 | 17.20 | 6.30 | 17.20 | 6.30 | 13.64 | 12.24 | 14.50 | 13.10 |
| 2,500 | 337.50 | 302.50 | 358.75 | 323.75 | 21.25 | 6.30 | 21.25 | 6.30 | 13.50 | 12.10 | 14.35 | 12.95 |
| 3,000 | 402.20 | 360.20 | 427.50 | 385.50 | 25.30 | 6.29 | 25.30 | 6.29 | 13.41 | 12.01 | 14.25 | 12.85 |
| 3,500 | 466.90 | 417.90 | 496.25 | 447.25 | 29.35 | 6.29 | 29.35 | 6.29 | 13.34 | 11.94 | 14.18 | 12.78 |
| 4,000 | 531.60 | 475.60 | 565.00 | 509.00 | 33.40 | 6.28 | 33.40 | 6.28 | 13.29 | 11.89 | 14.13 | 12.73 |

Comparison of Present and Proposed



| $\$ 34.00$ | $/ \mathrm{mo}$ |
| ---: | :--- |
| $\$ 12.26$ | $/ \mathrm{kW}$ |
| $\$ 9.16$ | $/ \mathrm{kW}$ |
| $\$ 0.07760$ | $/ \mathrm{kWh}$ |
| $\$ 0.06760$ | $/ \mathrm{kWh}$ |
| $\$ 0.05760$ | $/ \mathrm{kWh}$ |
| $\$ 0.00250$ | $/ \mathrm{kWh}$ |




が,

|  |  <br>  z <br>  <br>  |
| :---: | :---: |
|  |  |
|  |  <br>  <br>  <br>  |

$$
\begin{aligned}
\$ 110.00 & / \mathrm{mo} \\
& \\
\$ 24.85 & / \mathrm{kW} \\
\$ 18.95 & / \mathrm{kW} \\
\$ 13.00 & / \mathrm{kW} \\
\$ 4.75 & / \mathrm{kW} \\
\$ 0.04990 & / \mathrm{kWh} \\
(0.0005) & / \mathrm{kWh}
\end{aligned}
$$

\[

\]



# Statement of Operations <br> Proposed Rates <br> Test Year - 2018 Historical Adjusted 

| (a) | (b) | (c) | (d) | (e) |
| :---: | :---: | :---: | :---: | :---: |
| Line | Description | $2018$ | Adjustments ${ }^{1}$ | Pro Forma |
| 1 | Operating Revenue | (\$) | (\$) | (\$) |
| 2 | Rate Schedules | 202,630,477 | 6,498,007 | 209,128,484 |
| 3 | Other | 508,198 | 626,590 | 1,134,788 |
| 4 | Total Operating Revenue | 203,138,675 | 7,124,597 | 210,263,272 |
| 5 | Operating Expenses |  |  |  |
| 6 | Cost of Purchased Power | 149,330,034 | 1,319,432 | 150,649,466 |
| 7 | Transmission - O \& M | - |  |  |
| 8 | Distribution-Operation | 7,277,184 | $(383,045)$ | 6,894,139 |
| 9 | Distribution - Maintenance | 6,151,338 | 242,574 | 6,393,912 |
| 10 | Consumer Accounts | 5,312,955 | 380,854 | 5,693,809 |
| 11 | Consumer Service \& Information | 3,585,760 | $(180,461)$ | 3,405,299 |
| 12 | Sales | - | - | - |
| 13 | Administrative \& General | 11,907,838 | 71,783 | 11,979,621 |
| 14 | Depreciation \& Amortization | 10,281,975 | 404,073 | 10,686,048 |
| 15 | Taxes - Property | 3,372,283 | 178,507 | 3,550,790 |
| 16 | Taxes - Other | - | - | - |
| 17 | Other Interest Expense | 549,008 | - | 549,008 |
| 18 | Other Deductions | 6,239 | $(38,705)$ | $(32,466)$ |
|  | Total Operating Expenses (Before Long |  |  |  |
| 19 | Term Interest) | 197,774,614 | 1,995,012 | 199,769,626 |
|  | Net Operating Income (Before Long Term |  |  |  |
| 20 | Interest) | 5,364,061 | 5,129,585 | 10,493,646 |

[^63]$\qquad$

## Summary of Consumers, Energy Sales, and Revenue Under Proposed Rates

(Continued)

## I. Consumer and Sales Data for Pro Forma Test Year

| (a) | (b) | (c) | (d) | (e) | (f) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Line <br> No. | Description | Avg. No. Cons. | Energy Sales | Billing <br> Demand | Revenue ${ }^{2}$ |
|  |  |  | (kWh) | (kW) | (\$) |
| 1 | Residential \& Farm Service (31) | 100,202 | 838,089,528 | N.A. | 119,389,671 |
| 2 | Residential \& Farm Demand Control (32) | 15 | 378,000 | 917.2 | 44,529 |
| 3 | Electric Vehicle (33) | 88 | 300,960 | N.A. | 26,505 |
| 4 | Irrigation Service (36) Firm | 8 | 162,528 | 1,867.3 | 50,484 |
| 5 | Irrigation Service (36) Interruptible | 384 | 7,801,344 | 74,387.5 | 883,153 |
| 6 | Small General Service (41) | 4,431 | 42,537,600 | N.A. | 6,197,337 |
| 7 | Security Lighting Service (44) - Closed to New | 878 | 405,600 | N.A. | 120,526 |
| 8 | Street Lighting Service (44-2) | 2,269 | 2,405,280 | N.A. | 524,779 |
| 9 | Street Lighting System (44-1) | 470 | 521,040 | N.A. | 88,142 |
| 10 | Custom Residential Street Lighting (44-3) | 12,190 | 6,750,960 | N.A. | 1,623,968 |
| 11 | LED Security Lighting Service (44-4) | 356 | 64,896 | N.A. | 31,434 |
| 12 | LED Street Lighting Member Owned(44-5) | 11 | 8,712 | N.A. | 1,473 |
| 13 | LED Street Lighting (44-6) | 597 | 202,152 | N.A. | 57,768 |
| 14 | Low Wattage Unmetered Service (45) | 71 | - | N.A. | 8,946 |
| 15 | General Service (46) | 2,750 | 462,000,000 | 1,442,500.4 | 51,183,966 |
| 16 | Municipal Civil Defense Sirens (47) | 66 | - | N.A. | 3,960 |
| 17 | Geothermal Heat Pump (49) Closed to New | 3 | 172,800 | N.A. | 17,798 |
| 18 | Controlled Energy Storage (51) | 1,718 | 10,308,000 | N.A. | 502,001 |
| 19 | Controlled Interruptible Service (52) | 6,686 | 44,127,600 | N.A. | 2,784,452 |
| 20 | Residential \& Farm Time of Day (53) | 18 | 216,216 | N.A. | 30,323 |
| 21 | General Service Time of Day (54) | 6 | 1,059,984 | 6,802.3 | 130,543 |
| 22 | Standby Service (60) | 1 | - | - | 74,160 |
| 23 | Full Interruptible Service (70) | 234 | 379,080,000 | 858,880.1 | 24,654,929 |
| 24 | Partial Interruptible Service (71) | 28 | 27,720,000 | 111,609.5 | 2,299,459 |
| 25 | Cycled Air Conditioning Service (80) | 41,880 | 379,080,000 |  | $(1,625,193)$ |
| 26 | Wellspring |  |  |  | 23,370 |
| 27 | Total ${ }^{3}$ | 108,168 | 1,824,313,200 | 2,496,964.3 | 209,128,484 |

[^64]Exhibit __(DEA-5)
Page 3 of 10

## Summary of Consumers, Energy Sales, and

## Revenue Under Proposed Rates

(Continued)

## II. Estimate of Revenue Under Proposed Rates

| Rate Class | Billing <br> Determinants | Units | Rate | Revenue |
| :---: | :---: | :---: | :---: | :---: |
| Residential \& Farm Service (31) |  |  |  | (\$) |
| Fixed Charge | 100,202 | cons. | \$10.00 | 12,024,240 |
| Energy Charge |  |  |  |  |
| Summer | 257,025,312 | kWh | \$0.13790 | 35,443,791 |
| Other | 581,064,216 | kWh | \$0.12390 | 71,993,856 |
|  | 838,089,528 | kWh | Subtotal | 119,461,887 |
| RTA Charge ${ }^{1}$ | 838,089,528 | kWh |  |  |
| Controlled Water Heater Credit | 1,003 | units | (\$6.00) | $(72,216)$ |
|  |  |  | Total | 119,389,671 |
| Residential \& Farm Demand Control (32) |  |  |  |  |
| Fixed Charge | 15 | cons. | \$13.00 | 2,340 |
| Demand Charge |  |  |  |  |
| Summer | 182.2 | kW | \$15.50 | 2,824 |
| Other | 735.0 | kW | \$11.90 | 8,747 |
| Energy Charge | 378,000 | kWh | \$0.08100 | 30,618 |
|  |  |  | Subtotal | 44,529 |
| RTA Charge ${ }^{1}$ | 378,000 | kWh |  |  |
|  |  |  | Total | 44,529 |

## Electric Vehicle (33)

| Energy Charge |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Off Peak | $280,402 \mathrm{kWh}$ | $\$ 0.07560$ | 21,198 |  |
| On Peak | $8,554 \mathrm{kWh}$ | $\$ 0.44210$ | 3,782 |  |
| Other |  |  |  |  |
| Summer | $2,693 \mathrm{kWh}$ | $\$ 0.13790$ | 371 |  |
| Other | $9,311 \mathrm{kWh}$ | $\$ 0.12390$ | 1,154 |  |
|  |  | Subtotal | 26,505 |  |
| RTA Charge $^{1}$ | $300,960 \mathrm{kWh}$ |  | 26,505 |  |


| Irrigation Service (36) |  |  |  |  |
| :--- | ---: | :--- | ---: | ---: |
| Firm Service |  |  |  |  |
| Fixed Charge | 8 | cons. | $\$ 30.00$ | 2,880 |
| Demand Charge | 902.3 | kW | $\$ 26.60$ | 24,001 |
| Summer | 2.5 | kW | $\$ 21.20$ | 53 |
| Winter | 962.5 | kW | $\$ 15.67$ | 15,082 |
| Other | 162,528 | kWh | $\$ 0.05210$ | 8,468 |
| Energy Charge $^{\text {RTA Charge }{ }^{1}}$ | 162,528 | kWh |  | 5 |

[^65]
# Summary of Consumers, Energy Sales, and 

Revenue Under Proposed Rates
(Continued)

## II. Estimate of Revenue Under Proposed Rates

| Rate Class | Billing Determinants | Units | Rate | Revenue |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | (\$) |
| Irrigation Service (36) |  |  |  |  |
| Interruptible Service |  |  |  |  |
| Fixed Charge |  | cons. | \$30.00 | 138,240 |
| Demand Charge | 74,388 | kW | \$4.55 | 338,463 |
| Energy Charge | 7,801,344 | kWh | \$0.05210 | 406,450 |
| RTA Charge ${ }^{1}$ | 7,801,344 | kWh |  |  |
|  |  |  | Total | 883,153 |
| Small General Service (41) |  |  |  |  |
| Fixed Charge |  |  |  |  |
| Energy Charge | 4,431 | cons. | \$15.00 | 797,580 |
| Summer | 10,541,910 | kWh | \$0.13750 | 1,449,513 |
| Other | 31,995,690 |  | \$0.12350 | 3,951,468 |
|  | 42,537,600 | kWh | Subtotal | 6,198,561 |
| RTA Charge ${ }^{1}$ | 42,537,600 |  |  |  |
| Controlled Water Heater Credit | 17 units |  | Total (\$6.00) | (\$1,224) |
|  |  |  | 6,197,337 |

## Security Lighting Service (44) - Closed to New

## 175 W MV <br> 100 W HPS <br> 150 W HPS <br> 250 W HPS

RTA Charge ${ }^{1}$
$\begin{array}{rl} & \text { lights } \\ 819 & \text { lights } \\ 4 & \text { lights } \\ 8 & \text { lights } \\ 831 & \text { lights } \\ 405,600 & \mathrm{kWh}\end{array}$

|  |  |
| :--- | ---: |
| N/A |  |
| \$12.01 | 118,034 |
| \$14.26 | 684 |
| \$18.83 | 1,808 |
| Subtotal | 120,526 |
| Total |  |
|  |  |
|  |  |

## Street Lighting Service (44-2)

175 W MV
250 W MV
400 W MV
100 W HPS
150 W HPS
250 W HPS
400 W HPS

RTA Charge ${ }^{1}$

|  | lights | \$17.44 |  |
| :---: | :---: | :---: | :---: |
| 3 | lights | \$20.93 | 753 |
|  | lights | \$26.89 |  |
| 38 | lights | \$13.80 | 6,293 |
| 646 | lights | \$15.97 | 123,799 |
| 1,597 | lights | \$20.54 | 393,629 |
| 1 | lights | \$25.42 | 305 |
| 2,285 | lights | Subtotal | 524,779 |
| 2,405,280 kWh |  |  |  |
|  |  | Total | 524,779 |

[^66]Exhibit __(DEA-5)
Page 5 of 10

Summary of Consumers, Energy Sales, and Revenue Under Proposed Rates
(Continued)

## III. Estimate of Revenue Under Proposed Rates

| Rate Class | Billing <br> Determinants | Units | Rate | Revenue |
| :---: | :---: | :---: | :---: | :---: |
| Street Lighting System (44-1) |  |  |  | (\$) |
| 175 W MV |  | lights | \$13.25 |  |
| 250 W MV |  | lights | \$16.74 |  |
| 400 W MV |  | lights | \$22.71 |  |
| 100 W HPS |  | lights | \$9.61 |  |
| 150 W HPS | 101 | lights | \$11.78 | 14,277 |
| 200 W HPS | 101 | lights | \$14.18 | 17,186 |
| 250 W HPS | 272 | lights | \$16.35 | 53,366 |
| 400 W HPS | 13 | lights | \$21.24 | 3,313 |
|  | 487 | lights | Subtotal | 88,142 |
| RTA Charge ${ }^{1}$ | 521,040 | kWh |  |  |
|  |  |  | Total | 88,142 |

## Custom Residential Street Lighting (44-3)

175 W MV
50 W HPS
100 W HPS
150 W HPS
250 W HPS
RTA Charge ${ }^{1}$

## LED Security Lighting Service (44-4)

| LED, >4,500 Lumens | 338 lights |  | \$7.75 | 31,434 |
| :---: | :---: | :---: | :---: | :---: |
| RTA Charge ${ }^{1}$ | $64,896 \mathrm{kWh}$ |  |  |  |
|  |  | Total |  | 31,434 |


| lights |  |
| ---: | :--- |
| 81 | lights |
| 8,416 | lights |
| 3,732 | lights |
| 4 | lights |
| 12,233 | lights |

6,750,960 kWh
Total
\$14.03
$\$ 8.45 \quad 8,213$
\$10.39 1,049,307
$\$ 12.63 \quad 565,622$

| \$17.21 |
| :--- |
| $\begin{array}{r}1,623,968\end{array}$ |

Subtotal
Total $\quad 1,623,968$

RTA Charge ${ }^{1}$

[^67]Exhibit __(DEA-5)
Page 6 of 10

## Summary of Consumers, Energy Sales, and Revenue Under Proposed Rates <br> (Continued)

## III. Estimate of Revenue Under Proposed Rates

| Rate Class | Billing <br> Determinants | Units | Rate | Revenue |
| :---: | :---: | :---: | :---: | :---: |
| LED Street Lighting Member Owned(44-5) |  |  |  | (\$) |
| A (40-80 watts) |  | lights | \$5.50 |  |
| B (81-150 watts) |  | lights | \$7.75 |  |
| C (151-250 watts) | 11 | lights | \$11.16 | 1,473 |
| D (251-350 watts) |  | lights | \$15.04 |  |
| E (351-450 watts) |  | lights | \$19.07 |  |
|  |  |  |  | 1,473 |
| RTA Charge ${ }^{1}$ | 8,712 | kWh |  |  |
|  |  |  |  | 1,473 |
| LED Street Lighting (44-6) |  |  |  |  |
| Standard |  |  |  |  |
| >5,200 L, Coach (Post) |  | lights | \$9.30 | 13,504 |
| >5,200 L, Acorn (Post) | 48 | lights | \$10.85 | 6,250 |
| >7,000 L, Cobra (Mast) |  | lights | \$8.60 | 9,391 |
| >11,500 L, Shoebox | 151 | lights | \$10.70 | 19,388 |
| Basic |  |  |  |  |
| >5,200 L, Coach (Post) | 41 | lights | \$6.36 | 3,129 |
| >5,200 L, Acorn (Post) |  | lights | \$6.12 |  |
| >7,000 L, Cobra (Mast) | 53 | lights | \$6.98 | 4,439 |
| >11,500 L, Shoebox |  | lights | \$8.68 | 1,667 |
|  |  |  |  | 57,768 |
| RTA Charge ${ }^{1}$ | 202,152 | kWh |  |  |
|  |  |  |  | 57,768 |
| Low Wattage Unmetered Service (45) |  |  |  |  |
| Fixed Charge | 71 | cons. | \$10.50 | 8,946 |

[^68]
# Summary of Consumers, Energy Sales, and Revenue Under Proposed Rates <br> (Continued) 

## III. Estimate of Revenue Under Proposed Rates

| Rate Class | Billing <br> Determinants | Units | Rate | Revenue |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | (\$) |
| General Service (46) |  |  |  |  |
| Fixed Charge | 2,750 | cons. | \$34.00 | 1,122,000 |
| Demand Charge | 1,442,500.4 | kW |  |  |
| Summer | 413,627.7 |  |  |  |
| Summer Load Adjustment | $(11,771.4)$ |  |  |  |
| Net Summer | 401,856.3 | kW | \$13.70 | 5,666,699 |
| Other | 1,028,872.7 |  |  |  |
| Other Load Adjustment | $(21,406.1)$ |  |  |  |
| Net Other | 1,007,466.6 | kW | \$10.60 | 10,906,051 |
| Energy Charge |  |  |  |  |
| First $200 \mathrm{kWh} / \mathrm{kW}$ | 264,418,387 | kWh | \$0.07760 | 20,518,867 |
| Next $200 \mathrm{kWh} / \mathrm{kW}$ | 158,964,776 | kWh | \$0.06760 | 10,746,019 |
| Over $400 \mathrm{kWh} / \mathrm{kW}$ | 38,616,837 | kWh | \$0.05760 | 2,224,330 |
|  |  |  | Subtotal | 51,183,966 |
| Discounts |  |  |  |  |
| Primary Voltage |  |  | (\$0.15) |  |
| Primary Metering |  |  | (2.00\%) |  |
| RTA Charge 1 | 462,000,000 |  |  |  |
|  |  |  | Total | 51,183,966 |
| Municipal Civil Defense Sirens (47) |  | kWh |  |  |
| Fixed Charge | 66 | cons. | \$5.00 | 3,960 |
| Geothermal Heat Pump (49) |  |  |  |  |
| Energy Charge | 172,800 | kWh | \$0.10300 | 17,798 |
| RTA Charge ${ }^{1}$ | 172,800 | kWh |  |  |
|  |  |  | Total | $\underline{17,798}$ |
| Controlled Energy Storage (51) |  |  |  |  |
| Energy Net Charge - Rate 31 |  |  |  |  |
| Summer | 2,701,434 | kWh | \$0.04870 | 131,560 |
| Other | 7,509,011 | kWh | \$0.04870 | 365,689 |
| Energy Charge - Rate 41 |  |  |  |  |
| Summer | 6,874 | kWh | \$0.04870 | 335 |
| Other | 39,232 | kWh | \$0.04870 | 1,911 |
| Energy Charge - Rate 46 | 51,449 | kWh | \$0.04870 | 2,506 |
|  | 10,308,000 |  | Subtotal | 502,001 |
| RTA Charge ${ }^{\text {1 }}$ |  | kWh | NA |  |
|  |  |  | Total | 502,001 |

[^69]
# Summary of Consumers, Energy Sales, and Revenue Under Proposed Rates <br> (Continued) 

## III. Estimate of Revenue Under Proposed Rates

|  | Billing <br> Rate Class | Determinants | Units | Rate |
| :--- | :---: | :--- | :--- | :--- |$\quad$ Revenue


| Controlled Interruptible Service (52) |  |  |  | (\$) |
| :---: | :---: | :---: | :---: | :---: |
| Energy Net Charge - Rate 31 |  |  |  |  |
| Summer | 10,488,495 | kWh | \$ 0.0631 | 661,824 |
| Other | 32,538,130 | kWh | 0.0631 | 2,053,156 |
| Energy Charge - Rate 41 |  | kWh |  |  |
| Summer | 64,095 | kWh | \$0.06310 | 4,044 |
| Other | 386,791 | kWh | \$0.06310 | 24,407 |
| Energy Charge - Rate 46 | 650,089 |  | \$0.06310 | 41,021 |
| RTA Charge ${ }^{1}$ | 44,127,600 |  | NA |  |
|  |  |  | Total | 2,784,452 |
| Residential \& Farm Time of Day (53) |  |  |  |  |
| Fixed Charge | 18 | cons. | \$13.00 | 2,808 |
| Energy Charge |  |  |  |  |
| Peak Period |  |  |  |  |
| Summer | 49,267 | kWh | \$0.21263 | 10,476 |
| Other | 12,117 | kWh | \$0.19863 | 2,407 |
| Off-Peak Period | 154,832 | kWh | \$0.09450 | 14,632 |
|  | 216,216 | kWh | Subtotal | 30,323 |
| RTA Charge ${ }^{1}$ | 216,216 | kWh |  |  |
|  |  |  | Total | 30,323 |
| General Service Time of Day (54) |  |  |  |  |
| Fixed Charge | 6 | cons. | \$36.00 | 2,592 |
| Demand Charge |  |  |  |  |
| Peak Period |  |  |  |  |
| Summer | 960.1 | kW | \$26.14 | 25,097 |
| Winter | 436.9 | kW | \$19.91 | 8,699 |
| Other | 1,253.2 | kW | \$13.67 | 17,131 |
|  | 2,650.2 | kW |  |  |
| Maximum | 4,152.1 | kW | \$5.25 | 21,799 |
| Energy Charge | 1,059,984 | kWh | \$0.05210 | 55,225 |
|  |  |  | Subtotal | 130,543 |
| Discounts |  |  |  |  |
| Primary Voltage |  | kW | (\$0.15) |  |
| Primary Metering |  |  | (2.00\%) |  |
| RTA Charge ${ }^{1}$ | 1,059,984 | kWh |  |  |
|  |  |  | Total | 130,543 |

[^70]
# Summary of Consumers, Energy Sales, and <br> Revenue Under Proposed Rates <br> (Continued) 

## III. Estimate of Revenue Under Proposed Rates

Billing

| Rate Class | Determinants | Units | Rate | Revenue |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | (\$) |
| Standby Service (60) |  |  |  |  |
| Generation Reservation Fee |  |  |  |  |
| Summer | 1,000 | kW | \$3.21 | 9,630 |
| Winter | 1,000 | kW | \$2.47 | 7,410 |
| Other | 1,000 | kW | \$1.74 | 10,440 |
| Distribution Reservation Fee |  |  |  |  |
| Primary | 1,000 | kW | \$3.89 | 46,680 |
| Secondary |  | kW | \$4.02 |  |
|  |  | Total |  | $\underline{74,160}$ |
| Full Interruptible Service (70) |  |  |  |  |
| Fixed Charge | 234 | cons. | \$130.00 | 365,040 |
| Communication Fee | 51 |  | \$8.70 | 5,324 |
| Coinc. Demand Charge |  |  |  |  |
| Summer | 1,042.8 | kW | \$26.14 | 27,259 |
| Winter |  | kW | \$19.91 |  |
| Other |  | kW | \$13.67 |  |
| Total Coinc Demand | 1,042.8 | kW |  |  |
| Non-Coinc. Demand | 858,880.1 | kW | \$5.25 | 4,509,121 |
| Failure to Control | 1,042.8 | kW | \$5.00 | 5,214 |
| Energy Charge | 379,080,000 | kWh | \$0.05210 | 19,750,068 |
| Discounts |  |  | Subtotal | 24,662,026 |
| Primary Voltage | 47,311.1 | kW | (\$0.15) | $(\$ 7,097)$ |
| Primary Metering |  |  | (2.0\%) |  |
| RTA Charge ${ }^{1}$ | 379,080,000 | kWh | Total |  |
|  |  |  |  | 24,654,929 |

## Partial Interruptible Service (71)

| Fixed Charge | 28 | cons. | \$130.00 | 43,680 |
| :---: | :---: | :---: | :---: | :---: |
| Communication Fee | 17 |  | \$8.70 | 1,775 |
| Coinc. Demand Charge |  |  |  |  |
| Summer | 3,212.2 | kW | \$26.14 | 83,967 |
| Winter | 2,980.2 | kW | \$19.91 | 59,336 |
| Other | 5,964.3 | kW | \$13.67 | 81,532 |
| Total Coinc Demand | 12,156.7 | kW |  |  |
| Non-Coinc. Demand | 111,609.5 | kW | \$5.25 | 585,950 |
| Excess Demand |  | kW | \$5.00 |  |
| Energy Charge | 27,720,000 | kWh | \$0.05210 | 1,444,212 |
| Discounts |  | Subtotal |  | 2,300,452 |
| Primary Voltage | 6,623 | kW | \$0.15 | (993) |
| Primary Metering |  |  | 2.0\% | - |
| RTA Charge ${ }^{1}$ | 27,720,000 | kWh |  |  |
|  |  | Total |  | 2,299,459 |

[^71]Exhibit __(DEA-5)
Page 10 of 10

## Summary of Consumers, Energy Sales, and Revenue Under Proposed Rates

(Continued)

## III. Estimate of Revenue Under Proposed Rates

| Rate Class | Billing Determinants | Units | Rate | Revenue |
| :---: | :---: | :---: | :---: | :---: |
| Cycled Air Conditioning Service (80) |  |  |  |  |
| Option 1 |  | kWh |  |  |
| Option 2 |  |  |  |  |
| Residential Rate 8131 | 4,858,654 | kWh | (\$0.03200) | $(155,477)$ |
| Rate 8141 | 216,346 | kWh | (\$0.03200) | $(6,923)$ |
| Rate 8146 |  | kWh | (\$0.03200) |  |
|  | 5,075,000 | kWh |  | $(162,400)$ |
| Option 3 |  |  |  |  |
| Residential Rate 8231 | 35,158 | cons. | (\$13.00) | $(1,371,162)$ |
| Commercial |  | cons. | (\$13.00) |  |
|  |  |  |  | $(1,371,162)$ |
| Option 4 |  |  |  |  |
| Rate 8441 | 4,699 | tons | (\$6.50) | $(91,631)$ |
| Rate 8446 |  | tons | (\$6.50) |  |
|  | 4,699 |  |  | (91,631) |
|  |  |  |  | $(1,625,193)$ |
|  |  | Total |  |  |
| Wellspring |  |  |  | 23,370 |
| Grand Total | 1,824,313,200 |  |  | 209,128,484 |

[^72]
Summary of Cost of Service Analysis Load Management Rates
I. Summary
\[

$$
\begin{aligned}
& \begin{array}{l}
\text { Schedule } 49 \\
\text { Geothermal Heat Pump } \\
\text { Schedule } 51 \text { (Storage) } \\
\text { ETS-Water Heating ( } 16 \mathrm{hr} \text { ) } \\
\text { ETS-Storage }{ }^{1}
\end{array} \\
& \frac{\text { Schedule } 52 \text { (Interruptible) }}{\text { Peak Shave - Water }(8 \mathrm{hr})} \\
& \text { Dual Fuel - Space Heating }
\end{aligned}
$$
\]

Col. $\quad \underline{\text { Notes }}$
(a) Load management rates per GRE's present wholesale rate schedules.
(b) Based on GRE wholesale rate schedules for Year 2019.



©
(1) A :
(b)
GRE
$\underline{\text { Rate }}\left(\begin{array}{l}\text { RWh })\end{array}\right.$

8.13

2.00
2.25

3.40
3.65
(a) S

## Rate Description <br> Rate Description

Notes
(b) Based on GRE wholesale rate schedules for Year 2019.
(c) GRE General Service Energy Rate x $2.50 \%$ which repre
(c) GRE General Service Energy Rate x $2.50 \%$ which represents the average losses for the system. (d) See page 2.
(f) See page 3 for calculation of margin.
(g) Sum Col. (b) to Col. (f).
(i) Equals Total Cost times Weighted Sales. Sum equals retail rate of each schedule.

1 This rate may also apply to loads qualifying under the ETS Pool Heating program and/or Electric Vehicles program.
2 Geothermal equals GRE average energy rate plus average system capacity, transmission, and ancillary services costs on a per kWh basis.

## Cost of Service Analysis

## Load Management Rates

(Continued)

## II. Cost of Service Analysis

## A. Incremental Cost of Service <br> 1. Annual Cost of Control Unit and Meter <br> a. Investment <br> \$53 <br> 1. Meter <br> $\begin{array}{lr}\text { 2. Control Unit } & \$ 134 \\ \quad \text { Subtotal }\end{array}$

b. Annual Cost Factor

1. Capital Recovery Factor ${ }^{1}$
$\frac{0.0420 \mathrm{x}(1.0420)^{\wedge} 15}{1.0420^{\wedge} 15-1} \quad=\quad 9.1 \%$
2. Operation \& Maintenance

| $\frac{\mathrm{O} \& \mathrm{M} \text { Expense }}{\text { Dist. Plant }^{2}}$ |
| :---: | :--- | | $\frac{\$ 13,288,051}{\$ 267,355,082}$ |
| :--- |
| Total |$=$| $14.1 \%$ |
| :--- |

c. Annual Cost $\quad \$ 187.00 \mathrm{x} \quad 14.1 \%=\$ 26.35 /$ year
d. Per kWh Cost ${ }^{3} \quad 0.42 \not \subset / \mathrm{kWh}$
2. Purchased Power
a. At present wholesale energy rate adjusted for load management programs. See Page 1.
b. Average system losses for test year $=2.50 \%$

[^73]
## Cost of Service Analysis

## Load Management Rates

(Continued)

## II. Cost of Service Analysis (Continued)

A. Incremental Cost of Service (Continued)
3. Margin Requirement (Equity Portion Only) ${ }^{1}$
$\frac{\text { Required Net Operating Income - Interest Expense }}{\text { Total Expenses + Required Net Operating Income }}$

\[\)| $\$ 10,538,868-\$ 3,766,478$ |
| :--- |
| $\$ 199,769,626+\$ 10,538,868$ |\(=3.2202 \%

\]

B. Allocated Cost of Service (Full Share)

1. Distribution System Capacity
a. Depreciation (Acct. 403)
$\$ 10,686,048$
$3,766,478$

$13,288,051$$\quad$| $\$ 27,740,577$ |
| :---: |
| $1,824,313,200 \quad \mathrm{kWh}$ |
| 1.52 |
| $\mathrm{x} / \mathrm{kWh}$ |
| $50.00 \%$ |

2. Administration and General

| Accounts 920 to 930 |
| :--- | :--- |
| Total Energy Sales |$\quad=\quad \frac{\$ 11,979,621}{1,824,313,200} \mathrm{kWh} \quad=\quad 0.66 \phi / \mathrm{kWh}$

[^74]
## Cost of Service Analysis

## Load Management Rates

(Continued)

## B. Allocated Cost of Service (Full Share) (Continued)

3. Consumer Accounting

## Accounts 901 to $905 \times$ Weight Factor ${ }^{1}$

Total No. of Cons. x Off-Peak Usage

| $\$ 5,693,809$ | x | 0.50 |
| ---: | :--- | :---: |
| 108,165 | x | $6,300 \mathrm{~kW} \mathrm{~h}^{2}$ |

$0.42 \phi / \mathrm{kWh}$
4. Taxes

Account 408
Total Energy Sales
$\frac{\$ 3,550,790}{1,824,313,200} \mathrm{kWh}$
$0.19 ~ ¢ / \mathrm{kWh}$
5. Consumer Service \& Sales ${ }^{3}$
$0.10 ~ \& / k W h$
6. Total Allocated Costs (Before Margin Requirement)
$2.13 \not \subset / \mathrm{kWh}$

[^75]Docket No. E-111/GR-19-478

Cost of Service Sum

| Line <br> No. | Description | Total | Resid. <br> \& Farm |  |  |  |  |  |  | Small <br> General <br> Service | Irrigation | General <br> Service | C\&I <br> Interruptible | Lighting |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: |


| $\begin{aligned} & \text { Line } \\ & \text { No. } \end{aligned}$ | Cost of Service Summary Class Allocation Summary |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Category | Total | Resid. \& Farm | Small <br> General <br> Service | Irrigation | General Service | C\&I <br> Interruptible | Lighting |
| 1 | Power Supply |  |  |  |  |  |  |  |
| 2 | Direct and Revenue Related |  |  |  |  |  |  |  |
| 3 | Wholesale Cost |  |  |  |  |  |  |  |
| 4 | Allocated Cost |  |  |  |  |  |  |  |
| 5 | Subtotal |  |  |  |  |  |  |  |
| 6 | Capacity Related |  |  |  |  |  |  |  |
| 7 | Wholesale Cost | 33,514,067 | 20,781,131 | 1,032,371 | 24,859 | 11,370,890 | 149,849 | 154,967 |
| 8 | Allocated Cost | 328,991 | 198,146 | 10,188 | 183 | 105,776 | 12,878 | 1,819 |
| 9 | Subtotal | 33,843,058 | 20,979,277 | 1,042,559 | 25,042 | 11,476,666 | 162,728 | 156,786 |
| 10 | Energy Related |  |  |  |  |  |  |  |
| 11 | Wholesale Cost | 92,910,647 | 44,057,307 | 2,234,564 | 418,354 | 24,325,231 | 21,369,810 | 505,382 |
| 12 | Allocated Cost | 892,910 | 420,872 | 21,278 | 4,042 | 235,006 | 206,454 | 5,257 |
| 13 | Subtotal | 93,803,557 | 44,478,179 | 2,255,842 | 422,396 | 24,560,237 | 21,576,264 | 510,639 |
| 14 | Subtotal Power Supply | 127,646,615 | 65,457,456 | 3,298,400 | 447,438 | 36,036,904 | 21,738,992 | 667,425 |
| 15 | Transmission |  |  |  |  |  |  |  |
| 16 | Direct |  |  |  |  |  |  |  |
| 17 | Capacity | 22,649,623 | 13,696,762 | 706,106 | 12,511 | 7,229,676 | 880,227 | 124,341 |
| 18 | Energy |  |  |  |  |  |  |  |
| 19 | Allocated Cost |  |  |  |  |  |  |  |
| 20 | Subtotal Transmission | 22,649,623 | 13,696,762 | 706,106 | 12,511 | 7,229,676 | 880,227 | 124,341 |
| 21 | Distribution |  |  |  |  |  |  |  |
| 22 | Direct | 1,446,444 |  |  |  |  |  | 1,446,444 |
| 23 | Consumer | 35,017,518 | 30,207,652 | 1,736,178 | 269,591 | 2,007,933 | 695,080 | 101,085 |
| 24 | Capacity | 20,310,243 | 10,113,625 | 501,599 | 162,967 | 5,261,940 | 4,140,938 | 129,175 |
| 25 | Energy |  |  |  |  |  |  |  |
| 26 | Subtotal Distribution | 56,774,205 | 40,321,277 | 2,237,776 | 432,558 | 7,269,873 | 4,836,017 | 1,676,703 |
| 27 |  |  |  |  |  |  |  |  |
| 28 | Total | 207,070,443 | 119,475,495 | 6,242,283 | 892,507 | 50,536,453 | 27,455,236 | 2,468,469 |

Exhibit (DEA-3)
Page 4 of 42
Classification of Plant in Service (Net)

| $\begin{gathered} \text { Line } \\ \text { No. } \\ \hline \end{gathered}$ | Acct. <br> No. | Description | Class. <br> Factor | Total | Powe Energy | Supply Capacity | Tran <br> Energy | ission Capacity | Dist. Su Capacity | tation Cons. | Prima Capacity | y Line Cons. | Line Capacity | Transf. Cons. | Second. <br> \& Serv. <br> Cons. | Meter Cons. | Acct. \& Serv. Cons. | Revenue |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Net Intangible Plant |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | 301 | Organization | PLNT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | 302 | Franchises and consents | PLNT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | 303 | Miscellaneous intangible plant | PLNT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | 301-303 | Subtotal |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net Production Plant |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | 310-346 | Production Plant | PROD1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 Net Transmission Plant |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 | 350-359 | Transmission Plant | TRAN1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 Net Distribution Plant |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14 | 360 | Land | LAND | 4,163,712 |  |  |  |  | 4,163,712 |  |  |  |  |  |  |  |  |  |
| 15 | 361 | Structures | SUB |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16 | 362 | Station | SUB | 18,856,408 |  |  |  |  | 18,856,408 |  |  |  |  |  |  |  |  |  |
| 17 | 363 | Battery | SUB |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 18 | 364 | Poles, towers | POLES | 10,796,888 |  |  |  |  |  |  | 4,750,137 | 6,046,751 |  |  |  |  |  |  |
| 19 | 365 | OH Cond | PRI-OH | 13,738,437 |  |  |  |  |  |  | 2,414,494 | 11,323,943 |  |  |  |  |  |  |
| 20 | 366 | UG Conduit | PRI-UG |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 21 | 367 | UG Cond | PRI-UG | 84,374,330 |  |  |  |  |  |  | 63,512,819 | 20,861,511 |  |  |  |  |  |  |
| 22 | 368 | Transf | TRF | 17,481,215 |  |  |  |  |  |  |  |  | 3,443,783 | 14,037,432 |  |  |  |  |
| 23 | 369 | Services | SERV | 1,190,394 |  |  |  |  |  |  |  |  |  |  | 1,190,394 |  |  |  |
| 24 | 370 | Meters | MTR | 2,686,182 |  |  |  |  |  |  |  |  |  |  |  | 2,686,182 |  |  |
| 25 | 371 | Cons Premise | ICON | 123,745 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 26 | 372 | Leased Prop | LICON |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 27 | 373 | St. Light | STL | 4,543,471 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 28 | 360-373 | Subtotal |  | 157,954,781 |  |  |  |  | 23,020,120 |  | 70,677,450 | 38,232,205 | 3,443,783 | 14,037,432 | 1,190,394 | 2,686,182 |  |  |
| 29 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 30 Net General Plant |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 31 | 389 | Land \& Land Rights | PLNT | 102,278 |  |  |  |  | 14,906 |  | 45,765 | 24,756 | 2,230 | 9,089 | 771 | 1,739 |  |  |
| 32 | 390 | Structures and Improve. | PLNT | 4,601,923 |  |  |  |  | 670,678 |  | 2,059,148 | 1,113,874 | 100,333 | 408,973 | 34,681 | 78,260 |  |  |
| 33 | 391 | Office Furniture \& Equip. | PLNT | 5,056,678 |  |  |  |  | 736,954 |  | 2,262,629 | 1,223,945 | 110,247 | 449,387 | 38,109 | 85,994 |  |  |
| 34 | 392 | Transportation \& Equipment | PLNT | 918,591 |  |  |  |  | 133,874 |  | 411,027 | 222,341 | 20,027 | 81,635 | 6,923 | 15,622 |  |  |
| 35 | 393 | Stores Equipment | PLNT | 18,982 |  |  |  |  | 2,766 |  | 8,494 | 4,595 | 414 | 1,687 | 143 | 323 |  |  |
| 36 | 394 | Tool, Shop \& Garage Equip. | PLNT | 156,304 |  |  |  |  | 22,780 |  | 69,939 | 37,833 | 3,408 | 13,891 | 1,178 | 2,658 |  |  |
| 37 | 395 | Laboratory Equipment | PLNT | 209,246 |  |  |  |  | 30,495 |  | 93,628 | 50,647 | 4,562 | 18,596 | 1,577 | 3,558 |  |  |
| 38 | 396 | Power Operated Equipment | PLNT | 3,930,565 |  |  |  |  | 572,835 |  | 1,758,746 | 951,375 | 85,695 | 349,309 | 29,622 | 66,843 |  |  |
| 39 | 397 | Communication Equipment | PLNT | 345,799 |  |  |  |  | 50,396 |  | 154,729 | 83,699 | 7,539 | 30,731 | 2,606 | 5,881 |  |  |
| 40 | 398 | Miscellaneous Equipment | PLNT | 84,672 |  |  |  |  | 12,340 |  | 37,887 | 20,495 | 1,846 | 7,525 | 638 | 1,440 |  |  |
| 41 | 399 | Other tangible property | PLNT | 633,349 |  |  |  |  | 92,304 |  | 283,395 | 153,299 | 13,808 | 56,286 | 4,773 | 10,771 |  |  |
| 42 | 389-399 | Subtotal |  | 16,058,389 |  |  |  |  | 2,340,328 |  | 7,185,385 | 3,886,857 | 350,110 | 1,427,108 | 121,021 | 273,089 |  |  |
| 43 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 44 | To | Net Plant in Service |  | 174,013,170 |  |  |  |  | 25,360,448 |  | 77,862,835 | 42,119,061 | 3,793,893 | 15,464,540 | 1,311,415 | 2,959,271 |  |  |

Classification of Plant in Service (Net)

| $\begin{aligned} & \text { Line } \\ & \text { No. } \end{aligned}$ | Acct. No. | Description | Class. <br> Factor | Total | Resid. \& Farm Direct | Small <br> General Service <br> Direct | Irrigation Direct | General Service Direct | C\&I Interruptible Direct | Lighting Direct |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Net Intangible Plant |  |  |  |  |  |  |  |  |  |  |
| 2 | 301 | Organization | PLNT |  |  |  |  |  |  |  |
| 3 | 302 | Franchises and consents | PLNT |  |  |  |  |  |  |  |
| 4 | 303 | Miscellaneous intangible plant | PLNT |  |  |  |  |  |  |  |
| 5 | 301-303 | Subtotal |  |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |  |  |  |
| Net Production Plant |  |  |  |  |  |  |  |  |  |  |
| 8 | 310-346 | Production Plant | PROD1 |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |  |  |  |  |
| 10 Net Transmission Plant |  |  |  |  |  |  |  |  |  |  |
| 11 | 350-359 | Transmission Plant | TRAN1 |  |  |  |  |  |  |  |
| 12 |  |  |  |  |  |  |  |  |  |  |
| 13 Net Distribution Plant |  |  |  |  |  |  |  |  |  |  |
| 14 | 360 | Land | LAND | 4,163,712 |  |  |  |  |  |  |
| 15 | 361 | Structures | SUB |  |  |  |  |  |  |  |
| 16 | 362 | Station | SUB | 18,856,408 |  |  |  |  |  |  |
| 17 | 363 | Battery | SUB |  |  |  |  |  |  |  |
| 18 | 364 | Poles, towers | POLES | 10,796,888 |  |  |  |  |  |  |
| 19 | 365 | OH Cond | PRI-OH | 13,738,437 |  |  |  |  |  |  |
| 20 | 366 | UG Conduit | PRI-UG |  |  |  |  |  |  |  |
| 21 | 367 | UG Cond | PRI-UG | 84,374,330 |  |  |  |  |  |  |
| 22 | 368 | Transf | TRF | 17,481,215 |  |  |  |  |  |  |
| 23 | 369 | Services | SERV | 1,190,394 |  |  |  |  |  |  |
| 24 | 370 | Meters | MTR | 2,686,182 |  |  |  |  |  |  |
| 25 | 371 | Cons Premise | ICON | 123,745 |  |  |  |  |  | 123,745 |
| 26 | 372 | Leased Prop | LICON |  |  |  |  |  |  |  |
| 27 | 373 | St. Light | STL | 4,543,471 |  |  |  |  |  | 4,543,471 |
| 28 | 360-373 | Subtotal |  | 157,954,781 |  |  |  |  |  | 4,667,216 |
| 29 |  |  |  |  |  |  |  |  |  |  |
| $30 \quad$ Net General Plant |  |  |  |  |  |  |  |  |  |  |
| 31 | 389 | Land \& Land Rights | PLNT | 102,278 |  |  |  |  |  | 3,022 |
| 32 | 390 | Structures and Improve. | PLNT | 4,601,923 |  |  |  |  |  | 135,977 |
| 33 | 391 | Office Furniture \& Equip. | PLNT | 5,056,678 |  |  |  |  |  | 149,414 |
| 34 | 392 | Transportation \& Equipment | PLNT | 918,591 |  |  |  |  |  | 27,142 |
| 35 | 393 | Stores Equipment | PLNT | 18,982 |  |  |  |  |  | 561 |
| 36 | 394 | Tool, Shop \& Garage Equip. | PLNT | 156,304 |  |  |  |  |  | 4,618 |
| 37 | 395 | Laboratory Equipment | PLNT | 209,246 |  |  |  |  |  | 6,183 |
| 38 | 396 | Power Operated Equipment | PLNT | 3,930,565 |  |  |  |  |  | 116,140 |
| 39 | 397 | Communication Equipment | PLNT | 345,799 |  |  |  |  |  | 10,218 |
| 40 | 398 | Miscellaneous Equipment | PLNT | 84,672 |  |  |  |  |  | 2,502 |
| 41 | 399 | Other tangible property | PLNT | 633,349 |  |  |  |  |  | 18,714 |
| 42 | 389-399 | Subtotal |  | 16,058,389 |  |  |  |  |  | 474,490 |
| 43 ( |  |  |  |  |  |  |  |  |  |  |
| 44 | Tot | Net Plant in Service |  | 174,013,170 |  |  |  |  |  | 5,141,706 |

Adjusted Statement of Operations and Revenue Requirements
$\begin{array}{lccc}\text { (a) (b) (d) (e) } \\ \text { Line } & \text { (c) }\end{array}$

| Line <br> No. | Description | Total System ${ }^{1}$ | Adjustment ${ }^{2}$ | Adjusted System |
| :---: | :---: | :---: | :---: | :---: |
|  | Operating Revenue | (\$) | (\$) | (\$) |
| 1 | Rate Schedules | 200,474,161 | $(3,238,029)$ | 197,236,132 |
| 2 | Other | 1,100,791 |  | 1,100,791 |
| 3 | Total Operating Revenue | 201,574,952 | $(3,238,029)$ | 198,336,923 |
| 4 | Operating Expenses |  |  |  |
| 5 | Cost of Purchased Power |  |  |  |
| 6 | Substation | - | - | - |
| 7 | Transmission | 20,496,973 |  | 20,496,973 |
| 8 | Ancillary | 2,152,650 |  | 2,152,650 |
| 9 | Demand |  |  | - |
| 10 | Summer | 17,112,830 |  | 17,112,830 |
| 11 | Winter | 8,390,047 |  | 8,390,047 |
| 12 | Other | 8,011,190 |  | 8,011,190 |
|  | Energy |  |  | - |
| 13 | Wholesale Solar | 272,629 |  | 272,629 |
| 14 | Energy On-Peak | 36,623,232 | $(424,870)$ | 36,198,362 |
| 15 | Energy Off-Peak | 57,584,525 | $(1,144,869)$ | 56,439,656 |
| 16 | Standby Reservation fee | 27,060 | $(27,060)$ | - |
| 16 | Wellspring | 23,370 | $(23,370)$ | - |
|  | Member Specific Rate | $(45,040)$ | 45,040 | - |
| 16 | Transmission - O \& M |  | - | - |
| 18 | Distribution - Operation | 6,894,139 | $(277,154)$ | 6,616,985 |
| 19 | Distribution - Maintenance | 6,393,912 | $(277,154)$ | 6,116,758 |
| 20 | Consumer Accounts | 5,693,809 | - | 5,693,809 |
| 21 | Consumer Service \& Information | 3,405,299 | - | 3,405,299 |
| 22 | Sales | - | - | - |
| 23 | Administrative \& General | 11,979,621 | $(277,154)$ | 11,702,467 |
| 24 | Depreciation \& Amortization | 10,686,048 | $(277,154)$ | 10,408,894 |
| 25 | Taxes - Property | 3,550,790 | - | 3,550,790 |
| 26 | Taxes - Other | - | - | - |
| 27 | Other Interest Expense | 549,008 | - | 549,008 |
| 28 | Other Deductions | $(32,466)$ | - | $(32,466)$ |
| 29 | Total Operating Expenses (Before Long Term Interest) | 199,769,626 | $(2,683,745)$ | 197,085,881 |
| 30 | Long Term Interest ${ }^{3}$ | 3,766,478 | $(277,154)$ | 3,489,324 |
| 31 | Required Margin ${ }^{4}$ | 6,772,390 | $(277,152)$ | 6,495,238 |
| 32 | Revenue Requirements | 210,308,494 | (3,238,051) | 207,070,443 |

1 See Exhibit__(DEA-1), page 1.
${ }^{2}$ See page 7 for calculation of adjustment to exclude Municipal Civil Defense Sirens, Controlled
Off-Peak Energy Storage, Interruptible Heating Service, and Low Wattage Unmetered Service.
3 See Workpaper 1.
4 Required Net Operating Income less Long Term Interest. See calculation below:
$\$ 10,538,868-\$ 3,766,478=\$ 6,772,390$

## Adjustment to Eliminate Revenue and Expenses of Classes not included in the Base Cost of Service Study

1. Revenue ${ }^{1}$
a. Electric Vehicle (33)
b. Municipal Civil Defense Sirens (47)
c. Controlled Energy Storage (51)
d. Controlled Interruptible Service (52)
e. Low Wattage Unmetered Service (45)
f. Geothermal Heat Pump (49) Closed to New
g. Standby Service (60)
h. Wellspring
i. Total -- Revenue

## 2. Expenses

a. Purchased Power ${ }^{2}$

Energy:
Electric Vehicle (33)
Municipal Civil Defense Sirens (47)
ETS-Interruptible Water Heating 3
Peak Shave Water Heating (8 hr) 3
ETS-Interruptible Space Heating 3
Dual Fuel 3
Geothermal Heat Pump
Subtotal -- Energy Expenses
Standby
Wellspring
Member Specific Rate
Capacity - Geothermal
Subtotal -- Purchased Power Expenses
Remainder of Revenue to Allocate

| 264,300 | kWh x |  | 0.0200 | $=$ | 5,286 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $=$ | - |
| 6,187,000 | kWh x | x | 0.02000 | = | 123,740 |
| 21,206,900 | kWh x |  | 0.03400 | = | 721,035 |
| 1,323,100 | kWh x | x | 0.02250 | = | 29,770 |
| 18,516,900 | kWh x | x | 0.03650 | = | 675,867 |
| 172,800 | kWh x | x | 0.05087 | $=$ | 8,790 |
|  |  |  |  |  | 1,564,488 |
| 27,060 | /year |  |  | $=$ | 27,060 |
| 23,370 | /year |  |  | = | 23,370 |
| $(45,040)$ /year |  |  |  | $=$ | $(45,040)$ |
| 172,800 | $\mathrm{kWh} x$ | X | 0.03039 |  | 5,251 |
|  |  |  |  |  | 1,575,129 |

b. Distribution - Operation ${ }^{3}$
c. Distribution - Maintenance ${ }^{3}$
d. Administrative and General ${ }^{3}$
e. Depreciation ${ }^{3}$
f. Interest ${ }^{3}$
g. Margin Requirements ${ }^{3}$
h. Subtotal
i. Total -- Expenses

$$
=\quad 24,636
$$

$$
=\quad 3,960
$$

$$
=459,736
$$

$$
=2,634,418
$$

$$
=\quad 8,520
$$

$$
=\quad 16,571
$$

$$
=66,840
$$

$$
=\frac{23,370}{3,238,051}
$$

Classification of Revenue Requirements

Classification of Revenue Requirements

Classification of Revenue Requirements

| Line <br> No. | Acct. <br> No. | Description | Class. <br> Factor | Total | Power Energy | upply Capacity | $\begin{array}{r} \text { Trans } \\ \text { Energy } \end{array}$ | mission <br> Capacity | Dist. Subs Capacity | tation <br> Cons. | Prima Capacity | y Line Cons. | Line Trity Capacity | nsf. Cons. | Second \& Serv. Cons. | Meter Cons. | Acct. \& Serv. Cons. | Revenue |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 47 Consumer Acct., Service \& Sales |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 48 Consumer Accounting |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 49 | 901 | Supervision | CACC |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 50 | 902 | Meter Reading Expense | CACC | 935,425 |  |  |  |  |  |  |  |  |  |  |  |  | 935,425 |  |
| 51 | 903 | Records \& Collections | CACC | 4,358,650 |  |  |  |  |  |  |  |  |  |  |  |  | 4,358,650 |  |
| 52 | 904 | Uncollectible Accounts | CACC | 399,734 |  |  |  |  |  |  |  |  |  |  |  |  | 399,734 |  |
| 53 | 905 | Misc. Customer Account | CACC |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 54 |  | Subtotal |  | 5,693,809 |  |  |  |  |  |  |  |  |  |  |  |  | 5,693,809 |  |
| 55 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 56 |  | Consumer Service \& Info. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 57 | 907 | Supervision | CS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 58 | 908 | Customer Assistance | CS | 2,247,863 |  |  |  |  |  |  |  |  |  |  |  |  | 2,247,863 |  |
| 59 | 909 | Info. \& Instruction | CS | 875,663 |  |  |  |  |  |  |  |  |  |  |  |  | 875,663 |  |
| 60 | 910 | Misc. Cust Serv. \& Info | CS | 281,773 |  |  |  |  |  |  |  |  |  |  |  |  | 281,773 |  |
| 61 |  | Subtotal |  | 3,405,299 |  |  |  |  |  |  |  |  |  |  |  |  | 3,405,299 |  |
| 62 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 63 |  | Sales |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 64 | 911 | Supervision | SALES |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 65 | 912 | Demonstrating \& Selling | SALES |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 66 | 913 | Advertising | SALES |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 67 | 916 | Misc. Sales | SALES |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 68 |  | Subtotal |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 69 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $70 \quad$ Prorated Operating Expenses |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 71 | 920- | Administrative \& General |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 72 | 932 | Power Supply | EX6-PS | 1,170,247 | 860,025 | 317,373 |  |  |  |  |  |  |  |  |  |  |  |  |
| 73 |  | Transmission | EX6-TR |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 74 |  | Distribution | EX6-D | 10,532,220 |  |  |  |  | 840,462 |  | 946,332 | 2,240,927 | 4,828 | 19,681 |  | 1,853,498 | 4,389,432 |  |
| 75 |  | Subtotal - A\&G |  | 11,702,467 | 860,025 | 317,373 |  |  | 840,462 |  | 946,332 | 2,240,927 | 4,828 | 19,681 |  | 1,853,498 | 4,389,432 |  |
| 76 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 77 | 408 | Other Taxes |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 78 |  | Power Supply | EX6-PS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 79 |  | Transmission | EX6-TR |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 80 |  | Distribution | EX6-D |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 81 |  | Subtotal - Other Taxes |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 82 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 83 | 421- | Miscellaneous Expense |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 84 | 426,431 | Power Supply | EX6-PS | 51,654 | 37,961 | 14,009 |  |  |  |  |  |  |  |  |  |  |  |  |
| 85 |  | Transmission | EX6-TR |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 86 |  | Distribution | EX6-D | 464,888 |  |  |  |  | 37,098 |  | 41,771 | 98,914 | 213 | 869 |  | 81,813 | 193,748 |  |
| 87 |  | Subtotal - Misc. Expense |  | 516,542 | 37,961 | 14,009 |  |  | 37,098 |  | 41,771 | 98,914 | 213 | 869 |  | 81,813 | 193,748 |  |

