

METER UPGRADE FAQ



Dakota Electric is making investments to improve our electric grid. We are replacing old meters with advanced meters, similar to what other cooperatives and utilities around the country have already done.

Benefits:

- Replacement of aging infrastructure
- Increased system efficiencies
- Improved outage notification & restoration
- More energy information for members

Dakota Electric is in the process of updating older meters to advanced digital meters. This document will answer some questions you may have about this project.

How does the technology work?

The new advanced meters are solid state electric meters that collect and transmit metering information back to our office. The information is collected by the meter, saved in packets and sent via radio frequency back to our office a few times per day. The radio frequency is similar to other technologies that you are familiar with such as baby monitors and garage door openers.

Why is Dakota Electric looking at installing this technology?

Our existing meters and load management devices are aging, and the average age of these devices is more than 20 years old. Dakota Electric has more than 116,000 electric meters and about 50,000 load control devices in use today, and we are looking at the best technology to replace this infrastructure.

What are the benefits of advanced meters?

New metering technology can communicate meter readings and outage information directly to Dakota Electric's office and help us prevent outages by identifying failing equipment or overloaded situations before they turn into extended power outages. When an outage occurs, the system will rapidly collect information from individual meters and automatically report the outage so power can be restored, even if the member is away from home.

Advanced meters will also help support the increased integration of renewable energy on the distribution system.

A summary of benefits:

- Automated power outage reporting, improved restoration and member communications;
- Enhanced reliability and power quality improvements;
- Improved energy usage information and options for our members;
- Support increased integration of renewable energy;
- More efficient internal business processes regarding billing and metering;
- Better planning, utilization and operation of our distribution system;
- Operational savings;
- Improved and more effective load management system;
- Improved employee safety.

What is the timeline for the meter upgrade?

In the fall of 2019, we plan to install a limited number of meters and equipment to verify operation and performance of the interconnected systems. If all is in order, we will begin the installation of new meters in 2020, with meter installation taking approximately 24 months.

What will the project cost?

We estimate the entire project will cost about \$1-2 per member, per month through the life of the system. Besides the up-front costs of the installation of the new technology, there will be ongoing costs to operate the system. However, there are ongoing costs with our current infrastructure and metering system that will be avoided. The additional cost, above the operational costs of our current system, is less than \$6 million over the 15-year life cycle of the equipment.

- continued on back

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What is this "Advanced Meter Recovery" fee on my bill?

To recover costs associated with installing advanced meters and communication equipment, the Minnesota Public Utilities Commission approved an "advanced meter recovery" fee to appear as a line item on the bills. This fee, which is charged for each meter at a premise, is covering the cost of replacing old meters with advanced meters and equipment. This fee will be adjusted annually depending on the ongoing project costs. The line item fee will eventually be eliminated once these costs are covered in base rates.

What about privacy?

We use our members' energy usage and operational data for billing purposes and troubleshooting and resolving problems with equipment or services. We treat personal information and data about our members as confidential. Our use of load data will be strictly limited to the provision of electric service. We will not disclose, share, rent, lease, or sell individual customer data to any third party or affiliate for any other purpose, without the member's express, affirmative written informed consent.

What about health concerns?

Research conducted by the Federal Communications Commission (FCC), the Electric Power Research Institute, the Utilities Telecom Council and others has found no negative health impacts from digital meters that send information via a wireless communications network. The radio frequencies (RF) emitted by digital meters fall well below the maximum recommended in federal guidelines.

The following information is from the American Cancer Society: "How much RF energy that people are exposed to from the smart meter depends on how far they are from the smart meter antenna and how the smart meter sends its signal. The frequency and power of the RF waves given off by a smart meter are similar to that of a typical cell phone, cordless phone, or residential Wi-Fi router. Smart meters typically send and receive short messages about 1 percent of the time. Because the smart meter antenna usually is located outside the home, people are much farther away from the source of RF waves than some other possible sources of exposure to RF radiation, such as personal cell phones and cordless phones. In addition, walls between the person and the smart meter's antenna further reduce the amount of RF energy exposure. This means that the amount of RF radiation that someone would be exposed to from a smart meter is probably much lower than the amount that they would be exposed to from other sources."

What cyber security protections are there with this new technology?

Dakota Electric takes cyber security very seriously and regards it as essential to the success of this project. One of the major factors in selecting our vendors/partners for the advanced meter project was evaluating the cyber security quality of the products that would be deployed. We require our vendors to follow best practices, utilize appropriate countermeasures against potential threats, and ensure that they are updating their systems as future cyber-security vulnerabilities are discovered. While no system can ever be considered 100-percent secure against every threat, we are confident that Dakota Electric and its partners are doing their utmost to deliver and maintain a healthy cyber-security position for these systems.

What if I don't want the meter installed?

Those who do not want a smart meter can request that we not install one. By choosing this "opt-out" option, you will incur a monthly charge of \$11.45 for the cost of manually reading the meter.

Will my power be interrupted during the meter upgrade?

You may experience a brief outage when we replace the meter. The outage should last only a few minutes.

Do I need to be home when you install the new meter?

No, all work will be completed outside, but we will knock on your door before the meter installation attempt. Please make sure your meter is accessible. Photos will be taken before and after the installation.

Visit our web page dedicated to this project at www.dakotaelectric.com/meters

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