

Frequently Asked Questions about AMI (Advanced Metering Infrastructure) Meters

Nueces Electric Cooperative is investing in new AMI metering systems to improve the efficiency and reliability of our electric system. NEC realizes many members will have questions about these new meters and how they work.

Here are the most common questions we may receive -- and answers:

Is this new meter a “Smart Meter”?

It’s no smarter than the meters we’ve used for the last two decades, just more reliable. NEC has been utilizing an Automated Meter Reading (AMR) system to facilitate daily/monthly remote meter reads on most residential meters since 1997. In recent years, the old AMR system was also used to complement our Outage Management System, giving us the opportunity to confirm / predict outages and confirm outage restorations. But being 19 years old, it is no longer being supported by the manufacturer and it is time for to look to the future for a more sustainable and useful system. The new AMI digital meters, made by Sensus, collect energy consumption and power quality data and transmit the data back to the co-op via a licensed, secure system. The difference is they do it faster and more reliably.

Why is NEC changing out our meters?

Because the technology of our current infrastructure, installed in 1997, is no longer supported by the manufacturers. In addition, the old communication technique using PLC (power line carrier) is becoming more and more unreliable. NEC has conducted a pilot project of the new Sensus metering infrastructure in order to assure the reliability of the technology.

New benefits include:

- *Improved Efficiency* – reading all meters, residential and commercial, remotely will be more cost effective than having NEC personnel drive to remote locations monthly.
- *Improved Reliability* – Having a two-way communication with the AMI meters will enhance NEC’s outage management system by proactively determining outage locations.
- *Improved Power Quality* - The AMI system will report variances in voltage and other line conditions that will help NEC maintain a more reliable power distribution system.
- *Improved Customer Service* – The AMI system will allow NEC to offer our members more timely information regarding their energy consumption, which will help members make wise decisions about how they use energy in their homes.



How much is this going to cost?

There will be no additional costs to the member to install the new system. There will be no “metering surcharge” that many neighboring Investor Owned Utilities are charging.

How will this new AMI meter benefit me?

The new AMI meters will allow NEC to maintain a more reliable power distribution system, have improved efficiency throughout the cooperative billing system, have improved system power quality, and provide better member/customer service. The AMI system will allow NEC to offer members timely energy consumption data through NEC eBill, the Co-op's online account management system for members.

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. There will be no increased cost to the member due to the AMI Meter deployment.

When will my meter be installed?

NEC began full-scale deployment of the Sensus AMI meters in the Calallen / Orange Grove area and will work geographically through our system to the Nueces, Kleberg, and Jim Wells areas, completing the deployment in Duval County. Deployment is scheduled to begin in July 2015. However, once the communication infrastructure is complete, NEC will obviously not waste any money continuing to install any of the old AMR meters. So if you are installing a new service, or your old meter fails, you may get one of the new AMI meters ahead of schedule. Changes may be made to the deployment areas if necessary.

Will I lose electrical service during the installation?

Yes, for a few minutes. You will need to reset electronic clocks and other devices. The meter installer will notify you before they turn off the power. If you are not present, the technician will leave a door hanger to notify you of a successful upgrade.

How will my new AMI meter work?

Similar to your current AMR meter, NEC can read the meter remotely from our offices. Information from the meter is transmitted back to the co-op via a licensed, secure system. The collected data includes: usage readings, voltage levels, and outage / blink information. This data will not be shared with any third-parties outside of NEC business.

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

One difference is that the old AMR meters utilize power-line carrier technology (use of power lines to transmit data). With the old AMR meters, if a power-line went down during an outage, communication with the meter was lost and the member would have to manually call-in the outage. The new Sensus AMI meters utilize a licensed, secure system to transmit meter data during outages. This means that the meter can automatically report outages, voltage variances, as well as other line conditions without depending on the distribution line being intact.

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

Contact NEC's Member Care department at 1-800-632-9288 or membercare@nueceselectric.org right away to discuss your billing concerns. Electronic meters are more accurate than analog or mechanical meters. Each new meter installed has been tested and meet American National Standards Institute (ANSI) regulations. The new meters allow for timely, 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?

NEC will continue to do "System Reads" on a rotational basis throughout the service territory to verify remote readings received into our billing system. This is a practice that NEC currently utilizes and will continue to do. However, NEC might visit your location for non-meter related issues, such as power outages and line maintenance.

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 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. Its' voltage monitoring ability will also aid our dispatchers in analyzing line conditions.

What day of the month will the meters be read?

All of the co-op's new meters can be read daily and billed on the same schedule as before.

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.

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

The Sensus AMI System utilizes a licensed, banking data quality encrypted 900MHZ system to transmit meter data from the meter to NEC Towers, so it is extremely secure from unauthorized access.

Our goal is to upgrade our electric distribution system to make it safer, more secure, and more reliable. Your new AMI meter is part of this effort. Once your new AMI 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.

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, meter tampering or other problems.

How secure will the new meters be?

The meter display is visible for members to be able to check their consumption, just like the old ones. All other information and data stored in the meter is secure and the meter is sealed. Data stored inside the meter is usage and location data only. No personal information (i.e. Member's information) is stored inside of a meter.

Can the cooperative remotely disconnect electric service using the new meters?

Yes, most residential meters will have remote disconnect capabilities.

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

Yes, in most cases. The new AMI meters are capable of initiating two-way communications. This means that the meter can report outages and voltage variances, as well as other line conditions, without being prompted from our offices. However, NEC still recommends that you report your own outages by phone for extra insurance that your outage is documented.

Who will be changing out the meters?

NEC is contracting with Chapman Metering to exchange the meters. Their employees and vehicles will have Co-op identification so that our membership will know they are acting on behalf of NEC.

How will I know if my meter has been changed?

The co-op contractor, Chapman Metering, will leave a **green** 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. In the event of a circumstance such as a locked gate, pets in the yard or an obstruction that prevents the Chapman Metering employee from exchanging your meter, a **red** door hanger will be left notifying you of the problem. If you receive a notice like this, please follow the instructions on the card and contact us as soon as possible so that arrangements can be made.

Will the co-op notify me prior to installation?

Yes. We will be utilizing several methods of member notification of pending meter exchanges. They are as follows:

- Post Cards Reminders- sent to members 1-4 weeks prior to specific area deployment.
- NEC Website (www.nueceselectric.org) – AMI meter deployment information and maps will be updated as the meter deployment moves forward.



I heard that other utilities were having problems with their Digital meters like: i.e. *burning houses down, causing appliances to go bad, causing higher bills, etc.*

We do not know what the other utilities that you mentioned are installing on their system. We do know that the Sensus meters that NEC is installing are safe to install as we have been using these types of meters on our system for several years now and have not had any of the mentioned problems. In addition, the technician will check the meter socket for any signs of degradation that can create a safety hazard.

My meter displays several different things, what does all of that mean?

On residential meters, there can be three different screen displays. Usually the meter display will alternate between showing the kilowatt hours accumulated on the meter and a display refresh screen with all “8”s showing along with the words “VOLTAGE and kWh”. If the meter has been disconnected, it will display “OPEN”.



Residential Form 2S Remote Disconnect Meter Display Screen

Meter will scroll through 3 different screen options

Meter will display kilowatt hours. i.e. 000000 kWh



Meter will refresh the display screen and display **888888** along with words **VOLTAGE & kWh**.



Meter will display **OPEN** only when meter has been disconnected.