Classification of Revenue Requirements

$\frac{\text { Classification of Revenue Requirements }}{\text { (Continued) }}$

| Line <br> No. | $\begin{aligned} & \text { Acct. } \\ & \text { No. } \end{aligned}$ | Description | Class. <br> Factor | Total | Power Energy | Supply Capacity | $\begin{gathered} \text { Trans } \\ \text { Energy } \end{gathered}$ | smission Capacity | Dist. Sub Capacity | station Cons. | $\begin{aligned} & \text { Primar } \\ & \text { Capacity } \end{aligned}$ | ry Line Cons. | $\begin{array}{r} \text { Line T } \\ \text { Capacity } \end{array}$ | Transf. Cons. | Second. \& Serv. Cons. | Meter Cons. | Acct. \& Serv. Cons. | Revenue |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 88 Fixed Charges |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 89 | 403- | Depreciation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 90 | 407 | Power Supply | PROPLNT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 91 |  | Transmission | TRNPLNT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 92 |  | Distribution | DSTPLNT | 10,408,894 |  |  |  |  | 1,516,978 |  | 4,657,498 | 2,519,423 | 226,938 | 925,038 | 78,444 | 177,014 |  |  |
| 93 |  | Subtotal - Depreciation |  | 10,408,894 |  |  |  |  | 1,516,978 |  | 4,657,498 | 2,519,423 | 226,938 | 925,038 | 78,444 | 177,014 |  |  |
| 94 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 95 | 408 | Property Taxes |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 96 |  | Power Supply | PROPLNT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 97 |  | Transmission | TRNPLNT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 98 |  | Distribution | DSTPLNT | 3,550,790 |  |  |  |  | 517,487 |  | 1,588,814 | 859,452 | 77,416 | 315,559 | 26,760 | 60,385 |  |  |
| 99 |  | Subtotal - Property Taxes |  | 3,550,790 |  |  |  |  | 517,487 |  | 1,588,814 | 859,452 | 77,416 | 315,559 | 26,760 | 60,385 |  |  |
| 100 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 101 | 427 | Interest-LT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 102 |  | Power Supply | PROPLNT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 103 |  | Transmission | TRNPLNT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 104 |  | Distribution | DSTPLNT | 3,489,324 |  |  |  |  | 508,529 |  | 1,561,311 | 844,574 | 76,075 | 310,096 | 26,297 | 59,340 |  |  |
| 105 |  | Subtotal - Interest-LT |  | 3,489,324 |  |  |  |  | 508,529 |  | 1,561,311 | 844,574 | 76,075 | 310,096 | 26,297 | 59,340 |  |  |
| 106 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 107 |  | Required Margin |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 108 |  | Power Supply | PROPLNT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 109 |  | Transmission | TRNPLNT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 110 |  | Distribution | DSTPLNT | 6,495,238 |  |  |  |  | 946,607 |  | 2,906,318 | 1,572,142 | 141,611 | 577,231 | 48,950 | 110,458 |  |  |
| 111 |  | Subtotal - Required Margin |  | 6,495,238 |  |  |  |  | 946,607 |  | 2,906,318 | 1,572,142 | 141,611 | 577,231 | 48,950 | 110,458 |  |  |
| 112 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 113 |  | mmary of Revenue Requirements |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 114 |  | Power Supply |  | 127,646,615 | 93,808,633 | 34,618,033 |  |  |  |  |  |  |  |  |  |  |  |  |
| 115 |  | Transmission |  | 22,649,623 |  |  |  | 22,649,623 |  |  |  |  |  |  |  |  |  |  |
| 116 |  | Distribution |  | 56,774,205 |  |  |  |  | 6,109,403 |  | 13,663,749 | 12,780,779 | 537,091 | 2,189,270 | 180,451 | 6,184,731 | 13,682,287 |  |
| 117 |  | Total Revenue Required |  | 207,070,443 | 93,808,633 | 34,618,033 |  | 22,649,623 | 6,109,403 |  | 13,663,749 | 12,780,779 | 537,091 | 2,189,270 | 180,451 | 6,184,731 | 13,682,287 |  |


| $\begin{gathered} \text { Line } \\ \text { No. } \\ \hline \end{gathered}$ | Acct. <br> No. | Description | Class. <br> Factor | Total | Resid. \& Farm Direct | Small General Service Direct | Irrigation Direct | General Service Direct | C\&I Interruptible Direct | Lighting Direct |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 88 Fixed Charges |  |  |  |  |  |  |  |  |  |  |
| 89 | 403- | Depreciation |  |  |  |  |  |  |  |  |
| 90 | 407 | Power Supply | PROPLNT |  |  |  |  |  |  |  |
| 91 |  | Transmission | TRNPLNT |  |  |  |  |  |  |  |
| 92 |  | Distribution | DSTPLNT | 10,408,894 |  |  |  |  |  | 307,560 |
| 93 |  | Subtotal - Depreciation |  | 10,408,894 |  |  |  |  |  | 307,560 |
| 94 |  |  |  |  |  |  |  |  |  |  |
| 95 | 408 | Property Taxes |  |  |  |  |  |  |  |  |
| 96 |  | Power Supply | PROPLNT |  |  |  |  |  |  |  |
| 97 |  | Transmission | TRNPLNT |  |  |  |  |  |  |  |
| 98 |  | Distribution | DSTPLNT | 3,550,790 |  |  |  |  |  | 104,918 |
| 99 |  | Subtotal - Property Taxes |  | 3,550,790 |  |  |  |  |  | 104,918 |
| 100 |  |  |  |  |  |  |  |  |  |  |
| 101 | 427 | Interest-LT |  |  |  |  |  |  |  |  |
| 102 |  | Power Supply | PROPLNT |  |  |  |  |  |  |  |
| 103 |  | Transmission | TRNPLNT |  |  |  |  |  |  |  |
| 104 |  | Distribution | DSTPLNT | 3,489,324 |  |  |  |  |  | 103,102 |
| 105 |  | Subtotal - Interest-LT |  | 3,489,324 |  |  |  |  |  | 103,102 |
| 106 |  |  |  |  |  |  |  |  |  |  |
| 107 |  | Required Margin |  |  |  |  |  |  |  |  |
| 108 |  | Power Supply | PROPLNT |  |  |  |  |  |  |  |
| 109 |  | Transmission | TRNPLNT |  |  |  |  |  |  |  |
| 110 |  | Distribution | DSTPLNT | 6,495,238 |  |  |  |  |  | 191,920 |
| 111 |  | Subtotal - Required Margin |  | 6,495,238 |  |  |  |  |  | 191,920 |
| 112 |  |  |  |  |  |  |  |  |  |  |
| 113 Summary of Revenue Requirements |  |  |  |  |  |  |  |  |  |  |
| 114 |  | Power Supply |  | 127,646,615 | $(732,748)$ | $(47,303)$ |  |  |  |  |
| 115 |  | Transmission |  | 22,649,623 |  |  |  |  |  |  |
| 116 |  | Distribution |  | 56,774,205 |  |  |  |  |  | 1,446,444 |
| 117 |  | Total Revenue Required |  | $\underline{\text { 207,070,443 }}$ | $(732,748)$ | $(47,303)$ |  |  |  | 1,446,444 |

Summary of Classification Factors

| $\begin{aligned} & \text { Line } \\ & \text { No. } \\ & \hline \end{aligned}$ | Name | Description | Source | Total | Power Supply |  | Transmission |  | Dist. Substation |  | Primary Line |  | Line Transf. |  | Second. \& Serv. Cons. | Meter Cons. | Acct. \& Serv. Cons. | Revenue |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Energy | Cap. | Energy | Capacity | Cap. | Cons. | Cap. | Cons. | Cap. | Cons. |  |  |  |  |
|  |  | Classification Factor D |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | PROPLNT | Production Plant | Plant |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | TRNPLNT | Transmission Plant | Plant |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | DSTPLNT | Distribution Plant | Plant | 157,954,781 |  |  |  |  | 23,020,120 |  | 70,677,450 | 38,232,205 | 3,443,783 | 14,037,432 | 1,190,394 | 2,686,182 |  |  |
| 4 | PLNT | Prod, Trans, Dist. Subtotal | Plant | 157,954,781 |  |  |  |  | 23,020,120 |  | 70,677,450 | 38,232,205 | 3,443,783 | 14,037,432 | 1,190,394 | 2,686,182 |  |  |
| 5 | EX1 | Assigned Dist. Oper. Exp. | Rev Req | 3,356,660 |  |  |  |  | 631,828 |  | 542,430 | 233,321 |  |  |  | 1,949,081 |  |  |
| 6 | EX2 | Assigned Dist. Main. Exp. | Rev Req | 1,420,834 |  |  |  |  | 125,460 |  | 225,403 | 1,057,138 | 2,528 | 10,304 |  |  |  |  |
| 7 | EX3 | Dist. Oper. \& Main. | Rev Req | 12,733,743 |  |  |  |  | 1,742,242 |  | 1,961,706 | 4,645,347 | 10,009 | 40,797 |  | 3,842,224 |  |  |
| 8 | EX4 | Assigned O \& M Exp. | Rev Req | 170,907,188 | 92,910,647 | 34,286,651 |  | 22,649,623 | 1,742,242 |  | 1,961,706 | 4,645,347 | 10,009 | 40,797 |  | 3,842,224 | 9,099,108 |  |
| 9 | EX4-PS | Power Supply | Rev Req | 126,424,714 | 92,910,647 | 34,286,651 |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 | EX4-TR | Transmission | Rev Req | 22,649,623 |  |  |  | 22,649,623 |  |  |  |  |  |  |  |  |  |  |
| 11 | EX4-D | Distribution | Rev Req | 21,832,851 |  |  |  |  | 1,742,242 |  | 1,961,706 | 4,645,347 | 10,009 | 40,797 |  | 3,842,224 | 9,099,108 |  |
| 12 | EX5 | Rev. Req. Less Margin | Rev Req | 200,575,205 | 93,808,633 | 34,618,033 |  | 22,649,623 | 5,162,796 |  | 10,757,431 | 11,208,637 | 395,479 | 1,612,039 | 131,501 | 6,074,272 | 13,682,287 |  |
| 13 | EX5-PS | Power Supply | Rev Req | 127,646,615 | 93,808,633 | 34,618,033 |  |  |  |  |  |  |  |  |  |  |  |  |
| 14 | EX5-TR | Transmission | Rev Req | 22,649,623 |  |  |  | 22,649,623 |  |  |  |  |  |  |  |  |  |  |
| 15 | EX5-D | Distribution | Rev Req | 50,278,967 |  |  |  |  | 5,162,796 |  | 10,757,431 | 11,208,637 | 395,479 | 1,612,039 | 131,501 | 6,074,272 | 13,682,287 |  |


| $\begin{aligned} & \text { Line } \\ & \text { No. } \end{aligned}$ | Name | Description | Source | Total | Resid. \& Farm Direct | Small <br> General <br> Service <br> Direct | $\begin{aligned} & \text { Irrigation } \\ & \text { Direct } \end{aligned}$ | General Service Direct | $\begin{gathered} \text { C\&I } \\ \text { Interruptible } \\ \text { Direct } \end{gathered}$ | Lighting Direct |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Classification Factor Data |  |  |  |  |  |  |  |  |  |  |
| 1 | PROPLNT | Production Plant | Plant |  |  |  |  |  |  |  |
| 2 | TRNPLNT | Transmission Plant | Plant |  |  |  |  |  |  |  |
| 3 | DSTPLNT | Distribution Plant | Plant | 157,954,781 |  |  |  |  |  | 4,667,216 |
| 4 | PLNT | Prod, Trans, Dist. Subtotal | Plant | 157,954,781 |  |  |  |  |  | 4,667,216 |
| 5 | Ex1 | Assigned Dist. Oper. Exp. | Rev Req | 3,356,660 |  |  |  |  |  |  |
| 6 | EX2 | Assigned Dist. Main. Exp. | Rev Req | 1,420,834 |  |  |  |  |  |  |
| 7 | EX3 | Dist. Oper. \& Main. | Rev Req | 12,733,743 |  |  |  |  |  | 491,419 |
| 8 | EX4 | Assigned O \& M Exp. | Rev Req | 170,907,188 | (725,733) | $(46,851)$ |  |  |  | 491,419 |
| , | EX4-PS | Power Supply | Rev Req | 126,424,714 | (725,733) | $(46,851)$ |  |  |  |  |
| 10 | EX4-TR | Transmission | Rev Req | 22,649,623 |  |  |  |  |  |  |
| 11 | EX4-D | Distribution | Rev Req | 21,832,851 |  |  |  |  |  | 491,419 |
| 12 | EX5 | Rev. Req. Less Margin | Rev Req | 200,575,205 | (732,748) | $(47,303)$ |  |  |  | 1,254,524 |
| 13 | EX5-PS | Power Supply | Rev Req | 127,646,615 | (732,748) | $(47,303)$ |  |  |  |  |
| 14 | EX5-TR | Transmission | Rev Req | 22,649,623 |  |  |  |  |  |  |
| 15 | EX5-D | Distribution | Rev Req | 50,278,967 |  |  |  |  |  | 1,254,524 |

Summary of Classification Factors

| Line <br> No. | Name | Description | Source | Total | Power Supply |  | Transmission |  | Dist. Substation |  | Primary Line |  | Line Transf. |  | Second. \& Serv. Cons. | Meter <br> Cons. | Acct. \& Serv. Cons. | Revenue |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Energy | Cap. | Energy | Capacity | Cap. | Cons. | Cap. | Cons. | Cap. | Cons. |  |  |  |  |
| 16 | Classification | Factors |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 17 | CACC | Consumer Accounting | Input | 1.000000 |  |  |  |  |  |  |  |  |  |  |  |  | 1.000000 |  |
| 18 | CS | Customer Service | Input | 1.000000 |  |  |  |  |  |  |  |  |  |  |  |  | 1.000000 |  |
| 19 | CS-PS | Cust. Service - Pwr. Supply | Input |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20 | CS-TR | Cust. Service - Transmission | Input |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 21 | CS-D | Cust. Service - Distribution | Input |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 22 | SALES | Sales | Input |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 23 | SALES-PS | Sales - Power Supply | Input |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 24 | SALES-TR | Sales - Transmission | Input |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 25 | SALES-D | Sales - Distribution | Input |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 26 | PROPLNT | Production Plant | Plant |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 27 | TRNPLNT | Transmission Plant | Plant |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 28 | DSTPLNT | Distribution Plant | Plant | 1.000000 |  |  |  |  | 0.145739 |  | 0.447454 | 0.242045 | 0.021802 | 0.088870 | 0.007536 | 0.017006 |  |  |
| 29 | PLNT | Prod, Trans, Dist. Subtotal | Plant | 1.000000 |  |  |  |  | 0.145739 |  | 0.447454 | 0.242045 | 0.021802 | 0.088870 | 0.007536 | 0.017006 |  |  |
| 30 | EX1 | Assigned Dist. Oper. Exp. | Rev Req | 1.000000 |  |  |  |  | 0.188231 |  | 0.161598 | 0.069510 |  |  |  | 0.580661 |  |  |
| 31 | EX2 | Assigned Dist. Main. Exp. | Rev Req | 1.000000 |  |  |  |  | 0.088300 |  | 0.158642 | 0.744027 | 0.001779 | 0.007252 |  |  |  |  |
| 32 | EX3 | Dist. Oper. \& Main. | Rev Req | 1.000000 |  |  |  |  | 0.136821 |  | 0.154056 | 0.364806 | 0.000786 | 0.003204 |  | 0.301736 |  |  |
| 33 | EX4 | Assigned O \& M Exp. | Rev Req | 1.000000 | 0.543632 | 0.200616 |  | 0.132526 | 0.010194 |  | 0.011478 | 0.027181 | 0.000059 | 0.000239 |  | 0.022481 | 0.053240 |  |
| 34 | EX4-PS | Power Supply | Rev Req | 0.739727 | 0.543632 | 0.200616 |  |  |  |  |  |  |  |  |  |  |  |  |
| 35 | EX4-TR | Transmission | Rev Req | 0.132526 |  |  |  | 0.132526 |  |  |  |  |  |  |  |  |  |  |
| 36 | EX4-D | Distribution | Rev Req | 0.127747 |  |  |  |  | 0.010194 |  | 0.011478 | 0.027181 | 0.000059 | 0.000239 |  | 0.022481 | 0.053240 |  |
| 37 | EX5 | Rev. Req. Less Margin | Rev Req | 1.000000 | 0.467698 | 0.172594 |  | 0.112923 | 0.025740 |  | 0.053633 | 0.055882 | 0.001972 | 0.008037 | 0.000656 | 0.030284 | 0.068215 |  |
| 38 | EX5-PS | Power Supply | Rev Req | 0.636403 | 0.467698 | 0.172594 |  |  |  |  |  |  |  |  |  |  |  |  |
| 39 | EX5-TR | Transmission | Rev Req | 0.112923 |  |  |  | 0.112923 |  |  |  |  |  |  |  |  |  |  |
| 40 | EX5-D | Distribution | Rev Req | 0.250674 |  |  |  |  | 0.025740 |  | 0.053633 | 0.055882 | 0.001972 | 0.008037 | 0.000656 | 0.030284 | 0.068215 |  |
| 41 | EX6 | A\&G Classification | Input | 1.000000 | 0.073491 | 0.027120 |  |  | 0.071819 |  | 0.080866 | 0.191492 | 0.000413 | 0.001682 |  | 0.158385 | 0.375086 |  |
| 42 | EX6-PS | Power Supply | Input | 0.100000 | 0.073491 | 0.027120 |  |  |  |  |  |  |  |  |  |  |  |  |
| 43 | EX6-TR | Transmission | Input |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 44 | EX6-D | Distribution | Input | 0.900000 |  |  |  |  | 0.071819 |  | 0.080866 | 0.191492 | 0.000413 | 0.001682 |  | 0.158385 | 0.375086 |  |
| 45 | FUEL | Fuel | Input |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 46 | ICON | Install Cons. Prem. | Input | 1.000000 |  |  |  |  |  |  | 0.175747 | 0.824253 |  |  |  |  |  |  |
| 47 | LAND | Land \& Land Rights | Input | 1.000000 |  |  |  |  | 1.00000 |  |  |  |  |  |  |  |  |  |
| 48 | LICON | Leased Property | Input | 1.000000 |  |  |  |  |  |  | 0.175747 | 0.824253 |  |  |  |  |  |  |
| 49 | MTR | Meters | Input | 1.000000 |  |  |  |  |  |  |  |  |  |  |  | 1.000000 |  |  |
| 50 | POLES | Poles, Towers, and Fixtures | 1.0000 |  |  |  |  |  |  |  | 0.439954 | 0.560046 |  |  |  |  |  |  |
| 51 | PRI-OH | Primary Line-Overhead | Input | 1.000000 |  |  |  |  |  |  | 0.175747 | 0.824253 |  |  |  |  |  |  |
| 52 | PRI-UG | Primary Line-Underground | 1.0000 |  |  |  |  |  |  |  | 0.752750 | 0.247250 |  |  |  |  |  |  |
| 53 | PROD1 | Production Plant | Input |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 54 | PROD2 | Production O \& M | Input |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 55 | PURTR-1 | Trans. Capacity | Input | 1.000000 |  |  |  | 1.000000 |  |  |  |  |  |  |  |  |  |  |
| 56 | PURTR-2 | Trans. Energy | Input | 1.000000 | 1.000000 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 57 | PURKW-1 | Purchased Power Capacity | Input | 1.000000 |  | 1.000000 |  |  |  |  |  |  |  |  |  |  |  |  |
| 58 | PURKW-2 | Summer | Input | 1.000000 |  | 1.000000 |  |  |  |  |  |  |  |  |  |  |  |  |
| 59 | PURKW-3 | Winter | Input | 1.000000 |  | 1.000000 |  |  |  |  |  |  |  |  |  |  |  |  |
| 60 | PURKW-4 | Other | Input | 1.000000 |  | 1.000000 |  |  |  |  |  |  |  |  |  |  |  |  |
| 61 | PURKWH-1 | Purchased Power Energy | Input | 1.000000 | 1.000000 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 62 | PURKWH-2 | On-Peak | Input | 1.000000 | 1.000000 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 63 | PURKWH-3 | Off-Peak | Input | 1.000000 | 1.000000 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 62 | SERV | Services | Input | 1.000000 |  |  |  |  |  |  |  |  |  |  | 1.000000 |  |  |  |
| 63 | STL | Street Lighting | Input |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 64 | SUB | Substation | Input | 1.000000 |  |  |  |  | 1.000000 |  |  |  |  |  |  |  |  |  |
| 65 | TRAN1 | Transmission Plant | Input | 1.000000 |  |  |  | 1.000000 |  |  |  |  |  |  |  |  |  |  |
| 66 | TRAN2 | Transmission Purchases | Input | 1.000000 |  |  |  | 1.000000 |  |  |  |  |  |  |  |  |  |  |
| 67 | TRF | Line Transf. | Input | 1.000000 |  |  |  |  |  |  |  |  | 0.196999 | 0.803001 |  |  |  |  |



| $\begin{aligned} & \text { Line } \\ & \text { No. } \\ & \hline \end{aligned}$ | Cost Classification | Summary of Allocation of Revenue Requirements to Rate Classes |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Alloc. Factor | Total | Resid. <br> \& Farm | Small <br> General Service | Irrigation | General Service | C\&I <br> Interruptible | Lighting |
| Power Supply |  |  |  |  |  |  |  |  |  |
| 2 | Wholesale Power |  |  |  |  |  |  |  |  |
| 3 | Direct Assigned Charges (Credits) | Direct |  |  |  |  |  |  |  |
| 4 | Demand Related | D7 |  |  |  |  |  |  |  |
| 5 | Demand Related - Summer | D4 | 17,112,830 | 10,370,341 | 464,867 | 21,695 | 6,179,315 | 76,613 |  |
| 6 | Demand Related - Winter | D5 | 8,390,047 | 5,458,423 | 302,784 |  | 2,488,808 | 36,721 | 103,311 |
| 7 | Demand Related - Other | D6 | 8,011,190 | 4,952,367 | 264,721 | 3,164 | 2,702,767 | 36,516 | 51,656 |
| 8 | Subtotal - Demand |  | 33,514,067 | 20,781,131 | 1,032,371 | 24,859 | 11,370,890 | 149,849 | 154,967 |
| 9 | Energy Charges - Critical Peak | E2 |  |  |  |  |  |  |  |
| 10 | Energy Related - On-Peak | E3 | 36,393,097 | 17,333,391 | 879,140 | 164,592 | 9,570,234 | 8,407,488 | 38,252 |
| 11 | Energy Related - Off-Peak | E4 | 56,517,550 | 26,723,916 | 1,355,423 | 253,762 | 14,754,997 | 12,962,322 | 467,130 |
| 12 | Subtotal - Energy |  | 92,910,647 | 44,057,307 | 2,234,564 | 418,354 | 24,325,231 | 21,369,810 | 505,382 |
| 13 | Revenue Related | R2 |  |  |  |  |  |  |  |
| 14 | Subtotal - Wholesale |  | 126,424,714 | 64,838,438 | 3,266,934 | 443,213 | 35,696,121 | 21,519,659 | 660,349 |
| 15 | Allocated Overhead \& Margin |  |  |  |  |  |  |  |  |
| 16 | Direct Related | Direct |  |  |  |  |  |  |  |
| 17 | Revenue Related | R2 |  |  |  |  |  |  |  |
| 18 | Demand Related | D7 | 328,991 | 198,146 | 10,188 | 183 | 105,776 | 12,878 | 1,819 |
| 19 | Energy Related | E1 | 892,910 | 420,872 | 21,278 | 4,042 | 235,006 | 206,454 | 5,257 |
| 20 | Subtotal - Allocated |  | 1,221,901 | 619,019 | 31,466 | 4,225 | 340,782 | 219,332 | 7,076 |
| 21 | Subtotal - Power Supply |  | 127,646,615 | 65,457,456 | 3,298,400 | 447,438 | 36,036,904 | 21,738,992 | 667,425 |
| 22 |  |  |  |  |  |  |  |  |  |
| 23 | Transmission |  |  |  |  |  |  |  |  |
| 24 | Direct Assigned | Direct |  |  |  |  |  |  |  |
| 25 | Demand Related | D7 | 22,649,623 | 13,696,762 | 706,106 | 12,511 | 7,229,676 | 880,227 | 124,341 |
| 26 | Energy Related | E1 |  |  |  |  |  |  |  |
| 27 | Subtotal--Transmission |  | 22,649,623 | 13,696,762 | 706,106 | 12,511 | 7,229,676 | 880,227 | 124,341 |
| 28 | Allocated Overhead \& Margin |  |  |  |  |  |  |  |  |
| 29 | Direct Related | Direct |  |  |  |  |  |  |  |
| 30 | Revenue Related | R2 |  |  |  |  |  |  |  |
| 31 | Demand Related | D7 |  |  |  |  |  |  |  |
| 32 | Energy Related | E1 |  |  |  |  |  |  |  |
| 33 | Subtotal - Allocated |  |  |  |  |  |  |  |  |
| 34 | Subtotal - Transmission |  | 22,649,623 | 13,696,762 | 706,106 | 12,511 | 7,229,676 | 880,227 | 124,341 |
| 35 |  |  |  |  |  |  |  |  |  |
| 36 Distribution |  |  |  |  |  |  |  |  |  |
| 37 | Power Supply -Energy | E1 |  |  |  |  |  |  |  |
| 38 | Dist. Sub. -Capacity | D9 | 6,109,403 | 3,010,588 | 149,743 | 47,121 | 1,598,656 | 1,263,802 | 39,493 |
| 39 | Dist. Sub. -Consumer | C2 |  |  |  |  |  |  |  |
| 40 | Primary Line -Capacity | D9 | 13,663,749 | 6,733,215 | 334,901 | 105,386 | 3,575,413 | 2,826,507 | 88,326 |
| 41 | Primary Line $\quad$-Consumer | C2 | 12,780,779 | 11,552,938 | 610,737 | 67,936 | 463,412 | 47,096 | 38,660 |
| 42 | Line Transf. -Capacity | D1 | 537,091 | 369,821 | 16,955 | 10,460 | 87,871 | 50,629 | 1,355 |
| 43 | Line Transf. -Consumer | C3 | 2,189,270 | 1,946,450 | 115,497 | 14,312 | 96,436 | 10,063 | 6,513 |
| 44 | Sec. \& Serv. -Consumer | C4 | 180,451 | 165,079 | 7,965 | 798 | 5,512 | 544 | 552 |
| 45 | Meter -Consumer | C5 | 6,184,731 | 5,150,000 | 311,923 | 58,073 | 449,082 | 198,419 | 17,234 |
| 46 | Acct. \& Serv. -Consumer | C6 | 13,682,287 | 11,393,185 | 690,057 | 128,473 | 993,491 | 438,957 | 38,125 |
| 47 | Revenue Related -Revenue | R2 |  |  |  |  |  |  |  |
| 48 | Direct Assigned | Direct | 1,446,444 |  |  |  |  |  | 1,446,444 |
| 49 | Subtotal - Distribution |  | 56,774,205 | 40,321,277 | 2,237,776 | 432,558 | 7,269,873 | 4,836,017 | 1,676,703 |
| 50 | Total |  | 207,070,443 | 119,475,495 | 6,242,283 | 892,507 | 50,536,453 | 27,455,236 | 2,468,469 |

Allocation of Net Plant in Service To Rate Classes

| Line <br> No. | $\begin{gathered} \text { Acct. } \\ \text { No. } \\ \hline \end{gathered}$ | Description | Class. <br> Factor | Total | Resid. <br> \& Farm | Small General Service | Irrigation | General Service | C\&I <br> Interruptible | Lighting |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  | Net Intangible Plant |  |  |  |  |  |  |  |  |
| 2 | 301 | Organization | PLNT |  |  |  |  |  |  |  |
| 3 | 302 | Franchises and consents | PLNT |  |  |  |  |  |  |  |
| 4 | 303 | Miscellaneous intangible plant | PLNT |  |  |  |  |  |  |  |
| 5 | 301-303 | Subtotal | PLNT |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |  |  |  |
| 7 |  | Net Production Plant |  |  |  |  |  |  |  |  |
| 8 | 310-346 | Production Plant | PROD1 |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |  |  |  |  |
| 10 |  | Net Transmission Plant |  |  |  |  |  |  |  |  |
| 11 | 350-359 | Transmission Plant | TRAN1 |  |  |  |  |  |  |  |
| 12 |  |  |  |  |  |  |  |  |  |  |
| 13 |  | Net Distribution Plant |  |  |  |  |  |  |  |  |
| 14 | 360 | Land | LAND | 4,163,712 | 2,517,895 | 129,805 | 2,300 | 1,329,041 | 161,813 | 22,858 |
| 15 | 361 | Structures | SUB |  |  |  |  |  |  |  |
| 16 | 362 | Station | SUB | 18,856,408 | 11,402,915 | 587,852 | 10,416 | 6,018,896 | 732,812 | 103,517 |
| 17 | 363 | Battery | SUB |  |  |  |  |  |  |  |
| 18 | 364 | Poles, towers | PRI | 10,796,888 | 7,806,614 | 405,374 | 68,778 | 1,462,221 | 1,004,903 | 48,997 |
| 19 | 365 | OH Cond | PRI | 13,738,437 | 11,425,872 | 600,301 | 78,815 | 1,042,393 | 541,194 | 49,861 |
| 20 | 366 | UG Conduit | PRI |  |  |  |  |  |  |  |
| 21 | 367 | UG Cond | PRI | 84,374,330 | 50,155,173 | 2,553,592 | 600,753 | 17,375,897 | 13,215,247 | 473,668 |
| 22 | 368 | Transf | TRF | 17,481,215 | 14,851,750 | 849,266 | 158,835 | 1,181,760 | 389,152 | 50,453 |
| 23 | 369 | Services | SERV | 1,190,394 | 1,088,990 | 52,546 | 5,261 | 36,362 | 3,591 | 3,644 |
| 24 | 370 | Meters | MTR | 2,686,182 | 2,236,773 | 135,476 | 25,222 | 195,048 | 86,178 | 7,485 |
| 25 | 371 | Cons Premise | ICON | 123,745 |  |  |  |  |  | 123,745 |
| 26 | 372 | Leased Prop | LICON |  |  |  |  |  |  |  |
| 27 | 373 | St. Light | STL | 4,543,471 |  |  |  |  |  | 4,543,471 |
| 28 | 360-373 | Subtotal |  | 157,954,781 | 101,485,981 | 5,314,211 | 950,381 | 28,641,619 | 16,134,891 | 5,427,699 |
| 29 |  |  |  |  |  |  |  |  |  |  |
| 30 |  | Net General Plant |  |  |  |  |  |  |  |  |
| 31 | 389 | Land \& Land Rights | PLNT | 102,278 | 65,714 | 3,441 | 615 | 18,546 | 10,448 | 3,515 |
| 32 | 390 | Structures and Improve. | PLNT | 4,601,923 | 2,956,737 | 154,827 | 27,689 | 834,457 | 470,081 | 158,133 |
| 33 | 391 | Office Furniture \& Equip. | PLNT | 5,056,678 | 3,248,917 | 170,126 | 30,425 | 916,917 | 516,534 | 173,759 |
| 34 | 392 | Transportation \& Equipment | PLNT | 918,591 | 590,195 | 30,905 | 5,527 | 166,566 | 93,833 | 31,565 |
| 35 | 393 | Stores Equipment | PLNT | 18,982 | 12,196 | 639 | 114 | 3,442 | 1,939 | 652 |
| 36 | 394 | Tool, Shop \& Garage Equip. | PLNT | 156,304 | 100,425 | 5,259 | 940 | 28,342 | 15,966 | 5,371 |
| 37 | 395 | Laboratory Equipment | PLNT | 209,246 | 134,441 | 7,040 | 1,259 | 37,942 | 21,374 | 7,190 |
| 38 | 396 | Power Operated Equipment | PLNT | 3,930,565 | 2,525,389 | 132,239 | 23,649 | 712,721 | 401,502 | 135,063 |
| 39 | 397 | Communication Equipment | PLNT | 345,799 | 222,176 | 11,634 | 2,081 | 62,703 | 35,323 | 11,882 |
| 40 | 398 | Miscellaneous Equipment | PLNT | 84,672 | 54,402 | 2,849 | 509 | 15,353 | 8,649 | 2,910 |
| 41 | 399 | Other tangible property | PLNT | 633,349 | 406,927 | 21,308 | 3,811 | 114,844 | 64,696 | 21,763 |
| 42 | 389-399 | Subtotal |  | 16,058,389 | 10,317,518 | 540,266 | 96,620 | 2,911,835 | 1,640,345 | 551,804 |
| 43 44 |  | Total Net Plant in Service |  | 174,013,170 | 111,803,499 | 5,854,477 | 1,047,001 | 31,553,453 | 17,775,236 | 5,979,503 |

Allocation of Revenue Requirements to Rate Classes

DEA Exhibit 3 COS FINAL.xlsm
Allocation of Revenue Requirements to Rate Classes
(Continued)

Allocation of Revenue Requirements to Rate Classes
(Continued)

| $\begin{aligned} & \text { Line } \\ & \text { No. } \\ & \hline \end{aligned}$ | Acct. No. | Description | Class. <br> Factor | Total | Resid. \& Farm | Small General Service | Irrigation | General Service | C\&I <br> Interruptible | Lighting |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 88 | 408 | Other Taxes |  |  |  |  |  |  |  |  |
| 89 |  | Power Supply | EX6-PS |  |  |  |  |  |  |  |
| 90 |  | Transmission | EX6-TR |  |  |  |  |  |  |  |
| 91 |  | Distribution | EX6-D |  |  |  |  |  |  |  |
| 92 |  | Subtotal - Other Taxes |  |  |  |  |  |  |  |  |
| 93 | 421- | Miscellaneous Expense |  |  |  |  |  |  |  |  |
| 94 | 426,431 | Power Supply | EX6-PS | 51,654 | 26,168 | 1,330 | 179 | 14,406 | 9,272 | 299 |
| 95 |  | Transmission | EX6-TR |  |  |  |  |  |  |  |
| 96 |  | Distribution | EX6-D | 464,888 | 358,653 | 20,610 | 3,731 | 44,306 | 25,544 | 12,044 |
| 97 |  | Subtotal - Misc. Expense |  | 516,542 | 384,821 | 21,940 | 3,910 | 58,712 | 34,816 | 12,343 |
| 98 |  | d Charges |  |  |  |  |  |  |  |  |
| 99 | 403- | Depreciation |  |  |  |  |  |  |  |  |
| 100 | 407 | Power Supply | PROPLNT |  |  |  |  |  |  |  |
| 101 |  | Transmission | TRNPLNT |  |  |  |  |  |  |  |
| 102 |  | Distribution | DSTPLNT | 10,408,894 | 6,517,900 | 340,085 | 73,490 | 1,800,160 | 1,318,107 | 359,153 |
| 103 |  | Subtotal - Depreciation |  | 10,408,894 | 6,517,900 | 340,085 | 73,490 | 1,800,160 | 1,318,107 | 359,153 |
| 104 | 408 | Property Taxes |  |  |  |  |  |  |  |  |
| 105 |  | Power Supply | PROPLNT |  |  |  |  |  |  |  |
| 106 |  | Transmission | TRNPLNT |  |  |  |  |  |  |  |
| 107 |  | Distribution | DSTPLNT | 3,550,790 | 2,223,454 | 116,013 | 25,070 | 614,089 | 449,646 | 122,518 |
| 108 |  | Subtotal - Property Taxes |  | 3,550,790 | 2,223,454 | 116,013 | 25,070 | 614,089 | 449,646 | 122,518 |
| 109 |  |  |  |  |  |  |  |  |  |  |
| 110 |  | Total Oper. Expenses |  | 174,436,258 | 99,526,544 | 5,209,956 | 809,501 | 41,580,003 | 25,310,637 | 1,999,617 |
| 111 |  |  |  |  |  |  |  |  |  |  |
| 112 | 427 | Interest-LT |  |  |  |  |  |  |  |  |
| 113 |  | Power Supply | PROPLNT |  |  |  |  |  |  |  |
| 114 |  | Transmission | TRNPLNT |  |  |  |  |  |  |  |
| 115 |  | Distribution | DSTPLNT | 3,489,324 | 2,184,965 | 114,005 | 24,636 | 603,459 | 441,863 | 120,397 |
| 116 |  | Subtotal - Interest-LT |  | 3,489,324 | 2,184,965 | 114,005 | 24,636 | 603,459 | 441,863 | 120,397 |
| 117 |  | Required Margin |  |  |  |  |  |  |  |  |
| 118 |  | Power Supply | PROPLNT |  |  |  |  |  |  |  |
| 119 |  | Transmission | TRNPLNT |  |  |  |  |  |  |  |
| 120 |  | Distribution | DSTPLNT | 6,495,238 | 4,067,225 | 212,216 | 45,859 | 1,123,315 | 822,510 | 224,114 |
| 121 |  | Subtotal - Required Margin |  | 6,495,238 | 4,067,225 | 212,216 | 45,859 | 1,123,315 | 822,510 | 224,114 |
| 122 |  | mary of Revenue Requirements |  |  |  |  |  |  |  |  |
| 123 |  | Total Rev. Req. |  | $\underline{\text { 207,070,443 }}$ | 119,475,495 | 6,242,283 | 892,507 | 50,536,453 | 27,455,236 | 2,468,469 |

## Rate Class Weighting Factors

## I. Three Phase Vs. Single Phase Class Weighting Factors

A. Investment to Serve $3 Ø$ vs. $1 Ø$ Consumers (use replacement cost)

1. Meters
a. Resid.\& Farm
b. Small General Service
c. Irrigation
d. General Service
e. C\&I Interruptible

| 10 |  | $3 \varnothing$ |  | Wtd. |
| :---: | :---: | :---: | :---: | :---: |
| \$88.39 | 100\% |  | 0\% | \$88.39 |
| \$88.39 | 65\% | \$181.86 | 35\% | \$121.10 |
| \$191.86 | 10\% | \$261.86 | 90\% | \$254.86 |
|  | 18\% | \$341.86 | 82\% | \$280.33 |
|  | 0\% | \$1,302.86 | 100\% | \$1,302.86 |

2 Service ${ }^{1}$
\$481
\$694
3. Transformer ${ }^{2}$
\$1,718 \$2,751
4. Primary Line ${ }^{3}$
\$1,151
\$1,787
B. Weighting Factors for Relative $3 Ø$ Class Investment Costs

1. Meters
a. Resid.\& Farm

| $\$ 88 \div$ | $\$ 88$ | $=$ | 1.00 |  |
| ---: | ---: | ---: | ---: | ---: |
| $\$ 121 \div$ | $\$ 88$ | $=$ | 1.37 |  |
| $\$ 255$ | $\div$ | $\$ 88$ | $=$ | 2.88 |
| $\$ 280$ | $\div$ | $\$ 88$ | $=$ | 3.17 |
| $\$ 1,303$ | $\div$ | $\$ 88$ | $=$ | 14.74 |
| $\$ 2,330$ | $\div$ | $\$ 1,847$ | $=$ | 1.26 |
| $\$ 8,582$ | $\div$ | $\$ 4,339$ | $=$ | 1.98 |
| $\$ 6,393$ | $\div$ | $\$ 4,099$ | $=$ | 1.56 |

${ }^{1}$ Assume a typical installation of 80 feet of $1 / 0$ triplex (or quadriplex), pole and miscellaneous materials to estimate the difference between a $1 \varnothing$ and $3 \varnothing$ installation.

2 Use the cost difference between 1-75 kVA transformer and 3-25 kVA transformers as representative of the difference between a $1 \varnothing$ versus a $3 \varnothing$ transformer installation.
${ }^{3}$ Assume a typical installation of 150 feet of $1 / 0$ ACSR to estimate the difference in primary line between a $1 \varnothing$ and $3 Ø$ installation.
Analysis of Class Load Characteristics

| $\begin{gathered} \text { Line } \\ \text { No. } \\ \hline \end{gathered}$ | Description | Units | Total | Resid. <br> \& Farm | Small General Service | Irrigation | General Service | C\&I <br> Interruptible | Lighting |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Class Billing Determinants |  |  |  |  |  |  |  |  |  |
| 2 | No. of Cons. | cons. | 124,847 | 100,235 | 4,431 | 392 | 2,756 | 262 | 16,771 |
| 3 | Energy Sales -- All | MWh | 1,769,404 | 838,684 | 42,538 | 7,964 | 463,060 | 406,800 | 10,359 |
| 4 | Energy Sales -- On-Peak | MWh | 591,321 | 281,636 | 14,284 | 2,674 | 155,499 | 136,606 | 622 |
| 5 | Energy Sales -- Off-Peak | MWh | 1,178,083 | 557,048 | 28,253 | 5,290 | 307,561 | 270,194 | 9,737 |
| 6 | Billing Demand | kW-mo. | 2,496,047 |  |  | 76,255 | 1,449,303 | 970,490 |  |
|  |  |  |  |  |  |  |  |  |  |
| 8 | Demand Estimate |  |  |  |  |  |  |  |  |
| 9 | Non-Coincidental Demand of |  |  |  |  |  |  |  |  |
| 10 | Individual Cons. | kW | 1,122,260.0 | 772,748 | 35,427 | 21,856 | 183,608 | 105,789 | 2,832 |
| 11 | Non-Coincidental Class Demand | kW | 387,770.7 | 201,097 | 9,755 | 4,702 | 101,451 | 67,934 | 2,832 |
| 12 | Coincidental Summer Demand | kW | 326,853.1 | 202,779 | 9,352 | 396 | 112,926 | 1,400 |  |
| 13 | Coincidental Winter Demand | kW | 229,990.6 | 149,628 | 8,300 |  | 68,224 | 1,007 | 2,832 |
| 14 | Coincidental Other Demand | kW | 219,605.0 | 135,756 | 7,257 | 87 | 74,089 | 1,001 | 1,416 |
| 15 | Coincidental Class Demand-Transm. | kW | 257,935.3 | 155,980 | 8,041 | 142 | 82,332 | 10,024 | 1,416 |
| 16 | Base Rated Substation Capacity | kVA | 632,500.0 |  |  |  |  |  |  |

## Estimate of Class Demands

## I. Residential \& Farm $(31,32,53)$

A. Demand Per Consumer Calculation

|  | Summer ${ }^{1}$ | Winter ${ }^{1}$ | Other ${ }^{1}$ | Avg. |
| :---: | :---: | :---: | :---: | :---: |
| Energy usage/Month (kWh/cons/mo) | 900 | 727 | 643 | 722 |
| Estimated fully diversified demand per consumer (kW/cons.) ${ }^{2}$ | 2.44 | 2.02 | 1.81 | 2.01 |

B. Sum of Non-Coincidental Demands of Individual Consumers (Annual Peak)

|  | A" Factor ${ }^{3}$ |  |  | $\left(1-0.4+0.4\left(1^{2}+40\right)^{\wedge 1 / 2)}\right.$ |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Total kW | $=$ | 100,235 | Cons. | x | 3.1612 | x | $2.44=$

Total $\mathrm{kW}=100,235$ Cons. $\mathrm{x} 3.1612 \mathrm{x} \quad 2.44=$
772,748
C. Non-Coincidental Class Demand (Average Monthly)

| "A" Factor | $=$ |  | $\left(1-(0.4 \times 100,235)+0.4\left(100,235^{2}+40\right) \wedge 1 / 2\right)$ | $=$ | 1.0001 |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Total kW | $=$ | 100,235 | Cons. | x $1.0001 ~ x$ | 2.01 | $=$ | 201,097 |

D. Non-Coincidental Class Demand (Summer)

| "A" Factor |  |  |  | $\left(1-(0.4 \times 100,235)+0.4\left(100,235^{2}+40\right)^{\wedge 1} / 2\right)$ | $=$ | 1.0001 |
| :--- | :--- | :--- | :--- | :--- | :--- | ---: |
| Total kW | $=$ | 100,235 | Cons. x $1.0001 ~ x$ | 2.44 | $=$ | 244,463 |

E. Non-Coincidental Class Demand (Winter)

$$
\begin{array}{rlrlrrrr}
\left(1-\text { "A" Factor }^{3}\right. & = & & \left(1-(0.4 \times 100,235)+0.4\left(100,235^{2}+40\right) \wedge 1 / 2\right) & = & 1.0001 \\
\text { Total kW } & = & 100,235 & \text { Cons. } & \text { x } & 1.0001 \quad \text { x } & 2.02 & =
\end{array}
$$

[^76]
## Estimate of Class Demands

(Continued)

## I. Residential \& Farm $(31,32,53)$ (Continued)

F. Non-Coincidental Class Demand (Other)

| "A" Factor | $=$ |  | $\left(1-(0.4 \times 100,235)+0.4\left(100,235^{2}+40\right) \wedge 1 / 2\right)$ | $=$ | 1.0001 |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Total kW | $=$ | 100,235 | Cons. $\quad$ x | $1.0001 \quad$ x | 1.81 | $=$ |

G. Assigned Coincidental Demand Responsibility -- Summer
$\mathrm{kW}=202,779{ }^{4}$
H. Assigned Coincidental Demand Responsibility -- Winter
$\mathrm{kW}=149,628^{4}$
I. Assigned Coincidental Demand Responsibility -- Other
$\mathrm{kW}=135,756{ }^{4}$
J. Assigned Class Coincidental Demand Responsibility (25\% Summer, 25\% Winter, 50\% Other) $\mathrm{kW}=155,980^{4}$

[^77]
## Estimate of Class Demands

(Continued)

## II. Small General Service (41)

A. Demand Per Consumer Calculation

|  | Summer 1 | Winter ${ }^{1}$ | Other 1 | Avg. |
| :---: | :---: | :---: | :---: | :---: |
| Energy usage/Month (kWh/cons/mo) | 852 | 938 | 783 | 800 |
| Estimated fully diversified demand per consumer (kW/cons.) ${ }^{2}$ | 2.32 | 2.53 | 2.16 | 2.20 |

B. Sum of Non-Coincidental Demands of Individual Consumers (Annual Peak)

| "A" Factor | $=$ |  | $=$ | 3.1612 |
| :--- | :--- | :--- | :--- | :--- |
| Total kW | $\left(1-0.4+0.4\left(1^{2}+40\right)^{\wedge 1 / 2)}\right.$ |  |  |  |
| 3.53 | $=$ | 3.427 |  |  |

C. Non-Coincidental Class Demand (Average Monthly)

| "A" Factor | $\left(1-(0.4 \times 4,431)+0.4\left(4,431^{2}+40\right)^{\wedge} 1 / 2\right)$ |  |  |  |  |  | = | 1.0018 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total kW = | 4,431 | Cons. | X | 1.0018 | X | 2.20 | $=$ | 9,755 |

D. Non-Coincidental Class Demand (Summer)

| "A" Factor ${ }^{3}=$ | $\left(1-(0.4 \times 4,431)+0.4\left(4,431^{2}+40\right)^{\wedge} 1 / 2\right)$ |  | $=$ | 1.0018 |
| :--- | :--- | :--- | :--- | :--- |
| Total kW | $=$ | 4,431 Cons. x 1.0018 x | 2.32 | $=$ |
| 10,319 |  |  |  |  |

E. Non-Coincidental Class Demand (Winter)

| "A" Factor | $\left(1-(0.4 \times 4,431)+0.4\left(4,431^{2}+40\right)^{\wedge} 1 / 2\right)$ |  |  |  |  |  | $=$ | 1.0018 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total kW = | 4,431 | Cons. | X | 1.0018 | X | 2.53 | $=$ | 11,227 |

[^78]$$
\mathrm{kW} / \text { cons. }=.005925(\mathrm{kWh}) .885
$$

3 The "A" Factor from the RUS Demand Table reflects interclass diversity.

$$
\text { " } \mathrm{A} \text { " }=\left(1-.4 \mathrm{C}+.4\left(\mathrm{C}^{2}+40\right)^{1 ⁄ 2}\right)
$$

## Estimate of Class Demands

(Continued)

## II. Small General Service (41) (Continued)

F. Non-Coincidental Class Demand (Other)

| "A" Factor |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3 |  | $\left(1-(0.4 \times 4,431)+0.4\left(4,431^{2}+40\right)^{\wedge 1 / 2)}\right.$ |  | $=$ | 1.0018 |  |
| Total kW | $=$ | 4,431 | Cons. | x $1.0018 \quad$ x | 2.16 | $=$ |

G. Assigned Coincidental Demand Responsibility -- Summer
$\mathrm{kW}=\quad 9,352^{4}$
H. Assigned Coincidental Demand Responsibility -- Winter
$\mathrm{kW}=8,300^{4}$
I. Assigned Coincidental Demand Responsibility -- Other
$\mathrm{kW}=\quad 7,257^{4}$
J. Assigned Class Coincidental Demand Responsibility (25\% Summer, 25\% Winter, 50\% Other)

$$
\mathrm{kW}=8,041{ }^{4}
$$

[^79]
## Estimate of Class Demands

(Continued)

## III. Irrigation (36)

A. Sum of Non-Coincidental Demands of Individual Consumers (Annual Peak)

The sum of the peak annual non-coincidental demand of the consumers in this class is determined as follows:

$$
21,856 \mathrm{~kW}
$$

B. Non-Coincidental Class Demand (Average Monthly)

1. The sum of the monthly non-coincidental (class basis) demands of individual consumers in this class is determined from billing records (adjusted to Test Year conditions) to be $76,255 \mathrm{~kW}$.
2. The average nondiversified (class basis) monthly load factor of the class is calculated as follows:

$$
\text { 7,963,872 } \quad \mathrm{kWh} /(\quad 76,255 \quad \mathrm{~kW} \text { x } 730 \quad \mathrm{hr} .)=14.3 \%
$$

3. The coincidence factor is estimated from Bary curves to be $74 \%$.
4. The non-coincidental (system basis) average monthly demand of the class is estimated to be:

$$
(76,255 \mathrm{~kW} / 12 \mathrm{mo} .) \times 0.74=\quad 4,702 \mathrm{~kW}
$$

