

COGENERATION AND SMALL POWER PRODUCTION

MPUC SCHEDULE D
SCHEDULE 55
PARALLEL GENERATION RATE

AVAILABILITY

Available to all Members where the Member has qualified small power production or cogeneration facilities connected in parallel with the Cooperative's facilities. The Member is required to execute an Electric Service Agreement with the Cooperative.

SERVICE CHARACTERISTICS

Service hereunder shall be alternating current, 60 Hertz, at available voltages.

RATE

The Cooperative shall pay the Member monthly for all energy furnished during the month at the rate shown in Section 1.01 below. The rate selected shall be at the Member's option and shall conform to the capacity rules established by the MPUC. Members with a QF that exceeds 100 kW may agree with Cooperative to execute this standard agreement with the Time-Of-Day Rate, or the parties may agree that a negotiated agreement is more appropriate.

- 1.01 Net Energy Billing Rate: Available to QFs with capacity of less than 40 kW that do not select either the Time-Of-Day Rate or Simultaneous Purchase and Sale Billing Rate as specified in Minnesota Rule 7835.3300.

Cooperative shall pay the Member as follows:

<u>Type Service</u>	<u>Rate Schedules</u>	<u>Rate</u>
Residential	31, 32, 53, 56	13.01¢ Per kWh
Small General Service	41	12.82¢ Per kWh
General Service	46, 54	7.30¢ Per kWh
C&I Interruptible Service	70, 71	5.15¢ Per kWh

For members receiving service concurrently under Schedules 51 or 52, metered energy supplied by the QF to the Cooperative will be credited on the monthly bill at the applicable average retail energy rate, with all other consumption being billed according to applicable rate schedules.

- 1.02 Simultaneous Purchase and Sale Billing Rate: Available to QFs with capacity of less than 40 kW that do not select the Time-Of-Day Rate as specified in Minnesota Rule 7835.3400.

Cooperative shall pay the Member as follows:

- A. The energy component of the rate is specified in Schedule A.
- B. If the QF provides firm power to the Cooperative, then the capacity component of the rate is specified in Schedule B.

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MPUC SCHEDULE A

AVERAGE INCREMENTAL ENERGY COSTS ESTIMATES

Great River Energy’s avoided or incremental energy cost is expected to be the price of energy in the Midcontinent Independent System Operator (MISO) energy market. The Great River Energy estimate of those market prices for the next five (5) years is listed below.

Summer season is defined as May through October and Winter season is defined as November through April.

On Peak periods are defined as Monday through Friday beginning at 10:00 a.m. and ending at 8:00 p.m. (for a total of 10 hours per day), excluding NERC holidays. Off Peak periods are defined as all other days and hours.

ESTIMATED MARKET ENERGY COSTS* (\$/MWh)

		2022	2023	2024	2025	2026
		[TRADE SECRET DATA BEGINS -----]				
Summer	On Peak					
	Off Peak					
	All Hours					
Winter	On Peak					
	Off Peak					
	All Hours					
Annual	On Peak					
	Off Peak					
	All Hours					
		-----TRADE SECRET DATA ENDS]				
Annual # hours on-peak:		~2,600	~2,600	~2,600	~2,600	~2,600

* All prices in nominal dollars and adjusted to reflect line losses shown in Schedule B.

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MPUC SCHEDULE B

Estimated Capacity Costs

The following is provided in response to Rule 7835.0600.

Planned Utility Generating Facility Additions

Great River Energy (GRE) has no planned generating facility additions, other than from qualifying facilities, in the next 10 years.

- 1a. Name of Unit: N/A
- 1b. Nameplate rating: N/A
- 1c. Fuel Type: N/A
- 1d. In-Service Date: N/A
- 1e. N/A
- 1f. N/A
- 1g. N/A
- 1h. N/A
- 1i. N/A

Planned Firm Capacity Purchases

GRE has planned firm capacity purchases in the next 10 years, with parameters as follows:

- A. Year of Purchase [TRADE SECRET]
- B. Name of the seller [TRADE SECRET]
- C. Number of kW of capacity to be purchased [TRADE SECRET]
- D. Capacity cost in \$/kW [TRADE SECRET]
- E. Associated energy costs in cents/kWh [TRADE SECRET]

Percentage of Line Losses

Overall line losses, from generator bus bar to consumer end use is 9.47%.

Net Annual Avoided Capacity Cost

GRE has no planned generating facility additions.

GRE does have planned firm capacity purchases in the next 10 years.

The annual avoided capacity cost for GRE planned capacity purchases is \$[TRADE SECRET]/kWh.

COGENERATION AND SMALL POWER PRODUCTION
MPUC SCHEDULE C
CALCULATION OF THE AVERAGE COOPERATIVE ENERGY RATES

Definition: "Average Retail Cooperative Energy Rate" means for any rate class of cooperative member, the quotient of the total annual class revenue from sales of electricity minus the annual revenue resulting from fixed charges, divided by the annual class kilowatt-hour sales. Data from the most recent 12-month period available shall be used in the computation.

1. Residential Class (Rate Schedules 31, 32, 53, and 56)

$$\frac{(\text{Total 12-month class revenue}) - (\text{12-month class fixed \& demand charges})}{\text{Total 12-month class kWh sales}} = \$/\text{kWh}$$

$$\frac{(\$129,328,981) - (\$12,336,344) - (\$13,035)}{899,057,324 \text{ kWh}} = \$0.1301 \text{ per kWh}$$

\$0.1301 per kWh is the Residential "Average Retail Cooperative Energy Rate"
13.01¢/kWh

2. Small General Service Class (Rate Schedule 41)

$$\frac{(\text{Total 12-month class revenue}) - (\text{12-month class fixed charges})}{\text{Total 12-month class kWh sales}} = \$/\text{kWh}$$

$$\frac{(\$5,966,292) - (\$826,927)}{40,083,947 \text{ kWh}} = \$0.1282 \text{ per kWh}$$

\$0.1282 per kWh is the Small General Service "Average Retail Cooperative Energy Rate"
12.82¢/kWh

3. General Service Class (Rate Schedules 46 and 54)

$$\frac{(\text{Total 12-month class revenue}) - (\text{12-month class fixed \& demand charges})}{\text{Total 12-month class kWh sales}} = \$/\text{kWh}$$

$$\frac{(\$50,977,530) - (\$1,233,018) - (\$16,150,231)}{460,138,862 \text{ kWh}} = \$0.0730 \text{ per kWh}$$

\$0.0730 per kWh is the General Service "Average Retail Cooperative Energy Rate"
7.30¢/kWh

4. C&I Interruptible Class (Rate Schedules 70 and 71)

$$\frac{(\text{Total 12-month class revenue}) - (\text{12-month class fixed \& demand charges})}{\text{Total 12-month class kWh sales}} = \$/\text{kWh}$$

$$\frac{(\$23,279,678) - (\$405,808) - (\$4,493,769)}{357,019,841 \text{ kWh}} = \$0.0515 \text{ per kWh}$$

\$0.0515 per kWh is the C&I Interruptible "Average Retail Cooperative Energy Rate"
5.15¢/kWh