

Frequently Asked Questions about Digital Meters

Midwest Electric has invested in new, digital meters to improve the efficiency and reliability of our electric system. Many members have asked questions about these new meters and how they work. Here are the most common questions we have received -- and answers:

When will my meter be installed?

All AMI meters are expected to be installed by the end of 2011.

Will I lose electrical service during the installation?

Yes, for a few minutes. You will need to reset electronic clocks and other devices.

How does my new automated meter work?

With these new meters, **Midwest Electric** can read the meter remotely from our central office. Information from the meter is sent back to the co-op over radio signal in hourly increments.

Why are we changing to the automated meters?

The meter upgrade provides **Midwest Electric** members with numerous benefits. The new meters will help us

- Save money by eliminating the labor and transportation costs of in-person meter reading (which we had to do when members failed to send us their reading)
- Provide you greater convenience and value by eliminating your need to read your meter
- Improve billing accuracy, eliminating misreads or inaccurate readings
- Pinpoint the exact location of outages more quickly, meaning a faster response time.
- Help our consumer-member troubleshoot high-bill problems by providing information about power consumption patterns, and possibly leading to reduced energy use
- Help us identify areas needing preventive maintenance, by providing us with outage and blink count history and voltage information
- Improve electric service reliability and power quality – fewer outages, blinks and surges
- Help secure the overall safety of the cooperative employee team

How much is this going to cost?

There is no rate increase anticipated in association with this project. Following the

installation, members will receive a bill with two readings: one for the old meter and one for the new meter.

What other additional installation parts will I need?

No additional parts are anticipated or required. However, if something is identified as faulty or hazardous with member's equipment, you will be informed.

Who will be changing out the meters?

Midwest Electric employees.

Do members have a choice in getting a new meter?

No. New meters will be installed on all accounts. The cooperative is embarking on a system-wide program that will change 100 percent of existing residential and commercial meters in order to acquire more accurate information, without the need to enter a member's property.

At this time, if members have a question about their energy usage, the cooperative must send operation personnel to the member/owner's property to re-read the meter. With the new system, customer service representatives can access the meter information and obtain the reading almost instantaneously.

The new system will give the cooperative **access to hourly** meter readings, instead of monthly readings. Other features of the new system will provide new data that will enable us to monitor the system better and correct inefficiencies and further improve power reliability.

What's the difference between the new meters and the old meters?

The new meters are digital electronic devices while the old meters were an electro-mechanical device. The new meters will continue to display the meter reading, but it will be in a digital LED format. The biggest difference is that the new meters will have an electronic circuit board module installed. The module receives and stores the kilo-watt-hour (kWh) and demand consumption recorded by the electronics in the meter, and is able to transmit securely this and other system data back to the cooperative's computers.

Will I keep the same rate after the conversion?

Yes, members will continue to stay on the same rate class as they have in the past.

What if my bill reports more kWh usage than normal or I think my meter is not working correctly?

Contact us right away to discuss your billing concerns. Electronic meters are more

accurate than analog or mechanical meters. The new meters installed have been tested and meet American National Standards Institute (ANSI) regulations.

The new meters allow for accurate readings and a consistent billing period.

Will meter readers ever need to come to read the meter manually again once the new meter is in place?

Probably not. All meter reads will be digitally transmitted back to the co-op headquarters.

What information does the new meter record?

The new meter records an electronic kWh reading, the date and time of energy usage, the overall peak demand of the electric account, if the meter has rotated backwards, voltage readings, and the number of times the meter has experienced a loss of power for any reason. In fact, the meter will record the date and time of light blinks and the length of the power outage.

What day of the month will the meters be read?

All of the co-op's new meters can be read at a variety of times to obtain a history of account information. However, for billing purposes member bills will be read on monthly schedules, typically around the 15th of each month.

Once co-op employees no longer need to read the meter, can obstacles be constructed that may make the meter inaccessible?

No. Reasonable access to equipment still must be maintained. This allows for cooperative personnel to either read or maintain the meter if necessary at reasonable times.

How will the co-op read the meters?

The cooperative's computer will communicate with the metering equipment, which sends a request for one or more meter readings. The meter reading is sent back to the co-op via a secure network.

Will someone other than the co-op be able to read the new meter?

It's very unlikely but not impossible that some very sophisticated "bad actor" could access information from the cooperative's automated metering system. Meter manufacturers are incorporating security features and encryption technology into their meters, as recommended by national security experts. Our goal is to upgrade our electric distribution system to make it safer, more secure, and more reliable. Your new digital meter is part of this effort. Once your new digital meter is installed, your cooperative will be able to tell if someone "tampers" with your meter because the meter will report any tampering attempts to the cooperative.

Are there any potential health impacts from a meter that can receive and send data?

No. Research conducted by the Electric Power Research Institute, the Utilities Telecom Council and others has revealed no health impacts from digital meters. The radio frequencies emitted by digital meters falls well below the maximum recommended in federal guidelines. Contrary to some misconceptions, the new meters emit radio frequencies (RF) only when responding to a request for data from the co-op office – either once every fifteen minutes or once every hour for less than a second. Compare this activity to a laptop with a wireless connection, which is constantly sending and retrieving data. A digital meter equipped to send and receive data has an RF density hundreds of times less than the RF density of a cell phones – and the meters are installed on the outside of your house not next to your ear!

Will the co-op continue to do service inspections?

Routine inspections of all meters and services will continue in order to look for safety hazards, theft or other problems.

How secure will the new meters be?

The meter display is visible for members to be able to check their consumption. All other information and data stored in the meter is secure and the meter is sealed.

Can the cooperative disconnect electric service using the new meters?

Yes, meters *can* have remote disconnect capabilities.

Will the new meter notify the co-op when the power goes out?


The meters will be able to record outages allowing the cooperative to verify the outage is on our side of the meter.

How will I know if my meter has been changed?

The co-op employee or contractor will leave a door hanger on your front door to let you know they have changed the meter. We will work with businesses to minimize any inconvenience. You do not have to be present during the meter change.



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