C. Non-Coincidental Class Demand (Summer)

1. The sum of the summer non-coincidental (class basis) demands of individual consumers in this class is determined from billing records (adjusted to Test Year conditions) to be $15,828 \mathrm{~kW}$.
2. The average nondiversified (class basis) summer load factor of the class is calculated as follows:

$$
2,312,050 \quad \mathrm{kWh} /(\quad 15,828 \quad \mathrm{~kW} \text { x } \quad 730 \quad \mathrm{hr} .)=20.0 \%
$$

3. The coincidence factor is estimated from Bary curves to be $79 \%$.
4. The non-coincidental (system basis) summer demand of the class is estimated to be:
$15,828 \mathrm{~kW} \times 0.79=$
12,504 kW

## Estimate of Class Demands

(Continued)

## III. Irrigation (36) (Continued)

D. Non-Coincidental Class Demand (Winter)

1. The sum of the winter non-coincidental (class basis) demands of individual consumers in this class is determined from billing records (adjusted to Test Year conditions) to be 159 kW .
2. The average nondiversified (class basis) winter load factor of the class is calculated as follows:

$$
\text { 11,999 } \quad \mathrm{kWh} /(\quad 159 \quad \mathrm{~kW} \mathrm{x} \quad 730 \quad \mathrm{hr} .)=0.0 \%
$$

3. The coincidence factor is estimated from Bary curves to be $0 \%$.
4. The non-coincidental (system basis) winter demand of the class is estimated to be:

$$
159 \mathrm{~kW} \times 0.00=
$$

E. Non-Coincidental Class Demand (Other)

1. The sum of the other months non-coincidental (class basis) demands of individual consumers in this class is determined from billing records (adjusted to Test Year conditions) to be 4,716 kW.
2. The average nondiversified (class basis) other load factor of the class is calculated as follows:

$$
165,287 \quad \mathrm{kWh} /(\quad 4,716 \quad \mathrm{~kW} \mathrm{x} \quad 730 \quad \mathrm{hr} .)=4.8 \%
$$

3. The coincidence factor is estimated from Bary curves to be $58 \%$.
4. The non-coincidental (system basis) other demand of the class is estimated to be:

$$
4,716 \mathrm{~kW} \times 0.58=\quad 2,735 \mathrm{~kW}
$$

F. Assigned Coincidental Demand Responsibility -- Summer

$$
\mathrm{kW}=\quad 396^{1}
$$

G. Assigned Coincidental Demand Responsibility -- Winter

$$
\mathrm{kW}=\quad 0^{1}
$$

H. Assigned Coincidental Demand Responsibility -- Other

$$
\mathrm{kW}=\quad 87 \quad 1
$$

I. Assigned Class Coincidental Demand Responsibility (25\% Summer, 25\% Winter, 50\% Other)

$$
\mathrm{kW}=\quad 142^{1}
$$

[^80]
# Estimate of Class Demands 

(Continued)

## IV. General Service (46)

A. Sum of Non-Coincidental Demands of Individual Consumers (Annual Peak)

The sum of the peak annual non-coincidental demand of the consumers in this class is determined as follows:

$$
183,608 \mathrm{~kW}
$$

B. Non-Coincidental Class Demand (Average Monthly)

1. The sum of the monthly non-coincidental (class basis) demands of individual consumers in this class is determined from billing records (adjusted to Test Year conditions) to be 1,449,303 kW.
2. The average nondiversified (class basis) monthly load factor of the class is calculated as follows:

$$
\text { 463,059,984 kWh/( 1,449,303 kW x } 730 \quad \mathrm{hr} .)=43.8 \%
$$

3. The coincidence factor is estimated from Bary curves to be $84 \%$.
4. The non-coincidental (system basis) average monthly demand of the class is estimated to be:

$$
(1,449,303 \mathrm{~kW} / 12 \mathrm{mo} .) \times 0.84=\quad 101,451 \mathrm{~kW}
$$

C. Non-Coincidental Class Demand (Summer)

1. The sum of the summer non-coincidental (class basis) demands of individual consumers in this class is determined from billing records (adjusted to Test Year conditions) to be $139,671 \mathrm{~kW}$.
2. The average nondiversified (class basis) summer load factor of the class is calculated as follows:

$$
50,334,827 \quad \mathrm{kWh} /(\quad 139,671 \mathrm{~kW} \text { x } 730 \quad \mathrm{hr} .)=49.4 \%
$$

3. The coincidence factor is estimated from Bary curves to be $84 \%$.
4. The non-coincidental (system basis) summer demand of the class is estimated to be:

$$
139,671 \mathrm{~kW} \times 0.84=
$$

## Estimate of Class Demands

(Continued)

## IV. General Service (46) (Continued)

D. Non-Coincidental Class Demand (Winter)

1. The sum of the winter non-coincidental (class basis) demands of individual consumers in this class is determined from billing records (adjusted to Test Year conditions) to be 109,861 kW.
2. The average nondiversified (class basis) winter load factor of the class is calculated as follows:

$$
42,032,747 \quad \mathrm{kWh} /(\quad 109,861 \quad \mathrm{~kW} \text { x } 730 \quad \mathrm{hr} .)=52.4 \%
$$

3. The coincidence factor is estimated from Bary curves to be $84 \%$.
4. The non-coincidental (system basis) winter demand of the class is estimated to be:

$$
109,861 \mathrm{~kW} \times 0.84=
$$

E. Non-Coincidental Class Demand (Other)

1. The sum of the Other non-coincidental (class basis) demands of individual consumers in this class is determined from billing records (adjusted to Test Year conditions) to be $116,785 \mathrm{~kW}$.
2. The average nondiversified (class basis) other load factor of the class is calculated as follows:

$$
39,942,113 \quad \mathrm{kWh} /(\quad 116,785 \mathrm{~kW} \text { x } 730 \quad \mathrm{hr} .)=46.9 \%
$$

3. The coincidence factor is estimated from Bary curves to be $83 \%$.
4. The non-coincidental (system basis) other demand of the class is estimated to be:

$$
116,785 \mathrm{~kW} \times 0.83=\quad 96,931 \mathrm{~kW}
$$

F. Assigned Coincidental Demand Responsibility -- Summer

$$
\mathrm{kW}=\quad 112,926^{1}
$$

G. Assigned Coincidental Demand Responsibility -- Winter

$$
\mathrm{kW}=\quad 68,224 \quad 1
$$

H. Assigned Coincidental Demand Responsibility -- Other

$$
\mathrm{kW}=\quad 74,089 \quad 1
$$

I. Assigned Class Coincidental Demand Responsibility (25\% Summer, 25\% Winter, 50\% Other)

$$
\mathrm{kW}=\quad 82,332 \quad 1
$$

[^81]
# Estimate of Class Demands 

(Continued)

## V. General Service Peak Alert $(\mathbf{7 0 , 7 1})$

A. Sum of Non-Coincidental Demands of Individual Consumers (Annual Peak)

The sum of the peak annual non-coincidental demand of the consumers in this class is determined as follows:
105,789 kW
B. Non-Coincidental Class Demand (Average Monthly)

1. The sum of the monthly non-coincidental (class basis) demands of individual consumers in this class is determined from billing records (adjusted to Test Year conditions) to be 970,490 kW.
2. The average nondiversified (class basis) monthly load factor of the class is calculated as follows:

$$
406,800,000 \quad \mathrm{kWh} /(\quad 970,490 \mathrm{~kW} \mathrm{x} \quad 730 \quad \mathrm{hr} .)=57.4 \%
$$

3. The coincidence factor is estimated from Bary curves to be $84 \%$.
4. The non-coincidental (system basis) average monthly demand of the class is estimated to be:

$$
(970,490 \mathrm{~kW} / 12 \mathrm{mo} .) \times 0.84=\quad 67,934 \mathrm{~kW}
$$

C. Non-Coincidental Class Demand (Summer)

1. The sum of the summer non-coincidental (class basis) demands of individual consumers in this class is determined from billing records (adjusted to Test Year conditions) to be 93,162 kW.
2. The average nondiversified (class basis) summer load factor of the class is calculated as follows:

$$
38,279,750 \quad \mathrm{kWh} /(\quad 93,162 \quad \mathrm{~kW} \mathrm{x} \quad 730 \quad \mathrm{hr} .)=56.3 \%
$$

3. The coincidence factor is estimated from Bary curves to be $84 \%$.
4. The non-coincidental (system basis) summer demand of the class is estimated to be:

$$
93,162 \mathrm{~kW} \times 0.84=
$$

## Estimate of Class Demands

(Continued)

## V. General Service Peak Alert $(\mathbf{7 0 , 7 1})$ (Continued)

D. Non-Coincidental Class Demand (Winter)

1. The sum of the winter non-coincidental (class basis) demands of individual consumers in this class is determined from billing records (adjusted to Test Year conditions) to be $68,418 \mathrm{~kW}$.
2. The average nondiversified (class basis) winter load factor of the class is calculated as follows:

$$
\text { 31,189,530 kWh/( 68,418 kW x } 730 \quad \text { hr. })=62.4 \%
$$

3. The coincidence factor is estimated from Bary curves to be $84 \%$.
4. The non-coincidental (system basis) winter demand of the class is estimated to be:

$$
68,418 \mathrm{~kW} \times 0.84=\quad 57,471 \mathrm{~kW}
$$

E. Non-Coincidental Class Demand (Other)

1. The sum of the Other non-coincidental (class basis) demands of individual consumers in this class is determined from billing records (adjusted to Test Year conditions) to be $80,958 \mathrm{~kW}$.
2. The average nondiversified (class basis) other load factor of the class is calculated as follows:

$$
33,065,360 \quad \mathrm{kWh} /(\quad 80,958 \quad \mathrm{~kW} \text { x } \quad 730 \quad \mathrm{hr} .)=55.9 \%
$$

3. The coincidence factor is estimated from Bary curves to be $84 \%$.
4. The non-coincidental (system basis) other demand of the class is estimated to be:

$$
80,958 \mathrm{~kW} \times 0.84=\quad 68,005 \mathrm{~kW}
$$

F. Assigned Coincidental Demand Responsibility -- Summer
$\mathrm{kW}=\quad 1,400^{1}$
G. Assigned Coincidental Demand Responsibility -- Winter
$\mathrm{kW}=\quad 1,007{ }^{1}$
H. Assigned Coincidental Demand Responsibility -- Other
$\mathrm{kW}=\quad 1,001{ }^{1}$
I. Assigned Class Coincidental Demand Responsibility (25\% Summer, 25\% Winter, 50\% Other)
$\mathrm{kW}=\quad 1,102{ }^{1}$

[^82]
## Estimate of Class Demands

(Continued)

## VI. Street and Security Lighting

A. Sum of Non-Coincidental Demands of Individual Consumers (Annual Peak)

| Size \& Type | Power Required Per Light |  |  | No. of Lights | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Lamp | Ballast | Total |  |  |
|  | (kW) | (kW) | (kW) |  | (kW) |
| Security Lighting (Schedule 44) |  |  |  |  |  |
| 175 W MV | 0.175 | 0.035 | 0.210 | 0 | 0 |
| 100 W HPS | 0.100 | 0.035 | 0.135 | 819 | 111 |
| 150 W HPS | 0.150 | 0.050 | 0.200 | 4 | 1 |
| 250 W HPS | 0.250 | 0.060 | 0.310 | 8 | 2 |
|  |  |  |  | 831 | 114 |
| Street Lighting (Schedule 44-2)) (DEA Owned Equipment) |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| 175 W MV | 0.175 | 0.035 | 0.210 | 0 | 0 |
| 250 W MV | 0.250 | 0.050 | 0.300 | 3 | 1 |
| 400 W MV | 0.400 | 0.050 | 0.450 | 0 | 0 |
| 100 W HPS | 0.100 | 0.035 | 0.135 | 38 | 5 |
| 150 W HPS | 0.150 | 0.050 | 0.200 | 646 | 129 |
| 250 W HPS | 0.250 | 0.060 | 0.310 | 1,597 | 495 |
| 400 W HPS | 0.400 | 0.075 | 0.475 | 1 | 0 |
|  |  |  |  | 2,285 | 631 |
| Street Lighting (Schedule 44-1) |  |  |  |  |  |
| (Cons. Owned Equipment) |  |  |  |  |  |
| 175 W MV | 0.175 | 0.035 | 0.210 | 0 | 0 |
| 250 W MV | 0.250 | 0.050 | 0.300 | 0 | 0 |
| 400 W MV | 0.400 | 0.050 | 0.450 | 0 | 0 |
| 100 W HPS | 0.100 | 0.035 | 0.135 | 0 | 0 |
| 150 W HPS | 0.150 | 0.050 | 0.200 | 101 | 20 |
| 200 W HPS | 0.200 | 0.055 | 0.255 | 101 | 26 |
| 250 W HPS | 0.250 | 0.060 | 0.310 | 272 | 84 |
| 400 W HPS | 0.400 | 0.075 | 0.475 | 13 | 6 |
|  |  |  |  | 487 | 136 |
| Custom Resid. Lighting(Schedule 44-3) <br> (DEA Owned contrib. by Cons.) |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| 175 W MV | 0.175 | 0.035 | 0.210 | 0 | 0 |
| 50 W HPS | 0.050 | 0.020 | 0.070 | 81 | 6 |
| 100 W HPS | 0.100 | 0.035 | 0.135 | 8,416 | 1,136 |
| 150 W HPS | 0.150 | 0.050 | 0.200 | 3,732 | 746 |
| 250 W HPS | 0.250 | 0.060 | 0.310 | 4 | 1 |
|  |  |  |  | 12,233 | 1,889 |
| LED Security Lighting (44-4) |  |  |  |  |  |
| LED, >4,500 Lumens |  |  | 0.048 | 338 | 16 |

## Estimate of Class Demands

(Continued)

## VI. Street and Security Lighting (Continued)

A. Sum of Non-Coincidental Demands of Individual Consumers (Annual Peak)

| Size \& Type | Power Required Per Light |  |  | No. of Lights | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Lamp | Ballast | Total |  |  |
| LED Street Lighting Member Owned(44-5) |  |  |  |  |  |
| A (40-80 watts) |  |  | 0.060 | 0 | 0 |
| B (81-150 watts) |  |  | 0.115 | 0 | 0 |
| C (151-250 watts) |  |  | 0.200 | 11 | 2 |
| D (251-350 watts) |  |  | 0.300 | 0 | 0 |
| E (351-450 watts) |  |  | 0.400 | 0 | 0 |
|  |  |  |  | 11 | 2 |
| LED Street Lighting (44-6) |  |  |  |  |  |
| Standard |  |  |  |  |  |
| >5,200 L, Coach (Post) |  |  | 0.075 | 121 | 9 |
| >5,200 L, Acorn (Post) |  |  | 0.060 | 48 | 3 |
| >7,000 L, Cobra (Mast) |  |  | 0.066 | 91 | 6 |
| >11,500 L, Shoebox |  |  | 0.109 | 151 | 16 |
| Basic |  |  |  |  |  |
| >5,200 L, Coach (Post) |  |  | 0.075 | 41 | 3 |
| >5,200 L, Acorn (Post) |  |  | 0.060 | 0 | 0 |
| >7,000 L, Cobra (Mast) |  |  | 0.066 | 53 | 3 |
| >11,500 L, Shoebox |  |  | 0.109 | 16 | 2 |

## VI. Street and Security Lighting

B. Non-Coincidental Class Demand (Average Monthly)

1. The non-coincidental (system basis) class demand for the average month is assumed equal to the undiversified peak annual demand of $2,832 \mathrm{~kW}$ calculated above.
C. Assigned Coincidental Demand Responsibility -- Summer

$$
\mathrm{kW}=\quad 0 \quad 1
$$

D. Assigned Coincidental Demand Responsibility -- Winter

$$
\mathrm{kW}=\quad 2,832 \quad 1
$$

E. Assigned Coincidental Demand Responsibility -- Other

$$
\mathrm{kW}=\quad 1,416{ }^{1}
$$

F. Assigned Class Coincidental Demand Responsibility (25\% Summer, $25 \%$ Winter, $50 \%$ Other)

$$
\mathrm{kW}=\quad 1,416 \quad 1
$$

[^83]
## Dakota Electric

## Estimate of Class Demands

(Continued)

## VII. Estimate of Coincidental Demand

| A. Non-Coincidental Class Demands | $\frac{\text { Summer }}{(\mathrm{kW})}$ | $\frac{\text { Winter }}{(\mathrm{kW})}$ | $\frac{\text { Other }}{(\mathrm{kW})}$ |
| :---: | :---: | :---: | :---: |
| Residential \& Farm $(31,32,53)$ | 174,147 | 202,394 | 169,945 |
| Residential \& Farm Controlled A/C (8131) | 70,316 | 0 | 11,719 |
| Small General Service (41) | 9,064 | 11,227 | 9,357 |
| Small General Service Controlled A/C (8141) | 1,255 | 0 | 209 |
| Irrigation (36) | 12,504 | 0 | 2,735 |
| General Service (46) | 117,323 | 92,283 | 96,931 |
| General Service Peak Alert (70,71) | 78,256 | 57,471 | 68,005 |
| Street and Security Lighting | 2,832 | 2,832 | 2,832 |
| Total | 465,697 | 366,207 | 361,734 |
| B. Coincidence Factors (Summer) | Summer | Winter | Other |
| 1. Other Classes | (kW) | (kW) | (kW) |
| Coincidence Factor |  |  |  |
| Summer Coincidental Demand | 326,853 | 229,990 | 219,605 |
| Less: |  |  |  |
| Residential \& Farm Controlled A/C (8131) | 35,158 |  | 5,860 |
| Small General Service Controlled A/C (8141) | 628 |  | 105 |
| Irrigation (36) | 396 | 0 | 87 |
| General Service Peak Alert (70,71) | 1,400 | 1,007 | 1,001 |
| Street and Security Lighting | 0 | 2,832 | 1,416 |
| Total | 289,271 | 226,152 | 211,137 |
| Summer Non-Coincidental Demand | 465,697 |  | 361,734 |
| Less: |  |  |  |
| Residential \& Farm Controlled A/C (8131) | 70,316 | 366,207 | 11,719 |
| Small General Service Controlled A/C (8141) | 1,255 |  | 209 |
| Irrigation (36) | 12,504 | 0 | 2,735 |
| General Service Peak Alert (70,71) | 78,256 | 57,471 | 68,005 |
| Street and Security Lighting | 2,832 | 2,832 | 2,832 |
| Total | 300,534 | 305,904 | 276,233 |
| Coincidence Factor = | 289,271 | 226,152 | 211,137 |
|  | 300,534 | 305,904 | 276,233 |
|  | 96.25\% | 73.93\% | 76.43\% |

## Estimate of Class Demands

(Continued)

## VII. Estimate of Coincidental Demand

C. Assigned Coincidental Demand Responsibility (Summer Peak)

| Rate Class | Summer Non-Coinc. Demand | Coinc. <br> Factor | Summer Coinc. Demand |
| :---: | :---: | :---: | :---: |
|  | (kW) |  | (kW) |
| Residential \& Farm $(31,32,53)$ | 174,147 | 0.9625 | 167,621 |
| Plus: Controlled A/C | 70,316 | 0.5000 | 35,158 |
| Total Residential \& Farm $(31,32,53)$ | 244,463 | 0.8295 | 202,779 |
| Small General Service (41) | 9,064 | 0.9625 | 8,724 |
| Less Controlled A/C | 1,255 | 0.5000 | 628 |
| Total Small General Service (41) | 10,319 | 0.9063 | 9,352 |
| Irrigation (36) | 12,504 | 0.0317 | 396 |
| General Service (46) | 117,323 | 0.9625 | 112,926 |
| General Service Peak Alert (70,71) | 78,256 | 0.0179 | 1,400 |
| Street and Security Lighting | 2,832 | 0.0000 | 0 |
| Total | 465,697 |  | 326,853 |

D. Assigned Coincidental Demand Responsibility (Winter Peak)

${ }^{1}$ Approximately $95.8 \%$ of the irrigation load is controlled so that it does not add to the GRE coincidental peak. Assume $75 \%$ coincident factor for the remaining customers.

| Summer | $0.042 \times 12,504 \mathrm{~kW} \times 0.75$ | $396 \mathrm{~kW}(\mathrm{CD})$ | $=$ | 396 |
| :--- | :--- | ---: | :--- | ---: | ---: |
| Other | $0.042 \times 2,735 \mathrm{~kW} \times 0.75$ | $87 \mathrm{~kW}(\mathrm{CD})$ | $=$ | 87 |

## Estimate of Class Demands

(Continued)

## VII. Estimate of Coincidental Demand

E. Assigned Coincidental Demand Responsibility (Other Peak)

| $\underline{\text { Rate Class }}$ | Other Non-Coinc. Demand | Coinc. <br> Factor | Other <br> Coinc. <br> Demand |
| :---: | :---: | :---: | :---: |
|  | (kW) |  | (kW) |
| Residential \& Farm $(31,32,53)$ | 169,945 | 0.7643 | 129,896 |
| Less Controlled A/C | 11,719 | 0.5000 | 5,860 |
| Net Residential \& Farm $(31,32,53)$ | 181,664 | 0.7473 | 135,756 |
| Small General Service (41) | 9,357 | 0.7643 | 7,152 |
| Less Controlled A/C | 209 | 0.5000 | 105 |
| Net Small General Service (41) | 9,566 | 0.7586 | 7,257 |
| Irrigation (36) | 2,735 | 0.0317 | 87 |
| General Service (46) | 96,931 | 0.7643 | 74,089 |
| General Service Peak Alert (70,71) | 68,005 | 0.0320 | 1,001 |
| Street and Security Lighting | 2,832 | 0.5000 | 1,416 |
| Total | 361,734 |  | 219,605 |

F. Assigned Coincidental Demand Responsibility
(25\% Summer, 25\% Winter, 50\% Other months)
Residential \& Farm $(31,32,53)$
Small General Service (41)
Irrigation (36)
General Service (42)
General Service Peak Alert (70)
Street and Security Lighting
$\quad$ Total

| General Service Peak Alert (70) |  | Class NCP | CF | Monthly Transm. | Annual Transm. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Summer | 3 mos. | 78,256 | 0.0179 | 1,400 | 4,200 |
| Winter | 3 mos . | 57,471 | 0.2000 | 11,494 | 34,483 |
| Other | 6 mos. | 68,005 | 0.2000 | 13,601 | 81,606 |
|  |  |  |  |  | 120,289 |
|  |  |  |  |  | 12 |
|  |  |  |  |  | 10,024 |

Development of Allocation Factors

| Line <br> No. | Description | Units | Total | Resid. \& Farm | Small General Service | Irrigation | General Service | C\&I <br> Interruptible | Lighting |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Allocation Factor Input Data |  |  |  |  |  |  |  |  |
| 2 | Energy |  |  |  |  |  |  |  |  |
| 3 | Energy Sales -- All | MWh | 1,769,404 | 838,684 | 42,538 | 7,964 | 463,060 | 406,800 | 10,359 |
| 4 | Energy Sales -- Critical Peak | MWh |  |  |  |  |  |  |  |
| 5 | Energy Sales -- On-Peak | MWh | 591,321 | 281,636 | 14,284 | 2,674 | 155,499 | 136,606 | 622 |
| 6 | Energy Sales -- Off-Peak | MWh | 1,178,083 | 557,048 | 28,253 | 5,290 | 307,561 | 270,194 | 9,737 |
| 7 | Dist. Losses | MWh | 2.68\% | 2.68\% | 2.68\% | 2.68\% | 2.68\% | 2.68\% | 2.68\% |
| 8 | Energy -- All @ Sub. | MWh | 1,816,837 | 861,167 | 43,678 | 8,177 | 475,474 | 417,705 | 10,636 |
| 9 | Energy -- Critical Peak @ Sub. | MWh |  |  |  |  |  |  |  |
| 10 | Energy -- On-Peak @ Sub. | MWh | 607,173 | 289,186 | 14,667 | 2,746 | 159,667 | 140,268 | 638 |
| 11 | Energy -- Off-Peak @ Sub. | MWh | 1,209,664 | 571,981 | 29,011 | 5,431 | 315,806 | 277,437 | 9,998 |
| 12 | Trans. Losses | MWh |  |  |  |  |  |  |  |
| 13 | Energy -- All @ Source | MWh | 1,816,837 | 861,167 | 43,678 | 8,177 | 475,474 | 417,705 | 10,636 |
| 14 | Energy -- Critical Peak @ Source | MWh |  |  |  |  |  |  |  |
| 15 | Energy -- On-Peak @ Source | MWh | 607,173 | 289,186 | 14,667 | 2,746 | 159,667 | 140,268 | 638 |
| 16 | Energy -- Off-Peak @ Source | MWh | 1,209,664 | 571,981 | 29,011 | 5,431 | 315,806 | 277,437 | 9,998 |
| 17 | Demand |  |  |  |  |  |  |  |  |
| 18 | Non-Coin. Demand @ Cons. | kW | 1,122,260 | 772,748 | 35,427 | 21,856 | 183,608 | 105,789 | 2,832 |
| 19 | Class Non-Coin. Demand @ Sub. | kW | 387,771 | 201,097 | 9,755 | 4,702 | 101,451 | 67,934 | 2,832 |
| 20 | Class Non-Coin. Demand Transm. | kW | 387,771 | 201,097 | 9,755 | 4,702 | 101,451 | 67,934 | 2,832 |
| 21 | Summer Coin. Demand | kW | 326,853 | 202,779 | 9,352 | 396 | 112,926 | 1,400 |  |
| 22 | Winter Coin. Demand | kW | 229,991 | 149,628 | 8,300 |  | 68,224 | 1,007 | 2,832 |
| 23 | Other Coin. Demand | kW | 219,605 | 135,756 | 7,257 | 87 | 74,089 | 1,001 | 1,416 |
| 24 | Trans. Coin. Demand | kW | 257,935 | 155,980 | 8,041 | 142 | 82,332 | 10,024 | 1,416 |
| 25 |  |  |  |  |  |  |  |  |  |
| 26 | Average and Excess Demand |  |  |  |  |  |  |  |  |
| 27 | Average Demand | kW | 207,402 | 98,307 | 4,986 | 933 | 54,278 | 47,683 | 1,214 |
| 28 | Class Excess Demand | kW | 180,369 | 102,790 | 4,769 | 3,769 | 47,173 | 20,251 | 1,618 |
| 29 | Alloc. Excess Demand | kW | 50,534 | 28,799 | 1,336 | 1,056 | 13,217 | 5,674 | 453 |
| 30 | Avg. \& Excess Demand | kW | 257,935 | 127,105 | 6,322 | 1,989 | 67,494 | 53,357 | 1,667 |
| 31 | Revenue |  |  |  |  |  |  |  |  |
| 32 | Present Rate Revenue | \$ | 197,242,256 | 112,877,123 | 5,701,055 | 912,232 | 50,388,052 | 25,295,556 | 2,068,238 |
| 33 | Proposed Rate Revenue | \$ | 197,242,256 | 112,877,123 | 5,701,055 | 912,232 | 50,388,052 | 25,295,556 | 2,068,238 |
| 34 | Consumer |  |  |  |  |  |  |  |  |
| 35 | No. Consumers |  | 124,847 | 100,235 | 4,431 | 392 | 2,756 | 262 | 16,771 |
| 36 | Pri. Line Weight. Factor |  |  | 1.00 | 1.20 | 1.50 | 1.46 | 1.56 | 0.02 |
| 37 | Weight. No. of Cons. |  | 110,887.9 | 100,235.0 | 5,298.8 | 589.4 | 4,020.6 | 408.6 | 335.4 |
| 38 | Transf. Weight. Factor |  |  | 1.00 | 1.34 | 1.88 | 1.80 | 1.98 | 0.02 |
| 39 | Weight. No. of Cons. |  | 112,739.4 | 100,235.0 | 5,947.6 | 737.0 | 4,966.1 | 518.2 | 335.4 |
| 40 | Service Weight. Factor |  |  | 1.00 | 1.09 | 1.24 | 1.21 | 1.26 | 0.02 |
| 41 | Weight. No. of Cons. |  | 109,568.6 | 100,235.0 | 4,836.5 | 484.3 | 3,346.9 | 330.5 | 335.4 |
| 42 | Meter Weight. Factor |  |  | 1.00 | 1.37 | 2.88 | 3.17 | 14.74 | 0.02 |
| 43 | Weight. No. of Cons. |  | 120,374.1 | 100,235.0 | 6,071.0 | 1,130.3 | 8,740.5 | 3,861.9 | 335.4 |
| 44 | Cons. Acct. Weight Factor |  |  | 1.00 | 1.37 | 2.88 | 3.17 | 14.74 | 0.02 |
| 45 | Weight. No. of Cons. <br> DEA Exhibit 3 COS FINAL.xlsm |  | 120,374.1 | 100,235.0 | 6,071.0 | 1,130.3 | 8,740.5 | 3,861.9 | 335.4 |

Development of Allocation Factors
(Continued)

| Line <br> No. | Description | Data <br> Line <br> No. | Name | Total | $\begin{gathered} \text { Resid. } \\ \text { \& Farm } \end{gathered}$ |  | Irrigation | General Service | C\&I <br> Interruptible | Lighting |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 46 | Allocation Factors |  |  |  |  |  |  |  |  |  |
| 47 | Energy Related |  |  |  |  |  |  |  |  |  |
| 48 | Energy -- All @ Sub. | 8 | E1 | 1.000000 | 0.473992 | 0.024041 | 0.004501 | 0.261704 | 0.229908 | 0.005854 |
| 49 | Energy -- Critical Peak @ Sub. | 9 | E2 |  |  |  |  |  |  |  |
| 50 | Energy -- On-Peak @ Sub. | 10 | E3 | 1.000000 | 0.476282 | 0.024157 | 0.004523 | 0.262968 | 0.231019 | 0.001051 |
| 51 | Energy -- Off-Peak @ Sub. | 11 | E4 | 1.000000 | 0.472843 | 0.023982 | 0.004490 | 0.261069 | 0.229350 | 0.008265 |
| 52 | Energy -- All @ Source | 13 | E5 | 1.000000 | 0.473992 | 0.024041 | 0.004501 | 0.261704 | 0.229908 | 0.005854 |
| 53 | Energy -- Critical Peak @ Sourct | 14 | E6 |  |  |  |  |  |  |  |
| 54 | Energy -- On-Peak @ Source | 15 | E7 | 1.000000 | 0.476282 | 0.024157 | 0.004523 | 0.262968 | 0.231019 | 0.001051 |
| 55 | Energy -- Off-Peak @ Source | 16 | E8 | 1.000000 | 0.472843 | 0.023982 | 0.004490 | 0.261069 | 0.229350 | 0.008265 |
| 56 |  |  |  |  |  |  |  |  |  |  |
| 57 | Demand Related |  |  |  |  |  |  |  |  |  |
| 58 | Non-coin. Demand @ Cons. | 18 | D1 | 1.000000 | 0.688564 | 0.031567 | 0.019475 | 0.163606 | 0.094265 | 0.002523 |
| 59 | Non-coin. Demand @ Class | 19 | D2 | 1.000000 | 0.518597 | 0.025156 | 0.012127 | 0.261627 | 0.175192 | 0.007303 |
| 60 | Non-coin. Demand @ Transm | 20 | D3 | 1.000000 | 0.518597 | 0.025156 | 0.012127 | 0.261627 | 0.175192 | 0.007303 |
| 61 | Summer Coin. Demand | 21 | D4 | 1.000000 | 0.620398 | 0.028611 | 0.001213 | 0.345495 | 0.004284 |  |
| 62 | Winter Coin. Demand | 22 | D5 | 1.000000 | 0.650583 | 0.036088 |  | 0.296638 | 0.004377 | 0.012314 |
| 63 | Other Coin. Demand | 23 | D6 | 1.000000 | 0.618181 | 0.033044 | 0.000395 | 0.337374 | 0.004558 | 0.006448 |
| 64 | Trans. Coin. Demand @ Sub. | 24 | D7 | 1.000000 | 0.604724 | 0.031175 | 0.000552 | 0.319196 | 0.038863 | 0.005490 |
| 65 | Coin. Demand @ Source | 25 | D8 |  |  |  |  |  |  |  |
| 66 | Avg. \& Excess | 30 | D9 | 1.000000 | 0.492779 | 0.024510 | 0.007713 | 0.261671 | 0.206862 | 0.006464 |
| 67 |  |  |  |  |  |  |  |  |  |  |
| 68 | Revenue Related |  |  |  |  |  |  |  |  |  |
| 69 | Present Rate Revenue | 32 | R1 | 1.000000 | 0.572277 | 0.028904 | 0.004625 | 0.255463 | 0.128246 | 0.010486 |
| 70 | Proposed Rate Revenue | 33 | R2 | 1.000000 | 0.572277 | 0.028904 | 0.004625 | 0.255463 | 0.128246 | 0.010486 |
| 71 |  |  |  |  |  |  |  |  |  |  |
| 72 | Consumer Related |  |  |  |  |  |  |  |  |  |
| 73 | No. of Cons. | 35 | C1 | 1.000000 | 0.802863 | 0.035491 | 0.003140 | 0.022075 | 0.002099 | 0.134332 |
| 74 | Pri. Line Weight. Cons. | 37 | C2 | 1.000000 | 0.903931 | 0.047786 | 0.005315 | 0.036259 | 0.003685 | 0.003025 |
| 75 | Transf. Weight. Cons. | 39 | C3 | 1.000000 | 0.889086 | 0.052756 | 0.006537 | 0.044049 | 0.004597 | 0.002975 |
| 76 | Services Weight. Cons. | 41 | C4 | 1.000000 | 0.914815 | 0.044141 | 0.004420 | 0.030546 | 0.003016 | 0.003061 |
| 77 | Meter Weight. Cons. | 43 | C5 | 1.000000 | 0.832696 | 0.050434 | 0.009390 | 0.072611 | 0.032082 | 0.002786 |
| 78 | Cons. Acct. Weight. Cons. | 45 | C6 | 1.000000 | 0.832696 | 0.050434 | 0.009390 | 0.072611 | 0.032082 | 0.002786 |



Exhibit $\qquad$ (DEA-2)
Page 1 of 8

## Determination of Revenue <br> Requirements - Summary



[^84]
## Rate Base

| (a) | (b) | (c) <br> Line <br> No. |
| :---: | :---: | ---: |
|  | Description | Proposed <br> Pest Year |
|  | Utility Plant in Service $^{1}$ | $(\$)$ |
| 2 | Construction Work in Progress $^{1}$ | $300,342,133$ |
| 3 | Less: Accumulated Provision for Deprec. $^{2}$ | $4,222,209$ |
| 4 | Net Plant $^{1}$ | $126,526,023$ |
| 5 | Materials \& Supplies - Electric $^{3}$ | $178,038,319$ |
| 6 | Working Capital $^{4}$ | $4,715,491$ |
| 7 | Subtotal $^{6}$ | $6,816,147$ |
| 8 | Less: Consumer Deposits $^{1}$ | $11,531,638$ |
| 9 | Total Rate Base | 505,101 |

[^85]
## Rate Base Calculations <br> Materials \& Supplies

$\left.\begin{array}{crcc}\text { (a) } & \text { (b) } & \begin{array}{c}\text { (c) } \\ \text { Line } \\ \text { No. }\end{array} & \text { Month }\end{array} \begin{array}{c}\text { Supplies } \\ \text { Electric }{ }^{\mathbf{1}}\end{array}\right]$

[^86]Exhibit__(DEA-2)
Page 4 of 8

## Cost of Debt

| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Line No. | Description | Interest Rate | Estimated Balance | Annualized Interest Expense ${ }^{1}$ | Target Debt | Cost of Debt | Weighted Cost of Debt |
|  | Long Term Debt | (\%) | (\$) | (\$) | (\%) | (\%) | (\%) |
| 1 | CFC | 3.400\% | 1,585,363 | 53,902 |  |  |  |
| 2 | CFC | 4.500\% | 2,082,541 | 93,714 |  |  |  |
| 3 | CFC | 4.050\% | 1,766,030 | 71,524 |  |  |  |
| 4 | CFC | 4.250\% | 2,218,947 | 94,305 |  |  |  |
| 5 | CFC | 3.500\% | 2,465,360 | 86,288 |  |  |  |
| 6 | CFC | 3.800\% | 3,794,320 | 144,184 |  |  |  |
| 7 | CFC | 3.550\% | 11,379,844 | 403,984 |  |  |  |
| 8 | CFC | 3.550\% | 4,704,028 | 166,993 |  |  |  |
| 9 | CFC | 3.750\% | 4,337,267 | 162,648 |  |  |  |
| 10 | CFC | 3.300\% | 1,917,161 | 63,266 |  |  |  |
| 11 | CFC | 2.500\% | 1,309,090 | 32,727 |  |  |  |
| 12 | CFC | 3.600\% | 4,705,933 | 169,414 |  |  |  |
| 13 | CFC | 3.750\% | 9,749,608 | 365,610 |  |  |  |
| 14 | CFC | 4.250\% | 9,957,793 | 423,206 |  |  |  |
| 15 | CFC/Farmer Mac | 4.250\% | 2,816,884 | 119,718 |  |  |  |
| 16 | CFC/Farmer Mac | 3.830\% | 1,632,746 | 62,534 |  |  |  |
| 17 | CFC/Farmer Mac | 3.970\% | 992,292 | 39,394 |  |  |  |
| 18 | CoBank | 4.350\% | 1,059,986 | 46,109 |  |  |  |
| 19 | CoBank | 2.590\% | 3,841,338 | 99,491 |  |  |  |
| 20 | CoBank | 4.101\% | 4,904,209 | 201,122 |  |  |  |
| 21 | CoBank | 3.500\% | 1,088,704 | 38,105 |  |  |  |
| 22 | CoBank | 4.560\% | 4,332,287 | 197,552 |  |  |  |
| 23 | CoBank | 3.950\% | 3,433,732 | 135,632 |  |  |  |
| 24 | CoBank | 3.960\% | 3,738,278 | 148,036 |  |  |  |
| 25 | CoBank | 1.910\% | 167,115 | 3,192 |  |  |  |
| 26 | CoBank | 2.760\% | 1,546,883 | 42,694 |  |  |  |
| 27 | CoBank | 3.960\% | 3,745,754 | 148,332 |  |  |  |
| 28 | CoBank | 3.340\% | 4,574,903 | 152,802 |  |  |  |
| Total Long Term Debt 12/31/2018 ${ }^{2}$ |  |  | 99,848,397 | 3,766,478 | 60\% | 3.77\% | 2.26\% |

[^87]$\qquad$

## Historic Total Capitalization

| (a) <br> Line | (b) | $(\mathrm{c})$ | $(\mathrm{d})$ | $\left(\begin{array}{l}\text { (e) } \\ \text { No. }\end{array}\right.$ |
| :---: | :---: | ---: | ---: | ---: |
| Year | Equity | Debt | Total Capitalization ${ }^{1}$ |  |
|  |  |  |  | $(\$)$ |
| 1 | 1998 | $47,724,259$ | $89,235,673$ | $136,959,932$ |
| 2 | 1999 | $47,523,140$ | $86,467,753$ | $133,990,893$ |
| 3 | 2000 | $48,277,127$ | $86,508,221$ | $134,785,348$ |
| 4 | 2001 | $52,338,198$ | $84,148,127$ | $136,486,325$ |
| 5 | 2002 | $56,192,068$ | $91,885,042$ | $148,077,110$ |
| 6 | 2003 | $59,702,313$ | $92,300,874$ | $152,003,187$ |
| 7 | 2004 | $60,411,502$ | $104,332,408$ | $164,743,910$ |
| 8 | 2005 | $69,656,348$ | $100,360,082$ | $170,016,430$ |
| 9 | 2006 | $81,417,061$ | $101,287,278$ | $182,704,339$ |
| 10 | 2007 | $89,428,738$ | $107,146,528$ | $196,575,266$ |
| 11 | 2008 | $94,900,838$ | $107,846,291$ | $202,747,129$ |
| 12 | 2009 | $100,631,181$ | $114,660,602$ | $215,291,783$ |
| 13 | 2010 | $109,245,168$ | $115,021,054$ | $224,266,222$ |
| 14 | 2011 | $119,055,182$ | $112,770,620$ | $231,825,802$ |
| 15 | 2012 | $127,764,369$ | $98,368,388$ | $226,132,757$ |
| 16 | 2013 | $136,837,360$ | $92,752,617$ | $229,589,977$ |
| 17 | 2014 | $147,409,115$ | $96,605,051$ | $244,014,166$ |
| 18 | 2015 | $150,975,647$ | $94,984,079$ | $245,959,726$ |
| 19 | 2016 | $161,294,191$ | $93,878,841$ | $255,173,032$ |
| 20 | 2017 | $169,199,058$ | $97,068,697$ | $266,267,755$ |
| 21 | 2018 | $173,151,167$ | $99,848,397$ | $272,999,564$ |

The mean growth rate in Total Capitalization is estimated to be:

$$
\text { 2013-2018 }=\quad 3.52 \%
$$

Total Capitalization figures represent Margins \& Equities plus Total Long-Term Debt for the years listed. See Workpaper 1 for years 2014 thru 2018.

## Asset Growth Rate

## Department of Commerce Methodology

(Natural Logarithm of a Number)
(a)
(b)
(c)
(d)
(e)
$L N o f$
Assets Year Time Assets ${ }^{1}$ From LRF

| 19.6450 | 2018 | 1 | $340,193,777$ | $340,193,777$ |
| :--- | :--- | :--- | :--- | :--- |
| 19.6618 | 2019 | 2 | $345,961,418$ | $345,961,418$ |
| 19.6816 | 2020 | 3 | $352,873,712$ | $352,873,712$ |
| 19.6974 | 2021 | 4 | $358,477,813$ | $358,477,813$ |
| 19.7135 | 2022 | 5 | $364,321,717$ | $364,321,717$ |
| 19.7318 | 2023 | 6 | $371,018,880$ | $371,018,880$ |
| 19.7445 | 2024 | 7 | $375,785,642$ | $375,785,642$ |
| 19.7583 | 2025 | 8 | $380,994,230$ | $380,994,230$ |
| 19.7713 | 2026 | 9 | $385,996,186$ | $385,996,186$ |
| 19.7851 | 2027 | 10 | $391,362,529$ | $391,362,529$ |
| 19.8009 | 2028 | 11 | $397,573,959$ | $397,573,959$ |

0.0154 (10 yr. exponential GR)
0.0173 (5 yr. exponential GR)

1 Assets represent forecasted Assets for the years listed. See Workpaper 5, Page 2.

## Ratio Calculations <br> Department of Commerce Methodology

| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Equity ${ }^{1}$ | Debt ${ }^{2}$ | $\begin{gathered} \text { Total } \\ \text { Capital }^{3} \end{gathered}$ | Equity Ratio ${ }^{4}$ | $\begin{gathered} \text { Debt } \\ \text { Ratio }^{5} \end{gathered}$ | Assets ${ }^{6}$ | $\begin{gathered} \text { Equity as } \\ \text { \% of Assets }{ }^{7} \end{gathered}$ |
| 2019 | 175,914,526 | 105,640,524 | 281,555,050 | 0.6248 | 0.3752 | 345,961,418 | 50.85\% |
| 2020 | 177,214,989 | 111,540,354 | 288,755,343 | 0.6137 | 0.3863 | 352,873,712 | 50.22\% |
| 2021 | 178,231,219 | 116,416,226 | 294,647,445 | 0.6049 | 0.3951 | 358,477,813 | 49.72\% |
| 2022 | 179,402,896 | 121,376,453 | 300,779,349 | 0.5965 | 0.4035 | 364,321,717 | 49.24\% |
| 2023 | 180,280,744 | 127,483,768 | 307,764,512 | 0.5858 | 0.4142 | 371,018,880 | 48.59\% |
| 2024 | 179,749,233 | 133,070,041 | 312,819,274 | 0.5746 | 0.4254 | 375,785,642 | 47.83\% |
| 2025 | 179,718,738 | 138,597,124 | 318,315,862 | 0.5646 | 0.4354 | 380,994,230 | 47.17\% |
| 2026 | 178,123,694 | 145,364,127 | 323,487,821 | 0.5506 | 0.4494 | 385,996,186 | 46.15\% |
| 2027 | 176,747,430 | 152,394,734 | 329,142,164 | 0.5370 | 0.4630 | 391,362,529 | 45.16\% |
| 2028 | 176,124,124 | 159,517,470 | 335,641,594 | 0.5247 | 0.4753 | 397,573,959 | 44.30\% |
|  |  |  | 5-yr average: | 60.51\% | 39.49\% |  | 49.72\% |
|  |  |  | 10-yr average: | 57.77\% | 42.23\% |  | 47.92\% |

[^88]
## Overall Return on Rate Base Department of Commerce Methodology

| Assumptions: |  |  |
| :--- | :--- | ---: |
| 1 | Asset Growth Rate |  |
| 2 | Equity Ratio | $1.73 \%$ |
| 3 | Debt Ratio | $53.085 \%$ |
| 4 | Test Year Total Capital | $\$ 272,999,564$ |
| 5 | Test Year Total Equity | $\$ 173,151,167$ |
| 6 | Test Year Total Debt | $\$ 99,848,397$ |
| 7 | Annual Capital Credits | $\$ 3,500,000$ |
| 8 | Rate Base | $\$ 189,064,856$ |
| 9 | Cost of Long-Term Debt | $3.77 \%$ |

## Terms:

CC Capital Credits
DR Debt Ratio $=($ Debt $/$ Total Capital $)$
ER Equity Ratio = (Equity/Total Capital $)$
g Growth in Equity
i Cost of Long-Term Debt
K Rate of Return on Equity
OCC Overall Cost of Capital
RB Rate Base
ROR Return on Rate Base
TC Total Capital
TIER Times Interest Earned Ratio

## DOC Method:

| Return on Equity: $\mathrm{K}=\mathrm{g}+(\mathrm{CC} /(\mathrm{ER} \mathrm{x} \mathrm{TC}))$ | g | ER | TC | CC |  |
| :--- | :--- | :---: | :---: | :--- | :--- |
|  | 0.0173 | 0.5309 | $272,999,564$ | $\$$ | $3,500,000$ |


| Return on Equity: | 0.0414 | $\mathrm{~K}=\mathrm{g}+(\mathrm{CC} /(\mathrm{ER} \times \mathrm{TC}))$ |
| ---: | :---: | :--- |
| Overall Cost of Capital (OCC): | 0.0397 | $\mathrm{OCC}=(\mathrm{ER} \times \mathrm{K})+((1-\mathrm{ER}) \times \mathrm{i})$ |
| Overall Return on Rate Base: | $\mathbf{0 . 0 5 7 3}$ | $\mathrm{ROR}=\mathrm{OCC} \times(\mathrm{TC} / \mathrm{RB})$ |
| Times Interest Earned Ratio: | 2.24 | $\mathrm{TIER}=((\mathrm{K} \times \mathrm{ER})+(\mathrm{i} \times \mathrm{DR})) /(\mathrm{i} \times \mathrm{DR})$ |

[^89]

# Statement of Operations <br> Present Rates <br> Test Year - 2018 Historical Adjusted 

| (a) <br> Line <br> No. | (b) Description | $\begin{gathered} \text { (c) } \\ 2018 \\ \text { Actual } \\ \hline \end{gathered}$ | (d) ${ }_{\text {Adjustments }{ }^{1}}$ | (e) <br> Pro Forma Test Year |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Operating Revenue | (\$) | (\$) | (\$) |
| 2 | Rate Schedules | 202,630,477 | $(2,150,170)$ | 200,480,307 |
| 3 | Other | 508,198 | 592,593 | 1,100,791 |
| 4 | Total Operating Revenue | 203,138,675 | $(1,557,577)$ | 201,581,098 |
| 5 | Operating Expenses |  |  |  |
| 6 | Cost of Purchased Power | 149,330,034 | 1,319,432 | 150,649,466 |
| 7 | Transmission - O \& M | - |  | - |
| 8 | Distribution- Operation | 7,277,184 | $(383,045)$ | 6,894,139 |
| 9 | Distribution - Maintenance | 6,151,338 | 242,574 | 6,393,912 |
| 10 | Consumer Accounts | 5,312,955 | 380,854 | 5,693,809 |
| 11 | Consumer Service \& Information | 3,585,760 | $(180,461)$ | 3,405,299 |
| 12 | Sales | - |  | - |
| 13 | Administrative \& General | 11,907,838 | 71,783 | 11,979,621 |
| 14 | Depreciation \& Amortization | 10,281,975 | 404,073 | 10,686,048 |
| 15 | Taxes - Property | 3,372,283 | 178,507 | 3,550,790 |
| 16 | Taxes - Other | - |  | - |
| 17 | Other Interest Expense | 549,008 |  | 549,008 |
| 18 | Other Deductions | 6,239 | $(38,705)$ | $(32,466)$ |
| 19 | Total Operating Expenses (Before |  |  |  |
|  | Long Term Interest) | 197,774,614 | 1,995,012 | 199,769,626 |
| 20 | Net Operating Income (Before Long |  |  |  |
|  | Term Interest) | 5,364,061 | $(3,552,589)$ | 1,811,472 |

[^90]
## Summary of Test Year Adjustments to Operating Expenses

| (a) <br> Line <br> No. | (b) Description |  | (c) <br> 2018 <br> Actual |  | (d) justments |  | (e) <br> Pro Forma Test Year | Change from 2018 Actual |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Operating Expenses |  |  |  |  |  |  |  |  |
| 1 | Distribution - Operation (DO) | \$ | 7,277,184 | \$ | $(383,045)$ |  | 6,894,139 | -5.3\% |
| 2 | Distribution - Maintenance (DM) |  | 6,151,338 |  | 242,574 |  | 6,393,912 | 3.9\% |
| 3 | Consumer Accounts (CA) |  | 5,312,955 |  | 380,854 |  | 5,693,809 | 7.2\% |
| 4 | Consumer Service \& Information (CS) |  | 3,585,760 |  | $(180,461)$ |  | 3,405,299 | -5.0\% |
| 5 | Sales |  |  |  | - |  | - |  |
| 6 | Administrative \& General (AG) |  | 11,907,838 |  | 71,783 |  | 11,979,621 | 0.6\% |
| 7 | Depreciation \& Amortization |  | 10,281,975 |  | 404,073 |  | 10,686,048 | 3.9\% |
| 8 | Taxes - Property |  | 3,372,283 |  | 178,507 |  | 3,550,790 | 5.3\% |
| 9 | Taxes - Other |  | - |  | - |  | - |  |
| 10 | Other Interest Expense |  | 549,008 |  | - |  | 549,008 | 0.0\% |
| 11 | Other Deductions |  | 6,239 |  | $(38,705)$ |  | $(32,466)$ | -620.4\% |
|  | Total Operating Expenses Excluding Purchased Power (Before Long Term Interest) | \$ | 48,444,580 | \$ | 675,580 | \$ | 49,120,160 | 1.4\% |

Check Total

Summary of Test Year Adjustments to Operating Expenses Payroll

General Payroll Increase
Capital to Expense Changes
Staffing Changes
Total Payroll Adjustments
Payroll Benefits
Benefits on General Payroll Increase
Benefits on Capital to Expense Changes
Benefits on Staffing Changes
Base Benefit Decrease
Total Payroll Benefits
Depreciation
Other Adjustments
Property Taxes
Reduction in CIP Spending 2019 Budget to 2018 Actual
Regulatory Filing Fees
Rate Filing Fees recovery over 5 years
Net Deduction for Disallowed Expenses
Total Test Year Adjustments

## Reference

| $\$$ | 420,048 | Page 3 of 22 |
| :---: | :---: | :---: |
|  | $(65,168)$ | Page 4 of 22 |
|  | 260,379 | Page 5 of 22 |
|  | 615,259 |  |

197,171 Page 7 of 22
$(30,590) \quad$ Page 7 of 22
122,222 Page 7 of 22
$(393,317) \quad$ Page 6 of 22
$(104,514)$
404,073 Page 8 of 22
$(118,505) \quad$ Page 10 of 22
178,507 Page 8 of 22
$(200,296) \quad$ Page 9 of 22
18,800 Page 9 of 22
82,000 Page 10 of 22
$(199,744) \quad$ Page 10 of 22
\$ 675,580

| TEST YEAR ADJUSTMENTS ADJUSTMENTS TO PAYROLL |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| GENERAL WAGE INCREASE |  |  |  |  |
|  | Effective Date | Avg. \% <br> Increase | Wages Booked Prior To Increase | Wages Booked After Increase |
|  |  |  | (\$) | (\$) |
| Union (Hourly Wages \& OT) |  |  | Expensed | Expensed |
| Historical Test Year | 1/1/18 | 2.50\% | - | 7,047,334 |
|  |  |  |  | Jan thru Dec |
| Future Test Year | 1/1/19 | 2.50\% | - | 7,223,518 |
| Non-Union (Salaries, PT, etc.) |  |  |  |  |
| Historical Test Year | 6/1/18 | 2.50\% | 3,745,930 | 5,462,416 |
|  |  |  | Jan thru Jun | Jul - Dec |
| Future Test Year | 6/1/19 | 2.75\% | 3,839,578 | 5,612,632 |
| Net Adjustment to Expensed Wages |  |  |  | 420,048 |
| Total Union \& Non-Union |  |  |  <br> Wages Only | Total Comp inc OT, PT, etc. |
| Historical |  |  | 15,133,222 | 16,255,680 |
| Future Test Year |  |  | 15,524,462 | 16,675,728 |
| Net Increase |  |  | 2.6\% | 2.6\% |

Is the increase shown for the Future Test Year committed or still to be negotiated?
$\begin{array}{ll}\text { Union: } & \text { Committed } \\ \text { Non-Union: } & \text { Not Committed }\end{array}$

## CAPITAL TO EXPENSE CHANGE FOR NORMALIZED CONSTRUCTION YEAR

|  | \% <br> Expensed |  | Total <br> Payroll |  | Expensed Payroll |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Historical 2018 Test Year | 86.0\% | \$ | 18,709,060 | \$ | 16,097,181 |
| Average \% Expensed 2015 thru 2018 | 85.7\% |  |  |  | 16,033,664 |
| Additional Expensed for Normalized Year |  |  |  | \$ | $(63,517)$ |
| Test Year Net Increase |  |  |  |  | 2.6\% |
| Net Additional Expensed for Normalized Year |  |  |  | \$ | $(65,168)$ |
| Allocated to Operations \& Maintenance Categories |  |  |  |  |  |

Payroll Percentage Expensed History

|  | $\%$ <br> Expensed | Total <br> Payroll | Expensed <br> 2 | 2015 |
| :--- | :---: | ---: | ---: | ---: |

Exhibit__(DEA-1)
Page 5 of 22


1 Additional wages which would have been booked had the individual been employed for the entire Historical Year assuming an average of 2 FTEs unfilled.

| Dakota Electric AssociationTEST YEAR ADJUSTMENTSADJUSTMENTS TO PAYROLL RELATED EXPENSE |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| G/L <br> Account <br> Number |  | Rate |  | Total Cost Historical Test Year |  |
|  |  | Historical Test Year | Future Test Year |  |  |
| (\% of Payroll) (\% of Payroll) |  |  |  | (\$ Expensed) |  |
| Pension <br> Savings (401k) <br> FICA Tax <br> Life Insurance <br> Workers' Compensation <br> Medical Insurance <br> State \& Federal Unemployment Other-Retirement Health Benefits | 81540-41 | 17.57\% | 16.71\% A | \$ | $\begin{array}{r} 2,680,484 \\ 964,809 \end{array}$ |
|  | 81530-31 | 6.32\% | 6.77\% B |  |  |
|  | 81410 | 7.60\% | 7.60\% | 1,159,549 |  |
|  | 81520 | 0.55\% | 0.60\% | 84,336 |  |
|  | 82520 | 1.23\% | 1.32\% | 188,060 |  |
|  | 81510-15 | 12.55\% | 12.87\% | 1,915,268 |  |
|  | 81420-30 | 0.16\% | 0.14\% | 23,855 |  |
|  | 81550 | 3.54\% | 0.93\% C | 539,650 |  |
|  |  | 49.5\% | 46.94\% | \$ | 7,556,011 |
| Pro Forma Test Year Expensed Payroll Benefits |  |  |  | \$ 7,162,694 |  |
|  |  |  | Adjustment | \$ | $(393,317)$ |
| Historical Test Year Exp | Salaries \& | Hourly Wages | 15,259,255 |  |  |

## Notes:

A - Per NRECA, effective January 2019, the salaried and hourly rate is $28.93 \%$ and has increased 29pp from 2018. The decrease as a percent of total payroll is due to employee turnover as new hires are not eligible for the Retirement \& Pension Plan.

