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OPower's 3.0 upgrade gives utility customers data they can actually use

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OPower, the smart grid software firm formerly known as Positive Energy, is set to, in a couple of months, push out a new platform that has been "built from the ground up for the smart grid," CEO Dan Yates told us this week. "It's a full front-end for utilities to engage all of their mass market customers." Every function or feature on the front end has been redesigned or re-examined with the expectation that customers will have interval data available anywhere from daily to every 15 minutes. "We're launching now this massively-more functional and feature-rich web portal."

On the back end, the 3.0 platform was built to store terabytes of smart meter data, he added.

OPower uses software to crunch numbers from the utility about a customer's energy use, compares the results to the customer's neighbors and reports to the end user on how efficiently they are using power. The firm engages energy consumers via the web, snail mail and the telephone.

Utilities that sign up with OPower will be able to send alerts for high bills in the middle of the month and will gain support for all of the new rates that will be coming out. That's on top of "critical peak event alerts" that signal the season's highest prices that are available in 2.0.

"With one large IOU, for example, we're supporting real-time pricing," Yates said. A rate-selection tool is in 3.0 for OPower customers that let power consumers choose rates.

OPower's influence is spreading. It is now working with 26 utilities including Commonwealth Edison (ComEd), Dominion, Xcel Energy, National Grid, PPL, Puget Sound Energy, Sempra and Southern California Edison (SoCalEd) -- five more than when we last checked in with Yates in October (SGT, Oct-02). Since October, the Arlington, Va-based firm grew its staff to 65 from 50. Most of the new hires are in R&D.

OPower in the last four months made "a big move into C&I," expanding its platform to handle small- and medium-size business, Yates said. "The energy reports are now going to be available for SMBs. We have new content to give different kinds of targeted recommendations to different business classes. So everything that's available on the platform -- the web portal, the energy reports and the customer service interface -- is accommodating small and medium businesses."

The firm expects to be cash-flow positive this year but will focus on growth rather than profitability for the next two years, Yates said.

"We're still waiting for the big competition to come together and come chasing after us," he said. "Silver Spring Networks is now turning its attention to the front end of the smart grid. We think they bought Greenbox because they've turned their attention to this."

As the purchase of Greenbox Technology was set to close in the fall, Greenbox CEO Ivo Steklac told us the energy management software firm was preparing for a time when energy becomes a transparent good (SGT, Sep-29).

OPower is "still keeping an eye out for the big guys" -- Microsoft, for example, Yates added. With its online power-monitoring experiment called Hohm, Microsoft is squaring off with Google's PowerMeter to start testing the assumption that consumers will, with details about their home energy use in hand, change use patterns (SGT, Jul-06). "And I suspect we'll see competition from the likes of Tendril or one of these other in-home display companies that's gotten a lot of funding but hasn't had a lot of market penetration" and will thus shift its focus to software and analytics.

OPower is delving into DR in a limited way.

"We're not about to start the business of actually installing the devices and managing and maintaining them," Yates said. "Where we are playing a role is: All of these DR mass-market initiatives require consumer marketing. You can't just go into a home and open the door and start nailing these things on the wall. You've got to sell people on the value proposition and that's where these companies like Comverge have had the hardest time," he added.

"The acquisition costs for things like air conditioning cycling programs have been extraordinarily high. So we sit down with our utility partners and say, 'Look, we have together launched a set of channels that have demonstrated an 85%-plus engagement rate for customers in millions of homes to change their behavior around energy use. Let's take that customer attention capture channel, if you will, and apply this to your other initiatives,'" explained Yates.

Disaggregation is cool

OPower has since late last year been working with Puget Sound Energy to show customers of the oldest local energy utility in Washington a view of their heating use disaggregated from their total energy use (SGT, Dec-18).

Yates counts data disaggregation as “one of the coolest features we've been able to bring to market.”

The disaggregation functionality is included in OPower's 3.0 platform, “so everyone who has daily or hourly data gets it,” said Yates. ComEd and Xcel have it, for example. The firm's 2.0 platform included a raw data display for smart meter data that allowed drilling down but OPower “totally pulled away from it because all of our usability studies found that people just don't engage with that kind of data directly. You show somebody like my Mom a raw data stream and it's just meaningless. We took that to heart as we redesigned our whole energy data section,” he added.

“Insights and analysis trump real time,” Yates said. “People don't want to sit and stare at data from a real-time meter because they don't know what it means.

OPower hasn't yet had to deal with privacy concerns, he added. “The way we've anticipated dealing with them is to opt-out customers who are unhappy with the analysis. We're not showing this data to anybody else. You're seeing only your data disaggregation,” much like a mobile phone firm shows each customer a full itemization of every call made.

What does future hold?

The 3.0 platform maintains the firm's position of keeping a distance from in-home devices. “The industry is really overly reliant on these energy-efficiency approaches that rely on a doubling down of the investment in infrastructure in the home,” said Yates. “We've already made a huge investment in smart meters, and now to drive efficiency, we've got to double-down and put another whole layer of in-home devices and displays and devices that talk to each other and automatically control other devices?

“I think in 50 years, it will be so cheap and easy that everything will be addressable and we'll have these sort of self-aware appliances that can be communicated with. But there has been so much focus on that now and there hasn't been enough attention paid to the amount of savings you can generate from data you're getting directly from the smart meter.”

A SoCalEd smart meter filing at the California PUC has “very aggressive projections for penetration of in-home displays,” and reports an estimate that by 2020, only 35% of customers will have any sort of in-home equipment, Yates said. “That leaves 65% of Californians still completely unengaged because it even includes web access. It's that huge void that we see as our key differentiator.”

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