

# Innovations in Pricing: Giving Customers What They Want

By AHMAD FARUQUI

It is well understood that today's energy customers want options, but, as many in the electric power industry have noted, it's not always easy to figure out what options they want. Just as today's customers are very different from yesterday's, tomorrow's customers may be even more different than today's. Not only are their tastes changing, so are the technologies in their homes and the innovations that connect those homes to the energy grid. Look at how quickly the Internet of Things has become ubiquitous in the industry.

The ongoing revolution in expectations and technology calls for innovations in how electric companies engage with customers. For decades, electric companies have offered simple peak and off-peak rates to their customers. But market research, imaginative "design thinking," and plain old intuition are needed to meet the new needs of customers.

Electric companies recognize that there is great diversity among customers in their needs and preferences, and now they are beginning to offer dynamic pricing designs. Some customers want to reduce their bills by cutting down their energy use during peak times. Others are happy to save money by spreading out their usage. Some customers are less concerned about their specific

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rates but want to be rewarded for using less energy at critical times. Finally, some customers just don't want to think about when they are using energy, or how much they use. They prefer the flat rate of a guaranteed bill. The following examples show how "design thinking," common in many other industries, is finding a home in the electric power industry.

## OG&E's SmartHours Program

In 2012, Oklahoma Gas and Electric (OG&E) implemented its SmartHours program to slow the growth of peak energy demand and to avoid having to build additional power capacity. It enlisted customers in this effort by offering them an opportunity to lower

their energy bills by reducing usage during peak hours through the use of smart thermostats.

The launch of the program was preceded by a two-year pilot study, which ran in 2010 and 2011. In 2012, the company had completed the rollout of smart meters in its service territory, and SmartHours was launched.

To encourage usage during non-peak hours, the program halves the price of electricity for 19 of the 24 hours on each summer weekday, and during all 48 weekend hours, encouraging users to plan their electricity consumption to coincide with these periods. In its first year, OG&E enrolled 40,000 customers in the program. Today, the program has more than 130,000 active participants, with more than 120,000 on dynamic rates and more than 8,000 on peak and off-peak rates. By participating in the program, customers save an average of \$150 on their electric bill, or roughly one-fifth of their total summer bill (from June through September). Unlike customers enrolled in traditional air conditioning programs that enable electric companies to turn units off during periods of high demand, SmartHours customers have complete control over their thermostat setting. They can choose whether or not to respond to OG&E's alerts regarding which hours are discounted.



Overall, the average contribution to peak load for program participants has dropped almost 40 percent, from 4 kilowatts (kW) to 2.5 kW. Furthermore, OG&E has found that customers enrolled in the program are more satisfied than other customers; only 2 percent of customers who enrolled in the program have chosen to leave it.

OG&E executed a significant customer recruitment plan for SmartHours. It used advertising on TV, radio, buses, and digital billboards to garner attention. OG&E also used direct customer contact through mail, email, and customized offers on its

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website. The company also recruited customers at various public events and through its employees, who were given incentives for completing

program education modules and for recruiting friends and relatives to SmartHours.

The best setting for recruiting customers at public events turned out to be home and garden shows. Customers who came to these shows seeking ideas on how to improve their homes also learned how they could use SmartHours to lower their energy bills. As a result of the program, OG&E has installed more than 100,000 thermostats in customer homes.

As it looks to the future, OG&E is exploring different thermostat options and studying how best to incorporate solar power into the product mix.

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#### **BGE's Peak-Time Rebate Program**

After experimenting with different rate designs over several years, Baltimore Gas and Electric (BGE) designed a peak-time rebate program for all of its residential customers who have smart meters. Called Smart Energy Rewards®, the program provides 1.1 million residential customers an opportunity to earn \$1.25 per kilowatt-hour (kWh) on Energy Savings Days. If customers also are enrolled in the Peak Rewards program, which involves providing BGE with the ability to control their central air conditioner, they may be eligible for a greater rebate. BGE markets the program through direct mail, advertising, digital communication, including social media, and community outreach efforts.

Energy Savings Days events are declared during the summer, when electricity loads are expected to

be particularly high. To ensure awareness and engagement, BGE partners with Opower to deliver personalized multi-channel communications before and after events, using customers' preferred channels of communication (phone, email, or text).

During events, BGE typically makes 1.3 million phone calls, sends more than 1 million emails, and delivers approximately 50,000 SMS/text messages. These include a real-time call-to-action notification message and a personalized post-event message that includes the kWh saved and the bill credit earned.

To ensure timely and customer-focused communication, BGE keeps customer records and notification preferences updated and synced with Opower. Additionally, employees in BGE's customer care center have been trained to answer program questions, to help explain event-day communications, and to coach customers with ideas on how to participate in Energy Savings Days.