B- Beginning March 1, 2006, new hires are not eligible for the Retirement \& Pension Plan, but are enrolled in a new 401 k plan where DEA will contribute $5 \%$ of base pay and will match up to an additional $5 \%$ of base pay. DEA contributes only $4 \%$ to employees that are in the pension plan. When employees with the pension retire at the lower rate and are replaced by new hires at the higher rate, the average rate increases.

C-The decrease in the Other-Retirement Health Benefits is due to a 2018 yearend accrual adjustment to the post-employment FAS 106 benefit related to the increase in medical insurance. This increase is not anticipated in 2019.

## Dakota Electric Association

TEST YEAR ADJUSTMENTS SUMMARY ADJUSTMENTS TO PAYROLL AND BENEFITS

| SUMMARY OF COMPENSATION CHARGED TO EXPENSE ACCOUNTS |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Category | Historical <br> Test Year <br> Expensed <br> Compensation |  | Capital to Expense Changes | Staffing <br> Changes | Adjusted <br> Test Year <br> Expensed <br> Compensation |
|  | (\$) | (\$) | (\$) | (\$) | (\$) |
| I Operations | 2,985,569 | 77,906 | $(33,389)$ | $(34,438)$ | 2,995,648 |
| I Maintenance | 2,841,645 | 74,151 | $(31,779)$ | 156,816 | 3,040,833 |
| C Consumer Accounting | 2,113,151 | 55,142 | - | 111,823 | 2,280,116 |
| C Consumer Services | 1,001,465 | 26,133 | - | 7,671 | 1,035,269 |
| \& Administration \& General | 7,116,699 | 185,707 | - | 18,507 | 7,320,913 |
| Other (Diversified projects) | 38,652 | 1,009 | - | - | 39,661 |
| Construction | - | - | - | - | - |
| Total | 16,097,181 | 420,048 | $(65,168)$ | 260,379 | 16,712,440 |

SUMMARY OF PAYROLL BENEFITS CHARGED TO EXPENSE ACCOUNTS

| Category | Historical <br> Test Year <br> Expensed <br> Benefits | Benefits on General Payroll Increase | Benefits on Capital to Expense Changes | Benefits on Staffing Changes | Base <br> Benefits Adjustment | Adjusted <br> Test Year <br> Expensed <br> Benefits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 46.94\% | 46.94\% | 46.94\% | -2.58\% |  |
|  | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) |
| Operations | 1,401,425 | 36,569 | $(15,673)$ | $(16,165)$ | $(72,949)$ | 1,333,207 |
| Maintenance | 1,333,867 | 34,806 | $(14,917)$ | 73,609 | $(69,432)$ | 1,357,933 |
| Consumer Accounting | 991,912 | 25,884 | - | 52,490 | $(51,633)$ | 1,018,653 |
| Consumer Services | 470,087 | 12,267 | - | 3,601 | $(24,470)$ | 461,485 |
| Administration \& General | 3,340,577 | 87,171 | - | 8,687 | $(173,889)$ | 3,262,546 |
| Other (Diversified projects) | 18,143 | 474 | - | - | (944) | 17,673 |
| Construction | - | - | - | - | - | - |
| Total | 7,556,011 | 197,171 | $(30,590)$ | 122,222 | $(393,317)$ | 7,451,497 |


| Dakota Electric Association <br> TEST YEAR ADJUSTMENTS <br> ADJUSTMENTS - OTHER |  |
| :---: | :---: |
| Adjustment to Depreciation |  |
| Depreciation on Existing Plant |  |
| 1. Depreciation expense for the month of December 2018: | \$ 890,504 |
| 2. Multiply by 12 months. | 12 |
| 3. Normalized Depreciation Expense on Existing Plant | \$ 10,686,048 |
| Depreciation for the Pro Forma Test Year | \$ 10,686,048 |
| Less Historical 2018 Depreciation | (10,281,975) |
| Adjustment for Test Year | \$ 404,073 |
| Adjustment to Property Tax Expense |  |
| 1. Property Tax booked in the Historical Test Year: | \$ 3,371,493 |
| 2. Property Tax to be booked in the next 12 months: | 3,550,000 |
| Property Tax Adjustment | \$ 178,507 |

Note:
Current annual depreciation rates are outlined in the 5 -year depreciation study in Docket No. E111/D-17-505.

| TEST YEAR ADJUSTMENTS ADJUSTMENTS - OTHER (continued) |  |  |
| :---: | :---: | :---: |
| Projected Reduction in Total CIP Spending 2018 Actual to 2019 Budget |  |  |
| 2019 Budget CIP Spending | \$ | 2,206,786 |
| 2018 Actual Spending |  | 2,407,082 |
| Adjustment for CIP Spending | \$ | $(200,296)$ |
| Adjustment to Regulatory Filing Fees |  |  |
| 1. Indirect Assessments for 2019 Budget <br> 2 Direct Assessments for 2019 Budget Total Assessments | \$ | 344,000 |
|  |  | 85,000 |
|  | \$ | 429,000 |
| Assessments for the Pro Forma Test Year | \$ | 429,000 |
| Less Historical 2018 Filing Fees |  | $(410,200)$ |
| Adjustment for Test Year | \$ | 18,800 |


| Dakota Electric Association |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TEST YEAR ADJUSTMENTS ADJUSTMENTS - OTHER (continued) |  |  |  |  |  |
|  | FERC Acct |  | Project Code |  |  |
| Adjustment for Rate Filing Expense |  |  |  |  |  |
| Estimated Rate Filing Expense (excluding internal labor) |  |  | RATECASE19 | \$ | 410,000 |
| Amortize over 5 years |  |  |  |  | 5 |
| Adjustment (to A\&G Expense) | 928 |  |  | \$ | 82,000 |
| Adjustment for nonrecurring reimbursements |  |  |  |  |  |
| Adjustment for nonrecurring reimbursements |  |  |  | \$ | - |
| Other Adjustments |  |  |  |  |  |
| Normalize Contracted Services for Kubra Data Transfer Services |  |  |  | \$ | 36,758 |
| Normalize Contracted Services for Itineris |  |  |  |  | 109,080 |
| Normalize Collection Recovery Costs |  |  |  |  | 27,358 |
| Normalize Contracted Services for meter reading |  |  |  |  | 13,952 |
| Normalize for Circuits Redesign and advertising removal |  |  |  |  | 2,300 |
| Distributed Generation contracts terminated |  |  |  |  | 19,320 |
| Subsidiaries contracts terminated |  |  |  |  | 6,129 |
| Dispatching contracts terminated |  |  |  |  | 24,308 |
| Internet project completed (only depreciation remaining) |  |  |  |  | $(8,496)$ |
| Removal of AGi project |  |  |  |  | $(382,291)$ |
| New broadband lease agreement (shared expense with GRE) |  |  |  |  | 33,077 |
| Other Adjustments |  |  |  | \$ | $(118,505)$ |
| Adjustment for Disallowed Expenses |  |  | Project |  |  |
| Exclude Touchstone Energy Branding Project | 920 |  | BRANDING |  | $(115,225)$ |
| Exclude Image bill insert | 909 |  | Portion of MKT |  | $(7,667)$ |
| Customer Relations Disallowed Expenses: |  |  |  |  |  |
| Exclude Customer Zoo Event | 930 |  | CUSEVENT |  | $(37,608)$ |
| Subtract 50\% of Donation Project \$ Disallowed: |  |  |  |  |  |
| Community Donations | 426.1 | 50\% | DONCOMM |  | $(8,663)$ |
| Human Services Donations | 426.1 | 50\% | DONHUMSV |  | $(6,873)$ |
| Special Donations | 426.1 | 50\% | DONSPEC |  | $(9,500)$ |
| Youth Donations | 426.1 | 50\% | DONYOUTH |  | $(13,958)$ |
| Other Donations | 426.1 | 50\% | Various |  | (250) |
|  |  |  |  | \$ | $(199,744)$ |

## Summary of Consumers, Energy Sales, and Revenue Under Present Rates

## I. Consumer and Sales Data for 2018 (As Recorded)

| (a) | (b) | (c) | (d) | (e) | (f) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Line <br> No. | Description | Avg. No. Cons. | Energy Sales ${ }^{1}$ | $\begin{gathered} \text { Billing } \\ \text { Demand }^{11} \\ \hline \end{gathered}$ | Revenue ${ }^{1}$ |
|  |  |  | (kWh) | (kW) | (\$) |
| 1 | Residential \& Farm Service (31) | 99,322 | 867,819,897 | N.A. | 116,867,077 |
| 2 | Residential \& Farm Demand Control (32) | 15 | 407,603 | 989 | 45,353 |
| 3 | Electric Vehicle (33) | 0 | 332,257 | N.A. | 25,854 |
| 4 | Irrigation Service (36) Firm | 9 | 301,498 | 3,464 | 90,636 |
| 5 | Irrigation Service (36) Interruptible | 382 | 8,585,963 | 81,869 | 961,923 |
| 6 | Small General Service (41) | 4,426 | 42,642,557 | N.A. | 5,744,594 |
| 7 | Security Lighting Service (44) - Closed to New | 831 | 446,106 | N.A. | 102,393 |
| 8 | Street Lighting Service (44-2) | 2,284 | 2,487,972 | N.A. | 463,839 |
| 9 | Street Lighting System (44-1) | 487 | 523,536 | N.A. | 70,135 |
| 10 | Custom Residential Street Lighting (44-3) | 12,233 | 7,432,586 | N.A. | 1,331,468 |
| 11 | LED Security Lighting Service (44-4) | 338 | 63,709 | N.A. | 30,558 |
| 12 | LED Street Lighting Member Owned(44-5) | 11 | 8,056 | N.A. | 1,196 |
| 13 | LED Street Lighting (44-6) | 465 | 171,871 | N.A. | 51,719 |
| 14 | Low Wattage Unmetered Service (45) | 66 | - | N.A. | 7,888 |
| 15 | General Service (46) | 2,696 | 449,957,114 | 1,404,899 | 48,236,894 |
| 16 | Municipal Civil Defense Sirens (47) | 66 | - | N.A. | 3,960 |
| 17 | Geothermal Heat Pump (49) Closed to New | 3 | 203,303 | N.A. | 19,781 |
| 18 | Controlled Energy Storage (51) | 1,280 | 10,853,238 | N.A. | 501,196 |
| 19 | Controlled Interruptible Service (52) | 6,403 | 49,078,197 | N.A. | 2,949,495 |
| 20 | Residential \& Farm Time of Day (53) | 18 | 217,249 | N.A. | 27,157 |
| 21 | General Service Time of Day (54) | 6 | 1,143,456 | 7,338 | 134,668 |
| 22 | Standby Service (60) | 1 | - | - | 65,387 |
| 23 | Full Interruptible Service (70) | 233 | 384,258,036 | 870,612 | 24,613,715 |
| 24 | Partial Interruptible Service (71) | 27 | 25,529,544 | 102,790 | 2,062,689 |
| 25 | Cycled Air Conditioning Service (80) | 41,630 | 4,754,757 | N.A. | $(1,786,057)$ |
| 26 | Wellspring |  |  |  | 6,959 |
| 27 | Total ${ }^{2}$ | 107,135 | 1,852,463,748 | 2,471,961 | 202,630,477 |

1 See Workpaper 12.
2 The total number of consumers excludes Security, Street \& Residential Lighting, Low Wattage Unmetered Service , Municipal Civil Defense Sirens, Controlled Off-Peak Energy Storage, Interruptible Heating, and Controlled Air Conditioning Service.

## Summary of Consumers, Energy Sales, and Revenue Under Present Rates

(Continued)
II. Consumer and Sales Data for Pro Forma Test Year

| (a) | (b) | (c) | (d) | (e) | (f) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Line <br> No. | Description | 2019 Budget Avg No. Cons. | Energy <br> Sales | $\begin{gathered} \text { Billing } \\ \text { Demand }^{2} \\ \hline \end{gathered}$ | Revenue ${ }^{3}$ |
|  |  |  | (kWh) | (kW) | (\$) |
| 1 | Residential \& Farm Service (31) | 100,202 | 838,089,528 | N.A. | 114,332,035 |
| 2 | Residential \& Farm Demand Control (32) | 15 | 378,000 | 917.2 | 42,670 |
| 3 | Electric Vehicle (33) | 88 | 300,960 | N.A. | 24,636 |
| 4 | Irrigation Service (36) Firm | 8 | 162,528 | 1,867.3 | 50,143 |
| 5 | Irrigation Service (36) Interruptible | 384 | 7,801,344 | 74,387.5 | 862,089 |
| 6 | Small General Service (41) | 4,431 | 42,537,600 | N.A. | 5,799,609 |
| 7 | Security Lighting Service (44) - Closed to New | 878 | 405,600 | N.A. | 102,369 |
| 8 | Street Lighting Service (44-2) | 2,269 | 2,405,280 | N.A. | 466,293 |
| 9 | Street Lighting System (44-1) | 470 | 521,040 | N.A. | 72,603 |
| 10 | Custom Residential Street Lighting (44-3) | 12,190 | 6,750,960 | N.A. | 1,334,683 |
| 11 | LED Security Lighting Service (44-4) | 356 | 64,896 | N.A. | 31,109 |
| 12 | LED Street Lighting Member Owned(44-5) | 11 | 8,712 | N.A. | 1,297 |
| 13 | LED Street Lighting (44-6) | 597 | 202,152 | N.A. | 59,884 |
| 14 | Low Wattage Unmetered Service (45) | 71 | - | N.A. | 8,520 |
| 15 | General Service (46) | 2,750 | 462,000,000 | 1,442,500.4 | 50,261,766 |
| 16 | Municipal Civil Defense Sirens (47) | 66 | - | N.A. | 3,960 |
| 17 | Geothermal Heat Pump (49) Closed to New | 3 | 172,800 | N.A. | 16,571 |
| 18 | Controlled Energy Storage (51) | 1,718 | 10,308,000 | N.A. | 459,736 |
|  | Controlled Interruptible Service (52) | 6,686 | 44,127,600 | N.A. | 2,634,418 |
| 20 | Residential \& Farm Time of Day (53) | 18 | 216,216 | N.A. | 29,057 |
| 21 | General Service Time of Day (54) | 6 | 1,059,984 | 6,802.3 | 126,286 |
| 22 | Standby Service (60) | 1 | - |  | 66,840 |
| 23 | Full Interruptible Service (70) | 234 | 379,080,000 | 858,880.1 | 23,144,467 |
| 24 | Partial Interruptible Service (71) | 28 | 27,720,000 | 111,609.5 | 2,151,089 |
| 25 | Cycled Air Conditioning Service (80) | 41,880 | 5,075,000 | N.A. | $(1,625,193)$ |
| 26 | Wellspring |  |  |  | 23,370 |
| 27 | Total ${ }^{4}$ | 108,165 | 1,824,313,200 | 2,496,964.3 | 200,480,307 |
| 28 | Actual Revenue Recorded 2018 |  |  |  | 202,630,477 |
| 29 | Adjustment |  |  |  | $(2,150,170)$ |

[^91]
## Summary of Consumers, Energy Sales, and Revenue Under Present Rates

(Continued)
III. Estimate of Revenue Under Present Rates

| Rate Class | Billing Determinants | Units | Rate | Revenue |
| :---: | :---: | :---: | :---: | :---: |
| Residential \& Farm Service (31) |  |  |  | (\$) |
| Fixed Charge | 100,202 | cons. | \$9.00 | 10,821,816 |
| Energy Charge | 838,089,528 | kWh |  |  |
| Summer | 257,025,312 | kWh | \$0.13080 | 33,618,911 |
| Other | 581,064,216 | kWh | \$0.11680 | 67,868,300 |
|  |  |  | Subtotal | 112,309,027 |
| RTA Charge ${ }^{1}$ | 838,089,528 | kWh | \$0.00250 | 2,095,224 |
| Controlled Water Heater Credit | 1,003 | units | (\$6.00) | $(72,216)$ |
|  |  |  | Total | 114,332,035 |
| Residential \& Farm Demand Control (32) |  |  |  |  |
| Fixed Charge | 15 | cons. | \$12.00 | 2,160 |
| Demand Charge | 917.2 | kW |  |  |
| Summer | 182.2 | kW | \$14.70 | 2,678 |
| Other | 735.0 | kW | \$11.10 | 8,159 |
| Energy Charge | 378,000 | kWh | \$0.07600 | 28,728 |
|  |  |  | Subtotal | 41,725 |
| RTA Charge ${ }^{1}$ | 378,000 | kWh | \$0.00250 | 945 |
|  |  |  | Total | 42,670 |
| Electric Vehicle (33) |  |  |  |  |
| Energy Charge |  |  |  |  |
| Off Peak | 280,402 | kWh | \$0.06740 | 18,899 |
| On Peak | 8,554 | kWh | \$0.41440 | 3,545 |
| Other |  |  |  |  |
| Summer | 2,693 | kWh | \$0.13080 | 352 |
| Other | 9,311 | kWh | \$0.11680 | 1,088 |
|  |  |  | Subtotal | 23,884 |
| RTA Charge ${ }^{1}$ | 300,960 | kWh | \$0.00250 | 752 |

[^92]
# Summary of Consumers, Energy Sales, and Revenue Under Present Rates 

(Continued)

## III. Estimate of Revenue Under Present Rates

| Rate Class | Billing Determinants | Units | Rate | Revenue |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | (\$) |
| Irrigation Service (36) |  |  |  |  |
| Firm Service |  |  |  |  |
| Fixed Charge | 8 | cons. | \$30.00 | 2,880 |
| Demand Charge | 1,867.3 |  |  |  |
| Summer | 902.3 |  | \$26.35 | 23,776 |
| Winter |  | kW | \$20.95 | 52 |
| Other | 962.5 | kW | \$15.50 | 14,919 |
| Energy Charge | 162,528 | kWh | \$0.04990 | 8,110 |
|  |  |  | Subtotal | 49,737 |
| RTA Charge ${ }^{1}$ | 162,528 | kWh | \$0.00250 | 406 |
|  |  |  | Total | 50,143 |
| Interruptible Service |  |  |  |  |
| Fixed Charge | 384 | cons. | \$30.00 | 138,240 |
| Demand Charge | 74,388 | kW | \$4.55 | 338,463 |
| Energy Charge | 7,801,344 | kWh | \$0.04990 | 389,287 |
|  |  |  | Subtotal | 865,990 |
| RTA Charge ${ }^{1}$ | 7,801,344 | kWh | (\$0.00050) | $(3,901)$ |
|  |  |  | Total | 862,089 |
| Small General Service (41) |  |  |  |  |
| Fixed Charge | 4,431 | cons. | \$14.00 | 744,408 |
| Energy Charge | 42,537,600 | kWh |  |  |
| Summer | 10,541,910 | kWh | \$0.12690 | 1,337,768 |
| Other | 31,995,690 | kWh | \$0.11290 | 3,612,313 |
|  |  |  | Subtotal | 5,694,489 |
| RTA Charge ${ }^{1}$ | 42,537,600 |  | \$0.00250 | 106,344 |
| Controlled Water Heater Credit |  | units | (\$6.00) | $(1,224)$ |
|  |  |  | Total | 5,799,609 |

[^93]Exhibit 1,2,4-8 FINAL.xlsx

# Summary of Consumers, Energy Sales, and Revenue Under Present Rates 

(Continued)
III. Estimate of Revenue Under Present Rates

| Rate Class |
| :--- |
| Security Lighting Service (44) |

$$
175 \mathrm{~W} \text { MV }
$$

100 W HPS
150 W HPS
250 W HPS
RTA Charge ${ }^{1}$

Street Lighting Service (44-2)
175 W MV
250 W MV
400 W MV
100 W HPS
150 W HPS
250 W HPS
400 W HPS
RTA Charge ${ }^{1}$

## Street Lighting System (44-1)

| 175 W MV | - | lights | \$10.52 | 0 |
| :---: | :---: | :---: | :---: | :---: |
| 250 W MV | - | lights | \$13.46 | 0 |
| 400 W MV | - | lights | \$18.54 | 0 |
| 100 W HPS | - | lights | \$7.56 | 0 |
| 150 W HPS | 101 | lights | \$9.46 | 11,466 |
| 200 W HPS | 101 | lights | \$11.41 | 13,829 |
| 250 W HPS | 272 | lights | \$13.25 | 43,248 |
| 400 W HPS | 13 | lights | \$17.67 | 2,757 |
|  | 487 | lights | Subtotal | 71,300 |
| RTA Charge ${ }^{1}$ | 521,040 | kWh | \$0.00250 | 1,303 |
|  |  |  | Total | 72,603 |

# Summary of Consumers, Energy Sales, and Revenue Under Present Rates 

(Continued)
III. Estimate of Revenue Under Present Rates

|  | Billing <br> Rate Class | Determinants | Units | Rate |
| :---: | :---: | :---: | :---: | :---: | Revenue | (\$) |
| :---: |

## Custom Residential Street Lighting (44-3)

| 175 W MV | - | lights | \$11.37 | 0 |
| :---: | :---: | :---: | :---: | :---: |
| 50 W HPS | 81 | lights | \$6.70 | 6,512 |
| 100 W HPS | 8,416 | lights | \$8.41 | 849,343 |
| 150 W HPS | 3,732 | lights | \$10.30 | 461,275 |
| 250 W HPS | 4 | lights | \$14.09 | 676 |
|  | 12,233 | lights | Subtotal | 1,317,806 |
| RTA Charge ${ }^{1}$ | 6,750,960 | kWh | \$0.00250 | 16,877 |
|  |  |  | Total | 1,334,683 |

## LED Security Lighting (44-4)

LED, >4,500 Lumens
RTA Charge ${ }^{1}$

## LED Street Lighting Member Owned(44-5)

A (40-80 watts)
B (81-150 watts)
C (151-250 watts)
D (251-350 watts)
E (351-450 watts)
RTA Charge ${ }^{1}$

| - | lights | $\$$ | 4.81 | - |
| :---: | :---: | :---: | ---: | :---: |
| - | lights | $\$$ | 6.71 | - |
| 11 | lights | $\$$ | 9.66 | 1,275 |
| - | lights | $\$$ | 13.05 | - |
| - | lights | $\$$ | 16.52 | - |
| 11 | Subtotal | 1,275 |  |  |
| $8,712 \mathrm{kWh}$ | $\$ 0.00250$ | 22 |  |  |
|  |  |  |  |  |

[^94]
# Summary of Consumers, Energy Sales, and Revenue Under Present Rates 

(Continued)
III. Estimate of Revenue Under Present Rates

Rate Cla
LED Street Lighting (44-6)

## Standard

$>5,200 \mathrm{~L}$, Coach (Post)
$>5,200 \mathrm{~L}$, Acorn (Post)
$>7,000 \mathrm{~L}$, Cobra (Mast)
$>11,500$ L, Shoebox

## Basic

$>5,200 \mathrm{~L}$, Coach (Post)
$>5,200 \mathrm{~L}$, Acorn (Post)
$>7,000 \mathrm{~L}$, Cobra (Mast)
>11,500 L, Shoebox
RTA Charge ${ }^{1}$
41 lights
0 lights
53 lights
16 lights
521

| $\$ 6.83$ | 3,360 |
| ---: | ---: |
| $\$ 6.30$ | - |
| $\$ 6.51$ | 4,140 |
| $\$ 7.98$ | 1,532 |
| $\$ 0.00250$ | 59,379 |
|  | 505 |

## Low Wattage Unmetered Service (45)

Fixed Charge
71 cons.
$\$ 10.00 \quad 8,520$

## General Service (46)

Fixed Charge
Demand Charge
Summer
Other
Energy Charge
First 200 kWh/kW
Next 200 kWh/kW
Over $400 \mathrm{kWh} / \mathrm{kW}$
Discounts
Primary Voltage
Primary Metering
RTA Charge ${ }^{1}$

Billing
Determinants Units
Units Rate
Revenue
(\$)

# Summary of Consumers, Energy Sales, and <br> Revenue Under Present Rates 

(Continued)
III. Estimate of Revenue Under Present Rates

| Rate Class |
| :--- |
| Municipal Civil Defense Sirens (47) |
| Fixed Charge |

## Geothermal Heat Pump (49)

Energy Charge
RTA Charge ${ }^{1}$

| 172,800 | kWh | $\$ 0.09400$ | 16,243 |
| :--- | :--- | :--- | ---: |
|  |  | Subtotal | 16,243 |
| 172,800 | kWh | $\$ 0.00190$ | 328 |
|  |  | Total | 16,571 |
|  |  |  |  |

## Controlled Off-Peak Space \& Energy Storage (51)

Energy Net Charge - Rate 31
Summer
Other
Energy Charge - Rate 41
Summer
Other
Energy Charge - Rate 46
RTA Charge ${ }^{1}$

## Interruptible Heating Service (52)

Energy Net Charge - Rate 31
Summer
Other
Energy Charge - Rate 41
Summer
Other
Energy Charge - Rate 46

RTA Charge ${ }^{1}$

[^95]Exhibit 1,2,4-8 FINAL.xlsx

## Summary of Consumers, Energy Sales, and Revenue Under Present Rates

(Continued)
III. Estimate of Revenue Under Present Rates

|  | Billing |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Rate Class | Determinants | Units | Rate | Revenue |

## Residential \& Farm Time of Day (53)

Fixed Charge
Energy Charge
Peak Period
Summer
Other
Off-Peak Period

RTA Charge ${ }^{1}$

## General Service Time of Day (54)

Fixed Charge
Demand Charge
Peak Period
Summer
Winter
Other
Maximum
Energy Charge

Discounts
Primary Voltage
Primary Metering
RTA Charge ${ }^{1}$

Standby Service Large Power General (60)
Generation Reservation Fee
Summer
Winter
Other
Distribution Reservation Fee
Primary
Secondary

6 cons.
6,802.3
960.1 kW
436.9 kW

1,253.2 kW
4,152.1 kW
1,059,984 kWh
$\$ 4.75$
$\$ 0.04990$ Subtotal

| kW |  |
| ---: | :--- |
| $1,059,984$ | kWh |


|  | $(\$ 0.15)$ |
| ---: | :--- |
| $(2.00 \%)$ |  |
| $\$ 0.00250$ |  |


| 2,650 |
| ---: |
| 126,286 |

${ }^{1} 2019$ applied RTA.

## Summary of Consumers, Energy Sales, and Revenue Under Present Rates

(Continued)

## III. Estimate of Revenue Under Present Rates

| Rate Class | Billing <br> Determinants | Units | Rate | Revenue |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | (\$) |
| Full Interruptible Service (70) |  |  |  |  |
| Fixed Charge | 234 | cons. | \$110.00 | 308,880 |
| Communication Fee | 51 |  | \$8.70 | 5,324 |
| Coinc. Demand Charge |  |  |  |  |
| Summer | 1,042.8 | kW | \$24.85 | 25,914 |
| Winter | 0.0 | kW | \$18.95 | 0 |
| Other | 0.0 | kW | \$13.00 | 0 |
| Total Coinc Demand | 1,042.8 | kW |  |  |
| Non-Coinc. Demand | 858,880.1 | kW | \$4.75 | 4,079,680 |
| Failure to Control | 1,042.8 |  | \$5.00 | 5,214 |
| Energy Charge | 379,080,000 | kWh | \$0.04990 | 18,916,092 |
| Discounts |  |  | Subtotal | 23,341,104 |
| Primary Voltage | 47,311.12 | kW | (\$0.15) | $(\$ 7,097)$ |
| Primary Metering | - |  | (2.0\%) | \$0 |
| RTA Charge ${ }^{1}$ | 379,080,000 | kWh | (\$0.00050) | $(189,540)$ |
|  |  |  | Total | 23,144,467 |
| Partial Interruptible Service (71) |  |  |  |  |
| Fixed Charge | 28 | cons. | \$110.00 | 36,960 |
| Communication Fee | 17 |  | \$8.70 | 1,775 |
| Coinc. Demand Charge |  |  |  |  |
| Summer | 3,212.2 | kW | \$24.85 | 79,823 |
| Winter | 2,980.2 | kW | \$18.95 | 56,475 |
| Other | 5,964.3 | kW | \$13.00 | 77,536 |
| Total Coinc Demand | 12,156.7 | kW |  |  |
| Non-Coinc. Demand | 111,610 | kW | \$4.75 | 530,145 |
| Excess Demand |  | kW | \$5.00 | 0 |
| Energy Charge | 27,720,000 | kWh | \$0.04990 | 1,383,228 |
| Discounts |  |  | Subtotal | 2,165,942 |
| Primary Voltage | 6,622.67 | kW | \$0.15 | (993) |
| Primary Metering | 0 |  | 2.00\% | - |
| RTA Charge ${ }^{1}$ | 27,720,000 | kWh | (\$0.00050) | $(13,860)$ |
|  |  |  | Total | 2,151,089 |

[^96]
## Summary of Consumers, Energy Sales, and Revenue Under Present Rates

(Continued)
III. Estimate of Revenue Under Present Rates

| Rate Class | Billing <br> Determinants | Units | Rate | Revenue |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | (\$) |
| Controlled Air Conditioning Service (80) |  |  |  |  |
| Option 1 |  | kWh | \$0.00 | 0 |
| Option 2 |  |  |  |  |
| Residential Rate 81/31 | 4,858,654 | kWh | (\$0.03200) | $(155,477)$ |
| Rate 81/41 | 216,346 | kWh | (\$0.03200) | $(6,923)$ |
| Rate 81/46 | 0 | kWh | (\$0.03200) | 0 |
|  | 5,075,000 | kWh |  | $(162,400)$ |
| Option 3 |  |  |  |  |
| Residential Rate 82/31 | 35,158 | cons. | (\$13.00) | $(1,371,162)$ |
| Commercial | 0 | cons. | (\$13.00) | 0 |
|  | 35,158 |  |  | $(1,371,162)$ |
| Option 4 |  |  |  |  |
| Rate 84/41 | 4,699 | tons | (\$6.50) | $(91,631)$ |
| Rate 84/46 | 0 | tons | (\$6.50) | 0 |
|  | 4,699 |  |  | $(91,631)$ |
|  |  |  | tal | $(1,625,193)$ |

$$
\begin{array}{ll}
\text { Wellspring } & \text { 23,370 }
\end{array}
$$

## Estimate of Pro Forma

## Test Year Purchased Power Expense



[^97]
## STATE OF MINNESOTA

## BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

In the Matter of the Application of DAKOTA ELECTRIC ASSOCIATION
for Authority to Increase Rates for
Electric Service in Minnesota
Docket No. E-111/GR-19-478

PREFILED DIRECT TESTIMONY OF
DOUGLAS R. LARSON
VICE PRESIDENT OF REGULATORY SERVICES
DAKOTA ELECTRIC ASSOCIATION

STATE OF MINNESOTA
BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION
In the Matter of the Application of
DAKOTA ELECTRIC ASSOCIATION,
for Authority to Increase Rates
Docket No. E-111/GR-19-478
for Electric Service in Minnesota

PREFILED DIRECT TESTIMONY OF
VICE PRESIDENT OF REGULATORY SERVICES
DAKOTA ELECTRIC ASSOCIATION

## I. QUALIFICATIONS

Q. Please state your name.
A. My name is Douglas R. Larson.
Q. Where are you employed?
A. I am employed by Dakota Electric Association (DEA, Dakota Electric, or Cooperative).

Dakota Electric's headquarters are located at $4300220^{\text {th }}$ Street West, Farmington, Minnesota 55024.
Q. Please describe the business activities of Dakota Electric.
A. Dakota Electric Association was founded in 1937 as a non-profit, member-owned distribution electric utility. It serves about 108,000 members in an area covering much of Dakota County, just south of Minneapolis and St. Paul. Dakota Electric also provides electric service in portions of Scott, Rice and Goodhue counties.

Dakota Electric purchases wholesale electricity from Great River Energy (GRE), located in Maple Grove, Minnesota.

Testimony of D.R. Larson, page 2

A twelve-person elected board of directors made up of members governs the Cooperative. Dakota Electric is also regulated by the Minnesota Public Utilities Commission and is the only rate-regulated electric cooperative in Minnesota.
Q. Please state your title and describe your responsibilities with Dakota Electric Association.
A. I am Vice President of Regulatory Services. In this position, I am responsible for 1) developing new rates, monitoring existing rates, submitting miscellaneous tariff filings, and coordinating and/or preparing all necessary information pertaining to rate increase filings; 2) evaluating power supply issues through participation in meetings at Great River Energy; and 3) monitoring state and federal electric utility and environmental legislation and determining the potential affect on DEA's operation as a distribution cooperative.
Q. What is your educational and professional background?
A. My educational and professional background is summarized in Schedule 1 attached to this direct testimony.
Q. Have you previously presented testimony before the MPUC?
A. Yes. Schedule 2 attached to this direct testimony identifies the electric and natural gas utility general rate case proceedings, electric service territory compensation hearings, the contested rulemaking and the certificate of need proceeding in which I have presented testimony before the MPUC.

Testimony of D.R. Larson, page 3
Q. Have you submitted testimony to other state regulatory commissions?
A. Yes. Schedule 2 attached to this direct testimony also identifies the electric utility general rate case proceedings in which I have presented testimony before other state regulatory commissions.

## II. PURPOSE OF TESTIMONY

Q. What is the purpose of your testimony in this proceeding?
A. The purpose of my testimony is to present the analysis of Dakota Electric's revenue requirements, class cost of service study and proposed rates within the context of the 2018 Historical Test Year, adjusted for known and measurable changes.
Q. Please describe the organization of your direct testimony.
A. My direct testimony is organized around the following sections with topics covered as follows:

| Section I | Qualifications <br> - Identification <br> - Educational and professional background <br> - Previous testimony |
| :---: | :---: |
| Section II | Purpose of Testimony <br> - Organization of testimony <br> - Identification of exhibits <br> - Identification of workpapers |
| Section III | Summary of Filing |
| Section IV | Revenue Requirements <br> - Statement of Operations <br> - Rate of Return |
| Section V | Cost of Service Study <br> - COS overview <br> - Identify COS content <br> - General procedure for conducting COS <br> - Identify and summarize COS results |
| Section VI | Other Cost Analyses <br> - Load Management Cost Analysis |

Testimony of D.R. Larson, page 4

- Monthly Fixed Charge Cost Analysis
- Coincidental Demand Charges
- Special Fees and Charges
- Line Extension Analysis
- Base Calculations for Resource and Tax Adjustment
- Air Conditioning Analysis
- Standby Rate Analysis
- Electric Vehicle Rate Analysis
- Residential TOU Analysis

Section VII Rate Design

- Approach to rate design
- Proposed rates

Section VIII Summary and Conclusion
Q. Please identify the exhibits included with your testimony.
A. The following exhibits are included as part of my testimony:

| Exhibit__(DEA-1) | Statement of Operations - Present Rates |
| :--- | :--- |
| Exhibit_(DEA-2) | Determination of Revenue Requirements |
| Exhibit__(DEA-3) | Cost of Service Analysis |
| Exhibit__(DEA-4) | Load Management Cost Analysis |
| Exhibit__(DEA-5) | Statement of Operations - Proposed Rates <br> Comparison of Present and Proposed Rates |
| Exhibit__(DEA-6) | Monthly Fixed Charge Analysis |
| Exhibit__(DEA-7) | Coincidental Demand Charges |
| Exhibit__(DEA-8) | Summary of Lead-Lag Study |
| Exhibit__(DEA-9) | Special Fees and Charges |
| Exhibit__(DEA-10) | Line Extension Analysis |
| Exhibit__(DEA-11) | Base Calculations for Resource and Tax Adjustment |
| Exhibit__(DEA-12) | Air Conditioning Analysis |
| Exhibit__(DEA-13) | Standby Rate Analysis |
| Exhibit__(DEA-14) | Electric Vehicle Rate Analysis |
| Exhibit__(DEA-15) | Residential TOU Rate Analysis |
| Exhibit__(DEA-16) | Present Rate Schedules |
| Exhibit__(DEA-17) | Blackline Mark-up of Present Rate Schedules |
| Exhibit__(DEA-18) | Proposed Rate Schedules |
| Exhibit__(DEA-19) |  |

Testimony of D.R. Larson, page 5
Q. Please identify the documents included in the workpapers you have submitted:
A. The workpapers include the following documents:

1) Form 7s 2014-2018
2) Audited 2018 Financials and 2018 Annual Report
3) Accounting System Description and Cross-Reference Projects to Form 7
4) 2019 Budget ( 2017 \& 2018 Actual)
5) Long Range Forecast
6) Lead-Lag Study Detail
7) Cost Allocation Policy
8) Depreciation Summary
9) Conservation Improvement Program
10) Estimate of System Losses and System Own Use
11) Individual Customer Actual 2018 Usage and Demand by Rate Class
12) Monthly Billed Sales 2013-2018
13) Sales History and Forecasted Test Year Normalization
14) Property Tax Detail
15) Travel, Entertainment and Related Employee Expenses
16) Test Year Adjustments Bridge Schedule
17) Long Term Interest Expense / Prudently Incurred
18) Advertising
19) Donations / Charitable Contributions
20) Organizational Dues
21) Minimum Size Method w/ Demand Adjustment
22) Guide to the Cost of Service Study
23) Street Lighting Analysis
24) Reconciliation
25) Smart Metering Statement
Q. Has the material included in your exhibits and workpapers been prepared by you or by others under your direction?
A. The exhibits and workpapers I am sponsoring have been prepared by myself and others at Dakota Electric. In addition, the cost of service study model was completed by Richard J. Macke at Power System Engineering, Inc.

Testimony of D.R. Larson, page 6

## III. SUMMARY OF FILING

## Q. What are Dakota Electric's objectives in filing this general rate case?

A. Dakota Electric has two objectives in filing this general rate case. The first objective is financial. Dakota Electric's 2019 budget has negative operating margins of about $(\$ 2,250,000)$, making an increase in rates necessary. This general rate filing will allow the Cooperative to increase distribution operating revenues and achieve acceptable financial operating results. The second objective of this general rate filing is to make continuing adjustments to align class rates and revenue with the cost of providing service.
Q. Would you please summarize the revenue requirement, COS study results and proposed rate design results contained in your testimony?
A. Revenue Requirements -- Summary

The revenue requirements of the Cooperative simply refer to the total cost of doing business and are comprised of operating expenses plus margin requirements. By comparing the revenue requirements against present revenue, the adequacy of the present rates can be assessed; and a general change in rates can be discussed.

Operating expenses for the Cooperative (excluding interest) total $\$ 199,769,626$. We have calculated a proposed Rate of Return (ROR) on rate base of 5.73 percent, resulting in a required revenue increase of $\$ 8,727,396$ or 4.35 percent. The following table presents a summary of the revenue requirements analysis for the 2018 Test Year:


## Class Cost of Service -- Summary

Once the overall revenue requirements analysis was complete, the class Cost of Service (COS) analysis was prepared by Power System Engineering, Inc. This analysis is aimed at identifying the cost responsibility of each rate class and uses the same model approved by the MPUC in our 2003, 2009, and 2014 general rate cases with refinements described later in my testimony. The COS is also useful in determining the cost components of each rate class (i.e. member, energy and demand costs). The results of the class COS analysis are summarized on the following table:

Testimony of D.R. Larson, page 8

| Table 2 <br> Cost of Service Summary |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Rate Class |  | Revenue Requirement | Increase (Decrease) |  |
|  |  |  | Amount | Percent ${ }^{2}$ |
|  | (\$) | (\$) | (\$) | (\%) |
| Residential \& Farm ( $31,32,53$ ) | 113,507,080 | 119,475,495 | 5,968,415 | 5.29 |
| Small General Service (41) | 5,732,872 | 6,242,283 | 509,411 | 8.94 |
| Irrigation (36) | 917,323 | 892,507 | $(24,816)$ | (2.72) |
| General Service ( 46,54 ) | 50,669,263 | 50,536,453 | $(132,811)$ | (0.26) |
| C\&I Interruptible ( 70,71 ) | 25,436,728 | 27,455,236 | 2,018,508 | 7.98 |
| Lighting | 2,079,781 | 2,468,469 | 388,689 | 18.79 |
|  |  |  | Total System | 4.35 |

It is important, at this point, to distinguish between the COS and actual rate design. Due to the limitations inherent to a COS analysis, these results should be viewed as providing a general range of where rates should be. It is, in fact, uncommon for rates to be designed exactly in line with COS results.

Includes an allocated share of Other Operating Revenue.
Percentage is calculated using only rate schedule revenue (excludes Other Operating Revenue).

Testimony of D.R. Larson, page 9

Proposed Rates - Summary

Using the completed COS analysis, and in conjunction with Dakota Electric management and board of directors, we developed proposed rates. These rates are designed to meet various objectives of Dakota Electric and are discussed later in my testimony. The following table summarizes the impact of the proposed rates on Dakota Electric's rate revenue by service schedule:

| (a) | (b) | (c) | (d) | (e) | (f) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Revenue | Revenue |  |  |
| Line |  | Present | Proposed | Increase (Decrease) |  |
| No. | Rate Class | Rates <br> (\$) | Rates <br> (\$) | Amount <br> (\$) | Percent <br> (\%) |
| 1 | Residential \& Farm Service (31) | 114,332,035 | 119,389,671 | 5,057,636 | 4.42 |
| 2 | Residential \& Farm Demand Control (32) | 42,670 | 44,529 | 1,859 | 4.36 |
| 3 | Electric Vehicle (33) | 24,636 | 26,505 | 1,869 | 7.59 |
| 4 | Irrigation Service (36) Firm | 50,143 | 50,484 | 341 | 0.68 |
| 5 | Irrigation Service (36) Interruptible | 862,089 | 883,153 | 21,064 | 2.44 |
| 6 | Small General Service (41) | 5,799,609 | 6,197,337 | 397,728 | 6.86 |
| 7 | Security Lighting Service (44) | 102,369 | 120,526 | 18,157 | 17.74 |
| 8 | Street Lighting Service (44-2) | 466,293 | 524,779 | 58,486 | 12.54 |
| 9 | Street Lighting System (44-1) | 72,603 | 88,142 | 15,539 | 21.40 |
| 10 | Custom Residential Street Lighting (44-3) | 1,334,683 | 1,623,968 | 289,285 | 21.67 |
| 11 | LED Security Lighting Service (44-4) | 31,109 | 31,434 | 325 | 1.04 |
| 12 | LED Street Lghtg Member-Owned(44-5) | 1,297 | 1,473 | 176 | 13.57 |
| 13 | LED Street Lighting (44-6) | 59,884 | 57,768 | $(2,116)$ | (3.53) |
| 14 | Low Wattage Unmetered Service (45) | 8,520 | 8,946 | 426 | 5.00 |
| 15 | General Service (46) | 50,261,766 | 51,183,966 | 922,200 | 1.83 |
| 16 | Municipal Civil Defense Sirens (47) | 3,960 | 3,960 | - |  |
| 17 | Geothermal Heat Pump (49) | 16,571 | 17,798 | 1,227 | 7.40 |
| 18 | Controlled Energy Storage (51) | 459,736 | 502,001 | 42,265 | 9.19 |
| 19 | Controlled Interruptible Service (52) | 2,634,418 | 2,784,452 | 150,034 | 5.70 |
| 20 | Residential \& Farm Time of Day (53) | 29,057 | 30,323 | 1,266 | 4.36 |
| 21 | General Service Time of Day (54) | 126,286 | 130,543 | 4,257 | 3.37 |
| 22 | Standby Service (60) | 66,840 | 74,160 | 7,320 | 10.95 |
| 23 | Full Interruptible Service (70) | 23,144,467 | 24,654,929 | 1,510,462 | 6.53 |
| 24 | Partial Interruptible Service (71) | 2,151,089 | 2,299,459 | 148,370 | 6.90 |
| 25 | Cycled Air Conditioning Service (80) | $(1,625,193)$ | $(1,625,193)$ | - |  |

Testimony of D.R. Larson, page 10

## IV. REVENUE REQUIREMENTS

## Q. Please summarize the concept of revenue requirements.

A. In order to ensure financial viability, the Cooperative's retail rates must generate sufficient revenue to meet operating expenses and margin requirements. The margin requirement must in turn be adequate to cover interest expense, meet our lenders financial covenants and accomplish other capital management objectives such as rotating patronage capital and maintaining (or achieving) the desired equity position. In this testimony I will refer to the total operating expense and margin requirement as the "revenue requirements" of the Cooperative. This is expressed by the following equation:

REVENUE REQUIREMENTS $=$ OPERATING EXPENSE + MARGIN REQUIREMENT

To evaluate a cooperative's revenue requirement and the adequacy of its present rate structure to meet the requirement, it is common practice to analyze revenue and costs for a 12-month period of time called the Test Year.

## Q. What Test Year was used to determine revenue requirements?

A. The Test Year revenue requirements for the study were based on Dakota Electric's actual historical operations for calendar year 2018, with adjustments for known and measurable changes.

## Q. Has a Statement of Operations been prepared for the Test Year based on the revenue

 generated by DEA's present rates?A. Yes. Exhibit__(DEA-1) provides a Statement of Operations for the Test Year based on the revenue generated by DEA's present rates.

Testimony of D.R. Larson, page 11

Page 1 of Exhibit_(DEA-1) provides a summary of the Statement of Operations for the historical Test Year calendar 2018. The results shown in Column C reflect an unadjusted Test Year as actually recorded on DEA's books for the period January 1, 2018 through December 31, 2018 and correspond to the results shown in Exhibit_(DEA-2), page 1, Column C. Column D summarizes the various normalizing adjustments to the revenue and expense accounts proposed by the Cooperative with the resulting adjusted Pro Forma Test Year shown in Column E.

Page 2 of Exhibit_(DEA-1) provides a summary of each of the proposed adjustments. Pages 3 through 10 of Exhibit_(DEA-1) provide the detailed calculations for the following adjustments:

- Payroll;
- Payroll benefits;
- Depreciation;
- Other Adjustments;
- Property taxes;
- Reduction in CIP spending 2018 actual to 2019 budget;
- Regulatory filing fees;
- Rate Case filing fees recovery over 5 years; and
- Net deduction for disallowed expenses.

Page 11 of Exhibit_(DEA-1) presents the average number of consumers, energy sales, billing demand and revenue for Dakota Electric's rate classes as recorded for calendar year 2018.

Pages 12 through 21 of Exhibit_(DEA-1) present the calculation of revenue under present rates for the Pro Forma Test Year. That is, these pages multiply Pro Forma Test Year number of consumers, energy sales and billing demand times appropriate service schedule rates to determine the class and system revenue for the Pro Forma Test Year. These revenue calculations are based on Dakota Electric's present tariffed fixed, energy and demand rates

Testimony of D.R. Larson, page 12
for various rate schedules, including the Resource and Tax Adjustment (RTA) charges and/or credits that became effective on January 1, 2019. The calculation of forecasted Test Year billing units is shown in Workpaper 13. The forecasted billing units rely on regression analysis for the residential rate class which is most sensitive to fluctuating consumption based on changing weather. For those classes that do not experience such consumption fluctuations due to weather, the Test Year billing units reflect the higher of the 2019 budgeted units or a 10-year trendline analysis.

Finally, page 22 of Exhibit__(DEA-1) presents an overview of wholesale power costs.

## Q. What are Dakota Electric's Test Year revenue requirements?

A. Exhibit__(DEA-2) summarizes the operating results for DEA on both an unadjusted and an adjusted basis for the Test Year ended December 31, 2018. A summary of the Operating Statement is provided as follows:

| Table 4 <br> Statement of Operations - Present Rates |  |  |
| :---: | :---: | :---: |
| Description | $\begin{gathered} 2018 \\ \text { Actual } \\ \hline \end{gathered}$ | Pro Forma Test Year |
|  | (\$) | (\$) |
| Operating Revenue | 203,138,675 | 201,581,098 |
| Operating Expenses ${ }^{3}$ | 197,774,614 | 199,769,626 |
| Net Operating Income | 5,364,061 | 1,811,472 |
| Non-Operating Income |  |  |
| Capital Credits | 5,111,212 | 5,111,212 |
| Other | 292,978 | 292,978 |
| Subtotal | 5,404,190 | 5,404,190 |
| Total Margins | 10,768,251 | 7,215,662 |

3 Before interest expense is deducted.

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It should be emphasized that the Net Operating Income stated is before interest expense on long term debt is deducted.

Furthermore, it is important to distinguish between operating income or margins and total income. Use of the term "operating" is intended to designate revenue and expenses associated with the basic utility function (i.e., supplying electric distribution service to members). It is to be distinguished from Non-Operating Income, such as interest earnings from short-term investments and patronage capital credit assignments from associated organizations. Because Non-Operating Income is outside the operations and direct control of the distribution cooperative, it is not generally considered in establishing the revenue requirement for retail ratemaking purposes. Retail rates are generally designed to be sufficient, but only sufficient, to cover the operating revenue requirement.

Page 1, Column D of Exhibit__(DEA-2) shows that, in order to achieve the required ROR of 5.73 percent, present rates would need to be increased by $\$ 8,727,396$ or about 4.35 percent.

