



Integration



St. Croix Electric Cooperative is embarking on a meter replacement, information management plan called **Project Integration**. By investing in a new Advanced Metering Infrastructure (AMI) system, SCEC will be able to improve member service, as well as the efficiency and reliability of our electric system. Because of the rapid advances in technology, meter manufacturers have introduced new AMI systems into the marketplace and discontinued manufacturing the meter equipment we now use. Below is a list of questions members may have about **Project Integration** and the AMI deployment. Questions not addressed here can be directed to St. Croix Electric Cooperative at 715-796-7000 during normal office hours of 7:30 a.m. to 4:30 p.m., Monday through Friday.

Frequently Asked Questions about Advance Metering Infrastructure (AMI)

1. What is Project Integration?

It is a metering technology upgrade and information management project to better serve members and more efficiently monitor and manage our electric grid. For years, we've helped our members understand their own electric consumption and uses of energy. Today, with an AMI system, SCEC can better manage our distribution grid while providing enhanced services for members.

2. Why are we installing an AMI system?

Although our current metering system is functioning, it is first generation one-way communication technology and is quickly becoming obsolete. The meter manufacturer is no longer making this equipment or providing technical support for our metering system.

3. What's the difference between the meter I have now and the new AMI meter?

We now have a mix of older mechanical meters with a glass face and newer digital meters with a plastic cover. Both styles of meters have a module installed allowing them to report a meter reading over the power lines once a day.

The new meters will be acrylic, digital and equipped with a 2-watt radio frequency (RF) transmitter. The meters transmit encrypted data over the air at a frequency licensed by the Federal Communications Commission.

4. When fully deployed, the new AMI system will be capable of:

- Automatically reporting power outages to SCEC and confirming when power has been restored.
- In the future, allowing us to offer new rate options, including Time-of-Use rates for residential members.
- Giving members access to a near real-time outage map showing the areas where power is out and when it is restored.
- Allowing SCEC to offer pre-paid electric service for members who want to pay as they go.
- Reporting a member's electric use in 15-minute increments so they have more control over their electric use because they know what lifestyle choices affect their energy consumption.
NOTE: Electric use charts will only show overall electric use. They will not have the ability to pin point use for certain appliances or equipment within the home.

5. For St. Croix Electric Cooperative, the new AMI system means we can:

- Better assist members in analyzing energy use information for their account. More current data yields better results and satisfaction.
- Improve our move-out/move-in process when a property changes owners or occupants. SCEC staff can read the meter electronically in 10 seconds for the final billing and the start of service for a new member.
- Worry less about the theft or diversion of energy. The meters will report any instances of tampering.
- Begin offering members a near uniform number of days in each billing period.
- Receive daily reports by meter when low voltage situations, blinking lights or other service problems occur.
- Integrate more real-time data for our operations staff to help the linemen restore outages or reroute power faster.
- Not have to worry about finding spare parts for our current metering system.

6. Will the new AMI system affect our electric rates?

We have been planning and financially preparing for the new AMI system for several years. The expense of the system over its useful life will have a minimal effect on our cost of operations and the rates members pay.

7. When will my meter be installed?

We expect to begin the meter replacement at member accounts starting in October 2015. The meter replacement field work for Project Integration will continue through 2016.

8. Who will be changing out the meters?

We will be hiring an experienced contractor to do this work under the supervision and direction of SCEC staff. The contractor's vehicles will be clearly marked stating they are working for SCEC and each person will also have SCEC-issued identification.

9. Will the Co-op notify me prior to the new meter being installed?

Yes. Members will receive a letter from SCEC prior to the contractor working in their area.

10. Will my electric service be interrupted during the installation?

Under normal conditions, the only noticeable event from the meter replacement may be a momentary blink. A small number of older accounts may experience a loss of power up to five minutes.

11. Will I need additional parts or equipment for the new meters?

Generally speaking, no. The new AMI meter will be inserted into your existing meter socket, unless the meter socket needs to be replaced. Visual inspections at the time of the meter switch will confirm whether the socket presents an electrical hazard or is damaged. The meter socket is owned and maintained by the member or property owner. During Project Integration, SCEC will provide a replacement meter socket when needed at no charge. It is the member's obligation and expense to hire an electrician to install the new meter socket.

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

When the meter has been replaced, information will be left at the property by the contractor informing the member of the meter change out.

13. What if my meter is in the garage or porch?

SCEC requires meters to be installed outside of any building/structure so SCEC meter technicians can easily access the meter. During the implementation of Project Integration, any meters that are obstructed or enclosed in buildings must be relocated or have the obstruction removed. SCEC will notify the member of this requirement and a deadline for the work to be completed. All expenses for meter relocation or the removal of the obstructions will be the member's responsibility.

14. How does the new AMI system work?

The AMI system has the ability to both send meter data and receive messages and commands. These meters use wireless RF technology to send data to a nearby base station receiver/transmitter and respond to commands or requests for information when prompted by SCEC. These meters will automatically collect and report electric use every 15 minutes. The meter stores this 15 minute data for 4 hours and then transmits in – literally – a nanosecond (1/125th of 1 second) to a base station receiver for our use.

Total time of transmission via RF each WEEK per meter: Less than 1 second.

15. How secure will the AMI data be?

The AMI system manufacturer uses multiple authentication protocols to protect meter data. The information recorded by the meter is encrypted to prevent its use by parties other than SCEC.

16. How will the Co-op read the meters?

Each day, via the Internet, we will download the previous 24 hours of energy use and meter data into our customer information data base. This information will be archived electronically and available for members to view and access using our customer portal.

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