

The Rollout Begins

WEC Takes Smart-Metering To The Field

Washington Electric Co-op's Annual Membership Meeting on May 24 offered one more opportunity for the Board and management to discuss the coming advanced metering infrastructure (AMI) face to face with Co-op members before the new system is put in place, starting this summer. It was a very timely opportunity, too, because the Vermont Public Service Board (PSB) had recently approved the Co-op's plan.

"We're getting ready to roll," announced General Manager Avram Patt.

AMI refers to a network of equipment able to transmit information about usage, demand, and interruptions of the electric-distribution system digitally back to the utility.

One particular aspect of AMI – the so-called "smart meters" at people's homes – has drawn some attention from the public as Vermont's utilities have moved toward the statewide deployment of an advanced metering infrastructure. (The state's utilities applied in concert for a federal grant from the 2009 stimulus act; the application was approved, and the federal government is covering half the utilities' costs.) The Annual Meeting provided the Co-op another chance to remind members that WEC will be using a "wired" metering system, rather than the "wireless" meters most other utilities plan to install. With a wired system the information is transmitted over the company's power lines; wireless meters send the information via radio frequency waves,

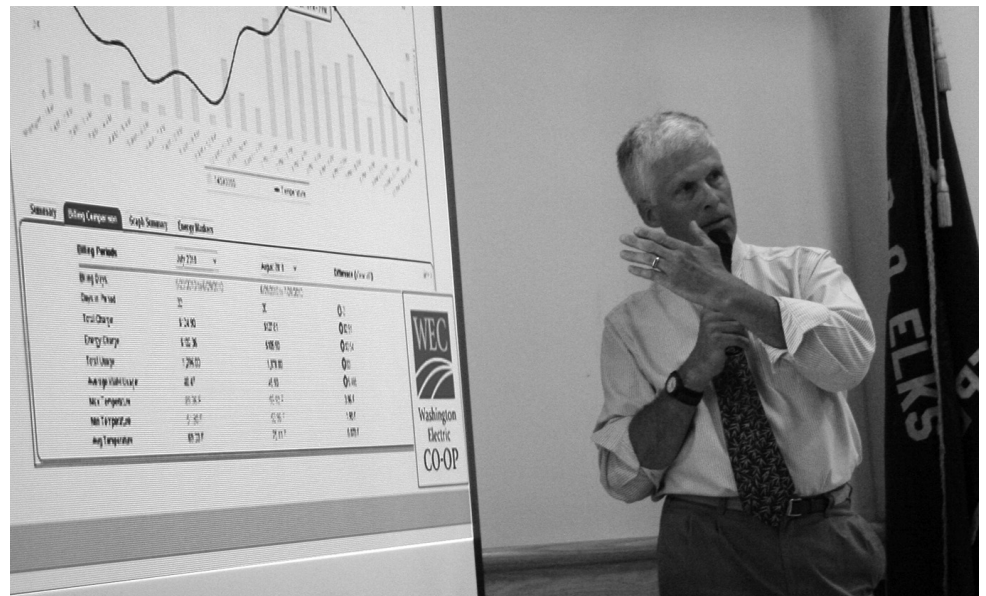
like cell phones, and some Vermonters have expressed health concerns about that technology.

"For people who are worried about radio frequency, the simple answer is that we're not using that," Patt said at the Annual Meeting. As for deploying the new system, Patt said, "We're going to select one of our substations for the starting point and equip it with the technology, and then begin connecting the people attached to that substation. When that's finished we'll move on to another substation, and so forth until it's done. You'll get a notice in the mail that someone will be coming out to change your meter."

The benefits of AMI include improved system reliability, because the utility will know, with more accuracy and efficiency than now,

where power is needed and where outages have occurred. Another benefit is the opportunity for members to know more about their power usage and what they can do to decrease it (and save money). Washington Electric has waited, and watched how wired AMI is working for Vermont Electric Cooperative, which began deploying advanced metering in 2008 and has almost completed the work; WEC is far ahead of the rest of the state's utilities. The results in terms of system reliability and faster outage response have been impressive.