## Q. How was Dakota Electric's margin requirement calculated?

A. To complete the Test Year Revenue Requirement, an appropriate level of margin must be added to the previously determined operating expenses. In establishing the level of margin required to achieve the Cooperative's financial objectives, we have determined an appropriate return on rate base using a calculation methodology recommended by the Department of Commerce and approved by the Commission in our last two general rate cases.

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Q. Please explain your determination of Rate of Return.
A. The Rate of Return method for establishing the Cooperative's margin requirement has been used by the Commission in Dakota Electric's general rate cases since we have been rateregulated in the early 1980's. The ROR method is intended to ensure that earnings are sufficient to cover the cost of debt (interest) and generate a fair return on the investment (equity) for the owners. When applied to cooperatives, the concept is intended to permit the development of sufficient margins to cover the cost of debt and equity capital. However, in the case of cooperatives, the term "return on equity" involves a totally different concept than it does for investor-owned utilities. Return on (or of) equity for cooperatives is related to the retirement, or rotation, of patronage capital. Thus, the ROR required for a cooperative must result in sufficient margins to:

1. Pay interest expense on long-term debt;
2. Rotate patronage capital as stated in the policy of the cooperative;
3. Maintain or achieve the desired equity position; while
4. Meeting the financial covenants of our lenders.
Q. Has the rate-based ROR approach as applied to cooperatives been endorsed by the MPUC?
A. Yes. The method was originally endorsed by the MPUC in 1976 in a case involving Anoka Electric Cooperative (Docket No. U-75-103). Since that time, it has been used in all other cases involving cooperatives, including DEA's last rate filing (Docket No. E-111/GR-14-482).
Q. Please provide an overview of Dakota Electric's Rate of Return calculation.
A. The calculations necessary to determine the Cooperative's overall Rate of Return (ROR) are shown on pages 2 through 8 of Exhibit $\qquad$ (DEA-2). Page 2 of Exhibit $\qquad$ (DEA-2) shows

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the calculation of the Cooperative's Rate Base, with page 3 providing the supporting detail for Materials \& Supplies used in the determination of Rate Base. Page 4 summarizes Dakota Electric's loans with the National Rural Utilities Cooperative Finance Corporation (CFC), Farmer Mac, and CoBank. The Cooperative's overall cost of debt used in the Test Year is 3.77 percent. Page 5 of Exhibit__(DEA-2) reviews Dakota Electric's historic total capitalization (debt and equity) for the years 1998 through 2018. We note that the mean growth rate in historic total capitalization for 2013 through 2018 is estimated to be 3.52 percent. Page 6 of Exhibit__(DEA-2) shows the calculation of the natural logarithm asset growth rate. Dakota Electric applied the 5 year exponential growth rate in the rate of return calculation as was used in the last general rate case. The five year period encompasses nearterm years with more certainty in the growth forecast and aligns with our general expectation of filing rate cases at approximately five year intervals. Page 7 of Exhibit__(DEA-2) presents various ratio calculations. Finally, page 8 of Exhibit__(DEA2) shows the calculation of DEA's 5.73 percent proposed ROR on rate base.
Q. Please identify the input assumptions used to calculate the overall ROR on rate base.
A. The input assumptions used to calculate the overall ROR on rate base are as follows:

| Asset Growth Rate | $1.73 \%$ |
| :--- | ---: |
| Equity Ratio | $53.085 \%$ |
| Debt Ratio | $46.915 \%$ |
| Test Year Total Capital | $\$ 272,999,564$ |
| Test Year Total Equity | $\$ 173,151,167$ |
| Test Year Total Debt | $\$ 99,848,397$ |
| Annual Capital Credits | $\$ 3,500,000$ |
| Rate Base | $\$ 189,064,856$ |
| Cost of Long-Term Debt | $3.77 \%$ |

Testimony of D.R. Larson, page 16
Q. Please identify the calculation for determining return on equity.
A. The calculation for determining the 4.14 percent return on equity is as follows:

$$
\begin{aligned}
& \mathrm{K}=\mathrm{g}+(\mathrm{CC} /(\mathrm{ER} \times \mathrm{TC})) \\
& \text { where: } \\
& \\
& \\
& \\
& \\
& \\
& \\
& \\
& \mathrm{K}=\text { Rate of Return on Equity } \\
& \mathrm{CC}=\text { Capital Credits } \\
& \\
& \\
& \\
& \mathrm{ER}=\text { Equity Ratio } \\
& \mathrm{TC}=\text { Total Capital }
\end{aligned}
$$

Q. Please identify the calculation for determining overall cost of capital.
A. The calculation for determining the 3.97 percent overall cost of capital is as follows:

$$
\begin{array}{ll}
\text { OCC }=(\text { ER } \times \text { K })+((1-\text { ER }) \times \text { i }) \\
\text { where: } & \\
& \text { OCC }=\text { Overall Cost of Capital } \\
& \text { ER }=\text { Equity Ratio } \\
& \mathrm{K}=\text { Rate of Return on Equity } \\
& \mathrm{i}=\text { Cost of Long-Term Debt }
\end{array}
$$

Q. Please identify the calculation for determining overall rate of return on rate base.
A. The calculation for determining the 5.73 percent overall rate of return on rate base is as follows:

$$
\mathrm{ROR}=\mathrm{OCC} x(\mathrm{TC} / \mathrm{RB})
$$

where: $\quad$ ROR $=$ Return on Rate Base
OCC = Overall Cost of Capital
TC = Total Capital
RB = Rate Base

Testimony of D.R. Larson, page 17
Q. How does Rate of Return on Rate Base relate to the financial performance requirements of the Cooperative's lenders?
A. Rate of return on rate base is not a financial performance metric used by Dakota Electric's lenders.

## Q. Please explain.

A. The financial performance metric used by our lenders is Modified Debt Service Coverage (MDSC). MDSC measures the number of times operating cash flow covers debt service on long-term debt. MDSC is calculated as follows:

MDSC $=($ Operating Margins + Non-Operating Margins-Interest + Interest Expense + Depreciation and Amortization Expense for year + Cash received in respect of Generation and Transmission and other Capital Credits)/(All payments of principal and interest during calendar year)

For the National Rural Utilities Cooperative Finance Corporation (CFC), Dakota Electric must maintain at least a 1.35 modified debt service coverage ratio calculated as an average of the two highest, out of the most recent three years. The 1.35 MDSC is a default threshold.

For CoBank, Dakota Electric must maintain at least a 1.25 modified debt service coverage ratio each year. The 1.25 MDSC is an annual default threshold.
Q. How does the pro forma Test Year revenue requirement and proposed revenue increase translate to MDSC for the Cooperative?
A. The filed pro forma revenue requirement using the 5.73 percent calculated rate of return and proposed revenue increase results in a calculated MDSC of about 2.0.

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Q. How do these results compare to the MDSC financial performance of other cooperatives?
A. Benchmark information from CFC for 1) all cooperatives in the country, 2) Minnesota cooperatives, and 3) cooperatives of similar size to Dakota Electric is as follows:
"US Total" MDSC:
Annual 5 yr. avg. $=1.84$
2 of 3 yr . high avg. $=1.96$
Minnesota MDSC:
Annual 5 yr. avg. $=1.69$
2 of 3 yr . high avg. $=1.76$
Similar Size Cooperative MDSC:
Annual 5 yr. avg. $=1.99$
2 of 3 yr . high avg. $=2.19$
Dakota Electric's calculated Test Year MDSC of about 2.0 is at the average of cooperatives of similar size to Dakota Electric.
Q. Please summarize Dakota Electric's revenue requirements in this proceeding.
A. A summary of the revenue requirements is presented in Table 5. The details of these calculations are provided in Exhibit $\qquad$ (DEA-2).

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| Table 5 <br> Revenue Requirements Summary |  |  |
| :---: | :---: | :---: |
|  |  | (\$) |
| 1. Operating Expenses (Excluding Interest) |  | 199,769,626 |
| 2. Margin Requirements |  |  |
| a. Rate Base |  | 189,064,856 |
| b. Rate of Return |  | 5.73\% |
| c. Return Required |  | 10,831,846 |
| d. Less: Non-Operating Income |  | 292,978 |
| e. Net Operating Income Required |  | 10,538,868 |
| 3. Total Revenue Requirements |  | 210,308,494 |
| 4. Revenue from Present Rates |  |  |
| a. Tariff Revenue (net of RTA) |  | 200,480,307 |
| b. Other Operating Revenue |  |  |
|  |  | 1,100,791 |
| c. Total Revenue |  | 201,581,098 |
| 5. Potential Increase (Decrease) |  | 8,727,396 |
|  | or | 4.35\% |

Q. What level of net operating income is DEA proposing?
A. DEA has established a proposed level of net operating income (before interest expense) of about $\$ 10,539,000$. The calculation of this net operating income is shown above in Table 5 and in Exhibit $\qquad$ (DEA-2).

## Q. What overall revenue increase is DEA requesting?

A. A summary of the proposed increase is shown in the above Table 5 with detailed calculations shown in Exhibit__(DEA-2). To eliminate the present revenue deficiency, annual revenue must be increased by $\$ 8,727,396$ or approximately 4.35 percent.

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## V. COST OF SERVICE ANALYSIS

## Q. Have you prepared a Cost of Service study for Dakota Electric?

A. Yes. A class COS analysis has been prepared to provide information to be used in designing rates. The basic objective of this analysis is to identify the cost of providing service to each rate class as a function of load and service characteristics. The methodology employed is often referred to as the "fully allocated average embedded" COS approach meaning that 1 ) costs are allocated on an average system-wide basis, and 2) embedded or accounting costs as recorded on the Cooperative's books are used in the analysis. We believe that this is generally the most appropriate technique to use in allocating cost responsibility to the various classes and developing rate design data and this has been confirmed by the Commission's approval of our cost of service study and methods in past rate cases.
Q. Has Dakota Electric used the same cost of service study model approved by the Commission in your last general rate case?
A. Yes, the cost of service study model is the same model approved by the Commission in our last rate case, with one modification.

## Q. Please explain the modification.

A. In the Commission's final Order in Dakota Electric's 2014 general rate case in Docket No. E-111/GR-14-482, Ordering Paragraph \#8 required that:

Dakota Electric Association shall include a demand adjustment in the Class Cost of Service Study submitted in its next rate case.

In compliance with this Order, we have incorporated a demand adjustment in the minimum size method used to classify specified distribution accounts within the class cost of service study. Workpaper 21 describes the calculation of minimum size classification factors for

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the respective distribution accounts, identifies the analysis used to determine the relevant demand adjustment, and incorporates the demand adjustment into the minimum size methodology. These demand adjusted classification factors are then applied in the COS. For a point of reference, we have also included COS summary results based on overall classification using the zero-intercept method.

## Q. Please describe Exhibit__(DEA-3).

A. Exhibit__(DEA-3) includes the COS analysis for Dakota Electric. The detailed calculations and assumptions that go into the analysis are as follows:

$$
\text { Page } \quad \text { Description }
$$

1-3 Cost of Service Summary
4-5 Classification of Plant in Service
6-7 Adjusted Statement of Operations
8-13 Classification of Revenue Requirements
14-17 Summary of Classification Factors
18 Summary of Allocation of Revenue Requirements to Rate Classes
19 Allocation of Plant in Service to Rate Classes
20-22 Allocation of Revenue Requirements to Rate Classes
23 Rate Class Weighting Factors
24 Analysis of Class Load Characteristics
25-40 Analysis of Class Demand Characteristics
41-42 Development of Allocation Factors

NOTE: To help facilitate review of the cost of service study, Dakota Electric has prepared a "Guide to the Cost of Service Study" that is submitted as Workpaper 22. This document provides a detailed review of methods used in the COS and incorporates answers to information requests submitted by the Department of Commerce in our last several rate cases.

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Q. How should the results of a COS be used?
A. It is important to recognize some of the inherent limitations of such a study. First, it must be emphasized that there are many different methodologies, techniques and assumptions that have been and will continue to be advocated by rate analysts. Because the various philosophies and assumptions can affect the results of the analysis, the results should be treated as providing an indication of the general range of class cost responsibility; and not as precise values.

Second, a COS analysis is directed at determining the cost imposed by a rate class on the system rather than at determining the cost imposed by individual customers within each classification. The cost responsibility of a specific, individual consumer may or may not be entirely consistent with the cost allocations made to their assigned consumer classification.

Third, accurate demand characteristics and load factor data for individual customer classes are often unavailable. Capacity allocations must therefore be made on the basis of estimates or "typical" data. These assumptions or estimates can have an effect on the end results.

Fourth, a COS analysis does not address itself to many of the other legitimate objectives of rate design such as member acceptance or the avoidance of excessively abrupt changes from the historical rate policies of the cooperative. In addition, it does not recognize the need to keep each rate schedule competitive, in as much as possible, with the corresponding rate schedule of neighboring utilities or the need to keep the rate structure simple so that it is easily administered and understood by members.

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With the above limitations in mind, a COS study can provide a useful guideline for assigning cost responsibility (i.e., revenue requirements) to each of the customer classifications in a manner which avoids unjustifiable price discrimination. The study also provides information useful in designing the individual rate schedules and provides support for justifying rate differentials to retail members.

## Q. Explain the general procedure for conducting a COS study.

A. The basic procedure used to determine the cost responsibility of each consumer classification is as follows:

Step 1 - Classify the plant account records into basic cost causative categories.
Step 2-Classify the Test Year expenses and margin requirement into the same cost causative categories.

Step 3-Develop allocation factors for each rate class.
Step 4 - Allocate costs to the various rate classes using the class allocation factors developed for each cost causative category.

In this regard, it is important to note that Dakota Electric has used the same COS model that was approved in our last three rate cases, with a refinement to account for capacity (demand adjustment) provided by facilities identified in the minimum size method as ordered by the Commission in our last rate case.

Testimony of D.R. Larson, page 24
Q. What do you mean by cost causative categories?
A. Plant investments, Test Year expenses and margin requirement are classified into the following cost causative categories:

1. Direct - Costs which are directly attributable to one specific customer classification. Expense associated with security and street lighting is an example of a Direct Expense.
2. Consumer - Costs that are the result of the number and location of each member and which do not vary significantly with the demand imposed on the system or the amount of energy consumed. Metering and customer accounting expenses perhaps best illustrate this type of expense. In addition, a portion of distribution expenses are categorized using the results of the minimum size analysis.
3. Capacity - Costs which result from providing and maintaining operation facilities required to meet the peak demand whether it be the system peak, circuit peak or individual member service peak. Much of the expense of operating and maintaining a three phase backbone feeder would generally fall within this category as would the Demand Charge in the purchased power rate.
4. Energy - Costs which are related to the amount of energy used. The major item in this category is the Energy Charge in the purchased power rate.

Each of these general cost causative categories is further subdivided as follows:

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| Direct | Consumer | Capacity | Energy |
| :---: | :---: | :---: | :---: |
| As Assigned |  | Power Supply P | Power Supply |
|  |  | Distribution Substation |  |
|  | Primary Line | Primary Line |  |
|  | Line Transformer | Line Transformer |  |
|  | Secondary \& Service |  |  |
|  | Meter |  |  |
|  | Customer Accounting |  |  |

Q. Could you briefly explain the methodology used in assigning plant accounts to cost causative categories?
A. The cost causative classification of the various electric plant accounts is presented in pages 4 and 5 of Exhibit__(DEA-3). The methodology used in assigning the plant accounts to the cost causative categories is discussed as follows:

1. Intangible Plant (Acct. 301 to 303) - The Intangible Plant accounts were prorated to the cost categories in the same relationship as the distribution plant allocations.
2. Land, Structures, Station and Battery (Accts. 360 to 363) - The Land and Land Rights, Structures and Improvements, Station Equipment, and Battery accounts were classified as capacity related since the facilities represented by the investment are generally dictated by capacity considerations.
3. Primary Line and Devices (Accts. 364, 365, 366, 367) - Assignment of the Primary Line and Device accounts was based on results of the "Minimum Size Method" to determine the consumer component share. A narrative and calculation of the minimum size method, with a demand adjustment, is provided in Workpaper 21. The remaining amount was then assigned to the capacity component.
4. Line Transformers (Acct. 368) - Classification of the Line Transformer account was approached in similar fashion using the "Minimum Size Method" with a demand adjustment. (See Workpaper 21.) Again, it was reasoned that there exists a certain

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minimum transformer investment required to provide basic service to each consumer independent of energy usage or capacity requirements. This cost is assigned to the consumer component, while the remaining investment is considered capacity related.
5. Services and Meters (Accts. 369 and 370) - Because the investment in Services and Meters is basically independent of usage level, it was assigned entirely to the customer component.
6. Consumer Premise (Acct. 371) - The Consumer's Premises account is associated to lighting plant and was directly assigned to the Lighting Class.
7. Street Lighting (Acct. 373) - The street or security lighting account was assigned directly to the Lighting Class.
8. General Plant Accounts (Accts. 389 to 399) - The General Plant accounts were assigned to the cost causative categories in the same relationship as the total distribution plant allocations. Because the assignment of the general plant has minimal effect on the classification of Test Year expenses, which ultimately is used to determine class COS responsibility, a more detailed analysis of general plant was not warranted.

## Q. Explain how revenue requirements were classified.

A. The Operating Statement for the Test Year forms the basis for the COS analysis. Actual expenses by account for the historical 12-month period were used to establish the pattern of the Test Year cost breakdown to the various accounts.

The various components of the revenue requirements were classified to the four basic cost causative categories as presented on pages 8 through 13 of Exhibit__(DEA-3). The factors

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used in the expense classification are summarized in pages 14 through 17 of Exhibit__(DEA-3). The methodology and rationale for that methodology is discussed below:

1. Purchased Power (Acct. 555) - The Demand and Energy Charge portions of the cost of Purchased Power were assigned to the capacity and energy components, respectively. This includes Transmission Charges which were assigned to the capacity component.
2. Distribution Operation and Maintenance (Accts. 580-598) - Distribution expense accounts that are related to specific plant accounts (Accts. 582, 583, 584, 585, 586, 591, 592, 593, 594, 595, 596 and 597) were classified in proportion to the corresponding plant accounts. These expenses result from operating and maintaining the distribution plant and thus may be considered plant related. The remaining distribution expense accounts (Accts. 580, 581, 587, 588, 589, 590 and 598) were prorated on the basis of the sum of the previously assigned distribution expense accounts. These accounts basically represent overhead or general distribution expenses.
3. Consumer Accounting (Accts. 901-905) - Consumer Accounting expenses were assigned in total to the consumer component since this expense is basically independent of energy usage or capacity requirements. Instead, these accounts are related to the number of consumers.
4. Consumer Service and Information and Sales (Accts. 907-916) - Consumer Service and Information and Sales expenses are also considered consumer related expenses.
5. Administrative and General (Accts. 920-932) - Administrative and General (A\&G) expenses are common costs for which there exists no obvious relationship to the functional categories. Thus, we have assigned 10 percent of these expenses to the

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power supply function and the remainder in proportion to the total of all other expenses without power supply.
6. Depreciation and Amortization (Accts. 403-407) - Depreciation and Amortization expense was allocated in proportion to the net plant account assignments.
7. Property Taxes (Acct. 408) - Property Taxes were assigned in proportion to the net plant account assignments.
8. Other Taxes, Other Interest, and Other Deductions - Other Taxes, Other Interest, and Other Deductions were assigned in a manner similar to the A\&G Accounts.
9. Net Operating Income (Margin Requirement) - Since margin is comprised of interest expense and return on equity, both related to plant investment, it is reasonable to classify this cost in proportion to the net plant assignments. This approach most nearly parallels the method used to determine target margin requirements (i.e., rate base - ROR method).

## Q. Discuss the allocation of costs to rate classes.

A. The allocation of the revenue requirement to each consumer classification is presented in pages 20 to 22 of Exhibit__(DEA-3). The allocations are based on various allocation factors that reflect certain cost causative drivers as discussed below:

## 1. Direct Cost Allocation

Costs specifically associated with street or security lighting facilities (investment and $O \& M$ ) directly assigned to the Lighting Class are an example of a possible direct cost allocation.

## 2. Consumer Costs Allocations

Generally speaking, consumer related costs were allocated to the various classes on the basis of the total number of consumers in each class. However, several

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adjustments were made in the general allocation procedure to reflect differences in the cost of providing basic service. Weighting factors were developed on page 23 of Exhibit__(DEA-3) to recognize the higher cost of three phase service versus standard single phase service for each subcategory of consumer related cost. A "weighting factor" of 0.02 was used to allocate the consumer expense related to providing basic service to an individual security or street light. Because these lights make use of facilities and services which have been primarily provided for under other rate schedules, it may be argued that it costs no more to prepare a bill for a consumer with a security light than for one without. However, it seems only fair that the lighting classes should be required to pay at least a token portion of the consumer related expense, hence the 0.02 weighting factor.

## 3. Capacity Cost Allocations

Three different allocation factors were developed for the capacity component. (See pages 24 to 40 of Exhibit__(DEA-3) for the development of class demands):
a. Line transformer capacity related costs were allocated in accordance with the estimated undiversified non-coincidental annual peak demand of each consumer in each class as this definition of demand most closely approximates transformer capacity requirements.
b. Distribution Substation and Primary Line capacity costs were allocated using the Average and Excess Demand Method based on the average monthly coincidental demand for each class (not necessarily coincidental with the system). Distribution system capacity related costs are a function not only of the system peak, but also the individual circuit and even consumer peak demand. The Average and Excess Demand Method gives recognition to the average demand imposed on the system by each class as well as the average monthly peak

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demand of the class (non-coincidental) and prevents any class from getting a "free ride" from a capacity standpoint.
c. Purchased Power Demand Charges were allocated in accordance with the average monthly coincidental class demands established by season.
d. Purchased Power Transmission Charges were allocated in accordance with the average monthly coincidental class demands

## 4. Energy Cost Allocations

Energy related costs were allocated on the basis of total energy sales in each rate class and further segmented into on-peak and off-peak energy.

Allocation factors for each category are developed in pages 41 to 42 of Exhibit__(DEA-3).
Q. Please summarize the results of the COS study performed for Dakota Electric.
A. Results obtained from the COS analysis are summarized in Tables 6,7 and 8. Table 6 provides a comparison of the calculated cost of providing service to each rate class with the revenue generated under the present rates by that class.

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| Table 6 <br> Cost of Service Summary |  |  |  |  |
| :--- | ---: | :---: | :---: | :---: |
| Rate Class | Revenue <br> Present <br> Rates $^{4}$ | Revenue <br> Requirement | Increase (Decrease) |  |
|  | $(\$)$ | $(\$)$ | $(\$)$ | $(\%)$ |
| Residential \& Farm (31,32,53) | $113,507,080$ | $119,475,495$ | $5,968,415$ | 5.29 |
| Small General Service (41) | $5,732,872$ | $6,242,283$ | 509,411 | 8.94 |
| Irrigation (36) | 917,323 | 892,507 | $(24,816)$ | $(2.72)$ |
| General Service (46,54) | $50,669,263$ | $50,536,453$ | $(132,811)$ | $(0.26)$ |
| C\&I Interruptible (70,71) | $25,436,728$ | $27,455,236$ | $2,018,508$ | 7.98 |
| Lighting | $2,079,781$ | $2,468,469$ | 388,689 | 18.79 |

Table 7 shows a breakdown of the COS by cost category for each class.

| Table 7 <br> Cost Allocation Summary |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Rate Class | Cost Category |  |  |  |
|  | Power <br> Supply | Transmission | Distribution | Total |
|  | (\$) | (\$) | (\$) | (\$) |
| Residential \& Farm ( $31,32,53$ ) | 65,457,456 | 13,696,762 | 40,321,277 | 119,475,495 |
| Small General Service (41) | 3,298,400 | 706,106 | 2,237,776 | 6,242,283 |
| Irrigation (36) | 447,438 | 12,511 | 432,558 | 892,507 |
| General Service ( 46,54 ) | 36,036,904 | 7,229,676 | 7,269,873 | 50,536,453 |
| Interruptible Service ( 70,71 ) | 21,738,992 | 880,227 | 4,836,017 | 27,455,236 |
| Street and Security Lighting | 667,425 | 124,341 | 1,676,703 | 2,468,469 |
| Total | 127,646,615 | 22,649,623 | 56,774,205 | 207,070,443 |

4 Includes an allocated share of Other Operating Revenue.
5 Percentage is calculated using only rate schedule revenue (excludes Other Operating Revenue).

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Table 8 provides total costs by class expressed in terms of $\$$ per customer per month (consumer component) and $\notin$ per kWh (capacity and energy components).

| Table 8 |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Unit Cost Summary |  |  |  |  |
| Rate Class | Consumer <br> Unit Cost | Demand <br> Unit Cost | Energy <br> Unit Cost |  |
| $(\$ / c u s t . m o)$ |  |  |  |  |
| $(\phi / \mathrm{kWh})$ | $(\phi / \mathrm{kWh})$ |  |  |  |
| Residential \& Farm (31,32,53) | 25.11 | 5.34 | 5.30 |  |
| Small General Service (41) | 32.65 | 5.29 | 5.30 |  |
| Irrigation (36) | 57.31 | 2.52 | 5.30 |  |
| General Service (46,54) | 60.71 | 5.18 | 5.30 |  |
| Interruptible Service (70,71) | 221.08 | 1.27 | 5.30 |  |
| Street and Security Lighting | 0.50 | 3.96 | 4.93 |  |

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## VI. OTHER COST ANALYSES

Q. Is any other cost analysis included in this filing besides the class COS study?
A. Yes, several other cost analyses are included in my exhibits as follows:

| Exhibit__(DEA-4) | Load Management Cost Analysis |
| :--- | :--- |
| Exhibit_(DEA-7) | Monthly Fixed Charge Analysis |
| Exhibit_(DEA-8) | Coincidental Demand Charges |
| Exhibit_(DEA-10) | Special Fees and Charges |
| Exhibit_(DEA-11) | Line Extension Analysis |
| Exhibit_(DEA-12) | Base Calculations for Resource and Tax Adjustment |
| Exhibit_(DEA-13) | Air Conditioning Analysis |
| Exhibit_(DEA-14) | Standby Rate Analysis |
| Exhibit_(DEA-15) | Electric Vehicle Rate Analysis |
| Exhibit__(DEA-16) | Residential TOU Analysis -Schedule 56 |

Q. Please explain the load management cost analysis.
A. The load management cost analysis, shown in Exhibit__(DEA-4), presents the costs to provide service to Schedules 49, 51, and 52. These costs include meter and control unit, wholesale power costs, line losses, allocated distribution costs, and margin. In the case of storage service, the cost is calculated at $4.87 \phi$ per kWh , while the cost for interruptible service is $6.31 \not \subset$ per kWh . The cost for geothermal heat pump service is calculated at $11.07 \phi$ per kWh. This cost analysis will form the basis for rate recommendations for Schedules 49, 51 and 52 described later in my testimony.

## Q. Explain the exhibit that calculates monthly fixed charge costs.

A. Exhibit__(DEA-7) calculates the monthly costs that should be applied in the monthly fixed charge of retail rates. This exhibit first identifies the "customer" related costs allocated to each class in the cost of service study. While such costs have been allocated based on number of consumers, not all of these costs may be appropriate for recovery in the monthly fixed charge. As Dakota Electric testified in our last general rate cases, we believe it is

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appropriate for the monthly fixed charge to recover costs we incur to stand ready to provide electric service, excluding costs for primary line. Such costs to be included in the monthly fixed charge include the monthly cost of a transformer, meter and service, customer accounting, as well as taxes and margin associated with plant costs proposed for recovery in the monthly fixed charge. The monthly fixed costs identified for recovery in this analysis are as follows:

| Residential | $\$ 15.01$ |
| :--- | :--- |
| Small General | $\$ 20.32$ |
| Irrigation | $\$ 41.19$ |
| General | $\$ 44.99$ |
| C\&I Interruptible | $\$ 200.69$ |

This cost analysis will form the basis for rate recommendations described later in my testimony.
Q. Discuss the calculation of Coincidental Demand Charges shown in Exhibit__(DEA-8).
A. The calculation of Coincidental Demand Charges reflects the wholesale demand-related charges Dakota Electric experiences from Great River Energy adjusted for distribution line loss. These calculations allow us to determine the summer, winter and other months' retail Coincident Demand Charges for the partial interruptible option and full interruptible option for Dakota Electric's Schedules 70 and 71.
Q. Explain the analysis for special fees and charges.
A. Exhibit_(DEA-10) presents an analysis of Dakota Electric's costs associated with special fees and charges. This exhibit calculates the labor, benefits, vehicles and other expenses associated with each special fee and charge. The results of this analysis will be used to update Dakota Electric's special fees and charges.

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Q. Explain the line extension analysis.
A. Exhibit__(DEA-11) presents the costs of actual line extension project costs and charges. This exhibit also identifies the amount of plant investment Dakota Electric recovers through base rates for these line extensions. The plant investment amounts on a per kWh and per kW basis from this exhibit will be applied to commercial line extensions.

Looking at recovery for individual residential line extensions, Exhibit__(DEA-11) shows that Dakota Electric's base rates for residential members recover about $\$ 1,300$ of distribution plant costs per residential member. By comparison, the average cost for extensions to individual residential members with no footage (includes material, labor, and vehicle costs to set a transformer and make the electrical connection) is about $\$ 3,600$. To recover these basic extension costs, Dakota Electric proposes to increase the present flat fee for all individual residential extensions from $\$ 500$ to $\$ 1,000$. For new connections where the extension of cable is also required, Dakota Electric proposes to increase the present charge of $\$ 8.30$ per foot to $\$ 11.00$ per foot. These changes will also eliminate the application of a free footage allowance. This flat fee increase will provide additional revenue to cover more of the fixed costs associated with transformer and connection costs not otherwise recovered in base rates. We note that while these line extension costs are proposed to increase, the amount of increase is still below our extension costs not being recovered in base rates. Dakota Electric anticipates making continued incremental increases to individual residential line extension provisions in future rate case proceedings.

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Q. Have you calculated new base factors for Dakota Electric's Resource \& Tax Adjustment (RTA)?
A. Yes. Exhibit__(DEA-12) presents the calculation of RTA base components for cost of power, conservation and DSM expenditures, and property tax recovery. These new base components will be applied with the implementation of final rates.

## Q. Please describe the calculation of power cost bases.

A. We have calculated several different power cost bases that track differences in wholesale power costs associated with specific retail rates. The calculation begins with an identification of an Energy Cost Adjustment (ECA) base. This ECA base relates to retail interruptible service that Dakota Electric provides to C \& I members under interruptible service Schedules 70 and 71. This ECA base also applies to interruptible irrigation service provided under Schedule 36. (We note that firm irrigation service under Schedule 36 will be subject to the firm Power Cost Adjustment (PCA) base as described below.) The average wholesale energy cost per kWh applicable to the Energy Cost Adjustment base equals $\$ 0.0521$ per kWh sold.

The next part of this exhibit calculates weighted power cost bases for Dakota Electric's load management rates including Schedules 51 and 52. For each rate schedule, we have calculated a weighted average wholesale power cost reflecting the relative purchase of water heating and space heating service under each schedule. Schedule 51 has a weighted power cost base per kWh sold of $\$ 0.0204$. Schedule 52 has a weighted power cost base per kWh sold of \$0.0352.

Next, we calculate the power cost base for rate Schedule 49, geothermal service. The base for this service includes the Cooperative's system average wholesale cost for energy,

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capacity, transmission, and ancillary service cost on a per kWh basis. The resulting Schedule 49 power cost base per kWh sold is $\$ 0.0813$.

Finally, this exhibit calculates the Power Cost Adjustment (PCA) base applicable to Dakota Electric's remaining firm service rate schedules. This calculation begins with the Cooperative's total wholesale power cost, from which we subtract ECA power costs, Rate 51 power costs, Rate 52 power costs, Rate 49 power costs, and wholesale power cost passthroughs for Wellspring, Member Specific Discount, Large Load High Load Factor Credit, Contract Rate Service, and Standby service. The result is a PCA base per kWh sold for Dakota Electric's firm service rate schedules of \$0.0939.

## Q. Explain the exhibit that evaluates cycled air conditioning.

A. Exhibit__(DEA-13) calculates the wholesale power cost savings achieved through cycling central air conditioners. Dakota Electric's cycled air conditioning program, in coordination with Great River Energy, provides for load control of central air conditioners typically during times of high demand. Air conditioners are controlled, or cycled, through fifteen minute on and fifteen minute off cycles during the respective control period. This exhibit calculates a diversified demand reduction for a typical controlled air conditioning unit. Based on this analysis, Dakota Electric recommends maintaining the present $\$ 13.00$ per month credit in the months of June, July, and August, with a corresponding increase in the energy credit for those units that are separately metered and an increase in the per ton credit for commercial units.

## Q. Please explain the Standby Analysis.

A. Exhibit__(DEA-14) calculates the primary and secondary distribution reservation fees for Standby Service. These costs are based on allocated costs to Dakota Electric's General

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Service Schedule 46, which corresponds to the size and type of customers who would likely receive such standby service. In fact, the one standby member that Dakota Electric serves is of a size that would normally receive service under Schedule 46. This exhibit also updates the substation standby reservation fee consist with the methodology approved by the Commission when Dakota Electric proposed this fee in Docket No. E-999/CI-15-115.

## Q. Please explain the Electric Vehicle Rate Analysis.

A. Exhibit__(DEA-15) updates the cost analysis that Dakota Electric submitted to the Commission when we proposed this service. The update reflects Test Year wholesale power supply and distribution costs. This rate has been very well received by members with electric vehicles, as we reported in a May 31, 2019, EV Informational Letter to the Commission. Based on participation and the high level of off-peak charging, Dakota Electric proposes to remove the "pilot" designation for this rate.

## Q. Please explain the Residential TOU Analysis for Schedule 56.

A. Exhibit__(DEA-16) presents an analysis of costs and development of rate design for the residential time of use rate (Schedule 56) that was approved in our last rate case. Page 1 of this exhibit identifies wholesale power and distribution costs based on the cost of service study results for the residential class. Page 2 assigns these costs to respective cost components and time periods. Page 3 estimates billing units, on a total residential class basis, for the billing periods for this schedule. Finally, page 4 develops rates for each billing component using the cost assignments from page 2.

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## VII. RATE DESIGN

Various tables showing the results of the COS analysis are useful in discussing the design and evaluation of Dakota Electric's rates. These tables, which have been previously presented, are listed below:

Table<br>Description<br>Table 6 Cost of Service Summary<br>Table 7 Cost Allocation Summary<br>Table $8 \quad$ Unit Cost Summary

## Q. What objectives have you considered while developing proposed rate changes?

A. There are many legitimate objectives that influence the design of rates. Some of the more important ones are as follows:

1. The proposed rates must develop the requisite total revenue.
2. The proposed rates should reflect the cost of providing service. No class or subclass should subsidize or be subsidized by another.
3. The rate schedules should be simple and concise to facilitate consumer acceptance and administration.
4. Abrupt departures from historical rate practices and levels should be avoided.
5. The rate structure should be acceptable to the membership.
6. Where there is a possibility of a consumer being eligible to receive service under more than one rate schedule, the transition should be made as smoothly as possible.
7. The rates should promote the efficient use of energy and system capacity.

It is generally not possible to fully accomplish all of the above objectives in developing rate schedules. Compromises based on judgment reflecting the policy of the Cooperative must be made.

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Q. Please describe how the proposed rates were developed.
A. The first step in designing the proposed rates was to establish the proposed or targeted increase for each class. While the COS analysis played an important role in establishing the targeted increase for each class, other rate design objectives such as 1 ) the need to avoid abrupt changes and 2) the desire to achieve member-consumer acceptance also came into play. Thus, the dollar and percentage increase or decrease for each class as shown in Table 6 were tempered by experienced judgment in order to accomplish the overall rate design objectives.
Q. Summarize the revenue impact of your proposed rates.
A. The rate design recommendations for the rate schedules contained and discussed herein result in an approximate $\$ 8,700,000$ revenue increase. (We note that additional annual revenue will be provided by proposed changes to special fees and charges and from residential line extensions.) Table 9 presents a comparison of the Present and Proposed Rates by service schedule.
Q. Provide an overview of your approach to proposed changes in monthly fixed charges.
A. Exhibit__(DEA-7) identifies the cost basis for the proposed monthly fixed charges and was described above. Using these results and recognizing the historic difficulty of increasing this billing component, Dakota Electric proposes to increase the monthly fixed charge for residential service and small general service by $\$ 1$ per month. This is the amount that was approved in prior rate cases after considerable testimony. For the other rate schedules, we

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propose aligning the monthly fixed charge on a similar cost basis percentage as the residential monthly fixed charge. The proposed monthly fixed charge changes 1) provide a more appropriate recovery of costs through this rate component, 2) reduce the amount of such costs that are otherwise recovered in volumetric charges, 3 ) align with similar charges the Commission has approved for neighboring utilities, and 4) make some progress toward cost recovery of this component in this rate case. We note, however, that this modest increase in the monthly fixed charge could result in taking 20 years or more to reach the appropriate cost recovery level for this component - based on the more recent approximate five-year cycle for Dakota Electric rate cases.
Q. Please describe the proposed rates.
A. A discussion of each of the proposed rates follows:

## Residential \& Farm Service (31)

The COS study shows the need to increase revenue from Residential \& Farm (Schedules 31,32 and 53) of about $\$ 5,968,000$ or a 5.29 percent increase (see Table 6 ) over revenue from present rates. Dakota Electric is proposing a slightly lower increase for residential members. We propose to increase the monthly fixed charge from the present $\$ 9.00$ to \$10.00. The present summer Energy Charge of $\$ 0.1308$ per kWh ( $\$ 0.1333$ per kWh including the RTA) is proposed to increase to $\$ 0.1379$ per kWh for the summer months of June, July and August. The proposed Energy Charge for all other months will increase from $\$ 0.1168$ per kWh ( $\$ 0.1193$ per kWh including the RTA) to $\$ 0.1239$ per kWh . These proposed rates reflecting a "zeroing" of the present RTA and result in an increase to the Schedule 31 class of approximately 4.42 percent.

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| Table 10 <br> Comparison of Present and Proposed Residential \& Farm Service (31) |  |  |
| :---: | :---: | :---: |
| Description | Present Rate | Proposed Rate |
| Fixed Charge | \$9.00/month | \$10.00/month |
| Energy Charge |  |  |
| Summer Months | \$0.1308/kWh | \$0.1379/kWh |
| Other Months | \$0.1168/kWh | \$0.1239/kWh |
| Average Charge |  |  |
| RTA Charge | \$0.0025/kWh | \$0.0000/kWh |

Dakota Electric is also proposing clarifying language to the Schedule 31 "Availability" clause and the addition of a clause describing billing for master-metered multi-tenant residential facilities. Both of these additions relate to the cost of service study and language we added to the to Schedule 31 related to service to apartments. The clarifying language proposed for the Availability clause indicates that Schedule 31 applies "to individually metered apartment units and mastered-metered multi-tenant complexes." This was the intent of the application that was adopted in our 2003 general rate case. It is reasonable for apartment units and apartment complexes to be billed under Schedule 31 since these are residential loads with residential load profiles. The new clause "Billing for MasterMetered Multi-Tenant Residential Facilities" specifies that "The monthly bill for mastermetered multi-tenant residential facilities will be determined by multiplying the number of residential living units per master-meter times the Fixed Charge plus the metered energy consumption times the applicable energy charge plus the Resource and Tax Adjustment."

## Residential \& Farm Demand Control (32)

As previously noted, the COS study generally shows a required revenue increase from Residential members of about 5.29 percent. Accordingly, we recommend that the monthly Fixed Charge be increased from $\$ 12.00$ to $\$ 13.00$. We further propose to continue the seasonality in this rate structure through the Demand Charge by increasing the summer

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Demand Charge from $\$ 14.70$ per kW per month to $\$ 15.50$ and the demand rate for all other months from $\$ 11.10$ per kW to $\$ 11.90$ per kW . We propose to increase the Energy Charge from the present tariff amount of $\$ 0.0760$ per kWh ( $\$ 0.0785$ per kWh including the RTA) to $\$ 0.0810$ per kWh . These proposed rates result in a revenue increase of about 4.36 percent for this rate schedule.

| Comparison of Present and Proposed <br> Residential \& Farm Demand Control (32) |  |  |
| :--- | :---: | :---: |
| Description | Present <br> Rate | Proposed <br> Rate |
| Fixed Charge | $\$ 12.00 / \mathrm{month}$ | $\$ 13.00 / \mathrm{month}$ |
| Demand Charge |  |  |
| $\quad$Summer Months | $\$ 14.70 / \mathrm{kW}$ | $\$ 15.50 / \mathrm{kW}$ |
| $\quad$ Other Months | $\$ 11.10 / \mathrm{kW}$ | $\$ 11.90 / \mathrm{kW}$ |
| Energy Charge | $\$ 0.0760 / \mathrm{kWh}$ | $\$ 0.0810 / \mathrm{kWh}$ |
| Average Charge | $\$ 0.0025$ | $\$ 0.0000$ |
| RTA Charge |  |  |

## Electric Vehicle - Residential (33)

Dakota Electric received Commission approval to implement a pilot residential electric vehicle service in Docket No. E-111/M-12-874. This service (also referred to as Schedule EV-1) provides our residential members with an additional option for charging the batteries in their electric vehicle. Dakota Electric proposes to remove the "pilot" designation for this schedule and update the rates for this service based on the Test Year wholesale power and distribution cost analysis in Exhibit__(DEA-15). The comparison of present and proposed rates is shown in Table 12 below.

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| Table 12 <br> Comparison of Present and Proposed Residential Electric Vehicle Service (33) |  |  |
| :---: | :---: | :---: |
| Description | Present Rate | Proposed Rate |
| Energy Charges: |  |  |
| Off-Peak | \$0.0674/kWh | \$0.0756/kWh |
| On-Peak | \$0.4144/kWh | \$0.4421/kWh |
| Other | Schedule 31 | Schedule 31 |
| RTA Charge | \$0.0025/kWh | \$0.0000/kWh |

## Irrigation Service (36)

The cost of service study shows the need to reduce revenues from irrigation service by about $\$ 25,000$ or about $2.72 \%$. However, to accommodate overall rate moderation among classes and to maintain relationships between similar billing components in other schedules, we propose a modest revenue increase for irrigation. The firm service irrigation rate structure presently includes a monthly fixed charge of $\$ 30$ per month that is applied every month throughout the calendar year. We propose keeping this monthly fixed charge at $\$ 30$ per month. The seasonal component for this firm service is incorporated in the Demand Charge with a present summer month Demand Charge of $\$ 26.35$ which we propose to increase to $\$ 26.60$. The $\$ 20.95$ per kW per month Demand Charge in the winter months is proposed to increase to $\$ 21.20$ per kW , and the $\$ 15.50$ per kW Demand Charge in the spring and fall months is proposed to increase to $\$ 15.67$ per kW . The present Energy Charge of $\$ 0.0499$ per kWh ( $\$ 0.0524$ per kWh including the RTA) for all energy consumed throughout the year is proposed to change to $\$ 0.0521$ per kWh.

Like the firm irrigation rate, the controlled irrigation rate will include a monthly fixed charge of $\$ 30.00$ per month that will be applied during all months throughout the

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calendar year. Dakota Electric proposes no change in the present $\$ 4.55$ per kW demand charge that recover distribution costs. (Since there is no seasonality in the wholesale power cost associated with controlled irrigation, the controlled irrigation rate does not incorporate any seasonality.) Finally, the proposed energy rate for controlled irrigation service will be the same $\$ 0.0521$ per kWh proposed for firm irrigation service.

| Table 13 <br> Comparison of Present and Proposed Firm Irrigation Service (36) |  |  |  |
| :---: | :---: | :---: | :---: |
| Firm Service |  | Present | Proposed |
| Fixed Charge | @ | \$30.00/month | \$30.00 /month |
| Demand Charge |  |  |  |
| Summer | @ | \$26.35/kW/month | \$26.60/kW/month |
| Winter | @ | \$20.95/kW/month | \$21.20/kW/month |
| Other | @ | \$15.50/kW/month | \$15.67/kW/month |
| Energy Charge | @ | \$0.0499/kWh | \$0.0521/kWh |
| RTA Charge | @ | \$0.0025/kWh | \$0.0000/kWh |
| Table 14 <br> Comparison of Present and Proposed Interruptible Irrigation Service (36) |  |  |  |
|  |  |  |  |
| Interruptible Service |  | Present | Proposed |
| Fixed Charge | @ | \$30.00/month | \$30.00 /month |
| Demand Charge | @ | \$4.55/ kW/month | \$4.55/kW/month |
| Energy Charge | @ | \$0.0499/kWh | \$0.0521/kWh |
| RTA Charge | @ | (\$0.0005)/kWh | \$0.0000/kWh |

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## Small General Service (41)

The COS study shows the need to increase revenues from the Small General Service class in the amount of $\$ 509,000$ or 8.94 percent. Dakota Electric proposes a more moderate overall revenue increase accomplished by increasing the monthly Fixed Charge for Small General Service from the present $\$ 14.00$ per month to $\$ 15.00$ per month. The present Energy Charge of $\$ 0.1269$ per $\mathrm{kWh}(\$ 0.1294$ per kWh including the RTA) in the summer months of June, July and August is proposed to increase to $\$ 0.1375$ per kWh and the present and the $\$ 0.1129$ per kWh ( $\$ 0.1154$ per kWh including the RTA) Energy Charge during all other months is proposed to increase to $\$ 0.1235$ per kWh . These proposed rates result in a revenue increase of about 6.86 percent for this rate schedule.

| Table 15 <br> Comparison of Present and Proposed <br> Small General Service (41) |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Present <br> Rate |  |  |  | Proposed <br> Rate |
| Fixed Charge | $\$ 14.00 / \mathrm{month}$ | $\$ 15.00 / \mathrm{month}$ |  |  |
| Energy Charge |  |  |  |  |
| Summer Months | $\$ 0.1269 / \mathrm{kWh}$ | $\$ 0.1375 / \mathrm{kWh}$ |  |  |
| Other Months | $\$ 0.1129 / \mathrm{kWh}$ | $\$ 0.1235 / \mathrm{kWh}$ |  |  |
| RTA Charge | $\$ 0.0025 / \mathrm{kWh}$ | $\$ 0.0000 / \mathrm{kWh}$ |  |  |

## General Service (46)

While the cost of service study shows a decrease of about 0.26 percent is justified for the General Service rate schedule, we are proposing a modest increase in revenue from this rate schedule to balance revenue from other classes.

The present General Service Schedule 46 includes a monthly Fixed Charge of $\$ 34.00$, which we propose to keep at the same amount. The Demand Charge in the summer months of June, July and August is proposed to increase from $\$ 12.26$ per kW to $\$ 13.70$ per kW .

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The Demand Charge during the remaining months is proposed to increase from $\$ 9.16$ per kW to $\$ 10.60$ per kW . These demand rate changes make progress in aligning demand charges with underlying capacity costs of providing service.

The proposed Energy Charges reflect load characteristics of customers on a monthly basis. This energy structure, commonly referred to as an "hours-use demand rate," is based on the amount of energy that an individual member uses each month in relation to the member's monthly non-coincident demand. That is, this energy rate is load-factor sensitive. The present energy rate for the first 200 kWh of energy consumption per kW of demand is $\$ 0.0776$ per $\mathrm{kWh}(\$ 0.0801$ per kWh including the RTA) and is proposed to stay at $\$ 0.0776$ per kWh . The next 200 kWh of energy consumption per kW of demand presently at $\$ 0.0676$ per kWh ( $\$ 0.0701$ per kWh including the RTA) is proposed to stay at $\$ 0.0676$ per kWh . All energy consumption above 400 kWh per kW of demand presently at $\$ 0.0576$ per kWh ( $\$ 0.0601$ per kWh including the RTA) is proposed to stay at $\$ 0.0576$ per kWh. Dakota Electric will continue to offer primary voltage discounts for members presently receiving primary service. The proposed General Service Schedule 46 rates result in an annual revenue increase of about 1.83 percent.

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| Comparison of Present and Proposed <br> General Service (46) Rates |  |  |
| :--- | :--- | :---: |
| Description |  |  |
| Present Rate | Proposed Rate |  |
| Fixed Charge | $\$ 34.00 / \mathrm{month}$ |  |
| Demand Charge | $\$ 34.00 / \mathrm{month}$ |  |
| Summer Months | $\$ 12.26 / \mathrm{kWh}$ |  |
| Other Months | $\$ 9.16 / \mathrm{kWh}$ |  |
| Energy Charge |  |  |
| First 200 kWh/kW | $\$ 0.0776 / \mathrm{kWh}$ |  |
| Next 200 kWh/kW | $\$ 0.0676 / \mathrm{kWh}$ |  |
| Over 400 kWh/kW | $\$ 0.0576 / \mathrm{kWh}$ |  |
| RTA Charge | $\$ 0.0025 / \mathrm{kWh}$ |  |
| Discounts |  |  |
| Primary Voltage Disc. | $\$ 0.00 .0676 / \mathrm{kWh}$ |  |
| Primary Metering Disc. | $\$ 0.15 / \mathrm{kWh}$ |  |

Dakota Electric is also proposing two additions to billing provisions for Schedule 46.
The first addition relates to the determination of billing demand. Prior to our 2003 general rate case, Dakota Electric had a provision in our general service rates that limited the billing impact for low load factor accounts. This provision was eliminated in the 2003 rate case and we find that it is reasonable and necessary to reintroduce a similar provision. Dakota Electric proposes to add language to the renamed "Determination of Demand" clause as follows: "In no month shall the Billing Demand be greater than the value in kW determined by dividing the kWh sales for the billing month by the product of 24 hours x 0.1 load factor x days in the billing month." Such a load factor billing limitation is reasonable since low load factor consumers generally exhibit lower system coincidence (distribution and wholesale power) than average consumers in the class.

The second addition relates to a proposed new clause describing billing for multi-use facilities. Multi-use facilities are properties that include a combination of commercial or institutional load along with some portion of residential domestic consumption. A growing example of this type of facility would be a property with independent living/apartment units where tenants may transfer

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to a unit with nursing or hospital type care. This could also include facilities with combined retail and residential living. The intent of this new clause is to provide clarification on billing for these facilities. Where electric service is provided through a single meter, the billing would be under either Schedules 41, 46 or 54. Where metering is separated between residential and commercial consumption, the service would be billed under Schedule 31 and Schedules 41/46/54 respectively.

