Co-op Electric Meters Are Different

The meter your co-op uses to measure the electricity you consume is different from what other utilities use.

For over eight years, Michigan electric co-ops have used a leading technology called automated meter reading (AMR). Automated meters are different because they send your electric use reading over the power line instead of using radio transmission or wireless technology. Therefore, they do not produce radiation or emit radio frequencies that some claim are a health concern.

"Studies have shown that meters using radio frequencies are safe, but co-ops do not even use them, so there are no safety issues with the AMR system," explains Tom Harrell, general manager of Alger Delta Electric, Michigan's second-smallest co-op (10,000+), in Gladstone.

"The AMR system only records kilowatt-hours consumed, time and day, meter number, serial number and account number," Harrell adds. Further, it doesn't control appliances and can't send electric use data or price signals instantly back to you.

What *Can* Automated Meters Do?

How then, do these units benefit you as a co-op owner and member?

"There is no doubt that the AMR technology used by the co-ops has revolutionized their service and business for the better—the benefits are real and numerous," says Elton Veenstra, operations and engineering manager for Michigan's largest co-op (120,000+ members), Great Lakes Energy.

For one, you don't have to trudge out to read the meter—especially in the snow. Before AMR, especially in the rural areas served by co-ops, manual meter reads really increased costs, and member readings or estimates often led to large bills when an actual meter read occurred. "AMR solves all of these issues," Veenstra says.

"We invested in the AMR technology because it can accurately and securely transmit meter readings to our office over the power lines in a matter of seconds," agrees Chris Jensen, a system engineer at HomeWorks Tri-County Electric, a medium-sized co-op (over 22,000) headquartered in Portland.

The AMR system reads the meters daily and exports it into the billing system. "This improves billing accuracy," Jensen adds, "by eliminating estimated billing and the need to hand-key meter readings into the system."

Other Benefits

The AMR system is an excellent example of how co-ops invest in technologies that control costs and improve service. Added AMR benefits include offering members access to their electric use history online; employee/public safety and environmental benefits through reduced fuel and travel costs; easy account transfers; a decrease in meter tampering/energy theft that costs all members more money; more efficient work planning; and shorter outages.

"This technology helps us identify the location of an outage faster, which in turn speeds up restoration times," Jensen says. During the record-breaking March snowstorm that affected five co-op service areas, automated meters helped restore power more quickly.

"The co-op can send a signal to the automated meters in any given area that prompts them to send a return signal," Veenstra explains. "Those that fail to reply are likely at homes without power, and these locations are relayed to nearby crews who make the repairs before moving on to the next area." This helps co-ops restore power to some homes before the owners are even aware of the outage. "Without AMR, restoration after this storm would've taken significantly longer," Veenstra says.

The system also provides voltage data that helps engineers prioritize improvements and predict where outages may occur.

Take Control of Your Own Data

Using the detailed energy use data available through automated meters, you can take control of and make your energy information work for you. Some co-ops (not all have this) can provide you with information about your energy use at different times of the day.

"Armed with a better understanding of their energy use, members can make informed decisions on how to optimize their electricity use and reduce their bills," Veenstra says.

Quick Facts On Automated Meters:

- You don't have to 'read the meter'
- Can help save money & energy
- Online access to electric history
- Faster outage response
- Shorter outage times
- Accurate billing/no estimated bills

Photo – Jayne Graham

Becky Beard, a HomeWorks Tri-County Electric customer service rep, uses AMR data to help members understand their energy use.

Help With High Bill Concerns

Co-op staff can use the data to help you check on or resolve high bill problems, too. "Meter readings available by the day or hour can pinpoint when most of the usage occurred," Veenstra says, "and this information helps determine what caused the higher usage."

Great Lakes Energy member Ruby VanAlstine found out how much the AMR data can help when her electric bill suddenly doubled. "I'm 82-years-old and it's not easy paying those kind of bills, but when I called the Great Lakes office, they were very good about it and looked at my electric bill and saw it was true," she says.

By working with VanAlstine and studying a graph of her 24-hour power use, a GLE technical support rep was able to determine that her well pump was running continuously. "We had to call in a well man and they had to dig up the pipes because our well had been put in 35 years ago, and some rusty pipes were causing the problem," VanAlstine explains.

VanAlstine's well is working good now, and she says, "I really have to thank them at the [Great Lakes Energy] office because I wouldn't have known what the problem was without them."

Some co-ops even have AMR technology that allows you to access your meter reading history online and check to see if your power is out or has been restored after an outage. This is especially helpful for frequent travelers or seasonal residents.

You can see why it's good to know the type of technology used to read your meter. Especially since some co-ops don't have automated meters, and others don't have all the features noted here. Either way, we hope this knowledge makes you proud that co-ops get an "A" for being different.