



San Bernard Electric
Cooperative, Inc.
www.sbec.org

Your Touchstone Energy
Cooperative

Frequently Asked Questions about AMI (Advanced Metering Infrastructure) Meters

San Bernard Electric Cooperative is investing in new AMI 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:

Is this new meter a “Smart Meter”?

It’s no smarter than the meters we’ve used for the last two decades, just better. SBEC has been utilizing an Automatic Meter Reading (AMR) system to facilitate daily/monthly remote meter reads on most residential meters since 1992. 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 20 years old, it is no longer being supported by the manufacturer and it is time for SBEC to look to the future for a more sustainable and useful system. The new AMI digital meters, called Sensus, collect energy consumption and power quality data and transmit the data back to the co-op via a licensed, secure radio frequency system. The difference is they do it faster, more accurately, and more reliably.

Why is SBEC changing out our meters?

Because the technology of our current infrastructure, installed in 1992, is no longer supported by the manufacturers. In addition, the old communication technique using PLC (power line carrier) is becoming more and more unreliable. SBEC 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 SBEC personnel drive to remote locations monthly.
- Improved Reliability – Having a two-way communication with the AMI meters will enhance SBEC’s outage management system by more accurately determining outage locations.
- Improved Power Quality - The AMI system will report variances in voltage and other line conditions that will help SBEC maintain a more reliable power distribution system.
- Improved Customer Service – The AMI system will allow SBEC 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.

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 **all** existing residential and commercial meters.

How much is this going to cost?

There will be no additional costs to the member to install the new system. There is no rate increase anticipated in association with this project, and 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 SBEC 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 SBEC to offer members more timely energy consumption data through a web-based Meter Data Management (MDM) system; if a member requests access to the information.

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?

SBEC will begin full scale deployment of the Sensus AMI meters in the Fieldstore area and work geographically through our system to the Hempstead, Bellville, and Columbus areas, completing the deployment in the Hallettsville area. Deployment began in February 2012. However, once the communication infrastructure is complete, SBEC 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. For the most current meter deployment information visit our website: www.sbec.org.

Will I lose electrical service during the installation?

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

How will my new AMI meter work?

Similar to your current AMR meter, SBEC can read the meter remotely from our offices. Information from the meter is transmitted back to the co-op via a licensed, secure radio frequency system.

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. The new Sensus AMR meters utilize a licensed, secure radio frequency system to transmit meter data during outages. This means that the meter can report outages, voltage variances, as well as other line conditions without depending on the distribution line being intact. The new meters are also digital, so they are inherently more accurate since they are not susceptible to mechanical issues.

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

Contact your nearest co-op office 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 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?

SBEC 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 SBEC currently utilizes and will continue to do. However, it will become more of an annual event rather than a monthly event.

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, 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 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 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?

Similar to your current meter, SBEC will read the meter remotely from our offices. Information from the meter is transmitted back to the co-op via a licensed, secure radio frequency system.

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 radio frequency system to transmit meter data from the meter to radio receivers on SBEC 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.

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 AMI meters. The radio frequencies emitted by AMI 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. An AMI 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, just like the old ones. 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?

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, SBEC 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?

SBEC is contracting with Texas Meter & Device (TMD) to exchange the meters. Their employees and vehicles will have Coop identification so that our membership will know they are acting on behalf of SBEC.

How will I know if my meter has been changed?

The co-op contractor, Texas Meter & Device (TMD), 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 TMD 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:

- Texas Co-op Power Magazine – monthly notifications of scheduled meter deployment areas.
- Post Cards Reminders- sent to members 1-2 weeks prior to specific area deployment.
- IVR (automated) Call Reminders- to members 2-3 days prior to specific area deployment. Remember, our phone records are only as accurate as you keep them. When you change your phone numbers, please let the Coop know. This will greatly enhance the Coop's ability to handle outages to your lines and inform you of events.
- SBEC Website (www.sbec.org) – AMI meter deployment information and maps will be updated as the meter deployment moves forward.

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.