## Lighting Service (Rates 44, 44-1, 44-2, 44-3, 44-4, 44-5, 44-6)

The COS shows a need to increase lighting revenue by about 18.79 percent. This is a substantial increase. To ease this impact on members with lighting service, Dakota Electric proposes to implement this increase over the course of three years. (Dakota Electric took a similar approach in our 2003 rate case when implementing a higher increase for irrigation service.) Dakota Electric proposes the following three-year phasein of lighting rates:

## Table 17

Comparison of Present and Proposed Rates for Lighting Service

| Description | Present Rate per Month | Year 1 <br> Rate <br> per Month | Year 2 <br> Rate per Month | Year 3 Rate per Month |
| :---: | :---: | :---: | :---: | :---: |
| Security Lighting Service (44) |  |  |  |  |
| 100 W HPS | \$ 10.10 | \$ 10.74 | \$ 11.37 | \$ 12.01 |
| 150 W HPS | \$ 11.99 | \$ 12.75 | \$ 13.50 | \$ 14.26 |
| 250 W HPS | \$ 15.79 | \$ 16.80 | \$ 17.82 | \$ 18.83 |
| Street Lighting Service (44-1) |  |  |  |  |
| 175 W MV | \$ 10.52 | \$ 11.43 | \$ 12.34 | \$ 13.25 |
| 250 W MV | \$ 13.46 | \$ 14.55 | \$ 15.65 | \$ 16.74 |
| 400 W MV | \$ 18.54 | \$ 19.93 | \$ 21.32 | \$ 22.71 |
| 100 W HPS | \$ 7.56 | \$ 8.24 | \$ 8.93 | \$ 9.61 |
| 150 W HPS | \$ 9.46 | \$ 10.23 | \$ 11.01 | \$ 11.78 |
| 200 W HPS | \$ 11.41 | \$ 12.33 | \$ 13.26 | \$ 14.18 |
| 250 W HPS | \$ 13.25 | \$ 14.28 | \$ 15.32 | \$ 16.35 |
| 400 W HPS | \$ 17.67 | \$ 18.86 | \$ 20.05 | \$ 21.24 |

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Street Lighting Service (44-2)

| 175 W MV | $\$$ | 15.23 | $\$$ | 15.97 | $\$$ | 16.70 | $\$$ | 17.44 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 250 W MV | $\$$ | 18.16 | $\$$ | 19.08 | $\$$ | 20.01 | $\$$ | 20.93 |
| 400 W MV | $\$$ | 23.25 | $\$$ | 24.46 | $\$$ | 25.68 | $\$$ | 26.89 |
| 100 W HPS | $\$$ | 12.27 | $\$$ | 12.78 | $\$$ | 13.29 | $\$$ | 13.80 |
| 150 W HPS | $\$$ | 14.16 | $\$$ | 14.76 | $\$$ | 15.37 | $\$$ | 15.97 |
| 250 W HPS | $\$$ | 17.95 | $\$$ | 18.81 | $\$$ | 19.68 | $\$$ | 20.54 |
| 400 W HPS | $\$$ | 22.38 | $\$$ | 23.39 | $\$$ | 24.41 | $\$$ | 25.42 |

Custom residential Lighting (44-3)

| 175 W MV | $\$$ | 11.37 | $\$$ | 12.26 | $\$$ | 13.14 | $\$$ | 14.03 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 50 W HPS | $\$$ | 6.70 | $\$$ | 7.28 | $\$$ | 7.87 | $\$$ | 8.45 |
| 100 W HPS | $\$$ | 8.41 | $\$$ | 9.07 | $\$$ | 9.73 | $\$$ | 10.39 |
| 150 W HPS | $\$$ | 10.30 | $\$$ | 11.08 | $\$$ | 11.85 | $\$$ | 12.63 |
| 250 W HPS | $\$$ | 14.09 | $\$$ | 15.13 | $\$$ | 16.17 | $\$$ | 17.21 |

LED Security Lighting Service (44-4)

| ED (>4,500 lumens) | \$ | 7.63 | \$ | 7.67 | \$ | 7.71 | \$ | 7.75 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

LED Street Lighting (44-5)
A (40-80 watts)
5.27 \$
5.50

B (81-150 watts)
\$ 6.71
C (151-250 watts)
9.66

D (251-350 watts)
\$ 13.05
E (351-450 watts)
16.52
7.40 \$
7.75

LED Street Lighting 'Standard" (44-
6)

| Coach | $\$$ | 10.60 | $\$$ | 10.17 | $\$$ | 9.73 | $\$$ | 9.30 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Acorn | $\$$ | 11.24 | $\$$ | 11.11 | $\$$ | 10.98 | $\$$ | 10.85 |
| Cobra | $\$$ | 8.31 | $\$$ | 8.41 | $\$$ | 8.50 | $\$$ | 8.60 |
| Shoebox | $\$$ | 10.71 | $\$$ | 10.71 | $\$$ | 10.70 | $\$$ | 10.70 |
| ED Street Lighting "Basic" (44-6) |  |  |  |  |  |  |  |  |
| Coach | $\$$ | 6.83 | $\$$ | 6.67 | $\$$ | 6.52 | $\$$ | 6.36 |
| Acorn | $\$$ | 6.30 | $\$$ | 6.24 | $\$$ | 6.18 | $\$$ | 6.12 |
| Cobra | $\$$ | 6.51 | $\$$ | 6.67 | $\$$ | 6.82 | $\$$ | 6.98 |
| Shoebox | $\$$ | 7.98 | $\$$ | 8.21 | $\$$ | 8.45 | $\$$ | 8.68 |

Testimony of D.R. Larson, page 52

## Low Wattage Unmetered Service (45)

Dakota Electric proposes to increase the Low Wattage Unmetered Service Schedule 45 rate from $\$ 10.00$ per month to $\$ 10.50$ per month.

| Table 18 |  |  |
| :--- | :---: | :---: |
| Comparison of Present and Proposed <br> Low Wattage Unmetered Service (45) |  |  |
| Description | Present <br> Rate | Proposed <br> Rate |
| Fixed Charge | $\$ 10.00 /$ month | $\$ 10.50 / \mathrm{month}$ |

## Municipal Civil Defense Sirens (47)

Dakota Electric is not proposing any changes in the monthly $\$ 5.00$ fixed charge applicable to Municipal Civil Defense Sirens.

| Table 19 |  |  |
| :---: | :---: | :---: |
| Comparison of Present and Proposed <br> Municipal Civil Defense Sirens (47) |  |  |
| Description | Present <br> Rate | Proposed <br> Rate |
| Fixed Charge | $\$ 5.00 /$ month | $\$ 5.00 / \mathrm{month}$ |

## Geothermal Heat Pump (49)

Dakota Electric's cost analysis for the Geothermal Heat Pump Rate is shown in Exhibit__(DEA-4). The costs for Schedule 49 include meter and control unit, wholesale power costs, line losses, allocated distribution costs, and margin. The cost for geothermal heat pump service is calculated at $\$ 0.1107$ per kWh . We propose an increase in the energy charge for this service from the present tariffed rate of $\$ 0.0940$ per $\mathrm{kWh}(\$ 0.0959$ per kWh including the RTA) to $\$ 0.103$ per kWh . Since geothermal heat pump service is no longer offered as a special program rate through our wholesale power supplier, this service been closed to new members since our last rate case.

Testimony of D.R. Larson, page 53

## Controlled Energy Storage (51)

Dakota Electric's cost analysis for Controlled Energy Storage is shown in Exhibit $\qquad$ 4). The cost for Controlled Energy Storage service is calculated at $\$ 0.0487$ per kWh . We propose an increase in the Energy Charge for this service from the present $\$ 0.0440$ per $\mathrm{kWh}(\$ 0.0446$ per kWh including the RTA) to $\$ 0.0487$ per kWh . This represents an increase of approximately 9.19 percent for this service.

| Table 20  <br> $\begin{array}{c}\text { Comparison of Present and Proposed } \\ \text { Controlled Energy Storage (51) }\end{array}$  <br> Description  $\begin{array}{c}\text { Present } \\ \text { Rate }\end{array}$ |  |  |
| :--- | :---: | :---: |
| Proposed |  |  |
| Rate |  |  |$]$| $\$ 0.0440 / \mathrm{kWh}$ |
| :--- |

## Controlled Interruptible Service (52)

A cost analysis for Controlled Interruptible Service is shown in Exhibit__(DEA-4). The cost for Controlled Interruptible service is calculated at $\$ 0.0631$ per kWh. Dakota Electric proposes an increase in the rate for this service from the present energy rate of $\$ 0.0550$ per $\mathrm{kWh}(\$ 0.0597$ per kWh including the RTA) to a proposed energy rate of $\$ 0.0631$ per kWh . This represents a 5.7 percent increase.

| Table 21 |  |  |
| :---: | :---: | :---: |
| Comparison of Present and Proposed <br> Controlled Interruptible Service (52) |  |  |
| Description | Present <br> Rate | Proposed <br> Rate |
| Net Energy Charge | $\$ 0.0550 / \mathrm{kWh}$ | $\$ 0.0631 / \mathrm{kWh}$ |

## Residential \& Farm Time of Day (53)

The COS for Residential \& Farm Time of Day service was incorporated in the COS study with the Residential \& Farm Service Schedule 31. Since the COS for these classes is

Testimony of D.R. Larson, page 54
similar, we are proposing a similar revenue increase for Schedule 53. This revenue increase will be achieved by increasing the monthly Fixed Charge from the present $\$ 12.00$ to \$13.00. The present summer Peak Period Energy Charge of $\$ 0.1880$ per kWh (\$0.1905 per kWh including the RTA) will be increased to $\$ 0.21263$ per kWh and the present other months Peak Period Energy Charge of $\$ 0.1740$ per kWh ( $\$ 0.1765$ per kWh including the RTA) will be increased to $\$ 0.19863$ per kWh . The Off-Peak Energy Charge will be changed from $\$ 0.0940$ per kWh ( $\$ 0.0965$ per kWh including the RTA) to $\$ 0.09450$ per kWh . These proposed changes result in an overall increase of about 4.36 percent.

| Table 22  <br> Comparison of Present and Proposed <br> Residential <br> \& Farm Time of Day (53) Present <br> Rate |  |  |
| :---: | :---: | :---: |
| Description | Proposed <br> Rate |  |
| Fixed Charge | $\$ 12.00 / \mathrm{month}$ | $\$ 13.00 / \mathrm{month}$ |
| Energy Charges |  |  |
| Peak Period: |  |  |
| Summer | $\$ 0.1880 / \mathrm{kWh}$ | $\$ 0.21263 / \mathrm{kWh}$ |
| Other | $\$ 0.1740 / \mathrm{kWh}$ | $\$ 0.19863 / \mathrm{kWh}$ |
| Off-Peak | $\$ 0.0940 / \mathrm{kWh}$ | $\$ 0.09450 / \mathrm{kWh}$ |
| RTA Charge | $\$ 0.0025 / \mathrm{kWh}$ | $\$ 0.0000 / \mathrm{kWh}$ |

## General Service Time of Day (54)

Dakota Electric proposes to realign component rates for Schedule 54 to track changes to other similar rate schedules. We propose to keep the monthly Fixed Charge for Rate 54 at the present $\$ 36.00$. The Peak Period Demand Charge will be changed to $\$ 26.14$ per kW in the summer months (June, July and August), $\$ 19.91$ per kW in the winter months (December, January and February) and $\$ 13.67$ per kW during all other months. The Maximum Demand Charge of $\$ 4.75$ per kW will be increased to $\$ 5.25$ per kW . The Energy Charge of $\$ 0.0499$ per kWh ( $\$ 0.0524$ per kWh including the RTA) will be changed to $\$ 0.0521$ per kWh . This proposed rate design results in a revenue increase of about 3.37 percent for this rate schedule.

Testimony of D.R. Larson, page 55

| Table 23 <br> Comparison of Present and Proposed <br> General Service Time of Day Service (54) |  |  |
| :--- | ---: | ---: |
| Present <br> Description |  | Proposed <br> Rate |
| Fixed Charge | $\$ 36.00 / \mathrm{month}$ | $\$ 36.00 / \mathrm{month}$ |
| Demand Charges |  |  |
| Peak Period: | $\$ 24.85 / \mathrm{kW} / \mathrm{month}$ | $\$ 26.14 / \mathrm{kW} / \mathrm{month}$ |
| Summer Months | $\$ 18.95 / \mathrm{kW} / \mathrm{month}$ | $\$ 19.91 / \mathrm{kW} / \mathrm{month}$ |
| Winter Months | $\$ 13.00 / \mathrm{kW} / \mathrm{month}$ | $\$ 13.67 / \mathrm{kW} / \mathrm{month}$ |
| Other Months | $\$ 4.75 / \mathrm{kW}$ | $\$ 5.25 / \mathrm{kW}$ |
| Maximum | $\$ 0.0499 / \mathrm{kWh}$ | $\$ 0.0521 / \mathrm{kWh}$ |
| Energy Charge | $\$ 0.15 / \mathrm{kW}$ | $\$ 0.15 / \mathrm{kW}$ |
| Primary Voltage Disc. | $2.00 \%$ | $2.00 \%$ |
| Primary Metering Disc. | $\$ 0.0025 / \mathrm{kWh}$ | $\$ 0.0000 / \mathrm{kWh}$ |
| RTA Charge |  |  |

## Residential \& Farm Time of Day (56)

(NOTE: This service was originally identified as Schedule 55 when it was first proposed in our last general rate case. During that proceeding, we realized that the " 55 " code was already being used internally - so the final approved designation for this service is Schedule 56.)

The cost analysis and development of the proposed rates for the Residential \& Farm Time of Day service is detailed in Exhibit 16. Table 31 identifies the proposed charges for this service.

| Table 24 <br> Comparison of Present and Proposed <br> Residential <br> \& Farm Time of Day (56) |  |  |
| :---: | :---: | :---: |
| Description | Present <br> Rate | Proposed <br> Rate |
| Fixed Charge | $\$ 12.00 / \mathrm{month}$ | $\$ 13.00 / \mathrm{month}$ |
| Energy Charges |  |  |
| Peak Periods: | $\$ 0.2710 / \mathrm{kWh}$ | $\$ 0.2890 / \mathrm{kWh}$ |
| Summer | $\$ 0.2210 / \mathrm{kWh}$ | $\$ 0.2320 / \mathrm{kWh}$ |
| Winter | $\$ 0.1750 / \mathrm{kWh}$ | $\$ 0.1880 / \mathrm{kWh}$ |
| Other | $\$ 0.0970 / \mathrm{kWh}$ | $\$ 0.1060 / \mathrm{kWh}$ |
| Intermediate | $\$ 0.0760 / \mathrm{kWh}$ | $\$ 0.0820 / \mathrm{kWh}$ |
| Off-Peak | $\$ 0.0025 / \mathrm{kWh}$ | $\$ 0.0000 / \mathrm{kWh}$ |
| RTA Charge |  |  |

Testimony of D.R. Larson, page 56

## Standby Service (60)

The distribution reservation fees for standby service have been analyzed in the attached Exhibit__(DEA-14). This analysis reflects the average primary and secondary distribution costs on a per kW basis for our General Service Schedule 46 members. It also updates the substation standby reservation fee consist with the methodology approved by the Commission when Dakota Electric proposed this fee in Docket No. E-999/CI-15-115. Based on this analysis, we propose increasing the primary distribution reservation fee from $\$ 3.28$ per kW to $\$ 3.89$ per kW . The secondary distribution reservation fee is proposed to increase from $\$ 3.51$ per kW to $\$ 4.02$ per kW . The substation distribution reservation fee is proposed to decrease from $\$ 0.90$ per kW to $\$ 0.81$ per kW . The generation reservation fees for this service are a direct passthrough of such wholesale power standby reservation fees from Great River Energy and are updated annually as authorized in this schedule.

## Interruptible Service - Full Interruptible Option (70)

The cost of service study shows a need to increase revenue from the C \& I interruptible members by about 7.98 percent. We propose a more moderate revenue increase. We propose increasing the monthly Fixed Charge from $\$ 110.00$ to $\$ 130.00$ per month. Coincidental Demand Charges are proposed at $\$ 26.14$ per kW in the summer months, $\$ 19.91$ per kW in the winter months and $\$ 13.67$ per kW during all other months. The NonCoincidental Demand Charge will be increased from the present $\$ 4.75$ per kW to $\$ 5.25$ per kW . The Energy Charge will be increased from $\$ 0.0499$ per kWh ( $\$ 0.0494$ per kWh including the RTA) to $\$ 0.0521$ per kWh .

Testimony of D.R. Larson, page 57

| Comparison of Present and Proposed <br> Interruptible Service (Full Interruptible Option) <br> (70) |  |  |  |
| :--- | ---: | ---: | :---: |
| Present <br> Date | Proposed <br> Rate |  |  |
| Fixed Charge | $\$ 110.00 / \mathrm{month}$ | $\$ 130.00 / \mathrm{month}$ |  |
| Communication Fee | $\$ 8.70 / \mathrm{month}$ | $\$ 8.70 / \mathrm{month}$ |  |
| Coinc. Demand Charge | $\$ 24.85 / \mathrm{kW} / \mathrm{month}$ |  |  |
| Summer Months | $\$ 18.95 / \mathrm{kW} / \mathrm{month}$ | $\$ 26.14 / \mathrm{kW} / \mathrm{month}$ |  |
| Winter Months | $\$ 13.00 / \mathrm{kW} / \mathrm{month}$ | $\$ 19.91 / \mathrm{kW} / \mathrm{month}$ |  |
| Other Months | $\$ 4.75 / \mathrm{kW}$ | $\$ 13.67 / \mathrm{kW} / \mathrm{month}$ |  |
| Non-Coinc. Demand Charge | $\$ 0.0499 / \mathrm{kWh}$ | $\$ 5.25 / \mathrm{kW}$ |  |
| Energy Charge | $\$ 0.15 / \mathrm{kW}$ | $\$ 0.0521 / \mathrm{kWh}$ |  |
| Primary Voltage Disc. | $2.00 \%$ | $\$ 0.15 / \mathrm{kW}$ |  |
| Primary Metering Disc. | $(\$ 0.0005) / \mathrm{kWh}$ | $2.00 \%$ |  |
| RTA Charge |  | $\$ 0.0000 / \mathrm{kWh}$ |  |

## Interruptible Service - Partial Interruptible Option (71)

Dakota Electric proposes the same retail rates for Schedule 71 as Schedule 70. The difference between these two services is that Schedule 70 consumers agree to fully interrupt their load during specified load control periods. Schedule 71 members, however, agree to reduce their load during control periods but not necessarily to zero. Accordingly, these consumers will have some portion of their load on during the control periods.

| Table 26Comparison of Present and ProposedInterruptible Service (Partial Interruptible Option) (71) |  |  |
| :---: | :---: | :---: |
| Description | Present Rate | $\begin{aligned} & \text { Proposed } \\ & \text { Rate } \end{aligned}$ |
| Fixed Charge | \$110.00/month | \$130.00/month |
| Communication Fee | \$8.70/month | \$8.70/month |
| Coinc. Demand Charge |  |  |
| Summer Months | \$24.85/kW/month | \$26.14/kW/month |
| Winter Months | \$18.95/kW/month | \$19.91/kW/month |
| Other Months | \$13.00/kW/month | \$13.67/kW/month |
| Non-Coinc. Demand Charge | \$4.75/kW | \$5.25 /kW |
| Excess Demand | \$5.00/kW | \$5.00/kW |
| Energy Charge | \$0.0499/kWh | \$0.0521/kWh |
| Primary Voltage Disc. | \$0.15/kW | \$0.15/kW |
| Primary Metering Disc. | 2.00\% | 2.00\% |
| RTA Charge | \$0.0060/kWh | \$0.0000/kWh |

Testimony of D.R. Larson, page 58

## Cycled Air Conditioning Service (80)

Dakota Electric's pricing for the four options under cycled air conditioning service reflect the savings we experience in wholesale capacity charges by members agreeing to control their air conditioners during peak periods. An analysis of wholesale power cost savings associated with cycled air conditioning is presented in Exhibit _(DEA-13). Based on this analysis, we propose no changes in the credit provided to the members participating in cycled air conditioning. The proposed rates for these options are presented below:

| Table 27 <br> Comparison of Present and Proposed <br> Controlled Air Conditioning Service (80) |  |  |  |
| :---: | :---: | :---: | :---: |
| Pescription | Present <br> Rate | Proposed <br> Rate |  |
| Option 1 |  | $(\$ 0.0320) / \mathrm{kWh}$ |  |
| Option 2 | $(\$ 0.0320) / \mathrm{kWh}$ | $(\$ 13.00) / \mathrm{month}$ |  |
| Option 3 | $(\$ 13.00) /$ month | $(\$ 6.50) /$ ton $/ \mathrm{month}$ |  |
| Option 4 | $(\$ 60) /$ ton $/$ month |  |  |

Testimony of D.R. Larson, page 59
Q. Have you prepared comparisons of the Present and Proposed Rates?
A. Yes, I have. Exhibit__ (DEA-6) provides several different comparisons of the present versus proposed rates as follows:

- Comparison of Present and Proposed Rates
- Comparison of Revenue under Present and Proposed Rates
- Comparison of Bills under Present and Proposed Rates for Selected Classes
Q. Is Dakota Electric proposing changes to other charges in addition to the rate schedules identified above?
A. Yes. Dakota Electric is proposing changes to its special fees and charges per occurrence as follows:

Testimony of D.R. Larson, page 60

| Description | Current Charge | Proposed Charge |
| :---: | :---: | :---: |
| Meter Test at Customer's Request |  |  |
| Single phase | \$85.00 | \$95.00 |
| Three phase | \$100.00 | \$110.00 |
| Bad Check | \$15.00 | \$11.50 |
| Reconnection Charge (after disconnect, same customer) |  |  |
| Self-Contained Meter: |  |  |
| Normal working hours | \$50.00 | \$55.00 |
| After hours | \$130.00 | \$145.00 |
| Transformer-Rated Meter: |  |  |
| Normal working hours | \$175.00 | \$185.00 |
| After hours | \$315.00 | \$340.00 |
| Service Charge (outside normal working hours when problem is not with DEA equipment) | \$280.00 | \$340.00 |
| Load Management Service Charge: |  |  |
| Normal working hours | \$70.00 | \$80.00 |
| After hours | \$140.00 | \$160.00 |
| Pulse Meter | \$500.00 | \$750.00 |
| Temporary Service: |  |  |
| - Non-winter months | \$205.00 | NA |
| -Winter menths | \$340.00 | NA |
| Transfer/Connection | \$ 17.50 | \$17.50 |

These changes are supported by the cost analysis presented in Exhibit__(DEA-10). The Temporary Service special fees listed are being deleted since there is already language in our Rate Book (Section VI, Sheet 8) that describes the provision of Temporary Service. This sheet states that "When installing temporary service to a member, Dakota Electric Association will require that the member bear the cost of the installation and removal of service in excess of any salvage realized." While this language has been in place, Dakota Electric has been charging according to the rates identified for Special Fees or Charges. It is more appropriate for these installations to pay the actual costs for each specific installation.

Testimony of D.R. Larson, page 61
Q. Are there any other proposed changes?
A. As I mentioned earlier, Dakota Electric is also proposing to update its line extension charges. The present line extension policy provides a base footage allowance of 75 feet, with a $\$ 500.00$ charge imposed on all individual residential line extensions plus $\$ 8.30$ per foot for extensions in excess of 75 feet. Based on the analysis in Exhibit__(DEA-11), Dakota Electric proposes to change individual residential line extension charges to a base fee of $\$ 1,000.00$ plus $\$ 11.00$ per foot for each foot of the extension (no free footage allowance). We are also proposing language that would refund the amount paid for individual residential line extensions that exceed actual costs for the extension. This proposal for individual residential line extension charges 1) better reflects costs recovered through base rates, 2) helps ensure that new members are paying a more reasonable share of line extension costs, 3) limits payments to no more than actual costs, while 4) reducing the cost burden on existing ratepayers.

Dakota Electric also proposes to update the line extension factors applicable for extensions to members receiving service under Schedule 41, Schedule 46, and Schedules 70/71. These factors are based on the analysis shown in Exhibit_(DEA-11). We also propose to add a factor and line in the calculation description for extensions to multitenant residential complexes. This proposed credit per residential unit for multi-tenant master-metered residential buildings is consistent with the residential credit used in the analysis for individual residential line extensions.

Testimony of D.R. Larson, page 62
Q. Have you prepared revised tariff pages reflecting the proposed changes discussed in your testimony?
A. Yes. Exhibit__(DEA-17) includes Dakota Electric's present rate schedules. This exhibit is followed by Exhibit__(DEA-18) that includes marked-up versions of present rate schedules showing all proposed additions and deletions. (The software used for this purpose specifically identifies text that has been deleted. Text proposed for addition is shown as underlined.) Finally, Exhibit_(DEA-19) presents a "clean" version of proposed rate schedules.

Testimony of D.R. Larson, page 63

## VIII. SUMMARY \& CONCLUSION

## Q. Please summarize your testimony and requests for Commission action.

A. Dakota Electric requests that the Commission:

1. Authorize an overall revenue increase of $\$ 8,727,396$ or about 4.35 percent.
2. Approve the pro forma Test Year Revenue Requirements contained in Exhibit__(DEA-1).
3. Approve a Rate of Return on Rate Base of 5.73 percent as calculated in Exhibit $\qquad$
4. Approve the Cooperative's Cost of Service study as contained in Exhibit $\qquad$ including the use of the minimum size method (with demand adjustment) in this and future general rate proceedings for the Cooperative.
5. Approve the charges for retail rate schedules as described in this testimony and contained in Exhibit__(DEA-6) and proposed tariff pages included in Exhibit__(DEA18) and Exhibit $\qquad$ (DEA-19).
6. Approve the RTA base components contained in Exhibit _(DEA-12) and as reflected in proposed tariff pages shown in Exhibit__(DEA-18) and Exhibit__(DEA-19).
7. Approve the proposed Special Fees and Charges shown in Exhibit__(DEA-10) and as reflected in proposed tariff pages shown in Exhibit__(DEA-18) and Exhibit__(DEA19).
8. Approve the proposed changes for individual residential line extensions as described in this testimony and analyzed in Exhibit__(DEA-11).
9. Approve the proposed modifications/clarifications to tariff pages in Section VI of the Cooperative's rate book as reflected in in proposed tariff pages shown in Exhibit__(DEA-18) and Exhibit__(DEA-19).

Testimony of D.R. Larson, page 64
Q. Does this conclude your prefiled Direct Testimony?
A. Yes, it does.

Schedule 1
Professional and Educational Background
Direct Testimony of Douglas R. Larson
Docket No. E-111/GR-19-478

## PROFESSIONAL EXPERIENCE

## Dakota Electric Association - Farmington, Minnesota (2008 - Present)

Vice President of Regulatory Services
Responsible for regulatory matters including developing new rates, monitoring existing rates, submitting miscellaneous tariff filings, and coordinating and/or preparing all necessary information pertaining to rate increase filings; evaluating power supply issues through participation in meetings at Great River Energy; and monitoring state and federal electric utility and environmental legislation and determining the potential affect on DEA's operation as a distribution cooperative.

Power System Engineering - Blaine, Minnesota (1998-2008)
Vice President of Rates and Financial Planning
Senior Rate and Financial Analyst
Manager of PSE's Blaine, Minnesota office. Responsibilities include preparation of rate and cost of service analyses for electric cooperative and municipal clients; economic evaluation of mergers, acquisitions and special programs; key account analysis; development of large power contracts and special rates; development of restructuring plans and various elements of such plans; and development of financial forecast and economic feasibility studies.

## Dakota Electric Association - Farmington, Minnesota (1992-1998)

Director of Regulatory \& Legislative Affairs
Coordinated and/or prepared all necessary information pertaining to rate filings, cost of service studies, new rate proposals and miscellaneous tariff filings. Monitored state and federal electric utility and environmental legislation to determine the potential effect on Dakota Electric's operations as a distribution cooperative. Participated in statewide rulemaking proceedings initiated by state agencies that affect electric utility operations. Prepared and conducted conservation, rate and industry-related presentations for consumer and other public meetings.

Dakota Energy Alternatives, Inc. - Farmington, Minnesota (1993-1998)
President/CEO - Unregulated Business Activities
Vice President of Business Operations
Supervised staff of professional engineers and support staff who sold and installed standby generation for commercial and industrial customers. Established relationships/partnerships with organizations to expand the standby generation business. Worked with officers to evaluate new business ventures.

## Minnesota Department of Public Service - St. Paul, Minnesota (1986 - 1992) <br> Rate Analyst

Filed testimony in utility rate cases regarding conservation, marketing, cost of service and rate design. Reviewed service area disputes between utilities and complaints from customers and recommended corrective actions. Presented testimony to establish compensation for municipal service territory acquisitions. Reviewed miscellaneous utility filings and prepared recommendations for Public Utilities Commission action. Also participated in Public Utilities Commission task forces to revise Minnesota Rules.

## Minnesota Department of Energy \& Economic Development, Energy Division

St. Paul, Minnesota (1983-1986)
Research Analyst
Responsible for filing testimony in utility rate cases regarding conservation planning and the calculation of cost-effective utility programs. Reviewed utility conservation programs and prepared comments for the Public Utilities Commission.

## EDUCATION

University of Minnesota - Minneapolis, Minnesota
Master of Business Administration
St. Olaf College - Northfield, Minnesota
Bachelor of Arts Degree in Economics

Schedule 2<br>Regulatory Proceedings<br>Direct Testimony of Douglas R. Larson<br>Docket No. E-111/GR-19-478

## Minnesota

| Docket Number | Utility | Type of Proceeding |
| :--- | :--- | :--- |
| G-009/GR-84-128 | Montana-Dakota Utilities | Rate Case |
| G-007/GR-84-669 | Inter-City Gas | Rate Case |
| G-002/GR-85-108 | Northern States Power | Rate Case |
| G,E-999/R-86-322 | Cold Weather Rules | Rulemaking |
| E-001/GR-86-384 | Interstate Power | Rate Case |
| E-221,148/SA-87-661 | City of Buffalo \& Wright-Hennepin | Service Territory |
|  | Cooperative |  |
| E-002/GR-87-670 | Northern States Power | Rate Case |
| E-132, 299/SA-88-270 | City of Rochester \& Peoples Cooperative | Service Territory |
| E-132,299/SA-88-996 | City of Rochester \& Peoples Cooperative | Service Territory |
| E-002/GR-89-865 | Northern States Power | Rate Case |
| E-309,124/SA-89-778 | City of Shakopee \& Minnesota Valley Coop | Service Territory |
| G-010/GR-90-678 | Midwest Gas | Rate Case |
| E-002/GR-91-001 | Northern States Power | Rate Case |
| E-002/CN-91-019 | Northern States Power | Certificate of Need |
| E-111/GR-91-074 | Dakota Electric Association | Rate Case |
| E-111/GR-03-261 | Dakota Electric Association | Rate Case |
| E-111/GR-09-175 | Dakota Electric Association | Rate Case |
| E-111/GR-14-482 | Dakota Electric Association | Rate Case |

## $\underline{\text { Kansas }}$

| $\underline{\text { Docket Number }}$ | $\underline{\text { Utility }}$ |
| :--- | :--- |
| 01 PNRE 058-RTS | Pioneer Electric Cooperative |$\quad$| Type of Proceeding |
| :--- |
| Rate Case |

## Iowa

| Docket Number | Linn County REC Utility |
| :--- | :--- |$\quad$| Type of Proceeding |
| :--- |
| RPU-02-1 |



# Your Touchstone Energy ${ }^{\oplus}$ Cooperative 



In the Matter of the Application of
DAKOTA ELECTRIC ASSOCIATION
for Authority to File, Establish, and make Effective
Revised Rates for the Sale of Electricity

Docket No. E-111/GR-19-478

Volume 1:Transmittal Documents Interim Petition
Testimony and Exhibits

September 19, 2019
Daniel P. Wolf, Executive Secretary
Minnesota Public Utilities Commission
$1217^{\text {th }}$ Place East, Suite 350
Saint Paul, MN 55101-2147

# SUBJECT: In the Matter of the Application of Dakota Electric Association for Authority to Increase Rates for Electric Service in Minnesota Docket No. E-111/GR-19-478 

## Dear Mr. Wolf:

Dakota Electric Association respectfully submits this Application for Authority to Increase Electric Rates (Application) pursuant to Minnesota Statutes 216B.16, Subd. 1. The Application includes changes in present rates and modifications to Dakota Electric Association's special fees and charges.

The name, address, and telephone number of the Cooperative and attorney are as follows:

Representing Attorney:
Eric F. Swanson
Winthrop \& Weinstine
225 South Sixth Street, Suite 3500
Minneapolis, Minnesota 55402-4629
(612) 604-6511

Utility Filing for Rate Change:
Dakota Electric Association $4300220^{\text {th }}$ Street West
Farmington, MN 55024
(651) 463-6327

Since our last general rate case was filed in 2014, Dakota Electric has experienced steadily increasing costs in providing electric distribution service. Dakota Electric's 2019 budget anticipates a net operating margin of about $\$ 2,250,000$ making an increase in rates necessary and unavoidable. Based on our Historical 2018 Test Year operating results (adjusted for known and measurable changes), this filing documents the need for an annual revenue increase of about $\$ 8,700,000$ or about 4.3 percent.

If the Commission elects to suspend the proposed rate increase under Minnesota Statute 216B.16, Subd. 2, we request that, pursuant to Minnesota Statute 216B.16, Subd. 3, an interim rate increase of approximately $\$ 6,000,000$ or about 3.0 percent be effective beginning with
consumption occurring on and after November 18, 2019, subject to refund (Agreement to Refund attached) should the Commission ultimately approve a lower final revenue level.

We request implementation of the proposed rates within 10 months of the date of Application and request that a Commission Order is received at the beginning of August 2020. However, we understand that multiple general rate proceedings will be filed with the Commission this year. Accordingly, Dakota Electric is willing to provide a limited waiver of the 10 -month statutory timeframe, extending the disposition of this case, if such an extension is necessary.

Dakota Electric's Application consists of the following:
Volume 1 Transmittal Documents
Interim Rate Petition
Testimony and Exhibits (including proposed rates)
Volume 2 Workpapers (supporting documentation)
To facilitate the review and confirmation of required filing information, attached is a document that identifies Dakota Electric's general rate case compliance requirements with an indication of where each compliance document is located in our submission. These compliance requirements include provisions in Minnesota Rules, Minnesota Statutes, Commission Policy Statements, and the final orders from our last two general rate cases (Docket No. E-111/GR-09-175 and Docket No. E-111/GR-14-482).

Enclosed is a copy of the official notice we propose to provide to customers as a bill insert and to counties and municipalities in our service area through a separate mailing. Upon approval we will begin sending this notice to customers.

In addition to our electronic filing, notice of this general rate case has been sent to those on the Cooperative's general service list and a list of potentially interested persons provided by Commission staff.

Sincerely,


Gregory C. Miller
President and Chief Executive Officer

## Dakota Electric Association General Service List

Daniel P. Wolf, Exec. Sec.
MN Public Utilities Commission
$1217^{\text {th }}$ Place East, Suite 350
St. Paul, MN 55101-2147
Sharon Ferguson
MN Department of Commerce
$857^{\text {th }}$ Place East, Suite 500
St. Paul, MN 55101-2198
Eric Swanson
Winthrop \& Weinstine
225 South $6^{\text {th }}$ Street, Suite 3500
Minneapolis, MN 55402-4629

Ron L. Spangler, Jr.
Rate Case Manager, Regulatory Services
Otter Tail Power Company
215 South Cascade Street
Fergus Falls, MN 56538
David R. Moeller
Attorney
Minnesota Power
30 West Superior St.
Duluth, MN 55802
John Lindell
Attorney General's Office - RUD
1400 Bremer Tower
445 Minnesota Street.
St. Paul, MN 55101
Pam Marshall
Energy Cents Coalition
823 East $7^{\text {th }}$ Street
St. Paul, MN 55106

Corey Hintz
Dakota Electric Association
$4300-220^{\text {th }}$ Street West
Farmington, MN 55024
Doug Larson
Dakota Electric Association
$4300-220^{\text {th }}$ Street West
Farmington, MN 55024

# Dakota Electric Association <br> List of Potentially Interested Persons <br> General Rate Case <br> Docket No. E-111/GR-19-478 

Jody Johnson
Executive Assistant
Prairie Island Indian Community
jody.johnson@piic.org
Shannon Geshick
Grants and Legislative Director
Minnesota Indian Affairs Council (MIAC)
shannon.geshick@state.mn.us
Heather Westra
Prairie Island Indian Community
heather.westra@piic.org

## Certificate of Service

I, Cherry Jordan, hereby certify that I have this day served copies of the attached document to those on the following service list by e-filing, personal service, or by causing to be placed in the U.S. mail at Farmington, Minnesota.

Docket No. E-111/GR-19-478

Dated this 19th day of September 2019
/s/ Cherry Jordan
Cherry Jordan

## "AGREEMENT TO REFUND"

I, Gregory C. Miller, President and Chief Executive Officer, acting on behalf of Dakota Electric Association, do hereby agree that the Association will refund any portion of the increase in interim rates, determined by the Minnesota Public Utilities Commission to be unreasonable, together with interest thereon.


Gregory C. Miller, President and Chief Executive Officer
DAKOTA ELECTRIC ASSOCIATION
Farmington, Minnesota 55024

## BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Katie Sieben<br>Dan Lipschultz<br>Valerie Means<br>Matt Schuerger<br>John Tuma<br>Chair<br>Commissioner<br>Commissioner<br>Commissioner<br>Commissioner

In the Matter of the Application of
DAKOTA ELECTRIC ASSOCIATION
for Authority to Increase Rates
for Electric Service in Minnesota

## SUMMARY OF RATE INCREASE PETITION

On September 19, 2019, Dakota Electric Association submitted an Application for Authority to Increase Electric Rates (Application) pursuant to Minnesota Statutes 216B.16, Subd. 1. The Application includes changes in present rates and modifications to Dakota Electric Association's special fees and charges.

Since our last general rate case was filed in 2014, Dakota Electric has experienced steadily increasing costs in providing electric distribution service. Dakota Electric's 2019 budget anticipates a negative net operating margin of about $\$ 2,250,000$, making an increase in rates necessary and unavoidable. Based on our Historical 2018 Test Year operating results (adjusted for known and measurable changes), this filing documents the need for an annual revenue increase of about $\$ 8,700,000$ or about 4.3 percent.

If the Commission elects to suspend the proposed rate increase under Minnesota Statute 216B.16, Subd. 2, we request that, pursuant to Minnesota Statute 216B.16, Subd. 3, an interim rate increase of approximately $\$ 6,000,000$ or about 3.0 percent be effective beginning with consumption occurring on and after November 18, 2019, subject to refund (Agreement to Refund attached) should the Commission ultimately approve a lower final revenue level.

We request implementation of the proposed rates within 10 months of the date of Application and request that a Commission Order is received at the beginning of August 2020. However, we understand that multiple general rate proceedings will be filed with the Commission this year. Accordingly, Dakota Electric is willing to provide a limited waiver of the 10 -month statutory timeframe, extending the disposition of this case, if such an extension is necessary.

# Dakota Electric Association <br> General Rate Case Compliance Requirements Docket No. E-111/GR-19-478 

## MN Rule

Minn. R. 7825.3200(A)

Minn. R. 7825.3300

Minn. R. 7825.3500

Minn. R. 7825.3600

Minn. R. 7825.3700

Minn. R. 7825.3800
Scope and Supplemental Information

Minn. R. 7825.3900

## Description

General rate changes shall include items prescribed in Minn. R. 7825.3300 to 7825.4400

Methods and Procedures for Refunding

Proposal for Change in Rates
A. Name, address, etc.
B. Date of filing and date of modified rates
C. Description and purpose of request
D. Effect in gross revenue \$ and \%
E. Signature and title of utility officer

Modified Rate Schedules and Tariffs

Expert Opinions and Supporting Exhibits

Jurisdictional Financial Summary Schedule
A. The proposed rate base, operating income, overall rate of return, and calculation of income requirements, income deficiency, and revenue requirements for the test year.
B. The actual unadjusted rate base, unadjusted operating income, overall rate of return, and calculation of income requirements, income deficiency, and revenue requirements for the most recent fiscal year.
C. The projected unadjusted rate base, unadjusted operating income, overall rate of return, and calculation of income requirements, income deficiency, and revenue requirements for the projected fiscal year.

## Compliance

See Minn. R. 7825.3300 to 7825.4400 below

Volume 1, "Agreement to Refund"

Volume 1, Cover letter

Volume 1, Exhibits 17-19

Volume 1, Testimony and Exhibits 1-19

See Minn. R. 7825.3900 to 7825.4400 below

Volume 1, Exhibit 2

## MN Rule

Minn. R. 7825.4000

Minn. R. 7825.4100

Minn. R. 7825.4200

Minn. R. 7825.4300

Rate Base Schedules
A. Summary schedule by major rate base component
B. Comparison of total utility and Minnesota jurisdictional rate base amounts by detailed rate base component
C. Rate Base Adjustments
D. Rate Base Assumptions and Approach
E. Rate Base Jurisdictional Allocation Factors (for multijurisdictional utilities)

Operating Income Schedules
A. Jurisdictional Operating Income Statements
B. Total Utility and Jurisdictional Operating Income Statements
C. Utility Income Tax Computations (investorowned utilities)
D. Operating Income Adjustments
E. Operating Income Assumptions and Approach
F. Operating Income Jurisdictional Allocation Factors (for multijurisdictional utilities)

Rate of Return Cost of Capital Schedules
A. Rate of Return Summary Schedules
B. Supporting Schedules
C. Average Short-Term Securities

Rate Structure and Design Information
A. Summary Comparison Test Year Operating Revenue
B. Detailed Comparison Test Year Operating Revenue
C. Cost of Service Study

## Compliance

Volume 1, Exhibit 2

Volume 1, Exhibit 1 and Exhibit 5

Volume 1, Exhibit 2
A. Volume 1, Exhibit 6
B. Volume 1, Exhibit 6
C. Volume 1, Exhibit 3

## MN Rule

Minn. R. 7825.4400

Minn. R. 7814.2400, subp. 4

Minn. R. 7829.2400

Description
Other Supplemental Information
A. Annual Report
B. Gross Revenue Conversion Factor (InvestorOwned)
C. Form 7 (cooperatives)
D. Form 7A (cooperatives)
E. Form 325 Financial Forecast (cooperatives)

New Base Electric Fuel Cost

Filing requiring determination of gross revenue.
Brief summary of the filing, sufficient to apprise potentially interested parties of its nature and general content.

A utility filing a general rate change request shall serve copies of the filing on the Department and Residential Utilities Division of the Office of the Attorney General. The utility shall serve the filing or the summary described in subpart 1 on the persons on the applicable general service list and persons who were parties to its last general rate case or incentive plan proceeding.

## Compliance

A. Volume 2, WP 2
B. NA
C. Volume 2, WP 1
D. Volume 2, WP 1
E. Volume 2, WP 5

Volume 1, Exhibit 12

Volume 1, Summary of Filing

Volume 1, Cover Letter

## MN Statute

Minn. Stat. § 216B.16,
subd. 3

Minn. Stat. § 216B. 241
Minn. Stat. § 216B.16,
subd. 1

Minn. Stat.§ 216B.16, subd.17; Travel, Entertainment and Related Employee Expenses

Description

Interim Rates

Energy Conservation Improvement Plan

Schedule separately itemizing all travel, entertainment, and related employee expenses as specified by the commission, including but not limited to the following categories:
(1) travel and lodging expenses;
(2) food and beverage expenses;
(3) recreational and entertainment expenses;
(4) board of director-related expenses, including and separately itemizing all compensation and expense reimbursements;
(5) expenses for the ten highest paid officers and employees, including and separately itemizing all compensation and expense reimbursements;
(6) dues and expenses for memberships in organizations or clubs;
(7) gift expenses;
(8) expenses related to owned, leased, or chartered aircraft; and
(9) lobbying expenses.

## Compliance

Volume 1, Notice and Petition for Interim Rates, and Interim Rate Schedules

Volume 2, WP 9

Volume 2, WP 15

Policy Statement
Description
Compliance

| Advertising | Statement that recovery is requested only for permitted advertisements. | Volume 2, WP 18 |
| :---: | :---: | :---: |
|  | Description of advertisements for which recovery is requested. |  |
|  | Sample advertisements for which recovery is requested. |  |
| Charitable Contributions | Evidence as to whether the recipients of the contributions: serve the utility's Minnesota service area; are nondiscriminatory in selecting recipients; and do not promote political or special interest groups. | Volume 2, WP 19 |
|  | Evidence as to what organizations are gifted, their activities, and that no part of the contribution goes to benefit any private stockholder or individual. |  |
|  | Itemized schedule showing amount, recipient and time of donations. |  |
|  | Only $50 \%$ of qualified contributions shall be allowed as operating expenses. |  |
| Organizational Dues | Schedule showing each organization being paid, the number of employees belonging to each organization and the dollar amount of dues being paid to each organization. | Volume 2, WP 20 |
|  | Testimony explaining the primary purpose of each organization. |  |
| Research Expenses | Description of each research activity for which an expense is claimed, with all expenses for each activity itemized and supported. | Not Applicable |
| Cash Working Capital | Lead/lag study with: 1) lead time divided into service to meter reading; meter reading to billing; and billing to collection; and 2) lag expenses divided in categories such as fuel, purchased power, labor. Other issues may include average or minimum cash | Volume 2, WP 6 |

balances required, depreciation, dividends and interest on debt.

Name, address and telephone number of utility and attorneys.

Date of filing and date proposed interim rates are requested to become effective.

Description and need for interim rates.
Description and corresponding dollar amount change included in interim rates as compared with most current approved general rate case and with the most recent year for which audited data is available.

Effect of the interim rates expressed in gross revenue dollars and as a percentage of test year gross revenues.

Certification by officer of the utility.
Signature and title of the utility officer authorizing the proposed interim rates.

Methods and procedures for refunding.
Supporting schedules and work papers.
Modified tariffs.
Notices.

## MPUC Order <br> E-111/GR-09-175

Description
Compliance
Sales Forecast
Long-Term Interest
Expense

Minimum-Size
Method

Line Extensions

## MPUC Order <br> E-111/GR-14-482

Purchased-Power

COS Demand
Adjustment

Dakota Electric shall, in future rate cases, be consistent in its use and source of weather data in determining its sales forecast.

Dakota Electric shall, in its next rate case, demonstrate that its long-term interest expense is prudently incurred. Such demonstration shall include data of rates offered by other lenders.

Dakota Electric shall, in its next rate case, either use the minimum-size method to classify distribution accounts, or provide such an analysis to support the outcome of the zero-intercept method.

Regarding line extensions, if Dakota Electric determines that there has been any increase in the number of its overhead extensions, it shall include that information in its next rate case.

## Description

Dakota Electric Association shall include in the initial filing of its next rate case work papers for both the purchased-power revenue and purchased-power expense amounts included in the pro forma testyear financial schedule.

Dakota Electric Association shall include a demand adjustment in the Class Cost of Service Study submitted in its next rate case.

Volume 2, WP 13

Volume 2, WP 17

Volume 2, WP 21

Volume 1, DRL Testimony

Compliance

Volume 2, WP 24

Volume 2, WP 21 and
Volume 1, Exhibit 3

Misc. Dockets

E-999/CI-06-159

E-111/M-16-774

E-111/M-16-923

E-111/M-17-180

Description
Compliance

In an August 10, 2007 Order, the Commission stated Volume 2, WP 25 its intention to examine individual utility smart metering practices in the context of rate cases.

The Association will track the wholesale power cost credits associated with each Member Specific Discount and exclude them from both the calculation of the base cost of power in future rate cases and the calculation of the Power Cost
Adjustment Charges in the Resource and Tax
Adjustment filings to the Minnesota Public Utilities Commission. This will ensure that the credits Dakota Electric receives from its wholesale power supplier are not double-counted.

The Association will track the wholesale power costs Volume 1, Exhibit 12 associated with All Large Load High Load Factor credits and exclude them from both the calculation of the base cost of power in future rate cases and the calculation of the Power Cost Adjustment Charges in the Resource and Tax Adjustment filings to the Minnesota Public Utilities Commission. This will ensure that the credits Dakota Electric receives from its wholesale power supplier are not doublecounted.

The Association will track the wholesale power costs Volume 1, Exhibit 12 associated with all contract rates and exclude them from both the calculation of the base cost of power in future rate cases and the calculation of the Power Cost Adjustment Charges in the Resource and Tax Adjustment filings to the Commission.

## Proposed changes for base electricity rates

Dakota Electric Association has asked the Minnesota Public Utilities Commission (MPUC) for permission to increase electric utility rates and service charges. The proposed increase in total cooperative annual revenues will be about $\$ 8.7$ million or $4.3 \%$ overall.

## Interim rates

State law allows us to collect higher rates on an interim basis while our rate filing is reviewed. If the MPUC approves our request for $\$ 6.0$ million or a $3.0 \%$ interim increase, the additional charge will apply to electricity use beginning in November, for which members will begin receiving bills in December. This interim increase appears on your bill as "Interim Rate Adjustment." For Residential and Small General Service members, the interim adjustment applies to the monthly fixed charge, energy charge and resource and tax adjustment*. For General Service members the interim adjustment also applies to the demand charge.

The interim increase will remain in effect until the MPUC determines final rates. The MPUC is expected to make its decision in 2020. If the approved overall total increase is lower than interim rates, we will refund members the difference with interest. If the overall total increase is higher, we will not charge members the difference

## What is increasing Dakota Electric's costs?

 Since Dakota Electric's last request for a rate increase in 2014, costs for equipment, labor and materials have continued to increase. These factors, combined with minimal growth in electric sales in the last five years, contributed to the need for this filing.
## How is Dakota Electric controlling costs?

- Using technology and process improvements to increase efficiency.
- Employees do things every day to reduce expenses. They may not produce large savings on their own but when added together, help lower expenses.
- Offering a variety of programs to help members conserve energy and save money.


## Impact on monthly bills

While the effect of the proposed increase on your bill will vary depending upon member classification and amount of energy use, the average monthly bill for a residential member will increase by $\$ 4.22$ from $\$ 94.96$ per month to $\$ 99.18$ per month. The charts below provide more detail on the impact of proposed increases.

| Proposed Change in Monthly Electricity Costs |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Member classification | Average monthly kWh use | Current monthly bill | Interim monthly bill | Proposed final monthly bill |
| Residential | 700 | \$94.96 | \$97.81 | \$99.18 |
| Small General Service | 1,000 | \$132.90 | \$136.89 | \$142.00 |
| General Service | 16,000 | \$1,637 | \$1,686 | \$1,654 |


| Energy (per kWh) and Demand (per kW) Rates (including RTA) |  |  |
| :---: | :---: | :---: |
| Member classification | Current | Proposed |
| Residential |  |  |
| Energy: Summer (June - Aug) | $13.33 ¢$ | 13.79¢ |
| Energy: Other (Sept - May) | 11.93¢ | 12.39¢ |
| Small General Service |  |  |
| Energy: Summer (June - Aug) | 12.94¢ | $13.75 ¢$ |
| Energy: Other | 11.54¢ | $12.35 ¢$ |
| General Service |  |  |
| Energy: First 200 kWh per kW | $8.01 ¢$ | 7.76¢ |
| Energy: Next 200 kWh per kW | 7.01\% | 6.76¢ |
| Energy: Over 400 kWh per kW | 6.01 C | 5.76¢ |
| Demand: Summer (June - Aug) | \$12.26 | \$13.70 |
| Demand: Other (Sept - May) | \$9.16 | \$10.60 |


| Monthly Fixed Charges |  |  |
| :--- | ---: | :---: |
| Member classification | Current | Proposed |
| Residential | $\$ 9.00$ | $\$ 10.00$ |
| Small General Service | $\$ 14.00$ | $\$ 15.00$ |
| General Service | $\$ 34.00$ | $\$ 34.00$ |

*The resource and tax adjustment (RTA) is a periodic rate adjustment for changes in wholesale power costs, property and real estate taxes and conservation spending.

## Review process

The Minnesota Public Utilities Commission will hold public hearings and accept written comments about our rate request. The public will be able to comment on our rate request at the public hearings. You may add oral comments, written comments, or both into the record. Dakota Electric will provide details about the hearings in local newspapers, in a bill insert and at www.dakotaelectric.com.

## More information

Details about proposed rates are available on Dakota Electric's Web site at www.dakotaelectric.com. A complete copy of our filing is also available for review at our Farmington office between 8 a.m. and 4:30 p.m. Monday through Friday. Our office is located at 4300 220th Street West, Farmington, MN.

You may also examine our current and proposed rate schedules and our request for new rates by contacting the Department of Commerce at:

Minnesota Department of Commerce
85 7th Place East, Suite 500
St. Paul, MN 55101
Phone: 651-296-9314

Web site: https://www.edockets.state.mn.us/EFiling/ search.jsp. Web address is case sensitive. Select 19 in the year field, enter 478 in the number field, click on search and the list of documents will appear on the next page.

Dakota Electric will also keep members informed of rate filing developments in our monthly Circuits newsletter and at www.dakotaelectric.com. As always, if you have questions or comments for Dakota Electric, contact us at 651-463-6212 or rates@dakotaelectric.com.

## How to participate

Anyone who wishes to formally intervene in this case should contact:

Minnesota Office of Administrative Hearings
P.O. Box 64620

St. Paul, MN 55164-0620
Phone: 651-361-7900

Citizens with hearing or speech disabilities may call through their preferred Telecommunication Relay Service.

You do not need to contact the Minnesota Office of Administrative Hearings if you simply want to attend the public hearings, provide oral comments at the public hearings or submit comment letters.

You may submit written comments to:
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101-2147
Phone: 651-296-0406 or 800-657-3782
E-mail: consumer.puc@state.mn.us
Citizens with hearing or speech disabilities may call through their preferred Telecommunication Relay Service.

Be sure to reference MPUC Docket No. E-111/GR-19478 in all correspondence or requests.

# Dakota Electric seeks increase in electric rates 

Interim rates effective with usage on and after November_, 2019 until final decision is made.

Docket No. E-111/GR-19-478


## SCHEDULE 31

## RESIDENTIAL AND FARM SERVICE

Availability
Available to individual residential and farm members for all domestic and farm use except irrigation.
This includes service to apartment units. Service is subject to the established rules and regulations of the Association.

Type of Service
Single phase or three phase, when economically feasible, 60 hertz, at available secondary voltages.
Monthly Rate

| Fixed Charge |  | $\$ 9.00$ per month |
| :--- | :--- | :--- |
| Energy Charge |  |  |
| $\quad$ Summer (June-Aug) | @ | $\$ 0.1308$ per kWh |
| Other | $@$ | $\$ 0.1168$ per kWh |
| Plus Applicable Taxes |  |  |

Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Minimum Monthly Charge

The minimum monthly charge under the above rate shall be the Fixed Charge.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 32

## RESIDENTIAL AND FARM DEMAND CONTROL RATE

## Availability

Available to residential and farm members with at least 5 kW of qualifying off-peak loads as determined by the Association. This rate is subject to the rules and regulations of the Association. Members requesting service under this rate schedule must remain on this rate schedule for a minimum of twelve (12) months.

