

Digging Into Health and Security MYTHS AND FACTS



MYTH 1: Smart meters are dangerous to my health because they communicate using wireless signals.

FACT: Research by the World Health Organization (WHO) has found that the tiny amount of RF energy produced by smart meters isn't harmful to human health. You would have to be exposed to the daily RF emitted by a smart meter for almost 400 years to get a dose equivalent to one year of 15 minutes of daily cell phone use.



MYTH 2: Smart meters are an invasion of privacy.

FACT: Smart meters measure how much energy you use over the course of the day, but not how you use that energy. In addition, ECI REC follows the strict policies set by the State of Iowa that regulate the use of personal information for business actions.



MYTH 3: Smart meters do not keep consumer data secure.

FACT: Security features and encryption technology are built into your smart meter.

continued on back

MYTHS AND FACTS *continued*

The meters are sealed and the information and data stored within can only be accessed with special software. If a highly sophisticated "bad actor" were to break into the encrypted system, the smart meters would alert the Cooperative within seconds.



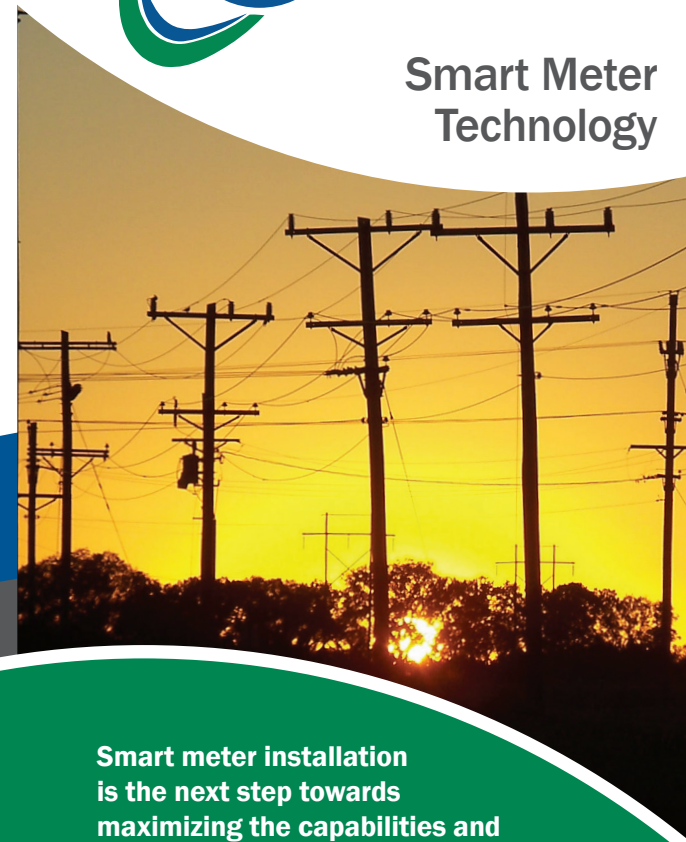
MYTH 4: Smart meters increase the risk of fire and explosion.

FACT: Each manufacturer must get independent certification proving their meters are safe and resistant to heat, fire, voltages, surges, and self-heating. We know the smart meters we use have passed this rigorous certification process.



BUILDING A SMARTER COOPERATIVE

Smart Meter Technology



ADDRESS:

2400 Bing Miller Lane
PO Box 248
Urbana, IA 52345-0248

PH: 319-443-4343

TOLL FREE: 877-850-4343

FAX: 319-443-4359

EMAIL: ecirec@ecirec.coop

WEBSITE: www.ecirec.coop

MONDAY-FRIDAY:

8:00 a.m. to 4:30 p.m.

Closed on holidays

East-Central Iowa Rural Electric Cooperative is an equal opportunity provider and employer.

facebook.com/eastcentraliowarec



CS-0061 9-8-17

Smart meter installation is the next step towards maximizing the capabilities and technology ECI REC has been planning for and implementing over the past several years.

By plugging into the smart grid with smart meters, we can streamline our operations and pave the way for a more affordable and efficient system.

 **ECI REC**
Energy Wise, Community Connected

A Touchstone Energy® Cooperative 

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.

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



BENEFIT #1 AFFORDABILITY

- **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.



Want to learn more about the new smart meters? The ECI REC team is here to address any questions you may have.

319-443-4343 | ecirec@ecirec.coop



BENEFIT #2 EFFICIENCY

- **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.



BENEFIT #3 RELIABILITY

- **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. They provide detailed reports on the type and potential cause of the outage, giving line crews an idea of what to expect.
- **Each meter monitors** and identifies blinks 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.