These Frequently Asked Questions explain Central Electric's Advanced Meter Infrastructure (AMI) project. These Questions and Answers were last amended in May 2011.

Q: What is AMI?

A: Advanced Metering Infrastructure, or AMI, is the term used to describe the full set of technologies and systems that create two-way communication between members' electrical meter and the utility's billing, distribution and control systems. This is part of what's typically called the "smart grid." Historically, information and energy have flowed in one direction only – from the utility to the meter. With AMI, Central Electric and its members will have the ability to share information about energy usage in real time and, as a result, boost efficiency.

The new meters often are referred to as "smart meters" due to their ability to send and receive data. "Smart meters" are only one component of a "smart grid."

Q: How is Central Electric adopting AMI?

A: CEC began replacing the electric meters at its members' homes and businesses in January 2011. My early May, approximately 3,900 of Central Electric's nearly 32,000 meters had been converted. The conversion work began northwest of Redmond and will make its way around CEC's 5,300 square-mile service area by mid-2013. The coop also is installing communication technology at its 25 substations to facilitate the transfer of usage data from individual meters to Central Electric's billing and data storage systems.

For a few months after the meter conversion, members' meters will continue to be read both manually and remotely. This will enable our engineering, operations and technology professionals to test our communications systems and review the meters' performance to ensure accuracy before moving to full deployment.

Q: Who is installing my meter?

A: Central has contracted TruCheck Metering Solutions to convert most of the meters, with CEC technicians handling the balance. TruCheck technicians are identifiable by their uniforms, ID badges, and vehicle markings including the TruCheck logo and vehicle signage identifying them as CEC contractors.

Q: When will the meter be installed at my home/business?

A: Our schedule is built around the substation modifications, the arrival of new meter inventories (many utilities are making this conversion, so manufacturers are staggering distribution of their product) and other logistical considerations.

Every CEC member will be notified by U.S. mail a few weeks in advance of their change-out. TruCheck installers will knock at homeowners' doors to alert them at the time of the change-out. If no one is home, TruCheck will proceed with the conversion.

Technicians will speak with business owners before any conversion takes place to ensure minimal impact on their activities.

Q: How will the conversion affect my service?

A: Other than a brief power outage, which is necessary to make the conversion safely, there will be no noticeable change in service. Due to the outage, you may have to re-set clocks and other electronic equipment.

Q: How do I benefit from having a smart meter?

A: Deploying smart meters to all of our members will enable CEC to operate more efficiently and cost-effectively, which lowers costs and reduces pressure on members' rates. Meter readers will no longer have to enter your property for monthly meter readings. Trips by CEC personnel to your property will become rare events. This will reduce labor, fuel and vehicle costs. Your meter will be read more regularly; increased frequency helps resolve billing disputes more easily.

In some cases, our ability to communicate with your meter also can give us precise information about the timing and location of outages, making some power restoration efforts more efficient. In such situations, we can reduce line crews' labor, fuel and vehicle costs because we will be able to pinpoint outages more comprehensively and achieve total restoration faster.

By late 2011, consumers also will be able to monitor their electricity usage in daily measurements by going to a secure, password-protected portion of the CEC web site. In the future, once all advanced meters have been installed, CEC may develop programs enabling members to more closely manage when and how they use electricity.

Q: Can I choose to not have a smart meter?

A: All of our members' homes and businesses will need to be equipped with the new meters. The efficiency of our billing, technology and electrical system operations will depend upon the instantaneous exchange of information, so all parts of our system must be integrated. Leaving any existing meters in place will create "holes" in our system that would hurt efficiency and drive up costs. When surveyed, more than 75 percent of our members said they were interested in having a meter installed that would enable them and the utility to access real time usage information.

Q: What if I don't want the utility monitoring my electricity usage?

A: We already do monitor your electricity usage, it's just that now we measure it monthly and must send a meter reader into the field to do so. With the new metering technology we will be able to instantly monitor your electricity usage remotely and on-demand. Under routine circumstances we will read the usage on a daily basis. We will be monitoring on a bulk basis only – the sum total of how much electricity you used in a 24-hour period. We will not be able to identify the specific ways you are using your electricity; we can only access gross usage data.

Q: I have heard that people's electricity bills go up after the new meters are installed. Is this true?

A: In some instances, yes. This is because the old, mechanical meter was running slower than it should and therefore was giving artificially low usage readings. The new meters use electronics to measure usage and this may result in some customers having higher bills despite no change in their behavior, a direct result of more accurate metering. With no moving parts to wear down, the new meters will provide more accurate readings for a longer period of time. Once the new meters are installed, all co-op members will now be more fairly billed for the actual amount of electricity used.

Q: What about these stories I hear about the utility controlling my thermostat and other electrical appliances?

A: These are called demand-management programs and you are referring to **possible** programs that some utilities may offer in the future. Any such programs would require the customer to volunteer to participate. CEC has no plans to offer such programs in the near future and any such programs that CEC might someday choose to offer will depend on members' voluntary participation.

The co-op already is involved in a pilot load management project that enables members in a limited geographic area to schedule times when electricity is turned off to their water heaters. The timers are installed in members' homes at their request and are controlled by members with no control interface with CEC. Our Peak Project pilot has been conducted on a strictly volunteer basis and has achieved a strong record of member satisfaction. This demonstrates that any efforts we undertake will be based on voluntary participation and that any such programs needn't depend on smart meters or AMI technology to be successful.

Q: Is this going to raise my rates?

A: Any changes in rates will not be driven by this program. Approximately half of the program's costs are being paid by a federal stimulus grant. The other half is being funded under our existing capital budget.

Q: How will I know when I will have a smart meter installed at my home/business?

A: We will notify members in advance of the installation in their area by mail. We also will leave a notice at your home or business after installation to let you know technicians have completed the installation.

Q: I have heard that signals emitted from the new meters pose a health hazard. Do Central Electric's new meters put me at risk?

A: Some customers of a major utility in California are raising concerns that wireless transmissions from AMI meters pose a health risk. While this is a hotly debated issue and has not been resolved, there is a major distinction between the technology in question in California and that used by Central Electric. Allegations of health impacts are directed at meters using wireless technology to send data from the meter to the utility. Central Electric is using wired technology; the data is sent over the existing power line that is bringing electricity to the home or business. There is no signal transmitted from the meter via the airwaves.

We utilize the low frequency 60-hertz power line signal on our existing wired infrastructure as the carrier for our meter-to-substation communications. Our decision was based in practicality and wise economics. With our low customer density, vast 5,300 square-mile service area, and its rugged terrain, wireless technology would have been a very expensive and less reliable option. Using the existing wired infrastructure was a much better option for Central Electric and our members.

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