"In the future there could also be optional services and rate structures that people can take advantage of, which are only possible with advanced metering," said Patt. "But I want to stress that these would be optional



Products & Services Director Bill Powell explains to Annual Meeting listeners how advanced metering can play a role in helping people learn to reduce their electric bills.

– your choice, nothing that will be imposed on you.”

Next to speak was Operations & Engineering Director Dan Weston.

“How many of you have ever lost power?” Weston asked, and most people raised their hands.

“My passion is to improve reliability,” he said, “our ability to determine where something has gone wrong. Right now, you folks are our advanced diagnostics. You call and tell us when your power is out.

“No offense,” he continued, “but we’re going to replace you.” (This drew lots of laughs.)

The diagnostics will soon be digital and automated. With AMI, Weston explained, one call to the Co-op from someone who has lost power would do the trick. Alerted that there was an outage, the outage-management team will “ping” the system, and by seeing which meters respond and which don’t they’ll be able to determine with more precision where a WEC distribution-line fuse has opened up (to isolate the damage). This will greatly facilitate a faster response and repair.

Smart metering won’t solve every problem. “You should still call us if you see a line down, or a limb on the power line, or if you see sparking somewhere,” Weston said. “We can’t fix that with smart meters.”

Bill Powell, director of products and services, continued the explanations. AMI will enable the Co-op to track and chart members’ electric usage, and this information will be available to each member through a secure internet connection. People without internet capability will be able to call the Co-op for that information.

“Either way, you’ll get better feedback about your power-usage patterns,” said Powell, “so we can suggest ways that

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— WEC member Allen Gilbert, E.D., ACLU of VT

you can adjust your usage, or perhaps help you figure out which of your devices or appliances aren’t running properly and are drawing too much energy.”

Information is a good thing.

Privacy and access

Or is it? Some people expressed a concern about privacy. Who would have access to information about their electricity usage?

The answer, Patt said, is that the Co-op already has a strict policy about privacy, and that policy will continue without change. “We don’t sell or provide access to members’ usage information. It’s between you and the Co-op, and that’s how it will stay.”

He also said that WEC would provide a limited “opt out” for people who wanted it. Under this system their meters would be programmed to send accumulated usage totals just once each 30 days, for billing purposes. However, by choosing that option,

which is called monthly limited choice, people would be excluding themselves from other opportunities provided by smart metering.

Patt also mentioned that Washington Electric was participating, with Vermont’s other utilities and under the auspices of the Public Service Board, in devising a statewide privacy policy for AMI. That raised a few people’s concern. Co-op member Rama Schneider, from Williamstown, said the history of private information remaining private, once government agencies had access to it, was not encouraging. He was worried that a statewide policy on privacy would be less stringent than the Co-op’s.

“I want *you guys* to step up,” he said, referring to WEC’s Board and management.

Patt replied, “I guess I don’t share your view that the people helping to design a policy are not looking out for the best interests of the users.” But in any case, he said, “The privacy policy the Co-op adopts will be adopted by your own Board of Directors.”

“We definitely are concerned about our members’ privacy,” Bernstein added, saying that negotiations with other entities won’t change that.

WEC member Allen Gilbert, of Worcester, who is the executive director of the Vermont chapter of the American Civil Liberties Union, put the discussion in a broader context.

“In Vermont we’re dealing with this issue in a much larger way than just smart meters,” he said. “We’re dealing with access



to prescription drug data, which we contend is fine as long as there's a warrant; and with cell phone tracking data, which is fine as long as there's a warrant. What we would ask of the Co-op is that information not be provided to anyone without a warrant, and that subpoenas be provided to us so we would know."

Finally, there was a question from

a member about the relative costs of wired and wireless AMI systems. WEC President Barry Bernstein provided the answer.

"On our system the wireless, radio frequency AMI would be twice as expensive to operate as the wired system we're putting in," he said. "We chose the wired system because it's more appropriate and will work better

for our rural territory. But the lower cost is certainly another benefit."

Washington Electric plans to make progress on AMI deployment throughout the summer and complete the changeover of its infrastructure by next April. WEC members are invited to call the Co-op with any questions they might have.