This year, on July 14, BGE called an Energy Savings Day. Its customers earned \$4.6 million by reducing their energy usage between the hours of 1 p.m. and 7 p.m. From Energy Savings Days' introduction in 2013 to the end of 2016, BGE customers have earned nearly \$40 million by reducing energy usage during periods of peak demand on hot summer days. The company estimates that about 80 percent of its customers reduce their usage on Energy Savings Days.

#### **APS's Demand Charges**

More than 120,000 (11.4 percent) of Arizona Public Service's (APS's) customers take advantage of

peak and off-peak rates, and more than 450,000 (42.9 percent) customers pay demand charges (sometimes referred to as energy efficiency rates); these percentages exceed those of any other electric company in the United States, and the absolute number of customers being rewarded for spreading out their energy usage is the highest in the United States.

APS began its implementation of rates with demand charges in 1981. Initially, all new customers with central air conditioning paid demand charges. In 1984, APS introduced peak and off-peak features both with and without demand charges and these rates

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became optional. APS made a significant commitment to providing customers with information on the various rate options. Ultimately, this resulted in a rate comparison tool that customers either could use on their own or with the assistance of a customer service representative.

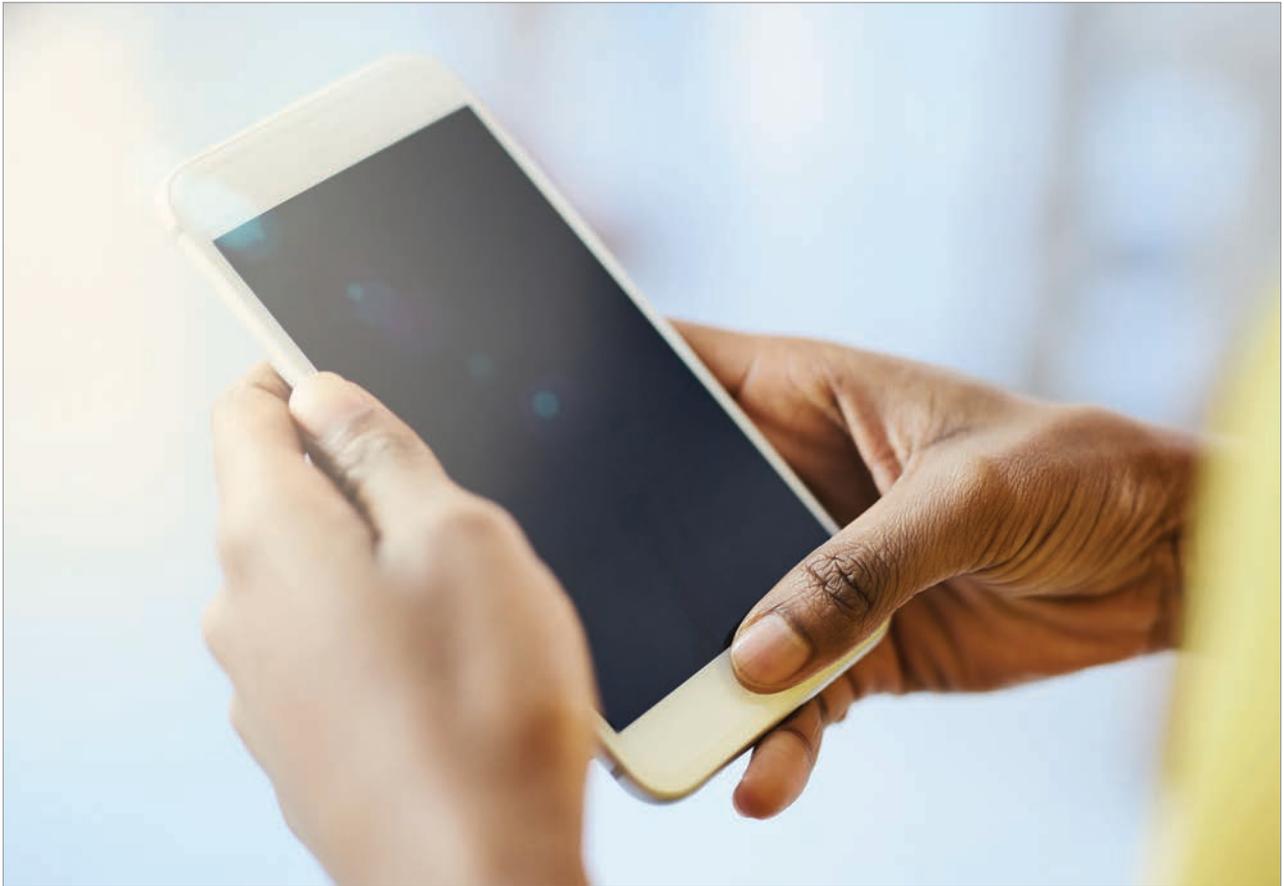
Additionally, APS began to provide customers with an annual analysis of their usage, energy savings recommendations, and a rate recommendation if the customer would benefit from switching. The

company also provides rate comparisons for customers who contact the call center.

