

## EnergyWise pilot project helps customers discover ways to save

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Staff writer

This month a select group of Connexus Energy customers will be receiving a special offer.

They will have a chance to be included in the pilot project for MYMETER, free online tracking of their home's energy use.

The in-home Trilliant Display helped Connexus Energy customers in the EnergyWise project take control of their energy use and discover ways to save money on their energy bills. Photo courtesy of Connexus Energy

Approximately 125 cooperative members in Andover will be able to see their energy use hourly, daily and monthly.

They will also be able to compare their home's energy use with that of their neighbors, as well as set goals to reduce their energy use.

In March, Connexus will introduce varying rates to the MYMETER project group, which is expected to start in June.

This is the second pilot project in which the same Andover neighborhood has been involved.

From April 2008 to August 2010, the 125 neighbors, which include five Connexus employees, volunteered to test the EnergyWise Smart Meter pilot project.

Connexus Energy installed 1,000 interval meters in the neighborhood to see how the 125-member test group participants in the project and 875 "control" non-project members were using energy, said Jeff Hendrickson, Connexus customer operations manager.

The meters captured energy use every 15 minutes, he said.



All the 125 project homes were equipped with programmable thermostats and in-home Trilliant Networks display devices; the other 875 were not.

The project was to see if customers would reduce or shift their energy consumption behaviors based on visual cues, education and enhanced technology, Hendrickson said.

The neighborhood east of Andover city hall was chosen because of its dense population, he said.

Although the pilot project was expected to end in 2009, the cool summer of 2009 caused Connexus to continue the project an additional year.

During the hotter than normal summer weather in 2010, the 125-member EnergyWise pilot group used less energy than the control group, said Hendrickson.

Overall, the entire 1,000-meter test group's energy use went up 5 percent during the 2010 summer compared with the previous two-year average, he said.

But the 125-member pilot group energy use only went up 2 percent, Hendrickson said.

Between September 2009 and August 2010, the EnergyWise customers used 3.4 percent less energy than the control group, saving an average of \$45.38, he said.

But that amount varied among the pilot group.

About 20 percent of the volunteers said they did not pay attention to the display device.

Mark Westergren's family was on the opposite side of the spectrum.

It was cool because the display device would show how much was being used and how much the energy cost was at given times, Westergren said.

"You didn't want to run when the watts cycle was in red (alerts)," he said.

"It was neat to see what we were paying for the electricity and being able to have chance to see what we could be paying at the individual times."

It helped them to figure out what was on and what didn't need to be, he said.

The thermostats were also cool. It would have a message displayed on it in the morning telling him what that day's conditions would be, what the peak energy use times would be and if there were any red alerts, warning of high energy demand times, Westergren said.

"You didn't want to run the dish washer or dryer during that time," he said.

During red alerts, Connexus Energy has to pay more for the energy, said Samantha Neral, Connexus Energy communications and community relations specialist.

These pilot projects are designed to give the energy control back to the customers, she said.

“They have been telling us the prices are too high. This lets them know what the costs are to run an air conditioner at peak time,” Neral said.

Even though Connexus was able to shut down his air conditioner for two hours or turn the temperature up 3 degrees through the thermostat, it was no big deal, according to Westergren.

As long as the family members were not opening the doors, the house stayed cool, Westergren said.

The hardest part of the project was figuring out when was the best time to use the appliances, he said.

“It was fun to watch as electrical (display) change when using the microwave or electric stove,” Westergren said.

“The dryer was the worst so was the pizza oven, which we use all the time.”

With a 15-year-old and 18-year-old in the house as well as a 20-year-old college student who is occasionally home, the Westergrens discovered it was more efficient to use the electric oven when all three kids wanted pizza.

They also learned it was better to use the high energy using appliances before 10 a.m. and after 8 p.m. to minimize the cost of the electricity they were paying for, Westergren said.

Although Westergren was disappointed the project ended, it did leave him with new habits and taught him how to save money on his electric bill, he said.

Westergren is hoping Connexus will move forward with implementing the EnergyWise technology.

“It’s worth the money the cooperative would have to pay because it will save customers money in the long run,” he said.

“It’s a great idea.”

Westergren is also looking forward to finding out about the new MYMETER project.

For customers like Westergren, the energy savings during the project were greater than those who did not actively use their display units.

When the volunteers actively watched their displays, they had a nearly 5 percent reduction in energy costs, Hendrickson said.

If customers changed their behaviors based on what their displays were telling them, this group reduced their energy costs by 6 percent, saving about \$78 annually, he said.

The pilot group seemed to like the project, Hendrickson said.

Eighty percent thought the in-home energy display and programmable thermostat were easy to use and helped them control their energy use, he said.

### **Moving forward**

The decision on whether the project will be expanded is yet to be made.

Connexus is still analyzing the equipment and will be testing it with variable rates as part of the MYMETER project before deciding to take it a larger customer base, said Hendrickson said.

“It will take a year or more to get the full picture,” he said.

Connexus probably will not make a decision until sometime in 2012 on where to take the project, Hendrickson said.

The cooperative wants to study the benefit, the financial aspect and if it has the appropriate payback for company and its customer members before making the extremely large investment, he said.

“We need to make wise use of the funds,” Hendrickson said.

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