Type of Service
Single phase, 60 Hertz, at available secondary voltages.
Monthly Rate

| Fixed Charge |  | $\$ 12.00$ per month |
| :--- | :--- | :--- |
| Energy Charge |  |  |
| Demand Charge |  | $\$ 0.0760$ per kWh |
| Summer (June-Aug) <br> Other | @ | $\$ 14.70$ per kW |
| Plus Applicable Taxes | @ | $\$ 11.10$ per kW |

Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

Billing Demand Determination
The demand will be determined based on the peak 15-minute demand reading during control periods for the month the bill was rendered. An estimated demand will be used for new customers until the actual controlled demand is established.

## Minimum Monthly Charge

The minimum monthly charge under the above rate shall be the $\$ 12.00$ Fixed Charge plus a minimum billing demand of 3 kW .

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be increased or decreased by $\$ 0.0001$ per kilowatt-hour for each 0.1 mill or major fraction by which the energy component in the Association's purchased power cost per kilowatt-hour purchased from its power supplier exceeds, or is less than $\$ 0.0903$ per kilowatt-hour purchased. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set fourth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE EV-1 <br> PILOT - RESIDENTIAL ELECTRIC VEHICLE SERVICE

## Availability

Available on voluntary basis as a pilot program for residential consumers taking service under Schedule 31 who also desire metered service for the sole purpose of electrically charging a licensed automobile or light truck. Service on this tariff is limited to electric vehicles that are SAE J1772 compliant and registered and operable on public highways in the State of Minnesota. Low-speed electric vehicles, including golf carts, are ineligible to take service under this tariff even if licensed to operate on public streets. The consumer may be required to provide the Association with proof of registration of the electric vehicle prior to taking service under this tariff. Service is subject to the established rules and regulations of the Association.

## Term

The pilot program will be offered for a minimum of a two year period. At the end of the initial two year pilot period, the Association will determine if this program will be continued, modified, or eliminated. If it is eliminated, the consumers participating in the pilot program will revert back to the appropriate retail rate tariff for their class of service.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages.

## Rate

Energy Charges:
Off-Peak: $\quad 6.74 \not \subset$ per kWh
On-Peak: $\quad 41.44 \notin$ per kWh
Other: $\quad$ Schedule 31 energy charges apply
Plus RTA and applicable sales tax

## Definition of Periods

Energy Charge time periods are defined as follows:
Off-Peak $\quad$ 9:00 pm to 8:00 am Mon. - Fri., and all day Weekends and Holidays
On-Peak $\quad$ 4:00 pm to 9:00 pm Mon. - Fri., excluding Holidays
Other $\quad$ 8:00 am to 4:00 pm Mon. - Fri., excluding Holidays
Holidays shall be: New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

|  | INTERIM |  |
| :--- | :--- | ---: |
| DAKOTA ELECTRIC ASSOCIATION | SECTION: | V |
| $4300220^{\text {th }}$ Street West | SHEET: | 5.0 |
| Farmington, MN 55024 | REVISION: | $1 \underline{7} 6$ |

## SCHEDULE 36

IRRIGATION SERVICE

## Availability

Available to any member for service to irrigation pumps. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages.

## Monthly Rate

Firm Service

| Fixed Charge |  | $\$ 30.00$ per month |
| :--- | :--- | :--- |
| Demand Charge | $@$ | $\$ 26.35$ per kW |
| $\quad$ Summer (June-Aug) | $@$ | $\$ 20.95$ per kW |
| Winter (Dec-Feb) | $@$ | $\$ 15.50$ per kW |
| Other | $@$ | $\$ 0.0499$ per kWh |
| Energy Charge |  |  |

Plus Applicable Taxes
Interruptible
Fixed Charge $\$ 30.00$ per month

Demand Charge
@ $\quad \$ 4.55$ per kW
Energy Charge
@ $\quad \$ 0.0499$ per kWh
Plus Applicable Taxes
Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

Determination of Metered Demand
The Metered Demand in kilowatts shall be the greatest 15 -minute demand (subject to power factor adjustment) during the month for which the bill is rendered. Demand will be read to the nearest 0.01 kilowatt.

## Power Factor Adjustment

The member agrees to maintain as near unity (100 percent) power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent, the demand for billing purposes shall be the demand as recorded by the demand meter multiplied by 90 percent and divided by the percent power factor.

Minimum Monthly Charge
The Minimum Monthly Charge under the above rate shall be the Fixed Charge.

## SCHEDULE 41 <br> SMALL GENERAL SERVICE

## Availability

Available to any commercial member for all uses, except irrigation pumps, where the Metered Demand is 15 kW or less. If the Metered Demand exceeds 15 kW for three consecutive months, the member will be transferred to the General Service Rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages.

## Monthly Rate

| Fixed Charge <br> Energy Charge | $\$ 14.00$ per month |  |
| :--- | :--- | :--- |
| $\quad$ Summer (June-Aug) | @ | $\$ 0.1269$ per kWh |
| $\quad$ Other | @ $\$ 0.1129$ per kWh |  |

Plus Applicable Taxes
Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Determination of Metered Demand

The Metered Demand in kilowatts shall be the greatest 15 -minute demand during the month for which the bill is rendered. Demand will be read to the nearest 0.01 kilowatt.

Minimum Monthly Charge
The Minimum Monthly Charge under the above rate shall be the Fixed Charge.

## Non-metered Option

This option has limited availability. It may be available for: devices that are located at individual points of delivery and are operated with a continuous or predetermined load level that exceeds the threshold determined for Schedule 45. The monthly energy consumption will be determined by the Association based on equipment documentation provided by the member. The maximum monthly energy allowed under this option will be 500 kWh .

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 44

## SECURITY LIGHTING SERVICE

## Availability

Available for year-around illumination for private residential, farm, or commercial lighting on existing Association service poles where service poles and service wires can be connected on the line side of member's meter. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

The Association shall own, operate, and maintain the security lighting system using the Association's standard security lighting equipment. The energy used by these lights is unmetered.

## Monthly Rate

Designation of Lamp
Monthly Rate Per Luminaire
100 Watt High Pressure Sodium (Closed to new)
\$10.10
150 Watt High Pressure Sodium (Closed to new)
250 Watt High Pressure Sodium (Closed to new) \$15.79
Plus Applicable Taxes
Optional - For residential or farm installation requiring any extra equipment, or in the event the consumer requests the changeout of an existing light to a different size and/or type, a contribution to construction will be required to cover the extra costs incurred. Commercial installations on existing service poles only.

Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## SCHEDULE 44-1 <br> STREET LIGHTING SERVICE <br> (MEMBER - OWNED)

## Availability

Available for year-round illumination of public streets, parkways, highways, and other public ways by electric lamps mounted on standards where member owns the lighting system complete with standards, luminaries, globes, lamps, and other appurtenances, together will all necessary cables extending between standards and to point of connection to the Association's facilities as designated by the Association.

## Type of Service

The street lighting system shall be built and owned by the member. All controls will be provided by the member. The member shall also provide all easements and right-of-way to permit access to feed points. The Association shall operate and provide limited maintenance (periodic cleaning of lens, refractor, and bulb replacement) on street lighting systems.

## Monthly Rate

| Designation of Lamp | Monthly Rate Per Luminaire |
| :--- | :---: |
| 175 Watt Mercury (Closed to new) | $\$ 10.52$ |
| 250 Watt Mercury (Closed to new) | $\$ 13.46$ |
| 400 Watt Mercury (Closed to new) | $\$ 18.54$ |
|  |  |
| 100 Watt High Pressure Sodium | $\$ 7.56$ |
| 150 Watt High Pressure Sodium | $\$ 9.46$ |
| 200 Watt High Pressure Sodium | $\$ 11.41$ |
| 250 Watt High Pressure Sodium | $\$ 13.25$ |
| 400 Watt High Pressure Sodium | $\$ 17.67$ |
| Plus Applicable Taxes |  |
|  |  |
| Rate Adjustment |  |

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## SCHEDULE 44-2 <br> STREET LIGHTING SERVICE <br> (DEA - OWNED EQUIPMENT)

## Availability

Available for governmental or private year-around illumination of public or private streets, parkways, highways, and other public ways by electric lamps in luminaires supported on existing poles where secondary voltage is available and the facilities for this service are furnished by the Association.

## Type of Service

The Association shall own, operate, and maintain the overhead street lighting system using the Association's standard street lighting equipment. The energy used by these lights is unmetered.

## Monthly Rate

| Designation of Lamp | Monthly Rate Per Luminaire |
| :--- | :---: |
| 175 Watt Mercury (Closed to new) | $\$ 15.23$ |
| 250 Watt Mercury (Closed to new) | $\$ 18.16$ |
| 400 Watt Mercury (Closed to new) | $\$ 23.25$ |
|  |  |
| 100 Watt High Pressure Sodium (Closed to new) | $\$ 12.27$ |
| 150 Watt High Pressure Sodium (Closed to new) | $\$ 14.16$ |
| 250 Watt High Pressure Sodium (Closed to new) | $\$ 17.95$ |
| 400 Watt High Pressure Sodium (Closed to new) | $\$ 22.38$ |
| Plus Applicable Taxes |  |

The above rates cover only an installation where the pole with secondary voltage is existing at the light location. Contributions to construction costs will be required if additional equipment is needed or if a member requests a change to a different lamp size and/or type when costs exceed $\$ 500$.

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

SCHEDULE 44-3
CUSTOM RESIDENTIAL STREET LIGHTING
(DEA-OWNED - CONTRIBUTION BY MEMBER)

## Availability

Available for year-round illumination of public streets, parkways, highways, and other public ways by electric lamps mounted on standards and served through underground circuits, where the facilities for this service are furnished by the Association. Street lighting service under this schedule is limited to residential areas having an underground distribution area.

## Type of Service

The Association shall own, operate, and maintain the lighting system using the Association's standard street lighting equipment which includes one lamp per standard. Member shall be required to contribute an amount equal to the installation cost of the lighting system. The energy used by these lights is unmetered.

Monthly Rate

Designation of Lamp

| 175 Watt Mercury (Closed to new) | $\$ 11.37$ |
| :--- | ---: |
| 50 Watt High Pressure Sodium (Closed to new) | $\$ 6.70$ |
| 100 Watt High Pressure Sodium | $\$ 8.41$ |
| 150 Watt High Pressure Sodium (Closed to new) | $\$ 10.30$ |
| 250 Watt High Pressure Sodium (Closed to new) | $\$ 14.09$ |
| Plus Applicable Taxes |  |

Monthly Rate Per Luminaire
\$11.37
$\$ 6.70$
$\$ 8.41$
$\$ 10.30$
\$14.09

Optional - For installations requiring any extra equipment or in the event the member requests the changeout of an existing light to be a different size and/or type, the member will be required to pay all construction fees or extra charges incurred.

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

Resource and Tax Adjustment (RTA)
The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

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## SCHEDULE 44-4 <br> LED SECURITY LIGHTING SERVICE

## Availability

Available for year-around illumination for private residential, farm, or commercial lighting by Light Emitting Diode (LED) electric lamps on existing Association service poles where service poles and service wires can be connected on the utility side of the meter. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

The Association shall own, operate, and maintain the LED security lighting system using the Association's standard LED security lighting equipment. Fixtures on this rate will only be attached to an existing DEA service pole. The energy used by these lights is unmetered.

## Monthly Rate

Light Emitting Diode Security Light (LED, > 4,500 lumens) $\$ 7.63$ per month
Plus Applicable Taxes

Optional - For installations requiring any extra equipment (excluding poles), a contribution to construction will be required to cover the extra costs incurred. In the event the member requests the change out of an existing light, the member will be required to pay all construction fees and material costs for the new installation or upgrade as well as payment for the undepreciated cost of the existing light, less any salvage value.

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet $53)$. The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## SCHEDULE 44-5 <br> LED STREET LIGHTING <br> (MEMBER-OWNED)

## Availability

Available for year-round illumination of public streets, parkways, highways, and other public ways by Light Emitting Diode (LED) electric lamps served through underground or overhead circuits, where the facilities for this service are furnished and owned by the Member. Service is subject to the established rules and regulations of the Association.

## Type of Service

The member shall own, operate, and maintain the LED lighting system.
The preferred service option is metered LED lighting. Such service will be billed to the Member under the rate schedule associated with the meter.

Unmetered service will be allowed if the Association determines it is not practical for the lights to be metered. For such unmetered use:

1. Billing will be according to specified consumption groups. Dakota Electric will determine if a member qualifies for the unmetered rate and which consumption group.
2. The Member will be required to provide Dakota Electric with a notice prior to any change in equipment.
3. No other use is allowed from the fixture. (e.g. Wi-Fi attachments, holiday lights, etc.)
4. The Association will periodically inspect the unmetered fixtures to ensure compliance with requirements.
5. The Member must provide proof of lighting system rating. (i.e. data sheet or model number)

No maintenance will be included in the monthly rate from the Association for any member-owned LED street light. At the request of a Member, Dakota Electric may enter into individual contracts with a Member for the type and frequency of maintenance they may desire from the Association.

## Monthly Rate

Metered Service:
According to applicable rate schedule
Unmetered Service:

Consumption Group
A (40 to 80 watts)
B (81 to 150 watts)
C (151 to 250 watts)
D (251 to 350 watts)
E (351 to 450 watts)

Monthly Rate per Fixture
\$4.81
\$6.71
$\$ 9.66$
\$13.05
\$16.52

Plus Applicable Taxes
The range of watt ratings for the Unmetered Consumption Groups will be adjusted periodically to reflect the predominant size of lights receiving such Unmetered Service.

Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

# SCHEDULE 44-6 <br> LED STREET LIGHTING <br> (DEA-OWNED - CONTRIBUTION BY MEMBER) 

## Availability

Available for year-round illumination of public streets, parkways, highways, and other public ways by Light Emitting Diode (LED) electric lamps served through underground or overhead circuits, where the facilities for this service are furnished by the Association. Conversion of existing lighting to LED lighting may be limited to accommodate workload scheduling. Street lighting service under this schedule is limited to designated LED lighting fixtures offered by the Association in its distribution area. Service is subject to the established rules and regulations of the Association.

## Type of Service

The Association shall own, operate, and maintain the LED lighting system using the Association's standard street lighting equipment which includes one fixture per pole. Member shall be required to contribute an amount equal to the initial installation or upgrade cost of the lighting system. The energy used by these lights is unmetered.

## Monthly Rate

```
Designation of Fixture
Light Emitting Diode (LED, > 5,200 lumens) Coach Light (Post)
Light Emitting Diode (LED, > 5,200 lumens) Acorn Light (Post)
Light Emitting Diode (LED, > 7,000 lumens) Cobra Light (Mast)
Light Emitting Diode (LED, > 11,500 lumens) Shoebox Light (Mast)
Plus Applicable Taxes
```

Monthly Rate per Fixture
Standard Basic
\$ $10.60 \quad \$ 6.83$
\$ $11.24 \quad \$ 6.30$
\$ $8.31 \quad \$ 6.51$
\$ $10.71 \quad \$ 7.98$

The Coach and Acorn fixtures will be mounted on a street light post. The Cobra and Shoebox fixtures will be fastened to a mast arm on existing service poles. In the event the member requests the change out of an existing light, the member will be required to pay all construction fees and material costs for the new installation or upgrade as well as payment for the undepreciated cost of the existing light, less any salvage value.

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

DAKOTA ELECTRIC ASSOCIATION
$4300220^{\text {TH }}$ Street West
Farmington, MN 55024

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## SCHEDULE 45

LOW WATTAGE UNMETERED SERVICE

## Availability

This rate is available for low-wattage electronic devices that are: 1) Individually located at each point of delivery, 2) Rated at less than 150 watts, and 3) A determinable load level. Each individual electronic device must not in any way interfere with Association operations and service to adjacent members. This rate is also available to equipment connected to the supply side of the service disconnect such as fire and sprinkler alarms, and emergency lighting systems, if such equipment is used only during times of emergency. This will require verification from a licensed electrical contractor/electrician in the form of an affidavit.

This Low Wattage Unmetered Service is not applicable to electric service for traffic signals, civil defense, or lighting. Association reserves the right to evaluate member requests for this service to determine eligibility.

## Type of Service

Either single phase or three phase, depending on feasibility, 60 hertz, at available secondary voltages.

## Installation Charges

The member shall pay the total estimated installation charges involved to provide service.

## Monthly Rate

$\$ 10.00$ per month per service location, plus applicable sales tax.

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Taxes

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance

SCHEDULE 46

## GENERAL SERVICE

## Availability

Available to any commercial member for all uses except irrigation. Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

Type of Service
Single phase or three phase, 60 hertz, at available secondary voltages.
Monthly Rate

Fixed Charge
Demand Charge
Summer (June-Aug) @ \$12.26 per kW

Other @ \$ 9.16 per kW
Energy Charge
First 200 kWh per kW @ $\$ 0.0776$ per kWh
Next 200 kWh per kW @ $\$ 0.0676$ per kWh
Over 400 kWh per kW @ $\$ 0.0576$ per kWh

Plus Applicable Taxes
Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

Determination of Metered Demand
The Metered Demand in kilowatts shall be the greatest 15-minute demand (subject to power factor adjustment) during the month for which the bill is rendered. Demand will be read to the nearest 0.01 kilowatt.

## Determination of Energy Charge

The energy ( kWh ) billed in each rate block is determined in relation to the monthly demand ( kW ). The energy in the first block includes the first 200 kWh multiplied by the monthly metered demand. The second block includes the next 200 kWh multiplied by the monthly metered demand. All energy in excess of 400 kWh multiplied by the monthly metered demand is billed under the third block.

## Power Factor Adjustment

The member agrees to maintain as near unity ( 100 percent) power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent, the demand for billing purposes shall be the demand as recorded by the demand meter multiplied by 90 percent and divided by the percent power factor.

Minimum Monthly Charge
The Minimum Monthly Charge under the above rate shall be the Fixed Charge plus $\$ 1.00$ per kW of the highest billing demand during the preceding 11 months.

## Primary Voltage Service

A discount of $\$ 0.15 / \mathrm{kW}$ of Billing Demand will be applied to the bill when service is taken by the member at the available primary voltage. If primary metering is used, an additional discount of 2.0 percent shall be applied to the bill. The 2.0 percent discount shall be applied after the $\$ 0.15 / \mathrm{kW}$ discount.

# SCHEDULE 49 <br> GEOTHERMAL HEAT PUMP RIDER <br> <br> (Closed to new consumers.) 

 <br> <br> (Closed to new consumers.)}

Availability
Available to any commercial member for energy used by a geothermal heat pump system.
Members requesting service under this rate schedule must be taking service concurrently under Rate Schedule 41 or 46 . Service is subject to the established rules and regulations of the Association.

Type of Service
Single phase or three phase, 60 hertz, at available primary or secondary voltages.

## Rate

Energy Charge $\quad \$ 0.0940$ per kWh
Plus applicable taxes

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Metering

The geothermal heat pump system must be separately, parallel metered from all other loads at the premise. Service will not be sub-metered.

## Power Factor

The member agrees to maintain as near unity ( 100 percent) power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent, the energy for billing purposes shall be adjusted accordingly.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kWh , or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour for this service annually exceeds, or is less than, $\$ 0.0775$ per kWh sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted as necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

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## SCHEDULE 51

CONTROLLED ENERGY STORAGE

## Availability

Available to members taking service concurrently under rate schedules 31,41 and 46 . This rate is for interruptible service to energy storage loads which are remotely controlled by the Association. Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages. Service under this schedule will be available for approximately eight hours per day, normally 11:00 p.m. to 7:00 a.m., or as established by the Association.

## Monthly Rate

Energy Charge @ $\$ 0.0440$ per kWh

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The energy cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected weighted average power cost per kilowatt-hour for this service exceeds, or is less than $\$ 0.0200$ per kilowatthour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

Demand
The metered demand of loads on this rate will be subtracted from the metered demand for members receiving service under Schedule 41 and 46 when the storage load is coincident with the member's other loads. When feasible, new controlled energy storage loads should be on a separate service from Schedule 41 and 46 load.

## Taxes

The rates set fourth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 52

## CONTROLLED INTERRUPTIBLE SERVICE

## Availability

Available to member taking service concurrently under rate schedules 31,41 and 46 . This rate is for interruptible service to qualifying loads which are remotely controlled by the Association. Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

Type of Service
Single phase or three phase, 60 hertz, at available secondary voltages. Service under this schedule will be available at all times except when interrupted by the Association during times of peak system demand or system emergencies.

Monthly Rate
Energy Charge @ $\$ 0.0550$ per kWh
Plus Applicable Taxes.
Alternate Monthly Rate for Controlled Water Heaters
Where separate metering of controlled water heaters is not possible or for members on Rate 53, a direct credit of $\$ 1.50$ per 100 kWh used up to a maximum of $\$ 6.00$ per month will be applied against the monthly bill.

Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The energy cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected weighted average power cost per kilowatt-hour for this service exceeds, or is less than $\$ 0.0305$ per kilowatthour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Demand

The metered demand of loads on this rate will be subtracted from the metered demand for members receiving service under Schedule 41 and 46 when the interruptible load is coincident with the member's other loads. When feasible, new controlled interruptible services loads should be on a separate service from Schedule 41 and 46 load.

## Taxes

The rates set fourth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 53 RESIDENTIAL AND FARM SERVICE TIME-OF-DAY RATE

## Availability

Available to residential and farm members for all domestic and farm use, except irrigation pumps. Members participating in this service are not eligible for either Schedule 51 or Schedule 52. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, when economically feasible, 60 hertz, at available secondary voltages.

## Monthly Rate

Fixed Charge
$\$ 12.00$ per month
Energy Charge
Summer - (June-Aug) Peak Period @ \$0.1880 per kWh
Other - Peak Period @ $\$ 0.1740$ per kWh Off-Peak Period @ \$0.0940 per kWh
Plus Applicable Taxes
Definition of Periods
Peak Period
4:00 p.m. to 11:00 p.m., excluding holidays and weekends
Off-Peak Period 11:00 p.m. to 4:00 p.m., plus all day on holidays and weekends
Holidays include New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

Minimum Monthly Charge
The minimum monthly charge under the above rate shall be the Fixed Charge.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceed, or is less than $\$ 0.0903$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## SCHEDULE 54 <br> GENERAL SERVICE <br> OPTIONAL TIME-OF-DAY RATE

## Availability

Available to any member for general service electrical loads. Members participating in this service are not eligible for either Schedule 51 or Schedule 52. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

Type of Service
Single phase or three phase, 60 hertz, at available primary or secondary voltages.
Monthly Rate

Fixed Charge
Peak Period Demand Charge
Summer (June-Aug) @ $\$ 24.85$ per kW

Winter (Dec-Feb) @ $\$ 18.95$ per kW
Other
Maximum Demand Charge
Energy Charge
Plus Applicable Taxes

|  | $\$ 36.00$ per month |
| :--- | :--- |
| $@$ | $\$ 24.85$ per kW |
| $@$ | $\$ 18.95$ per kW |
| $@$ | $\$ 13.00$ per kW |
|  | Plus |
| $@$ | $\$ 4.75$ per kW |
| $@$ | $\$ 0.0499$ per kWh |

Definition of Periods
Peak Period
Off-Peak Period

4:00 p.m. to 11:00 p.m., excluding holidays and weekends
11:00 p.m. to 4:00 p.m., plus all day on holidays and weekends

Holidays include New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

Determination of Billing Demand

1. Peak Period - The Peak Period Billing Demand shall be the greatest 15 minute demand (subject to power factor adjustment) between $4 \mathrm{p} . \mathrm{m}$. and $11 \mathrm{p} . \mathrm{m}$. during the month for which the bill is rendered, as indicated or recorded by a demand meter. Demand will be read to the nearest 0.01 kilowatt.
2. Maximum Demand - The Maximum Billing Demand shall be the greatest 15 minute demand (subject to power factor adjustment) during the month for which the bill is rendered, as indicated or recorded by a demand meter. Demand will be read to the nearest 0.01 kilowatt.

## Minimum Monthly Charge

The minimum monthly charge under the above rate shall be the Fixed Charge plus $\$ 1.00$ per kW of the highest Maximum Billing Demand during the preceding 11 months.

## SCHEDULE 56

RESIDENTIAL AND FARM SERVICE TIME-OF-DAY RATE

## Availability

Available to residential and farm members for all domestic and farm use, except irrigation pumps. Members participating in this service are not eligible for either Schedule 51 or Schedule 52. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, when economically feasible, 60 hertz, at available secondary voltages.

## Monthly Rate

Fixed Charge $\quad \$ 12.00$ per month
Energy Charges
Peak Periods:
Summer - (June-Aug) @ $\$ 0.2710$ per kWh
Winter - (Dec-Feb) @ $\$ 0.2210$ per kWh
Spring/Fall @ $\$ 0.1750$ per kWh
Intermediate Period @ $\$ 0.0970$ per kWh
Off-Peak Period @ $\$ 0.0760$ per kWh

## Definition of Periods

Peak Periods
Intermediate Period
Off-Peak Period
4:00 p.m. to 11:00 p.m., excluding holidays and weekends
8:00 a.m. to 4:00 p.m., excluding holidays and weekends
11:00 p.m. to 8:00 a.m. Mon-Fri and all day weekends and holidays
Holidays include New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.
Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

Minimum Monthly Charge
The minimum monthly charge under the above rate shall be the Fixed Charge.
Resource and Tax Adjustment (RTA)
The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceed, or is less than $\$ 0.0903$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## SCHEDULE 60 <br> RIDER FOR STANDBY SERVICE CONTINUED

## Definitions

Contracted Standby Demand is the quantity specified in the member's Electric Service Agreement as the maximum amount of firm or non-firm standby service the Cooperative is obligated to supply and will not exceed the capacity of the member's distributed generation system.

Firm Service refers to a utility's most reliable, constant electric service. A utility would interrupt the supply of electricity to a firm service customer only as a last resort.

Non-Firm Service, also called interruptible service, refers to electric service that a utility provides only to the extent that it has capacity not being used to meet the needs of firm-service members at the moment.

All other definitions shall be as described in Cooperative's Distributed Generation Interconnection Requirements and Interconnection Process for Distributed Generation Systems.

## Charges for Service

The following Reservation Fees, Communication Fee, Usage Fees, and Wheeling Fees will be assessed as applicable in addition to all charges for service being taken under Cooperative's base rate schedule:

## Reservation Fees

Charges as specified below for the reservation of either Firm or Non-Firm generation, transmission and distribution service per Month per kW will each be applied to the member's Contracted Standby Demand as specified in member's Electric Service Agreement with Cooperative:

|  | Firm Service <br> $(\$$ per kW $)$ | Non-Firm Service <br> $(\$$ per kW $)$ |
| :--- | :---: | :---: |
| Generation | $*$ | $* *$ |
| Transmission | $*$ | $* *$ |
| Distribution - Secondary Service | $\$ 3.51$ | $\$ 3.51$ |
| Distribution - Primary Service | $\$ 3.28$ | $\$ 3.28$ |
| Distribution - Substation Service | $\$ 0.90$ | $\$ 0.90$ |

* Firm Standby Service generation and transmission Reservation Fees will be billed under the rates, terms and conditions of the Cooperative's wholesale power supplier (Great River Energy), which is available on GRE's Web site; greatriverenergy.com and DEA's Web site; dakotaelectric.com.
**Generation and transmission Reservation Fees are not applied for Non-Firm Service. However, members will be responsible for all costs associated with wholesale power supply during any times of usage.


## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Communication Fee

A monthly Communication Fee will be applied to cover the cost of transmitting data through the use of digital cellular equipment. The monthly Communication Fee is applied to each required meter with cellular data capabilities.

$$
\text { Communication Fee } \quad \$ 8.70 \text { per meter }
$$

## Usage Fees

## Demand Charge

If the member registers electrical usage from Cooperative during a billing month then such usage will result in demand charges which may vary between members contracting for Firm Standby Service or Non-Firm Standby Service.

## SCHEDULE 70 <br> INTERRUPTIBLE SERVICE <br> (FULL INTERRUPTIBLE OPTION)

## Availability

Available to any member with a minimum controllable demand of 50 kW . Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Members participating in this service are not eligible for concurrent service under any other rate schedule. Service is subject to the established rules and regulations of the Association.

Under the full interruptible control option, members agree to interrupt their entire electrical energy usage. Members may attain this full interruption through curtailment or with the use of on-site generation back-up. During the interruption, the member's load must go to zero.

## Type of Service

Single phase or three phase, 60 hertz, at available primary or secondary voltages.

Monthly Rate


Communication Fee (meters w/ digital cellular)
Coincidental Demand
Summer (June-Aug)
Winter (Dec-Feb)
Other
Non-Coincidental Demand
Energy Charge
Failure to Control Charge
Plus Applicable Taxes
$\$ 110.00$ per month $\$ 8.70$ per month
\$24.85 per kW
\$18.95 per kW
$\$ 13.00$ per kW
\$ 4.75 per kW
\$ 0.0499 per kWh
$\$ 5.00$ per kW

Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Control Period

The control period shall be defined as the period of time during which the Association is controlling these loads with the intent of minimizing demand on the Association's system.

## Coincidental Demand

The monthly Coincidental Demand under the full interruptible control option shall be defined as the member's actual hourly demand (subject to power factor adjustment) that is coincident with the wholesale power supplier (i.e. average of the four fifteen minute demand readings for the hour ending of the wholesale billing peak) when the load is directed to be controlled during the wholesale billing peak.

## Non-Coincidental Demand

The Non-Coincidental Demand shall be the maximum kilowatt demand (subject to power factor adjustment) established by the member for any period of 15 consecutive minutes during the month for which the bill is rendered, as indicated or recorded by a demand meter.

## Failure to Control

The Failure to Control Charge will be applied to the highest kilowatt demand during any one monthly control period when the member does not fully interrupt demand. The Failure to Control Charge is applied to the highest demand recorded during any one of the monthly control periods. The control period shall be defined as the period of time during which the Association is controlling these loads with the intent of minimizing demand on the Association's system. Failure to control or being unavailable for control for more than one calendar month may require the member to be removed from Schedule 70 for the remainder of the year.

## Scheduled Maintenance

Members are encouraged to schedule required periodic maintenance during the spring and fall months and coordinate such maintenance with the Association.

SCHEDULE 71
INTERRUPTIBLE SERVICE
(PARTIAL INTERRUPTIBLE OPTION)
Availability
Available to any member with a minimum controllable demand of 50 kW . Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Members participating in this service are not eligible for concurrent service under any other rate schedule. Service is subject to the established rules and regulations of the Association.

Under the partial interruptible control option, members agree to reduce a portion of their electrical energy usage. Members may attain this partial interruption through curtailment or with the use of on-site generation back-up. During the interruption, the member's load goes to a Predetermined Demand Level (PDL). If a partial interruptible member fails to control demand to the PDL, then the PDL will be adjusted to the demand occurring during such control period.
Type of Service
Single phase or three phase, 60 hertz, at available primary or secondary voltages.

## Monthly Rate

| Fixed Charge |  | \$110.00 per month |
| :---: | :---: | :---: |
| Communication Fee (meters w/ digital cellular) |  | \$8.70 per month |
| Coincidental Demand |  |  |
| Summer (June - Aug) | @ | \$24.85 per kW |
| Winter (Dec - Feb) | @ | \$18.95 per kW |
| Other | @ | \$13.00 per kW |
| Non-Coincidental Demand | @ | \$ 4.75 per kW |
| Energy Charge | @ | \$ 0.0499 per kWh |
| Excess Demand Charge | @ | \$ 5.00 per kW |
| Plus Applicable Taxes |  |  |

Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Control Period

The control period shall be shall be defined as the period of time during which the Association is controlling these loads with the intent of minimizing demand on the Association's system.

## Coincidental Demand

The monthly Coincidental Demand under the partial interruptible control option shall be defined as:

- During a month with no control period, the monthly Coincidental Demand under the partial interruptible control option will be the lesser of the member's actual hourly demand (subject to power factor adjustment) that is coincident with the wholesale power supplier (i.e. average of the four fifteen minute demand readings for the hour ending of the wholesale billing peak) or the Predetermined Demand Level. During a month with a control period, the monthly Coincidental Demand under the partial interruptible control option will be the member's actual hourly demand (subject to power factor adjustment) that is coincident with the wholesale power supplier (i.e. average of the four fifteen minute demand readings for the hour ending of the wholesale billing peak).
The partial interruptible PDL will be adjusted to any higher actual demand of the member occurring during a curtailable event for the remainder of the calendar year. In the case of members using on-site generation, the PDL may be adjusted to reflect the rated capacity of such generation that was not operational during the control period. Only one such adjustment per year will be allowed.


## Non-Coincidental Demand

The Non-Coincidental Demand shall be the maximum kilowatt demand (subject to power factor adjustment) established by the member for any period of 15 consecutive minutes during the month for which the bill is rendered, as indicated or recorded by a demand meter.

## Availability

Available to members taking service concurrently under another rate schedule. This rate is for interruptible service to central air conditioners which are remotely controlled by the Association. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages. Service under this schedule will be available at all times except when interrupted by the Association during times of peak system demand or system emergencies.

## Monthly Rate

Option No. 1 - Available to members who also take service under Schedules 51 and 52 where an existing meter and control unit may be utilized for the controlled air conditioning load.

Energy Charge per applicable Schedule 51 or 52
Option No. 2 - Available to members where a new meter and control unit must be installed to control the air conditioning load.

Energy Charge Credit @ $\$ 0.0320$ per kWh
Option No. 3 - Available to members where a control unit must be installed to control the air conditioning load.

A credit will be applied to the first $\$ 13.00$ of the member's net energy consumption charges in the months of June, July, and August. In no case will the credit exceed the sum of the monthly Energy Charge and Resource and Tax Adjustment.

Option No. 4 - Available to non-residential members where a new meter and control unit must be installed but where it is not feasible or designed to meter the air conditioning load separately. The maximum capacity of any individual air conditioning compressor is 7.5 tons. A $\$ 6.50$ per ton per month credit will be applied to member's bill in the months of June, July, and August. The aggregate monthly credit per account will not exceed $1 / 3$ of the net charges for energy and demand in each month.

## Plus Applicable Taxes

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Taxes

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## INTERIM RATE ADJUSTMENT RIDER

## Availability

The 3.0\% Interim Rate Adjustment applies to:

1. Fixed Charge
2. Energy Charge
3. Demand Charge
4. Resource and Tax Adjustment
5. Minimum Charges
6. Energy Charge Credits
7. Voltage Discounts
8. Lighting Rates per Luminaire
9. Low Wattage Unmetered Service
10. Standby Reservation Fees
11. Controlled Air Conditioning and Water Heating Discounts

The Interim Rate Adjustment does not apply to:

1. Municipal Civil Defense Sirens
2. Special Fees or Charges
3. Communication Fee
4. Competitive Service Rider
5. Franchise Fee Surcharge Rider
6. Optional Renewable Energy Rider
7. Member Energy Exchange Rider
8. Voluntary Energy Reduction Rider
9. Member Specific Discount Rider
10. Large Load High Load Factor Rider
11. Contract Rate Service
12. Advanced Grid Infrastructure Rider
13. Advanced Meter Opt-Out (AMO) Rider
14. Late Payment Charge

This temporary Interim Rate Adjustment Rider will expire when final rates become effective.

## Rate

Each rate schedule that the Interim Rate Adjustment applies to contains the following text:
Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment
Rider effective for service rendered on and after November $\qquad$ , 2019.

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SCHEDULE 31
RESIDENTIAL AND FARM SERVICE

Availability
Available to individual residential and farm members for all domestic and farm use except irrigation.
This includes service to apartment units. Service is subject to the established rules and regulations of the Association.

Type of Service
Single phase or three phase, when economically feasible, 60 hertz, at available secondary voltages.

## Monthly Rate

| Fixed Charge |  | $\$ 9.00$ per month |
| :--- | :--- | :--- |
| Energy Charge |  |  |
| $\quad$ Summer (June-Aug) | @ | $\$ 0.1308$ per kWh |
| Other | @ | $\$ 0.1168$ per kWh |
| Plus Applicable Taxes |  |  |

Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Minimum Monthly Charge

The minimum monthly charge under the above rate shall be the Fixed Charge.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## SCHEDULE 32

RESIDENTIAL AND FARM DEMAND CONTROL RATE

## Availability

Available to residential and farm members with at least 5 kW of qualifying off-peak loads as determined by the Association. This rate is subject to the rules and regulations of the Association. Members requesting service under this rate schedule must remain on this rate schedule for a minimum of twelve (12) months.

Type of Service
Single phase, 60 Hertz, at available secondary voltages.
Monthly Rate


Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Billing Demand Determination

The demand will be determined based on the peak 15-minute demand reading during control periods for the month the bill was rendered. An estimated demand will be used for new customers until the actual controlled demand is established.

## Minimum Monthly Charge

The minimum monthly charge under the above rate shall be the $\$ 12.00$ Fixed Charge plus a minimum billing demand of 3 kW .

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be increased or decreased by $\$ 0.0001$ per kilowatt-hour for each 0.1 mill or major fraction by which the energy component in the Association's purchased power cost per kilowatt-hour purchased from its power supplier exceeds, or is less than $\$ 0.0903$ per kilowatt-hour purchased. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set fourth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

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SCHEDULE EV-1
PILOT - RESIDENTIAL ELECTRIC VEHICLE SERVICE

## Availability

Available on voluntary basis as a pilot program for residential consumers taking service under Schedule 31 who also desire metered service for the sole purpose of electrically charging a licensed automobile or light truck. Service on this tariff is limited to electric vehicles that are SAE J1772 compliant and registered and operable on public highways in the State of Minnesota. Low-speed electric vehicles, including golf carts, are ineligible to take service under this tariff even if licensed to operate on public streets. The consumer may be required to provide the Association with proof of registration of the electric vehicle prior to taking service under this tariff. Service is subject to the established rules and regulations of the Association.

## Term

The pilot program will be offered for a minimum of a two year period. At the end of the initial two year pilot period, the Association will determine if this program will be continued, modified, or eliminated. If it is eliminated, the consumers participating in the pilot program will revert back to the appropriate retail rate tariff for their class of service.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages.

## Rate

Energy Charges:
Off-Peak: $\quad 6.74 \not \subset$ per $k W h$
On-Peak: $\quad 41.44 \notin$ per kWh
Other: $\quad$ Schedule 31 energy charges apply
Plus RTA and applicable sales tax

## Definition of Periods

Energy Charge time periods are defined as follows:
Off-Peak $\quad$ 9:00 pm to 8:00 am Mon. - Fri., and all day Weekends and Holidays
On-Peak $\quad$ 4:00 pm to 9:00 pm Mon. - Fri., excluding Holidays
Other $\quad$ 8:00 am to 4:00 pm Mon. - Fri., excluding Holidays
Holidays shall be: New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## SCHEDULE 36

IRRIGATION SERVICE

## Availability

Available to any member for service to irrigation pumps. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages.

## Monthly Rate

Firm Service

| Fixed Charge |  | $\$ 30.00$ per month |
| :--- | :--- | :--- |
| Demand Charge | $@$ | $\$ 26.35$ per kW |
| $\quad$ Summer (June-Aug) | $@$ | $\$ 20.95$ per kW |
| Winter (Dec-Feb) | $@$ | $\$ 15.50$ per kW |
| Other | $@$ | $\$ 0.0499$ per kWh |
| Energy Charge |  |  |

Plus Applicable Taxes
Interruptible

Fixed Charge
Demand Charge
Energy Charge
Plus Applicable Taxes
$\$ 30.00$ per month
$\$ 4.55$ per kW
$\$ 0.0499$ per kWh

Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Determination of Metered Demand

The Metered Demand in kilowatts shall be the greatest 15 -minute demand (subject to power factor adjustment) during the month for which the bill is rendered. Demand will be read to the nearest 0.01 kilowatt.

## Power Factor Adjustment

The member agrees to maintain as near unity ( 100 percent) power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent, the demand for billing purposes shall be the demand as recorded by the demand meter multiplied by 90 percent and divided by the percent power factor.

Minimum Monthly Charge
The Minimum Monthly Charge under the above rate shall be the Fixed Charge.

## SCHEDULE 41 <br> SMALL GENERAL SERVICE

## Availability

Available to any commercial member for all uses, except irrigation pumps, where the Metered Demand is 15 kW or less. If the Metered Demand exceeds 15 kW for three consecutive months, the member will be transferred to the General Service Rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages.

## Monthly Rate

| Fixed Charge |  | $\$ 14.00$ per month |
| :--- | :--- | :--- |
| Energy Charge |  |  |
| $\quad$ Summer (June-Aug) | @ | $\$ 0.1269$ per kWh |
| $\quad$ Other | @ | $\$ 0.1129$ per kWh |
| Plus Applicable Taxes |  |  |

Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Determination of Metered Demand

The Metered Demand in kilowatts shall be the greatest 15 -minute demand during the month for which the bill is rendered. Demand will be read to the nearest 0.01 kilowatt.

Minimum Monthly Charge
The Minimum Monthly Charge under the above rate shall be the Fixed Charge.

## Non-metered Option

This option has limited availability. It may be available for: devices that are located at individual points of delivery and are operated with a continuous or predetermined load level that exceeds the threshold determined for Schedule 45. The monthly energy consumption will be determined by the Association based on equipment documentation provided by the member. The maximum monthly energy allowed under this option will be 500 kWh .

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

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## SCHEDULE 44

## SECURITY LIGHTING SERVICE

## Availability

Available for year-around illumination for private residential, farm, or commercial lighting on existing Association service poles where service poles and service wires can be connected on the line side of member's meter. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

The Association shall own, operate, and maintain the security lighting system using the Association's standard security lighting equipment. The energy used by these lights is unmetered.

Monthly Rate
Designation of Lamp

100 Watt High Pressure Sodium (Closed to new)
150 Watt High Pressure Sodium (Closed to new)
250 Watt High Pressure Sodium (Closed to new) Plus Applicable Taxes

Monthly Rate Per Luminaire
$\$ 10.10$
\$11.99
\$15.79

Optional - For residential or farm installation requiring any extra equipment, or in the event the consumer requests the changeout of an existing light to a different size and/or type, a contribution to construction will be required to cover the extra costs incurred. Commercial installations on existing service poles only.

Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

# SCHEDULE 44-1 <br> STREET LIGHTING SERVICE <br> (MEMBER - OWNED) 

## Availability

Available for year-round illumination of public streets, parkways, highways, and other public ways by electric lamps mounted on standards where member owns the lighting system complete with standards, luminaries, globes, lamps, and other appurtenances, together will all necessary cables extending between standards and to point of connection to the Association's facilities as designated by the Association.

## Type of Service

The street lighting system shall be built and owned by the member. All controls will be provided by the member. The member shall also provide all easements and right-of-way to permit access to feed points. The Association shall operate and provide limited maintenance (periodic cleaning of lens, refractor, and bulb replacement) on street lighting systems.

## Monthly Rate

| Designation of Lamp | Monthly Rate Per Luminaire |
| :--- | :---: |
| 175 Watt Mercury (Closed to new) | $\$ 10.52$ |
| 250 Watt Mercury (Closed to new) | $\$ 13.46$ |
| 400 Watt Mercury (Closed to new) | $\$ 18.54$ |
|  |  |
| 100 Watt High Pressure Sodium | $\$ 7.56$ |
| 150 Watt High Pressure Sodium | $\$ 9.46$ |
| 200 Watt High Pressure Sodium | $\$ 11.41$ |
| 250 Watt High Pressure Sodium | $\$ 13.25$ |
| 400 Watt High Pressure Sodium | $\$ 17.67$ |
| Plus Applicable Taxes |  |
| Rate Adjustment |  |
| \% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment |  |
| effective for service rendered on and after November 18, 2019. |  |

INTERIM
DAKOTA ELECTRIC ASSOCIATION
SECTION:
SHEET: 11.3

Farmington, MN 55024
REVISION:

## SCHEDULE 44-2

STREET LIGHTING SERVICE
(DEA - OWNED EQUIPMENT)

## Availability

Available for governmental or private year-around illumination of public or private streets, parkways, highways, and other public ways by electric lamps in luminaires supported on existing poles where secondary voltage is available and the facilities for this service are furnished by the Association.

## Type of Service

The Association shall own, operate, and maintain the overhead street lighting system using the Association's standard street lighting equipment. The energy used by these lights is unmetered.

## Monthly Rate

| Designation of Lamp | Monthly Rate Per Luminaire |
| :--- | :---: |
| 175 Watt Mercury (Closed to new) | $\$ 15.23$ |
| 250 Watt Mercury (Closed to new) | $\$ 18.16$ |
| 400 Watt Mercury (Closed to new) | $\$ 23.25$ |
| 100 Watt High Pressure Sodium (Closed to new) | $\$ 12.27$ |
| 150 Watt High Pressure Sodium (Closed to new) | $\$ 14.16$ |
| 250 Watt High Pressure Sodium (Closed to new) | $\$ 17.95$ |
| 400 Watt High Pressure Sodium (Closed to new) | $\$ 22.38$ |
| Plus Applicable Taxes |  |

The above rates cover only an installation where the pole with secondary voltage is existing at the light location. Contributions to construction costs will be required if additional equipment is needed or if a member requests a change to a different lamp size and/or type when costs exceed $\$ 500$.

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## SCHEDULE 44-3

CUSTOM RESIDENTIAL STREET LIGHTING
(DEA-OWNED - CONTRIBUTION BY MEMBER)

## Availability

Available for year-round illumination of public streets, parkways, highways, and other public ways by electric lamps mounted on standards and served through underground circuits, where the facilities for this service are furnished by the Association. Street lighting service under this schedule is limited to residential areas having an underground distribution area.

## Type of Service

The Association shall own, operate, and maintain the lighting system using the Association's standard street lighting equipment which includes one lamp per standard. Member shall be required to contribute an amount equal to the installation cost of the lighting system. The energy used by these lights is unmetered.

## Monthly Rate

Designation of Lamp

| 175 Watt Mercury (Closed to new) | $\$ 11.37$ |
| :--- | ---: |
| 50 Watt High Pressure Sodium (Closed to new) | $\$ 6.70$ |
| 100 Watt High Pressure Sodium | $\$ 8.41$ |
| 150 Watt High Pressure Sodium (Closed to new) | $\$ 10.30$ |
| 250 Watt High Pressure Sodium (Closed to new) | $\$ 14.09$ |
| Plus Applicable Taxes |  |

100 Watt High Pressure Sodium $\quad \$ 8.41$
150 Watt High Pressure Sodium (Closed to new) \$10.30
250 Watt High Pressure Sodium (Closed to new) \$14.09 Plus Applicable Taxes

Optional - For installations requiring any extra equipment or in the event the member requests the changeout of an existing light to be a different size and/or type, the member will be required to pay all construction fees or extra charges incurred.

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53 ). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## SCHEDULE 44-4 <br> LED SECURITY LIGHTING SERVICE

## Availability

Available for year-around illumination for private residential, farm, or commercial lighting by Light Emitting Diode (LED) electric lamps on existing Association service poles where service poles and service wires can be connected on the utility side of the meter. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

The Association shall own, operate, and maintain the LED security lighting system using the Association's standard LED security lighting equipment. Fixtures on this rate will only be attached to an existing DEA service pole. The energy used by these lights is unmetered.

## Monthly Rate

Light Emitting Diode Security Light (LED, > 4,500 lumens) $\$ 7.63$ per month
Plus Applicable Taxes

Optional - For installations requiring any extra equipment (excluding poles), a contribution to construction will be required to cover the extra costs incurred. In the event the member requests the change out of an existing light, the member will be required to pay all construction fees and material costs for the new installation or upgrade as well as payment for the undepreciated cost of the existing light, less any salvage value.

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Taxes

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Availability

Available for year-round illumination of public streets, parkways, highways, and other public ways by Light Emitting Diode (LED) electric lamps served through underground or overhead circuits, where the facilities for this service are furnished and owned by the Member. Service is subject to the established rules and regulations of the Association.

## Type of Service

The member shall own, operate, and maintain the LED lighting system.
The preferred service option is metered LED lighting. Such service will be billed to the Member under the rate schedule associated with the meter.

Unmetered service will be allowed if the Association determines it is not practical for the lights to be metered. For such unmetered use:

1. Billing will be according to specified consumption groups. Dakota Electric will determine if a member qualifies for the unmetered rate and which consumption group.
2. The Member will be required to provide Dakota Electric with a notice prior to any change in equipment.
3. No other use is allowed from the fixture. (e.g. Wi-Fi attachments, holiday lights, etc.)
4. The Association will periodically inspect the unmetered fixtures to ensure compliance with requirements.
5. The Member must provide proof of lighting system rating. (i.e. data sheet or model number)

No maintenance will be included in the monthly rate from the Association for any member-owned LED street light. At the request of a Member, Dakota Electric may enter into individual contracts with a Member for the type and frequency of maintenance they may desire from the Association.

## Monthly Rate

Metered Service:
According to applicable rate schedule
Unmetered Service:

| Consumption Group | Monthly Rate per Fixture |
| :--- | :---: |
| A (40 to 80 watts) | $\$ 4.81$ |
| B (81 to 150 watts) | $\$ 6.71$ |
| C (151 to 250 watts) | $\$ 9.66$ |
| D (251 to 350 watts) | $\$ 13.05$ |
| E (351 to 450 watts) | $\$ 16.52$ |

Plus Applicable Taxes
The range of watt ratings for the Unmetered Consumption Groups will be adjusted periodically to reflect the predominant size of lights receiving such Unmetered Service.

Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

# SCHEDULE 44-6 <br> LED STREET LIGHTING <br> (DEA-OWNED - CONTRIBUTION BY MEMBER) 

## Availability

Available for year-round illumination of public streets, parkways, highways, and other public ways by Light Emitting Diode (LED) electric lamps served through underground or overhead circuits, where the facilities for this service are furnished by the Association. Conversion of existing lighting to LED lighting may be limited to accommodate workload scheduling. Street lighting service under this schedule is limited to designated LED lighting fixtures offered by the Association in its distribution area. Service is subject to the established rules and regulations of the Association.

## Type of Service

The Association shall own, operate, and maintain the LED lighting system using the Association's standard street lighting equipment which includes one fixture per pole. Member shall be required to contribute an amount equal to the initial installation or upgrade cost of the lighting system. The energy used by these lights is unmetered.

## Monthly Rate

Designation of Fixture
Light Emitting Diode (LED, > 5,200 lumens) Coach Light (Post)
Light Emitting Diode (LED, > 5,200 lumens) Acorn Light (Post)
Light Emitting Diode (LED, > 7,000 lumens) Cobra Light (Mast)
Light Emitting Diode (LED, > 11,500 lumens) Shoebox Light (Mast)
Plus Applicable Taxes

Monthly Rate per Fixture

| $\underline{\text { Standard }}$ | $\underline{\text { Basic }}$ |
| :--- | :--- |
| $\$ 10.60$ | $\$ 6.83$ |
| $\$ 11.24$ | $\$ 6.30$ |
| $\$ 8.31$ | $\$ 6.51$ |
| $\$ 10.71$ | $\$ 7.98$ |

The Coach and Acorn fixtures will be mounted on a street light post. The Cobra and Shoebox fixtures will be fastened to a mast arm on existing service poles. In the event the member requests the change out of an existing light, the member will be required to pay all construction fees and material costs for the new installation or upgrade as well as payment for the undepreciated cost of the existing light, less any salvage value.

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceeds, or is less than $\$ 0.0903$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

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## SCHEDULE 45

LOW WATTAGE UNMETERED SERVICE

## Availability

This rate is available for low-wattage electronic devices that are: 1) Individually located at each point of delivery, 2) Rated at less than 150 watts, and 3) A determinable load level. Each individual electronic device must not in any way interfere with Association operations and service to adjacent members. This rate is also available to equipment connected to the supply side of the service disconnect such as fire and sprinkler alarms, and emergency lighting systems, if such equipment is used only during times of emergency. This will require verification from a licensed electrical contractor/electrician in the form of an affidavit.

This Low Wattage Unmetered Service is not applicable to electric service for traffic signals, civil defense, or lighting. Association reserves the right to evaluate member requests for this service to determine eligibility.

## Type of Service

Either single phase or three phase, depending on feasibility, 60 hertz, at available secondary voltages.

## Installation Charges

The member shall pay the total estimated installation charges involved to provide service.

## Monthly Rate

$\$ 10.00$ per month per service location, plus applicable sales tax.