As APS began rolling out more advanced metering to all customers, the rate comparison tool was modified to reflect analysis of actual load data. Over the years, APS has not marketed any particular rate option to its customers. Instead, it has provided them—through the rate comparison tool—the information they need to make an informed decision about what rates are best for them.

### ComEd's Nest-Enabled Air Conditioner Control Program

Commonwealth Edison (ComEd) has partnered with Nest, a smart thermostat provider, to offer customers an incentive to participate in their AC Cycling program. The program allows ComEd to control its customers' thermostats during peak events. For their participation, customers can receive up to \$40 each summer in rewards—\$10 for each month in which they participate. Though ComEd is allowed to control the thermostats up



to 10 times in a summer, the company only did so once in 2016; customers still were compensated for their participation.

The AC Cycling Program started in 1996 with direct load control (DLC) switches. In June 2014, more than 72,000 customers had signed up for the program. ComEd decided to include the Nest thermostat option—which enables ComEd to make more subtle and specific changes to a home’s temperature—and 3,250 customers signed up. In July 2017, the number of customers on the DLC switch option was approximately the same, but the number of customers on the Nest option had grown to more than 11,000. A small number

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of new plan customers transferred from the DLC switch option (6 percent), but the vast majority (94 percent) was new to the program.

Under the AC Cycling pilot, ComEd provided Nest customers the same \$40-per-summer incentive they provided to DLC switch customers. In 2014, ComEd also provided a \$100 rebate on the Nest Smart Thermostat during a six-week signup period. In 2015, the rebate was not offered, but the credit continued. In 2016, the rebate was offered again and it continues today. The customer pays for and owns the smart thermostat.

Based on customer surveys by Nest, the level of satisfaction is very high, and ComEd plans to

continue the program as currently structured. ComEd still supports the DLC switches that have been installed, along with the Nest thermostats. Some customers have had the DLC switch for more than 20 years and like that option. Advantages of sticking with the DLC switch are that customers do not have to buy a smart thermostat and have it installed, and they don't need to have Wi-Fi in their home (a requirement that can be an impediment in low-income households).

ComEd offers rebates for installing a number of different thermostats (such as Nest, Ecobee, and Honeywell). Under the AC Cycling Program, no rewards are offered for buying the thermostats, but customers can earn efficiency rewards in the form of bill credits for participating in the program.

### Georgia Power's Bill Stability Offering

Some customers don't want—or are unable—to “optimize” their energy use. They don't want to think about when to use energy and when not to use it. With these concerns in mind, Georgia Power introduced its FlatBill® plan, which holds customers' bills constant for an upcoming 12-month period—regardless of summer heat or winter cold, energy price volatility, or electricity usage—providing value for customers who desire more certainty and who are willing to pay a slight premium. For many, the eased state of mind is worth it. The FlatBill® originated from a series of customer focus groups, and the company has promoted the plan periodically since the early 2000s.

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The company has found that its FlatBill® customers are highly satisfied—even more so than the average residential customer group as a whole. As of today, about 20 percent of Georgia Power's residential customers are enrolled in a leveled rate plan that is a combination of FlatBill® and a leveled payment plan called Budget Bill.

### Pepco, Delmarva Power, and Atlantic City Electric Company

Exelon's Pepco and Delmarva Power have implemented a peak-time rebate program for their residential customers in Maryland and Delaware, enabled by the installation of smart meters. The rebate, referred to as the Peak Energy Saving Credit (PESC) Program, provides a \$1.25-per-kWh bill credit for energy efficiency based on comparisons with typical residential energy use during specific time periods on

specific days. There is no penalty if customers' use is above their baseline. Customers are informed of Peak Energy Savings days no later than the previous evening via their choice of telephone messaging, email, and/or text messaging. Small commercial customers in Delmarva Power's Delaware market also are permitted to participate in the PESC Program. The program typically takes effect during the hours of 2 p.m. to 6 p.m.

In Delaware, the PESC Program was phased-in beginning in 2011 by Delmarva Power; in Maryland, Pepco initiated the program in 2012. Pepco rebates have exceeded \$15 million through year-end 2016. Two PESC events have been called in Maryland to date during 2017, and one PESC event has been called in Delaware.

Pepco, Delmarva Power, and Atlantic City Electric Company also operate residential air conditioning cycling programs—referred to as the Energy Wise Rewards Program—in the District of Columbia, Maryland (including small commercial customers), Delaware, and New Jersey. As with BGE's and ComEd's programs, the companies control customers' web-enabled thermostats during peak hours in the summer.

### The Shape of Things to Come

Experience shows that when electric companies anticipate—and work to meet—the needs of their customers, both sides win. So, what's next? The industry should—and will—continue to find better ways to engage with customers and to provide energy solutions that give them more control over their energy use. **EP**

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