

Frequently Asked Questions about Digital Meters

Empire Electric Association is investing in a new metering system 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? We will start later in 2016 and intend to be completed by the end of 2017.

Will I lose electrical service during the installation? Yes, for just a few minutes. You may need to reset electronic clocks and other devices.

How does my new automated meter work? With these new meters, Empire Electric can read the meter remotely from our central office. Information from the meter is transmitted back to the co-op in daily/hourly/15-minute increments, usually once a day. Your current meter is reporting this information back to EEA every 27 hours.

Why are we changing to the automated meters? The meter upgrade provides EEA members with numerous benefits. The new meters will help us

- 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, outage and blink count history and voltage information, reducing usage questions
- Improve system monitoring capabilities so that problems can be identified and fixed more quickly
- Help secure the overall safety of the cooperative employee team

How will this affect my bill? 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, the co-op will need to address those concerns with its member.

Who will be changing out the meters? Either EEA personnel or a contracted metering replacement company will be responsible for actual change out of the meters. We ask the members to assure our team has safe and ready access to the meter locations to make the transition as quick and uneventful as possible.

How will the information from the new metering system benefit us? EEA is embarking on a system-wide program that will change the majority 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, consumer services representatives can access the meter information and obtain the reading almost instantaneously.

Other features of the new system will provide new data that will enable us to monitor the system better and correct inefficiencies.

What's the difference between the new meters and the old meters? Visible differences are minor. The new meters will look similar to the old ones. The primary differences are in the new meters' capabilities. The new meters will be able to capture and store more data and they will be able to communicate back to the office much faster.

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. Sometimes an old meter will run slow because it's out of specification and the new meter will, by comparison, record more kWh usage than before. More often than not the new value is more accurate and the member has been paying less than they should because the old meter was not accurate. 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? Technicians may need to visit the meter occasionally for routine maintenance or troubleshooting, but we expect field visits to be minimal and infrequent.

What information does the new meter record? The new meter records an electronic kWh reading comprised of voltage, current, the date and time of energy usage, the overall peak demand of the electric account, if the meter has rotated backwards, 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. The new meters will help EEA recognize and respond to power quality issues better than ever before with requiring the member to notify us of a problem.

What day of the month will the meters be read? All of EEA'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.

Once the meter is changed, 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 and provides for safe access should any work need to be performed.

How will EEA read the meters? The meters will communicate with the cooperative's headquarters via a secure wireless network.

Will someone other than EEA be able to read the new meter? EEA makes considerable effort to ensure its systems and networks remain secure. Meter manufacturers also incorporate security features and encryption technology into their products. It's very unlikely that anyone other than the cooperative will be able to read meters through the new system. We continually strive to make our electric system safer, more secure, and more reliable. The new metering system is part of this effort. Once your new digital meter is installed, your cooperative will be able to tell if someone "tamper" with your meter because the meter has several methods to determine if tampering occurs and will report any tampering attempts to the cooperative on a daily basis.

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! In fact, the RF output of the meter is substantially less than the RF which emanates naturally from the earth.

Will EEA 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 EEA disconnect electric service using the new meters? Yes, meters can have remote disconnect capabilities.

Will the new meter notify EEA when the power goes out? The meters will be able to record outages allowing EEA to verify whether the outage is either on the member's side of the meter or EEA's.

Will the co-op notify me prior to installation? Yes. We will be sending out installation schedules.

How will I know if my meter has been changed? The EEA 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.