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Taxes

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance

SCHEDULE 46

## GENERAL SERVICE

## Availability

Available to any commercial member for all uses except irrigation. Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

Type of Service
Single phase or three phase, 60 hertz, at available secondary voltages.
Monthly Rate

Fixed Charge
Demand Charge
Summer (June-Aug) @ \$12.26 per kW
Other @ \$9.16 perkW
Energy Charge
First 200 kWh per kW @ $\$ 0.0776$ per kWh
Next 200 kWh per kW @ $\$ 0.0676$ per kWh
Over 400 kWh per kW
Plus Applicable Taxes
$\$ 34.00$
@ $\quad \$ 0.0676$ per kWh

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

Determination of Metered Demand
The Metered Demand in kilowatts shall be the greatest 15-minute demand (subject to power factor adjustment) during the month for which the bill is rendered. Demand will be read to the nearest 0.01 kilowatt.

## Determination of Energy Charge

The energy ( kWh ) billed in each rate block is determined in relation to the monthly demand ( kW ). The energy in the first block includes the first 200 kWh multiplied by the monthly metered demand. The second block includes the next 200 kWh multiplied by the monthly metered demand. All energy in excess of 400 kWh multiplied by the monthly metered demand is billed under the third block.

## Power Factor Adjustment

The member agrees to maintain as near unity ( 100 percent) power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent, the demand for billing purposes shall be the demand as recorded by the demand meter multiplied by 90 percent and divided by the percent power factor.

Minimum Monthly Charge
The Minimum Monthly Charge under the above rate shall be the Fixed Charge plus $\$ 1.00$ per kW of the highest billing demand during the preceding 11 months.

## Primary Voltage Service

A discount of $\$ 0.15 / \mathrm{kW}$ of Billing Demand will be applied to the bill when service is taken by the member at the available primary voltage. If primary metering is used, an additional discount of 2.0 percent shall be applied to the bill. The 2.0 percent discount shall be applied after the $\$ 0.15 / \mathrm{kW}$ discount.

# SCHEDULE 49 <br> GEOTHERMAL HEAT PUMP RIDER <br> (Closed to new consumers.) 

Availability
Available to any commercial member for energy used by a geothermal heat pump system.
Members requesting service under this rate schedule must be taking service concurrently under Rate Schedule 41 or 46 . Service is subject to the established rules and regulations of the Association.

Type of Service
Single phase or three phase, 60 hertz, at available primary or secondary voltages.

## Rate

Energy Charge $\quad \$ 0.0940$ per kWh
Plus applicable taxes

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Metering

The geothermal heat pump system must be separately, parallel metered from all other loads at the premise. Service will not be sub-metered.

## Power Factor

The member agrees to maintain as near unity ( 100 percent) power factor as practicable. The Association reserves the right to measure such power factor at any time. Should such measurements indicate that the average power factor is less than 90 percent, the energy for billing purposes shall be adjusted accordingly.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kWh , or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour for this service annually exceeds, or is less than, $\$ 0.0775$ per kWh sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted as necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

|  | INTERIM |  |
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## SCHEDULE 51

CONTROLLED ENERGY STORAGE

## Availability

Available to members taking service concurrently under rate schedules 31,41 and 46 . This rate is for interruptible service to energy storage loads which are remotely controlled by the Association. Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages. Service under this schedule will be available for approximately eight hours per day, normally 11:00 p.m. to 7:00 a.m., or as established by the Association.

## Monthly Rate

Energy Charge @ $\$ 0.0440$ per kWh
Plus Applicable Taxes.

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The energy cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected weighted average power cost per kilowatt-hour for this service exceeds, or is less than $\$ 0.0200$ per kilowatthour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Demand

The metered demand of loads on this rate will be subtracted from the metered demand for members receiving service under Schedule 41 and 46 when the storage load is coincident with the member's other loads. When feasible, new controlled energy storage loads should be on a separate service from Schedule 41 and 46 load.

## Taxes

The rates set fourth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

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## SCHEDULE 52

## CONTROLLED INTERRUPTIBLE SERVICE

Availability
Available to member taking service concurrently under rate schedules 31,41 and 46 . This rate is for interruptible service to qualifying loads which are remotely controlled by the Association. Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages. Service under this schedule will be available at all times except when interrupted by the Association during times of peak system demand or system emergencies.

## Monthly Rate

Energy Charge @ $\$ 0.0550$ per kWh Plus Applicable Taxes.

Alternate Monthly Rate for Controlled Water Heaters
Where separate metering of controlled water heaters is not possible or for members on Rate 53, a direct credit of $\$ 1.50$ per 100 kWh used up to a maximum of $\$ 6.00$ per month will be applied against the monthly bill.

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The energy cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected weighted average power cost per kilowatt-hour for this service exceeds, or is less than $\$ 0.0305$ per kilowatthour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## Demand

The metered demand of loads on this rate will be subtracted from the metered demand for members receiving service under Schedule 41 and 46 when the interruptible load is coincident with the member's other loads. When feasible, new controlled interruptible services loads should be on a separate service from Schedule 41 and 46 load.

## Taxes

The rates set fourth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder, excluding real and personal property taxes already recovered through the RTA, shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

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## SCHEDULE 53 RESIDENTIAL AND FARM SERVICE TIME-OF-DAY RATE

## Availability

Available to residential and farm members for all domestic and farm use, except irrigation pumps. Members participating in this service are not eligible for either Schedule 51 or Schedule 52. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, when economically feasible, 60 hertz, at available secondary voltages.

## Monthly Rate

Fixed Charge
$\$ 12.00$ per month
Energy Charge
Summer - (June-Aug) Peak Period @ \$0.1880 per kWh
Other - Peak Period @ \$0.1740 per kWh Off-Peak Period @ \$0.0940 per kWh
Plus Applicable Taxes
Definition of Periods
Peak Period
4:00 p.m. to 11:00 p.m., excluding holidays and weekends
Off-Peak Period 11:00 p.m. to 4:00 p.m., plus all day on holidays and weekends
Holidays include New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Minimum Monthly Charge

The minimum monthly charge under the above rate shall be the Fixed Charge.

## Resource and Tax Adjustment (RTA)

The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceed, or is less than $\$ 0.0903$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

## SCHEDULE 54 <br> GENERAL SERVICE <br> OPTIONAL TIME-OF-DAY RATE

## Availability

Available to any member for general service electrical loads. Members participating in this service are not eligible for either Schedule 51 or Schedule 52. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

Type of Service
Single phase or three phase, 60 hertz, at available primary or secondary voltages.
Monthly Rate

Fixed Charge
Peak Period Demand Charge
Summer (June-Aug) @ $\$ 24.85$ per kW

Winter (Dec-Feb) @ $\$ 18.95$ per kW
Other
Maximum Demand Charge
Energy Charge
Plus Applicable Taxes
$\$ 36.00$ per month
@ $\$ 13.00$ per kW
Plus
@ $\$ 4.75$ per kW
@ $\$ 0.0499$ per kWh

Definition of Periods
Peak Period
4:00 p.m. to 11:00 p.m., excluding holidays and weekends
Off-Peak Period
11:00 p.m. to 4:00 p.m., plus all day on holidays and weekends
Holidays include New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Determination of Billing Demand

1. Peak Period - The Peak Period Billing Demand shall be the greatest 15 minute demand (subject to power factor adjustment) between $4 \mathrm{p} . \mathrm{m}$. and $11 \mathrm{p} . \mathrm{m}$. during the month for which the bill is rendered, as indicated or recorded by a demand meter. Demand will be read to the nearest 0.01 kilowatt.
2. Maximum Demand - The Maximum Billing Demand shall be the greatest 15 minute demand (subject to power factor adjustment) during the month for which the bill is rendered, as indicated or recorded by a demand meter. Demand will be read to the nearest 0.01 kilowatt.

## Minimum Monthly Charge

The minimum monthly charge under the above rate shall be the Fixed Charge plus $\$ 1.00$ per kW of the highest Maximum Billing Demand during the preceding 11 months.

## SCHEDULE 56

RESIDENTIAL AND FARM SERVICE TIME-OF-DAY RATE

## Availability

Available to residential and farm members for all domestic and farm use, except irrigation pumps. Members participating in this service are not eligible for either Schedule 51 or Schedule 52. Members will be required to remain on this rate for a minimum of 12 months. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, when economically feasible, 60 hertz, at available secondary voltages.

## Monthly Rate

Fixed Charge $\quad \$ 12.00$ per month
Energy Charges
Peak Periods:
Summer - (June-Aug) @ $\$ 0.2710$ per kWh
Winter - (Dec-Feb) @ $\$ 0.2210$ per kWh
Spring/Fall @ $\$ 0.1750$ per kWh
Intermediate Period @ $\$ 0.0970$ per kWh
Off-Peak Period @ $\$ 0.0760$ per kWh

## Definition of Periods

Peak Periods
Intermediate Period
Off-Peak Period
4:00 p.m. to 11:00 p.m., excluding holidays and weekends
8:00 a.m. to 4:00 p.m., excluding holidays and weekends
11:00 p.m. to 8:00 a.m. Mon-Fri and all day weekends and holidays
Holidays include New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.
Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Minimum Monthly Charge

The minimum monthly charge under the above rate shall be the Fixed Charge.
Resource and Tax Adjustment (RTA)
The Energy Charge shall be adjusted for incremental changes in purchased power costs, incremental changes in Dakota Electric's conservation tracker account balance, and incremental changes in real and personal property taxes above or below the appropriate base costs. The conservation tracker account factor shall be calculated as described in the Resource Adjustment Rider (Sheet 51). The real and personal property tax factor shall be calculated as described in the Property Tax Adjustment Rider (Sheet 53). The purchased power cost factor shall be adjusted by $\$ 0.0001$ per kilowatt-hour or major fraction thereof, of which the Association's total projected power cost per kilowatt-hour annually exceed, or is less than $\$ 0.0903$ per kilowatt-hour sold. The year used for the annualized RTA will be January 1 through December 31. The projection shall be reviewed after six months (July) and adjusted if necessary. The RTA shall be filed with the Public Utilities Commission each year before implementation.

|  | INTERIM |  |
| :--- | :--- | ---: |
| DAKOTA ELECTRIC ASSOCIATION | SECTION: | V |
| $4300220^{\text {th }}$ Street West | SHEET: | 31.1 |
| Farmington, Minnesota 55024 | REVISION: | 6 |

## SCHEDULE 60 <br> RIDER FOR STANDBY SERVICE CONTINUED

## Definitions

Contracted Standby Demand is the quantity specified in the member's Electric Service Agreement as the maximum amount of firm or non-firm standby service the Cooperative is obligated to supply and will not exceed the capacity of the member's distributed generation system.

Firm Service refers to a utility's most reliable, constant electric service. A utility would interrupt the supply of electricity to a firm service customer only as a last resort.

Non-Firm Service, also called interruptible service, refers to electric service that a utility provides only to the extent that it has capacity not being used to meet the needs of firm-service members at the moment.

All other definitions shall be as described in Cooperative's Distributed Generation Interconnection Requirements and Interconnection Process for Distributed Generation Systems.

## Charges for Service

The following Reservation Fees, Communication Fee, Usage Fees, and Wheeling Fees will be assessed as applicable in addition to all charges for service being taken under Cooperative's base rate schedule:

## Reservation Fees

Charges as specified below for the reservation of either Firm or Non-Firm generation, transmission and distribution service per Month per kW will each be applied to the member's Contracted Standby Demand as specified in member's Electric Service Agreement with Cooperative:

|  | Firm Service <br> $(\$$ per kW $)$ | Non-Firm Service <br> $(\$$ per kW $)$ |
| :--- | :---: | :---: |
| Generation | $*$ | $* *$ |
| Transmission | $*$ | $* *$ |
| Distribution - Secondary Service | $\$ 3.51$ | $\$ 3.51$ |
| Distribution - Primary Service | $\$ 3.28$ | $\$ 3.28$ |
| Distribution - Substation Service | $\$ 0.90$ | $\$ 0.90$ |

* Firm Standby Service generation and transmission Reservation Fees will be billed under the rates, terms and conditions of the Cooperative's wholesale power supplier (Great River Energy), which is available on GRE's Web site; greatriverenergy.com and DEA's Web site; dakotaelectric.com.
**Generation and transmission Reservation Fees are not applied for Non-Firm Service. However, members will be responsible for all costs associated with wholesale power supply during any times of usage.


## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Communication Fee

A monthly Communication Fee will be applied to cover the cost of transmitting data through the use of digital cellular equipment. The monthly Communication Fee is applied to each required meter with cellular data capabilities.

$$
\text { Communication Fee } \quad \$ 8.70 \text { per meter }
$$

## Usage Fees

## Demand Charge

If the member registers electrical usage from Cooperative during a billing month then such usage will result in demand charges which may vary between members contracting for Firm Standby Service or Non-Firm Standby Service.

## SCHEDULE 70 <br> INTERRUPTIBLE SERVICE <br> (FULL INTERRUPTIBLE OPTION)

## Availability

Available to any member with a minimum controllable demand of 50 kW . Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Members participating in this service are not eligible for concurrent service under any other rate schedule. Service is subject to the established rules and regulations of the Association.

Under the full interruptible control option, members agree to interrupt their entire electrical energy usage. Members may attain this full interruption through curtailment or with the use of on-site generation back-up. During the interruption, the member's load must go to zero.

## Type of Service

Single phase or three phase, 60 hertz, at available primary or secondary voltages.
Monthly Rate

| Fixed Charge |  | $\$ 110.00$ per month <br> $\$ 8.70$ per month |
| :--- | :--- | :--- |
| Communication Fee (meters w/ digital cellular) |  |  |
| Coincidental Demand |  | $\$ 24.85$ per kW |
| Summer (June-Aug) | @ | $\$ 18.95$ per kW |
| Winter (Dec-Feb) | @ | $\$ 13.00$ per kW |
| Other | $@$ | $\$ 4.75$ per kW |
| Non-Coincidental Demand | @ | $\$ 0.0499$ per kWh |
| Energy Charge | @ | $\$ 5.00$ per kW |
| Failure to Control Charge | @ |  |
| Plus Applicable Taxes |  |  |

Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Control Period

The control period shall be defined as the period of time during which the Association is controlling these loads with the intent of minimizing demand on the Association's system.

## Coincidental Demand

The monthly Coincidental Demand under the full interruptible control option shall be defined as the member's actual hourly demand (subject to power factor adjustment) that is coincident with the wholesale power supplier (i.e. average of the four fifteen minute demand readings for the hour ending of the wholesale billing peak) when the load is directed to be controlled during the wholesale billing peak.

## Non-Coincidental Demand

The Non-Coincidental Demand shall be the maximum kilowatt demand (subject to power factor adjustment) established by the member for any period of 15 consecutive minutes during the month for which the bill is rendered, as indicated or recorded by a demand meter.

## Failure to Control

The Failure to Control Charge will be applied to the highest kilowatt demand during any one monthly control period when the member does not fully interrupt demand. The Failure to Control Charge is applied to the highest demand recorded during any one of the monthly control periods. The control period shall be defined as the period of time during which the Association is controlling these loads with the intent of minimizing demand on the Association's system. Failure to control or being unavailable for control for more than one calendar month may require the member to be removed from Schedule 70 for the remainder of the year.

## Scheduled Maintenance

Members are encouraged to schedule required periodic maintenance during the spring and fall months and coordinate such maintenance with the Association.

SCHEDULE 71
INTERRUPTIBLE SERVICE
(PARTIAL INTERRUPTIBLE OPTION)
Availability
Available to any member with a minimum controllable demand of 50 kW . Members requesting service under this rate schedule must remain on this rate schedule for a minimum of 12 months. Members participating in this service are not eligible for concurrent service under any other rate schedule. Service is subject to the established rules and regulations of the Association.

Under the partial interruptible control option, members agree to reduce a portion of their electrical energy usage. Members may attain this partial interruption through curtailment or with the use of on-site generation back-up. During the interruption, the member's load goes to a Predetermined Demand Level (PDL). If a partial interruptible member fails to control demand to the PDL, then the PDL will be adjusted to the demand occurring during such control period.

Type of Service
Single phase or three phase, 60 hertz, at available primary or secondary voltages.
Monthly Rate

| Fixed Charge |  | $\$ 110.00$ per month <br> Communication Fee (meters w/ digital cellular) |
| :--- | :--- | :--- |
| $\$ 8.70$ per month |  |  |
| Coincidental Demand |  |  |
| Summer (June - Aug) | $@$ | $\$ 24.85$ per kW |
| Winter (Dec - Feb) | $@$ | $\$ 18.95$ per kW |
| Other | $@$ | $\$ 13.00$ per kW |
| Non-Coincidental Demand | $@$ | $\$ 4.75$ per kW |
| Energy Charge | $@$ | $\$ 0.0499$ per kWh |
| Excess Demand Charge | $@$ | $\$ 5.00$ per kW |
| Plus Applicable Taxes |  |  |

Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Control Period

The control period shall be shall be defined as the period of time during which the Association is controlling these loads with the intent of minimizing demand on the Association's system.

## Coincidental Demand

The monthly Coincidental Demand under the partial interruptible control option shall be defined as:

- During a month with no control period, the monthly Coincidental Demand under the partial interruptible control option will be the lesser of the member's actual hourly demand (subject to power factor adjustment) that is coincident with the wholesale power supplier (i.e. average of the four fifteen minute demand readings for the hour ending of the wholesale billing peak) or the Predetermined Demand Level. During a month with a control period, the monthly Coincidental Demand under the partial interruptible control option will be the member's actual hourly demand (subject to power factor adjustment) that is coincident with the wholesale power supplier (i.e. average of the four fifteen minute demand readings for the hour ending of the wholesale billing peak).
The partial interruptible PDL will be adjusted to any higher actual demand of the member occurring during a curtailable event for the remainder of the calendar year. In the case of members using on-site generation, the PDL may be adjusted to reflect the rated capacity of such generation that was not operational during the control period. Only one such adjustment per year will be allowed.


## Non-Coincidental Demand

The Non-Coincidental Demand shall be the maximum kilowatt demand (subject to power factor adjustment) established by the member for any period of 15 consecutive minutes during the month for which the bill is rendered, as indicated or recorded by a demand meter.

## SCHEDULE 80

## CYCLED AIR CONDITIONING SERVICE

## Availability

Available to members taking service concurrently under another rate schedule. This rate is for interruptible service to central air conditioners which are remotely controlled by the Association. Service is subject to the established rules and regulations of the Association.

## Type of Service

Single phase or three phase, 60 hertz, at available secondary voltages. Service under this schedule will be available at all times except when interrupted by the Association during times of peak system demand or system emergencies.

## Monthly Rate

Option No. 1 - Available to members who also take service under Schedules 51 and 52 where an existing meter and control unit may be utilized for the controlled air conditioning load.

Energy Charge per applicable Schedule 51 or 52
Option No. 2 - Available to members where a new meter and control unit must be installed to control the air conditioning load.

Energy Charge Credit @ $\$ 0.0320$ per kWh
Option No. 3-Available to members where a control unit must be installed to control the air conditioning load.

A credit will be applied to the first $\$ 13.00$ of the member's net energy consumption charges in the months of June, July, and August. In no case will the credit exceed the sum of the monthly Energy Charge and Resource and Tax Adjustment.

Option No. 4 - Available to non-residential members where a new meter and control unit must be installed but where it is not feasible or designed to meter the air conditioning load separately. The maximum capacity of any individual air conditioning compressor is 7.5 tons. A $\$ 6.50$ per ton per month credit will be applied to member's bill in the months of June, July, and August. The aggregate monthly credit per account will not exceed $1 / 3$ of the net charges for energy and demand in each month.

## Plus Applicable Taxes

## Interim Rate Adjustment

A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment Rider effective for service rendered on and after November 18, 2019.

## Taxes

The rates set forth are based on taxes as of January 1, 2014. The amount of any increase in existing or new taxes on the transmission, distribution, or sales of electricity allocable to sales hereunder shall be added to the above rate as appropriate.

## Terms of Payment

The above charges are net. Balances over $\$ 10.00$ not received by the Association by the next scheduled billing date will have an interest charge of 1.5 percent or $\$ 1.00$, whichever is greater, added to the balance.

## INTERIM RATE ADJUSTMENT RIDER

## Availability

The 3.0\% Interim Rate Adjustment applies to:

1. Fixed Charge
2. Energy Charge
3. Demand Charge
4. Resource and Tax Adjustment
5. Minimum Charges
6. Energy Charge Credits
7. Voltage Discounts
8. Lighting Rates per Luminaire
9. Low Wattage Unmetered Service
10. Standby Reservation Fees
11. Controlled Air Conditioning and Water Heating Discounts

The Interim Rate Adjustment does not apply to:

1. Municipal Civil Defense Sirens
2. Special Fees or Charges
3. Communication Fee
4. Competitive Service Rider
5. Franchise Fee Surcharge Rider
6. Optional Renewable Energy Rider
7. Member Energy Exchange Rider
8. Voluntary Energy Reduction Rider
9. Member Specific Discount Rider
10. Large Load High Load Factor Rider
11. Contract Rate Service
12. Advanced Grid Infrastructure Rider
13. Advanced Meter Opt-Out (AMO) Rider
14. Late Payment Charge

This temporary Interim Rate Adjustment Rider will expire when final rates become effective.

## Rate

Each rate schedule that the Interim Rate Adjustment applies to contains the following text:
Interim Rate Adjustment
A 3.0\% Interim Rate Adjustment will be applied as specified in the Interim Rate Adjustment
Rider effective for service rendered on and after November $\qquad$ , 2019.

Katie Sieben
Dan Lipschultz
Valerie Means
Matt Schuerger
John Tuma
In the Matter of the Application of
DAKOTA ELECTRIC ASSOCIATION
for Authority to Increase Rates
for Electric Service in Minnesota

Chair
Commissioner
Commissioner
Commissioner
Commissioner
Docket No. E-111/GR-19-478
September 19, 2019

## NOTICE AND PETITION FOR INTERIM RATES

## A. Introduction

Dakota Electric Association ("Dakota Electric" or "Cooperative") submits to the Minnesota Public Utilities Commission ("MPUC" or the "Commission") this Petition for Interim Rates (the "Petition") for retail electric rates to members, pursuant to Minn. Stat. § 216B. 16 subd. 3; the Commission's Statement of Policy on Interim Rates dated April 14, 1982; and relevant Commission rules.

## B. Information Provided Pursuant to the Commission Statement of Policy on Interim Rates and Relevant Commission Rules

1. Name, address, and telephone number of utility and attorney. (Policy Statement, Item 1, page 2)

Utility Filing for Rate Change:
Dakota Electric Association
4300 220th Street West
Farmington, MN 55024
(651) 463-6212

Representing Attorney:
Eric F. Swanson
Winthrop \& Weinstine
225 South Sixth Street, Suite 3500
Minneapolis, Minnesota 55402-4629
(612) 604-6511
2. Date of filing and date proposed interim rates are requested to become effective. (Policy Statement, Item 2, page 2)

This Petition is filed September 19, 2019. The Petition is submitted as part of the Cooperative's Application for a General Electric Rate Increase (the "Application"), which is also being filed on September 19, 2019. Pursuant to Minn. Stat. § 216B.16,subd.3, Dakota Electric requests, if the Commission suspends the operation of the general rate schedules that accompany the Application pursuant to Minn. Stat. § 216B.16, subd. 2, that the proposed interim rates be made effective with consumption occurring on and after November 18, 2019. The interim rates will be subject to refund, pending final Commission determination on the general electric rate increase.
3. Description and need for interim rates. (Policy Statement, Item 3, page 2)

Dakota Electric proposes an interim rate increase of three percent (3.0\%), which will apply to retail rates as specified in the proposed Interim Rate Adjustment Rider. Interim rates are necessary because the Cooperative has experienced increasing costs of service as reflected in the Cooperative's general rate application. The proposed $3.0 \%$ interim rate increase is anticipated to be sufficient to maintain positive annual margins beginning in 2020. We calculated the proposed interim rates consistent with Commission requirements and precedent. Specifically, when determining the interim rate request, the overall rate of return ("ROR") requested for interim rates for Dakota Electric uses the present average cost of long-term debt and the return on equity previously authorized by the Commission in Dakota Electric's last rate case (Docket No. E-111/GR-14-482). The proportion of each component and the factor to adjust the weighted cost of capital to establish return on rate base is also consistent with the numbers approved in the final order from our last general rate case. Overall, this adjustment results in an interim revenue deficiency of about $\$ 8,460,000$ or about 4.2 percent, which is greater than the requested interim increase of $3.0 \%$ and slightly lower than the overall increase of about $4.3 \%$ requested in this proceeding.

Minn. Stat. § 216B.16, subd. 3(b) provides that unless "the commission finds that exigent circumstances exist, the interim rate schedule shall be calculated using the proposed test year cost of capital, rate base, and expenses, except that it shall include (1) a rate of return on common equity for the utility equal to that authorized by the commission in the utility's most recent rate case proceeding."

In calculating interim rates, Dakota Electric proposes an amount that is less than the amount authorized under the interim rates statute, but sufficient to meet financial metrics during the rate case proceeding while providing a transitional step to final rates. As the Commission found in the Cooperative's last two rate case proceedings, charging the Association's members more than the Association believes its operations require for interim rates would contravene the public interest. The Commission has agreed that Dakota Electric's proposed approach to interim revenue increases in past rate cases is reasonable and in the public interest. Therefore, Dakota Electric requests that the Commission find that exigent circumstances exist and not require Dakota Electric to
apply the capital structure and cost of capital set by statute when determining the interim rate increase in this rate case. The Association's request avoids collecting more revenue than necessary during this proceeding and provides a transitional increase in rates should the Commission ultimately order the rates requested.
4. Description and corresponding dollar amount of changes included in interim rates as compared with most current approved general rate case and with the most recent year for which audited data is available.
(Policy Statement, Item 4, page 2)
A comparison of the Interim Petition and Application revenue deficiencies is attached to this Petition. The difference in the two calculations relates to the overall rate of return. The Application calculates a ROR of $5.73 \%$, while the Interim Petition uses a 5.59\% percent ROR calculated as follows:

| Component | Proportion | Cost Rate | Weighted Cost |
| :--- | :---: | :---: | :---: |
| Long-Term Debt | $41.81 \%$ | $3.77 \%$ | $1.58 \%$ |
| Return on Equity | $58.19 \%$ | $4.28 \%$ | $2.49 \%$ |
| Weighted Cost of Capital | $100 \%$ |  | $4.07 \%$ |
| Return on Rate Base |  | 1.373 | $5.59 \%$ |

In any event, Dakota Electric is requesting an interim revenue increase below the revenue deficiency identified in both the Application and Interim Petition calculations.
5. Effect of the interim rates expressed in gross revenue dollars and as a percentage of test year gross revenues. (Policy Statement, Item 5, page 2).

The test year for Dakota Electric's general rate increase filing is the historical 2018 calendar year adjusted for known and measurable changes. Dakota Electric requests an interim rate adjustment that will increase Dakota Electric's base rate (distribution) revenues by about $\$ 6,000,000$ or 3.0 percent above the test year gross revenues. This interim rate adjustment will be uniformly billed as a 3.0 percent increase on the subtotal of members' bills. As noted, this interim increase is below the possible interim increase of about $\$ 8,460,000$ calculated according to Commission requirements and precedent for interim adjustments. The proposed Interim Tariff clause describes the interim rate increase and is consistent with the application of interim rates approved by the Commission in Dakota Electric's last two general rate cases (Docket No. E-111/GR-09175 and Docket No. E-111/GR-14-482). We have further refined that explanation by developing an Interim Rate Surcharge Rider, which lists those charges to which the interim rate increase applies and a list of those rates to which the interim rate increase does not apply. This Rider is identical to the Rider approved by the Commission in our last two general rate cases. Dakota Electric proposes that a uniform percentage be applied to all of the base rate elements listed in the Interim Rate Surcharge Rider, with such interim revenue being used to support our distribution operations. That is, Dakota Electric proposes to continue all present charges, including the RTA, and apply the 3.0
percent interim adjustment to the subtotal of such charges. All such interim revenue will be applied to the Cooperative's provision of electric distribution service.

## 6. Certification by Chief Executive Officer. (Policy Statement, Item 6, page 2)

This Petition contains a certificate signed by Greg Miller, President and CEO, Dakota Electric Association, affirming that this interim rate Petition complies with Minnesota Statutes and is attached to this petition.
7. Methods and procedures for refunding.

Pursuant to Minn. Stat. § 216B.16, subd. 3, Dakota Electric's Agreement and Undertaking to make appropriate refunds if required is contained in the Application.
8. Signature and title of the utility officer authorizing the proposed interim rates. (Policy Statement, Item 7, page 2)

The Petition is signed on behalf of Dakota Electric by Greg Miller, President and CEO, Dakota Electric Association.
9. Supporting schedules and workpapers. (Policy Statement, Items 1-4, page 3)

The supporting documentation described in the Commission's Policy Statement is included with this Petition and Application. These schedules include the rate base amounts; income statement amounts; revenue deficiencies; rates of return required for interim rates as compared to the same information for Dakota Electric's general rate increase Application.

## 10. Interim rate schedules, Revenue rate comparisons. (Minn. R. 7825.3600)

A summary of the revenue increases under present and proposed interim rates for all customer classes is included in this Petition. The rate schedules containing proposed interim rates are also included with this Petition. Consistent with Minn. Stat. § 216B.16, subd. 3, no change has been made in the existing rate design. A uniform percentage equal to the proposed interim rate increase needed to recover the interim revenue deficiency from base rates has been applied to all billing components as described in the Interim Rate Adjustment Rider.

## 11. Customer Notice.

(Minn. R. 7829.2400, subpt. 3; Minn. Stat. § 216B.16, subd. 1)
Pursuant to Minn. R. 7829.2400, subpt. 3, and Minn. Stat. § 216B.16, subd. 3, Dakota Electric proposes to send a notice to its members and to the counties and municipalities in our service area. In addition, Dakota Electric will publish a display advertisement in the
newspapers of general circulation in Dakota County. Pursuant to Minn. Stat. § 216B.16, subd. 1, the proposed notice to consumers, counties and municipalities is included in this filing and can be found in the transmittal information in the Application.

## 12. Interim Bills.

The Commission's Policy Statement on Interim Rates suggests that changes in interim rates be shown on customer bills as a separate line item "if practical." The interim rate amount will be shown as a separate line item stated as "Interim Rate Adjustment," and will reflect the total amount of the interim charge applied to the bill.

## C. Conclusion

Dakota Electric respectfully requests, if the Commission suspends the operation of the general rate schedules that accompany the Application pursuant to Minn. Stat. 216B.16, subd. 2, that the proposed interim rates be made effective with consumption occurring on and after November 18, 2019, subject to refund, pending final Commission action on the Cooperative's general electric rate increase Application.

Dated: September 19, 2019
Respectfully submitted,


Greg Miller
President \& CEO
Dakota Electric Association


[^0]:    See pages 2 and 3 of this workpaper for the determination of power supply energy and capacity per unit costs. See page 4 of this workpaper for the determination of allocated distribution per unit costs.

    See page 5 of this workpaper for the determination of monthly maintenance costs by rate schedule. See page 6 of this workpaper for the determination of capital costs by rate schedule.

[^1]:    ${ }^{1}$ See Exhibit DEA__(DEA-3), pages 20 to 22.

[^2]:    Based on lights being on from $1 / 2$ hour after sunset to $1 / 2$ hour before sunrise, or about 3,930 hours per year. See Workpaper 10 for average system losses.
    $6.23 \%$ On Peak at $5.948 \phi$ per kWh plus $93.77 \%$ at $4.655 \phi$ per kWh

[^3]:    ${ }^{1}$ See Exhibit (DEA-3), pages 20 to 22.
    ${ }^{2}$ Reflects the percentage of distribution-related costs that have been classified as consumer related.

[^4]:    Based on lights being on from $1 / 2$ hour after sunset to $1 / 2$ hour before sunrise, or about 3,930 hours per year. See Workpaper 10 for average system losses.
    $6.23 \%$ On Peak at $5.948 \not \subset$ per $k W h$ plus $93.77 \%$ at $4.655 \notin$ per kWh .

[^5]:    ${ }^{1}$ See Exhibit (DEA-3), pages 20 to 22.
    ${ }^{2}$ Reflects the percentage of distribution-related costs that have been classified as consumer related.

[^6]:    ${ }^{1}$ volt-ampere reactive (var) is a unit by which reactive power is expressed in an AC electric power system. Since reactive power does not do any real work, the extra current supplied to provide the reactive power means greater line losses and higher thermal limits for equipment.

[^7]:    

[^8]:    

[^9]:    

[^10]:    

[^11]:    Program provided by National Rural Utilities Cooperative Finance Corporation - Compass Version 4.0
    NRUCFC Confidential

[^12]:    Program provided by National Rural Utilities Cooperative Finance Corporation - Compass Version 4.0
    $\qquad$

[^13]:    Program provided by National Rural Utilities Cooperative Finance Corporation - Compass Version 4.0

[^14]:    ${ }^{1}$ See Exhibit__(DEA-1), page 6 of 20.

[^15]:    Note: GRE wholesale rates include capacity, transmission, and ancillary service charges.

[^16]:    ${ }^{1}$ The operating expense adjustments are summarized on page 2 of Exhibit__(DEA-1).
    2 See pages 2 through 10 for an estimate of the Pro Forma Test Year revenue under proposed rates.

[^17]:    ${ }^{1}$ See Exhibit__(DEA-1), page 13.
    2 See Exhibit__(DEA-5), pages 3 through 9.
    ${ }^{3}$ The total number of consumers excludes Security, Street \& Residential Lighting, Low Wattage Unmetered Service, Municipal Civil Defense Sirens, Controlled Off-Peak Energy Storage, Interruptible Heating, and Controlled Air Conditioning Service.

[^18]:    ${ }^{1}$ Proposed rates assume zero RTA.

[^19]:    ${ }^{1}$ Proposed rates assume zero RTA.

[^20]:    ${ }^{1}$ Proposed rates assume zero RTA.

[^21]:    ${ }^{1}$ Proposed rates assume zero RTA.

[^22]:    ${ }^{1}$ Proposed rates assume zero RTA.

[^23]:    ${ }^{1}$ Proposed rates assume zero RTA.

[^24]:    ${ }^{1}$ Proposed rates assume zero RTA.

[^25]:    ${ }^{1}$ Proposed rates assume zero RTA.

[^26]:    ${ }^{1}$ The incremental interest rate is estimated as follows:

    $$
    \begin{array}{llll}
    \text { CFC-15 yr } & 1.00 \mathrm{x} & 4.2000 \% & =4.2000 \%
    \end{array}
    $$

[^27]:    ${ }^{1}$ Interest expense is reflected in the "annual cost factor". Margin is to cover the patronage capital which will be allocated to each consumer on the basis of all other costs which is somewhat analogous to revenue.
    ${ }^{2}$ Factor to be used to allocate distribution system related cost to the off-peak class. Use 0.5000 as this approximates the capacity related distribution system costs in the listed categories.

[^28]:    ${ }^{1}$ Use a weighting factor of 0.5 to represent the amount of consumer accounting expense to be allocated to this class.
    ${ }^{2}$ Estimate the annual usage for a typical system to be $6,300 \mathrm{kWh}$ per year based on Pro Forma Test Year Sales.
    ${ }^{3}$ This factor is based on the judgment of management as to the special cost assocated with providing information and customer service for this type of load.

[^29]:    ${ }^{1}$ GRE defines summer months to be June, July and August -- Winter months to be January, February, and December.
    2 The fully diversified demand per consumer is based on the "B" factor formula contained in the RUS Demand Tables (Bulletin 45-2), adjusted such that the total calculated demand at the substation equals the metered demand.

    $$
    \text { kW/cons. }=.005925(\mathrm{kWh}) \quad .885
    $$

    3 The "A" Factor from the RUS Demand Table reflects interclass diversity.

    $$
    \text { "A" }=\left(1-.4 \mathrm{C}+.4\left(\mathrm{C}^{2}+40\right)^{1 / 2}\right)
    $$

[^30]:    ${ }^{1}$ GRE defines summer months to be June, July and August -- Winter months to be January, February, and December.
    2 The fully diversified demand per consumer is based on the "B" factor formula contained in the RUS Demand Tables (Bulletin 45-2), adjusted such that the total calculated demand at the substation equals the metered demand.

    $$
    \text { kW/cons. }=.005925(\mathrm{kWh}) \quad .885
    $$

    3 The "A" Factor from the RUS Demand Table reflects interclass diversity.

    $$
    \text { "A" }=\left(1-.4 \mathrm{C}+.4\left(\mathrm{C}^{2}+40\right)^{1 / 2}\right)
    $$

    4 See pages 39 and 40.

[^31]:    1 GRE defines summer months to be June, July and August -- Winter months to be January, February, and December.
    2 The fully diversified demand per consumer is based on the "B" factor formula contained in the RUS Demand Tables (Bulletin 45-2), adjusted such that the total calculated demand at the substation equals the metered demand.

[^32]:    ${ }^{1}$ GRE defines summer months to be June, July and August -- Winter months to be January, February, and December.
    2 The fully diversified demand per consumer is based on the "B" factor formula contained in the RUS Demand Tables (Bulletin 45-2), adjusted such that the total calculated demand at the substation equals the metered demand.

    $$
    \text { kW/cons. }=.005925(\mathrm{kWh}) \quad .885
    $$

    3 The "A" Factor from the RUS Demand Table reflects interclass diversity.

    $$
    \text { "A" }=\left(1-.4 \mathrm{C}+.4\left(\mathrm{C}^{2}+40\right)^{1 / 2}\right)
    $$

    4 See pages 39 and 40.

[^33]:    1 See pages 39 and 40.

[^34]:    1 See pages 39 and 40.

[^35]:    1 See pages 39 and 40.

[^36]:    ${ }^{1}$ See pages 39 and 40.

[^37]:    ${ }^{1}$ See Exhibit__(DEA-1).
    ${ }^{2}$ Line 1 minus Line 2.
    ${ }^{3}$ See Workpaper 1.
    ${ }^{4}$ Line 3 plus Line 4 plus Line 5.
    5 See Exhibit__(DEA-2), page 2.
    ${ }^{6}$ See Exhibit__(DEA-2), page 8.
    ${ }^{7}$ Line 9 times Line 10.
    ${ }^{8}$ Line 11 minus Line 12.
    $9 \quad$ Line 7 plus Line 13.
    ${ }^{10}$ Line 16 plus Line 17.
    ${ }^{11}$ Line 14 minus Line 18.
    ${ }^{12}$ Line 19 divided by Line 16.

[^38]:    ${ }^{1}$ December 31, 2018 Form 7 amount. See Workpaper 1.
    2 December 31, 2018 Form 7 amount adjusted to include Depreciation adjustment . See Exhibit _ (DEA-1), page x.
    ${ }^{3}$ Thirteen - month average. See Exhibit_(DEA-2), page 3.

[^39]:    ${ }^{1}$ Inventory accounts 13110 through 13320 from December 31, 2018 year end General Ledger.

[^40]:    The Annualized Interest Expense is based on the Estimated Loan Balance multiplied by the loan interest rate.
    ${ }^{2}$ Equals Form 7, Part C, Line 38 (Long Term Debt) plus Line 45 (Current Portion) 93,460,696 + 6,387,701 = 99,848,397

[^41]:    ${ }^{1}$ See Workpaper 5
    ${ }^{2}$ See Workpaper 5
    ${ }^{3}$ Column b plus Column c
    ${ }^{4}$ Column b divided by Column d
    ${ }^{5} 1$ minus Column e
    ${ }^{6}$ See Workpaper 5
    ${ }^{7}$ Column b divided by Column g

[^42]:    5 Year Asset Growth Rate, See Exhibit_(DEA-2), Page 6
    Average of 2022 and 2023 Equity Ratios, See Exhibit_(DEA-2), Page 7
    1 - (Equity/Total Capital)
    See DEA Exhibit_(DEA-2), Page 5
    See DEA Exhibit_(DEA-2), Page 5
    See DEA Exhibit_(DEA-2), Page 5
    DEA Board Resolution 14-5-5 Long Range Financial Forecast

    See DEA Exhibit_(DEA-2), Page 4

[^43]:    ${ }^{1}$ The operating expense adjustments are summarized on pages 2 through 10 .
    ${ }^{2}$ See pages 12 through 21 for Pro Forma Test Year Revenue.
    ${ }^{3}$ See page 22 for Pro Forma Test Year Purchased Power expense.

[^44]:    ${ }^{1}$ Pro Forma Test Year consumers are based on DEA's average number of 2019 budgeted consumers.
    2 Energy Sales are based on average monthly sales using the higher of 7-10 year trend or budget multiplied by average budgeted 2019 number of customers. See Workpaper 13.
    ${ }^{3}$ See page 13 through 21.
    4 The total number of consumers excludes Security, Street \& Residential Lighting, Low Wattage Unmetered Service, Municipal Civil Defense Sirens, Controlled Off-Peak Energy Storage, Interruptible Heating, and Controlled Air Conditioning Service.
    Exhibit 1,2,4-8 FINAL.xlsx

[^45]:    ${ }^{1} 2019$ applied RTA.

[^46]:    ${ }^{1} 2019$ applied RTA.

[^47]:    ${ }^{1} 2019$ applied RTA.

[^48]:    ${ }^{1} 2019$ applied RTA.

[^49]:    ${ }^{1} 2019$ applied RTA.

[^50]:    ${ }^{1}$ Test Year Rates are GRE's Year 2019 updated rates. Includes a direct pass through of Wellspring costs.
    ${ }^{2}$ The Test Year capacity is based on 2019 budget
    ${ }^{3}$ Wholesale Solar purchases are 2019 budget.

[^51]:    Issued: 9/19/19
    Effective: 11/18/19

[^52]:    ${ }^{1}$ The operating expense adjustments are summarized on pages 2 through 10 .
    ${ }^{2}$ See pages 12 through 21 for Pro Forma Test Year Revenue.
    ${ }^{3}$ See page 22 for Pro Forma Test Year Purchased Power expense.

[^53]:    ${ }^{1}$ Pro Forma Test Year consumers are based on DEA's average number of 2019 budgeted consumers.
    ${ }^{2}$ Energy Sales are based on average monthly sales using the higher of 7-10 year trend or budget multiplied by average budgeted 2019 number of customers. See Workpaper 13.
    ${ }^{3}$ See page 13 through 21.
    4 The total number of consumers excludes Security, Street \& Residential Lighting, Low Wattage Unmetered Service, Municipal Civil Defense Sirens, Controlled Off-Peak Energy Storage, Interruptible Heating, and Controlled Air Conditioning Service.

[^54]:    ${ }^{1}$ See Exhibit__(DEA-1).
    2 Line 1 minus Line 2.
    ${ }^{3}$ See Workpaper 3.
    ${ }^{4}$ Line 3 plus Line 4 plus Line 5.
    5 See Exhibit__(DEA-2), page 2.
    ${ }^{6}$ See Exhibit__(DEA-2), page 5.
    ${ }^{7}$ Line 9 times Line 10 .
    ${ }^{8}$ Line 11 minus Line 12.
    $9 \quad$ Line 7 plus Line 13.
    ${ }^{10}$ Line 16 plus Line 17.
    ${ }^{11}$ Line 14 minus Line 18.
    ${ }^{12}$ Line 19 divided by Line 16.

[^55]:    1 Inventory accounts 13110 through 13320 from December 31, 2018 year end General Ledger.

[^56]:    ${ }^{1}$ Pro Forma Test Year consumers are based on DEA's average number of 2019 budgeted consumers.
    ${ }^{2}$ Energy Sales are based on average monthly sales using the higher of 7-10 year trend or budget multiplied by average budgeted 2019 number of customers. See Workpaper 13.
    ${ }^{3}$ See pages 13 through 21.
    4 The total number of consumers excludes Security, Street \& Residential Lighting, Low Wattage Unmetered Service, Municipal Civil Defense Sirens, Controlled Off-Peak Energy Storage, Interruptible Heating, and Controlled Air Conditioning Service.

[^57]:    1 2019 applied RTA.

[^58]:    ${ }^{1} 2019$ applied RTA.

[^59]:    2019 applied RTA.

[^60]:    ${ }^{1} 2019$ applied RTA.

[^61]:    ${ }^{1}$ See Exhibit__(DEA-1), page 6 of 20.

[^62]:    Note: GRE wholesale rates include capacity, transmission, and ancillary service charges.

[^63]:    ${ }^{1}$ The operating expense adjustments are summarized on page 2 of Exhibit__(DEA-1).
    2 See pages 2 through 10 for an estimate of the Pro Forma Test Year revenue under proposed rates.

[^64]:    ${ }^{1}$ See Exhibit__(DEA-1), page 13.
    2 See Exhibit__(DEA-5), pages 3 through 9.
    ${ }^{3}$ The total number of consumers excludes Security, Street \& Residential Lighting, Low Wattage Unmetered Service, Municipal Civil Defense Sirens, Controlled Off-Peak Energy Storage, Interruptible Heating, and Controlled Air Conditioning Service.

[^65]:    ${ }^{1}$ Proposed rates assume zero RTA.

[^66]:    ${ }^{1}$ Proposed rates assume zero RTA.

[^67]:    ${ }^{1}$ Proposed rates assume zero RTA.

[^68]:    ${ }^{1}$ Proposed rates assume zero RTA.

[^69]:    ${ }^{1}$ Proposed rates assume zero RTA.

[^70]:    ${ }^{1}$ Proposed rates assume zero RTA.

[^71]:    ${ }^{1}$ Proposed rates assume zero RTA.

[^72]:    ${ }^{1}$ Proposed rates assume zero RTA.

[^73]:    ${ }^{1}$ The incremental interest rate is estimated as follows:

    $$
    \begin{array}{llll}
    \text { CFC-15 yr } & 1.00 \mathrm{x} & 4.2000 \% & =4.2000 \%
    \end{array}
    $$

[^74]:    ${ }^{1}$ Interest expense is reflected in the "annual cost factor". Margin is to cover the patronage capital which will be allocated to each consumer on the basis of all other costs which is somewhat analogous to revenue.
    ${ }^{2}$ Factor to be used to allocate distribution system related cost to the off-peak class. Use 0.5000 as this approximates the capacity related distribution system costs in the listed categories.

[^75]:    ${ }^{1}$ Use a weighting factor of 0.5 to represent the amount of consumer accounting expense to be allocated to this class.
    ${ }^{2}$ Estimate the annual usage for a typical system to be $6,300 \mathrm{kWh}$ per year based on Pro Forma Test Year Sales.
    ${ }^{3}$ This factor is based on the judgment of management as to the special cost assocated with providing information and customer service for this type of load.

[^76]:    ${ }^{1}$ GRE defines summer months to be June, July and August -- Winter months to be January, February, and December.
    2 The fully diversified demand per consumer is based on the "B" factor formula contained in the RUS Demand Tables (Bulletin 45-2), adjusted such that the total calculated demand at the substation equals the metered demand.

    $$
    \text { kW/cons. }=.005925(\mathrm{kWh}) \quad .885
    $$

    3 The "A" Factor from the RUS Demand Table reflects interclass diversity.

    $$
    \text { "A" }=\left(1-.4 \mathrm{C}+.4\left(\mathrm{C}^{2}+40\right)^{1 / 2}\right)
    $$

[^77]:    ${ }^{1}$ GRE defines summer months to be June, July and August -- Winter months to be January, February, and December.
    2 The fully diversified demand per consumer is based on the "B" factor formula contained in the RUS Demand Tables (Bulletin 45-2), adjusted such that the total calculated demand at the substation equals the metered demand.

    $$
    \text { kW/cons. }=.005925(\mathrm{kWh}) \quad .885
    $$

    3 The "A" Factor from the RUS Demand Table reflects interclass diversity.

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    \text { "A" }=\left(1-.4 \mathrm{C}+.4\left(\mathrm{C}^{2}+40\right)^{1 / 2}\right)
    $$

    4 See pages 39 and 40.

[^78]:    1 GRE defines summer months to be June, July and August -- Winter months to be January, February, and December.
    2 The fully diversified demand per consumer is based on the "B" factor formula contained in the RUS Demand Tables (Bulletin 45-2), adjusted such that the total calculated demand at the substation equals the metered demand.

[^79]:    ${ }^{1}$ GRE defines summer months to be June, July and August -- Winter months to be January, February, and December.
    2 The fully diversified demand per consumer is based on the "B" factor formula contained in the RUS Demand Tables (Bulletin 45-2), adjusted such that the total calculated demand at the substation equals the metered demand.

    $$
    \text { kW/cons. }=.005925(\mathrm{kWh}) \quad .885
    $$

    3 The "A" Factor from the RUS Demand Table reflects interclass diversity.

    $$
    \text { "A" }=\left(1-.4 \mathrm{C}+.4\left(\mathrm{C}^{2}+40\right)^{1 / 2}\right)
    $$

    4 See pages 39 and 40.

[^80]:    1 See pages 39 and 40.

[^81]:    1 See pages 39 and 40.

[^82]:    1 See pages 39 and 40.

[^83]:    ${ }^{1}$ See pages 39 and 40.

[^84]:    ${ }^{1}$ See Exhibit__(DEA-1).
    ${ }^{2}$ Line 1 minus Line 2.
    ${ }^{3}$ See Workpaper 1.
    ${ }^{4}$ Line 3 plus Line 4 plus Line 5.
    5 See Exhibit__(DEA-2), page 2.
    ${ }^{6}$ See Exhibit__(DEA-2), page 8.
    ${ }^{7}$ Line 9 times Line 10.
    ${ }^{8}$ Line 11 minus Line 12.
    $9 \quad$ Line 7 plus Line 13.
    ${ }^{10}$ Line 16 plus Line 17.
    ${ }^{11}$ Line 14 minus Line 18.
    ${ }^{12}$ Line 19 divided by Line 16.

[^85]:    ${ }^{1}$ December 31, 2018 Form 7 amount. See Workpaper 1.
    2 December 31, 2018 Form 7 amount adjusted to include Depreciation adjustment . See Exhibit _ (DEA-1), page x.
    ${ }^{3}$ Thirteen - month average. See Exhibit_(DEA-2), page 3.

[^86]:    ${ }^{1}$ Inventory accounts 13110 through 13320 from December 31, 2018 year end General Ledger.

[^87]:    The Annualized Interest Expense is based on the Estimated Loan Balance multiplied by the loan interest rate.
    ${ }^{2}$ Equals Form 7, Part C, Line 38 (Long Term Debt) plus Line 45 (Current Portion) 93,460,696 + 6,387,701 = 99,848,397

[^88]:    ${ }^{1}$ See Workpaper 5
    ${ }^{2}$ See Workpaper 5
    ${ }^{3}$ Column b plus Column c
    ${ }^{4}$ Column b divided by Column d
    ${ }^{5} 1$ minus Column e
    ${ }^{6}$ See Workpaper 5
    ${ }^{7}$ Column b divided by Column g

[^89]:    5 Year Asset Growth Rate, See Exhibit_(DEA-2), Page 6
    Average of 2022 and 2023 Equity Ratios, See Exhibit_(DEA-2), Page 7
    1 - (Equity/Total Capital)
    See DEA Exhibit_(DEA-2), Page 5
    See DEA Exhibit_(DEA-2), Page 5
    See DEA Exhibit_(DEA-2), Page 5
    DEA Board Resolution 14-5-5 Long Range Financial Forecast

    See DEA Exhibit_(DEA-2), Page 4

[^90]:    ${ }^{1}$ The operating expense adjustments are summarized on pages 2 through 10 .
    ${ }^{2}$ See pages 12 through 21 for Pro Forma Test Year Revenue.
    ${ }^{3}$ See page 22 for Pro Forma Test Year Purchased Power expense.

[^91]:    ${ }^{1}$ Pro Forma Test Year consumers are based on DEA's average number of 2019 budgeted consumers.
    2 Energy Sales are based on average monthly sales using the higher of 7-10 year trend or budget multiplied by average budgeted 2019 number of customers. See Workpaper 13.
    ${ }^{3}$ See page 13 through 21.
    4 The total number of consumers excludes Security, Street \& Residential Lighting, Low Wattage Unmetered Service, Municipal Civil Defense Sirens, Controlled Off-Peak Energy Storage, Interruptible Heating, and Controlled Air Conditioning Service.
    Exhibit 1,2,4-8 FINAL.xlsx

[^92]:    ${ }^{1} 2019$ applied RTA.

[^93]:    ${ }^{1} 2019$ applied RTA.

[^94]:    ${ }^{1} 2019$ applied RTA.

[^95]:    ${ }^{1} 2019$ applied RTA.

[^96]:    ${ }^{1} 2019$ applied RTA.

[^97]:    ${ }^{1}$ Test Year Rates are GRE's Year 2019 updated rates. Includes a direct pass through of Wellspring costs.
    ${ }^{2}$ The Test Year capacity is based on 2019 budget
    ${ }^{3}$ Wholesale Solar purchases are 2019 budget.

[^98]:    Issued: 9/19/19
    Effective: 11/18/19

