

Electricity rates may start going by the clock Smart meters could let TXU, others charge by time of day

11:55 PM CST on Tuesday, January 30, 2007

By ELIZABETH SOUDER / The Dallas Morning News
esouder@dallasnews.com

By the end of this year, some electricity consumers in North Texas may have the option to save money by using power in the evening rather than during the day.

Thanks to a major power line upgrade that starts this week, electricity companies could charge different rates based on what time of day electricity is used. Customers who sign up for such pricing plans could get rock-bottom prices at night and on week-ends, but pay a hefty premium for power during peak hours.

Consumers will be able to monitor their electricity use and charges in real time, and some will be able to connect to the Internet through power lines.

This week TXU Corp. began installing the initial 10,000 smart meters in Dallas. The new meters are a key piece of a four-year technology upgrade that will turn North Texas power lines into a communications network.

"It's a communications network that we lay over the electricity network," said Jay Birnbaum, vice president for Current Communications Group, which created a partnership with TXU last year to help install and operate the new technology.

"We can talk to our equipment that we install throughout the network. We can talk to a modem inside your house if you're a broadband customer. And we can talk to a meter on the side of your house," he said.

Experts say the new technology could change the entire power industry. It will automate meter reading and help TXU Electric Delivery respond to power outages more quickly.

Generation costs go down, because consumers have an incentive to use power during off-peak hours, when it's cheaper to produce. And that means the state could need fewer new power plants to meet peak demand.

When experts talk about what the technology could one day mean for consumers, they describe an energy Utopia, a "House of Tomorrow" in which a consumer uses a Web site to control household appliances, turning on the air conditioner or the oven remotely before leaving work, setting the dishwasher to start when electricity prices drop, or putting the freezer on a strict electricity diet.

Making the switch

It all starts with new meters.

TXU Electric Delivery, the regulated wires-and-poles unit of the Dallas power company, began installing smart meters Tuesday in homes and businesses in Lakewood and surrounding neighborhoods. The trial installation will take about three weeks.

Each installation takes a couple of minutes. Spokeswoman Carol Peters said TXU will leave door hangers explaining the technology. If workers can't reach a meter behind a fence or inside a house, they will leave a hanger asking the owner to call and make arrangements for the switch, she said.

TXU plans to upgrade 300,000 meters in the Dallas-Fort Worth area by the end of the year. And by 2011, the company expects to have spent about \$450 million to change nearly 3 million meters in its service territory.

All of the new meters will be automated, and many will have broadband-over-power-line technology, including those in Dallas, Fort Worth and some suburbs.

Will Trammell removes an old electricity meter before installing a high-tech replacement at the home of Dean and Hailey Maruna in Dallas. The new meters will be automated, and many will have broadband-over-power-line technology.

The new system will read electricity meters 96 times a day. And TXU Electric Delivery will create a Web site where consumers can check their electricity use in real time, Ms. Peters said.

Eventually, Current, which is adding technology to the wires as TXU upgrades meters, will offer broadband Internet service over power lines to consumers. Mr. Birnbaum declined to say when. He said the company will probably roll out the service in individual neighborhoods as the technology upgrades are completed.

The cost of the new technology could trickle down to consumers if state regulators allow TXU to increase the amount it charges electricity providers for using power lines. Customer's viewpoint

Some TXU Energy customers are already testing a simple time-of-use product.

The company launched a pilot program last year charging 11.9 cents per kilowatt-hour during mornings, nights and weekends, and during the winter. But May through October, between 1 p.m. and 6 p.m. on weekdays, the price soars to 29.8 cents per kilowatt-hour.

Edith Omberg, a retiree in Hillsboro, signed up for the program because she thinks she can save some money next summer. She said she's already become more strict about electricity use as prices have risen.

TXU Electric Delivery began installing smart meters Tuesday in homes and businesses in Lakewood and surrounding neighborhoods.

"It may be some work, aggravation even, you know," she said. "And I'm retired; we will be home. But I think I can do it."

She plans to set her temperature above 80 degrees during the afternoons and do her laundry in the mornings.

"We have energy-saving light bulbs, you know, and if I can keep the husband from leaving the hall light on all the time whether he needs it, this sort of thing, I think we'll do well," she added.

TXU Energy spokeswoman Sophia Stoller said the company will roll out the pricing plan to more customers this year.

She said executives will reset the prices to keep them competitive. Since the pilot program began, some retailers have begun charging less than 11 cents per kilowatt-hour all day long.

Other electricity providers are considering whether to offer their own time-of-use pricing plan to compete with TXU Energy. Once the new technology is installed, competing providers could create their own time-of-use pricing plans, collecting the data generated by the new meters and billing customers accordingly.

Matthew Benner, senior vice president of retail marketing and operations for Reliant, said he's thinking about offering such a system. He likes the idea of giving consumers an incentive to use energy at a time when demand is usually low and power costs less on the wholesale market.

"Time of use is just a fabulous idea. The cost to provide power during the peak is just a lot higher than providing power other times of day," he said.

During peak demand times, electricity generators must fire up their older, less efficient generators to meet demand. That boosts the wholesale market price. When demand dies down in the evening, power companies can rely on more efficient plants, and market prices drop.

Foreseeing confusion

But other people in the industry worry that charging different prices could be too confusing for some consumers who are still getting accustomed to the deregulated market.

Brent Moore is head of SaveOnEnergy, a Web site that helps consumers choose electricity plans. He thinks the time-of-use system is the future of the industry, but it's a little early for most consumers.

"If I get a customer on the phone today that was with TXU for 60 years and I was trying to convince them to switch, and I tried to offer them that product, I would get a deer in the headlights," he said.

HOW SMART ARE THEY?

TXU Corp. and Current Communications are installing smart meters and broadband over power line technology to create a new communications network.

- The system will automatically read your meter 96 times a day. No more monthly visit from the meter reader.
- Current will offer Internet service using broadband over power line technology in some areas.
- Electricity providers can use the system to charge customers different rates for power used during peak hours and off-peak hours.
- Consumers will be able to check their real-time electricity use on a TXU Web site.