## **IT'S A WIN-WIN!** Members and the Cooperative Both Benefit From Smart Meters



By recording energy usage data and allowing two-way communication between our computer system and the meter, smart meters put ECI REC in an excellent position to secure the affordability, efficiency, and reliability advantages of the smart electric grid of the future.

Below is a comprehensive breakdown of benefits both ECI REC and its members can expect to see following smart meter installation.



- With smart meter technology, ECI REC can read meters remotely from the office. We no longer have to hire a contractor or send out line crews to gather readings, which saves the Cooperative approximately \$175,000 per year and lowers our carbon footprint.
- Smart meters record daily usage data on an hour-by-hour basis. After enough data is gathered, ECI REC can use it to minimize subsidization. Eventually, ECI REC will have enough data to offer rate options that give members the opportunity to lower their electric bills by using energy during less expensive times of the day.
- Since usage data collected by smart meters is frequently updated on SmartHub, you can easily evaluate changes in your energy usage habits. For example, log into your account to watch your electricity consumption decline after replacing an old appliance with a more efficient model. Or, stay aware of how much your usage increases after plugging in something, like an electric space heater.
- Smart meters help us monitor your energy demand to ensure your transformer is properly sized to accommodate your needs.

Smart meter data helps ECI REC streamline our strategic and financial planning efforts in areas like power-load forecasting, equipment maintenance planning, and power quality and line loss issues.



- Smart meters provide scheduled readings to ensure consistent billing periods.
- ECI REC can spend less time uploading meter readings into the billing portal.
- **Two-way communication** between ECI REC and smart meter equipment speeds up and streamlines the outage restoration process. In some cases, power could be restored several hours faster than it was with the old system.
- Smart meters obtain and send readings in seconds, simplifying account transfers when members relocate.
- ECI REC can connect or disconnect single-phase residential meters remotely. This power-off switch would only be used for member-requested disconnects and safety measures.





- ECI REC's current meters are nearly 17 years old, which is beyond the recommended life cycle of this equipment. Smart meters are state-of-the-art, and they complement the newer technologies ECI REC has implemented over the past several years.
- Smart meters integrate with ECI REC's Outage Management System (OMS), allowing for faster, more efficient outage detection and diagnosis. The meters provide detailed reports on the type and potential cause of the outage, giving line crews an idea of what to expect if they have to go into the field to make a repair.
- Each meter monitors and identifies blinks at its location to help us accurately detect the location of the problem and gather data to improve power quality.
- Meter tampering alarms reduce theft and energy diversions.



9-8-172400 Bing Miller Lane | Urbana, IA 52345-0248 | Toll Free: 877-850-4343 | Web: www.ecirec.coopCS-0059East-Central Iowa Rural Electric Cooperative is an equal opportunity provider and employer.