

Oklahoma Gas and Electric Co. customers saving with smart meters

New smart grid technology is helping Oklahoma Gas and Electric Co. customers save money on their utility bills.

BY JAY F. MARKS

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Regulators had a lot of questions when Oklahoma Gas and Electric Co. first broached the idea of adding smart meters to its system.

They wondered if the new technology was worth the expense, remembers Brandy Wreath, deputy director of the Oklahoma Corporation Commission's public utility division.



Oklahoma Gas and Electric Co. worker Greg Henderson installs a new programmable thermostat Thursday at a house in Piedmont. The thermostat can communicate with a smart meter at the house to help reduce electricity costs. Photos by Chris Landsberger, The Oklahoman

METERS TALK

Some Oklahoma Gas and Electric Co. customers will be able to get programmable thermostats that will make it easier for them to save money with new smart meters.

Ken Grant, managing director of OG&E's smart grid program, said the thermostats can communicate with smart meters, so customers can set them to react to changes in electricity costs. The thermostats can be set to change the temperature spike.

Customers will be able to override the thermostats, if desired, but the smart technology will help them avoid paying extra when electricity rates go up because of high demand.

Officials said there will be 40,000 such thermostats available for OG&E customers this summer at no cost, thanks to funding from the U.S. Department of Energy.

Grant said OG&E hopes to provide more thermostats to customers each year.

Such questions lingered even when the commission agreed to allow OG&E to proceed with its \$366 million smart grid program in July 2010 by a 2-to-1 vote.

But Wreath is sold on the technology now. His house has been equipped with a smart meter and a programmable thermostat capable of communicating with it.

"It made a drastic difference in our house," he said.

Customers like Wreath, who were part of an OG&E smart grid study last summer, saved at least \$200 on their electric bills during those blazing hot months.

Overall, 98 percent of customers with smart meters have gotten lower electricity bills, according OG&E. Wreath said he saved more than \$100 each month, despite record high temperatures. "We had a dramatic savings, and the comfort in our home didn't suffer," he said.

Ken Grant, managing director of OG&E's smart grid program, said the company has gotten extremely high customer satisfaction scores since it started installing smart meters.

"It shows us that customers loved the program," he said.

Since the smart grid program started with a small pilot project in northwest Oklahoma City, OG&E has installed more than 500,000 smart meters. Crews can install about 200 a day if the weather cooperates, Grant said.

By the end of the year, OG&E expects to have smart meters installed for all of its nearly 800,000 customers in Oklahoma and western Arkansas.

The technology is meant to give customers the means to reduce their energy use, while forestalling the need for OG&E to add new generating capacity to its system until at least 2020.

Grant said it is working so far.

OG&E's latest smart grid study included 6,000 customers, twice as many as the first one, to make sure the results were statistically valid.

Grant said the study ran from June 1 to Sept. 30, during one of the hottest Oklahoma summers on record, when electrical demand peaks. While blistering temperatures caused most state residents to rack up monumental electric bills last summer, customers in OG&E's study group saved an average of \$200 during the test period.

ONLY CHANGES SUBTLE

Smart meter customers realized those savings by making subtle changes to their habits to avoid using electricity when demand peaks, weekdays between 2 and 7 p.m., said Penny Seale, a spokeswoman for the smart grid program. "The changes are not that difficult," she said.

Electricity can cost more than double the average rate during peak hours because OG&E must rely on less efficient sources of power to meet the demand.

Grant said customers have come up with their own ways to save money once they know how much electricity they are using.

One woman realized it is best to avoid grocery shopping when electricity rates peak because it's more expensive for her refrigerator and freezer to get cool again if they've been loaded during those hours.

"That never occurred to me, but that's brilliant," Grant said.

Customers with smart meters can log on to myOGEpower.com to see how much electricity they are using. Grant said access to that information is enough to spur people to change their habits.

Norman resident Matthew McCoy has had a smart meter for two years, since he was part of the original test group there. He said it has helped him slash his electric bill, even though "I really haven't made any significant sacrifice in terms of comfort."

McCoy, 40, said he realized a number of appliances and electronic device drew a lot of power even when they're not in use, so he started unplugging them. He also switched to compact florescent and LED lights throughout his home.

During the summer, McCoy worked later and ran errands on his way home to avoid the peak hours when it was more expensive to run the air conditioner. He also grilled outside more often, rather than using the oven.

He said \$71 was his highest electric bill last summer, despite countless days when temperatures rose above 100 degrees.

“You end up devising new ways to save energy, just by experimentation,” he said. “It’s just simple little things that you play with.”

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