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## World Energy Unveils “Demand Response” Auctions, Disrupting a Market Dominated by Boston’s EnerNOC

Wade Roush, 2/24/10

It’s so costly and complicated to build new generating plants these days that utilities would rather prepare for periods of peak demand, such as hot summer days, by buying “negawatts”—that is, by agreeing to pay big customers like factories, stores, and municipalities to dial back their electricity use when called upon. EnerNOC (NASDAQ: ENOC), a sweetheart of the Boston technology community since its 2007 IPO, has built a big business around pooling customers who want to participate in these so-called “demand response” programs and remotely managing their electricity use when the call comes in from grid operators. EnerNOC profits by keeping a percentage of the operators’ per-megawatt payments.

But while EnerNOC is the largest and most successful of the so-called “curtailment service providers” (CSPs), there is growing competition in its industry—and now the company is getting some very unwelcome news. World Energy (NASDAQ: XWES), a Worcester, MA-based company known for operating online reverse auctions in which energy suppliers compete to win contracts with big customers, announced today that it’s getting into the demand response market. This means that for the first time, customers in deregulated electricity markets who want to be paid for their curtailable load will be able

to solicit bids online from competing curtailment service providers, then choose the provider offering the highest price (meaning the most attractive percentage split).

EnerNOC, in other words, is gradually losing its first-mover advantage. It may soon have to cope with a market in which it’s no longer the first and only curtailment service provider to approach new customers, but instead must compete with dozens of other providers in electronic auctions specifically designed to drive bidders’ profit margins down.

The irony is that EnerNOC, which built its business on smoothing out inefficiencies in electrical supply and demand, is now seeing that business disrupted by another young, technology-based company that sees the demand response market itself as inefficient.

From World Energy’s point of view, customers thinking about joining demand response pools have had no way, up to now, to determine the fair market value of their curtailable load. Indeed, it sees its auction service as providing both competition and transparency. It’s portraying the service, which it has already tested in the “PJM” grid region covering 13 Midwest and Middle Atlantic states, as a boon for both electricity

### WorldEnergy

users and curtailment service providers, since it provides a ready-made meeting ground.

“We see this as a win-win,” says Phil Adams, president and chief operating officer at World Energy. “The customer gets a good price for what they’re looking for, meaning the highest share of the fees, and on the other side the CSP gets access to a customer that is ready to contract for zero sales cost.” (In return for running its auctions, World Energy keeps a small percentage of any payouts from the curtailment agreements its users negotiate.)

The reaction to World Energy’s move from executives at EnerNOC might best be described as dismissive.

On the one hand, the company says it welcomes anything that makes the demand response market more competitive. “Competition spurs innovation,” says Gregg Dixon, EnerNOC’s senior vice president of marketing. “If we were the only ones who were successful in demand response—and I think it’s safe to say we are the only ones who have been truly successful so far, having just had our first profitable quarter—it wouldn’t be healthy for the industry.”

But at the same time, EnerNOC argues that demand response capacity isn't a simple commodity like the other forms of energy traded on World Energy's platform, and that auctions are therefore a poor way for customers to discover the true value of a relationship with a curtailment service provider.

"I've seen their auctions platform, and it's not a stretch to say that it's world-class," says Dixon. "We just don't think it has a tremendous amount of applicability for demand response, if customers are trying to get the most out of program participation." While an online reverse auction might be a good way for customers to get the best percentage split for their curtailment commitments, Dixon says, it won't help them discover which service providers are best at tasks like identifying curtailable load or managing load during an actual demand-response event.

For World Energy, demand response auctions are a natural extension of the company's existing business running auctions for power and gas contracts, carbon emissions allowances, and renewable-energy credits. (For more on those sides of World Energy's operations, see our May 2008 and July 2009 features.) "We're sticking to our knitting, but taking our technology and migrating it across similar commodity markets," says Adams. "With the rise of demand response, we felt like we needed an option, because our customers were looking for one-stop shopping" in energy management services.

The company briefly considered acquiring a curtailment service pro-

vider—there are 50 to 70 such providers in the PJM market alone, according to Adams. But sometime in 2009, he says, "the light bulb went off, and we said, 'Wait, aren't there enough CSPs out there that we could actually build a market and do the same thing as we do with our retail energy providers?' We explored it, and we have tested the concept, and now we're moving into full launch mode."

World Energy tried its demand response auctions first in the PJM market, where it has many existing customers. (The name comes from Pennsylvania-New Jersey-Maryland, but the interconnected grid region actually covers all or parts of Delaware, Illinois, Indiana, Kentucky, Michigan, North Carolina, Ohio, Tennessee, Virginia, West Virginia, and the District of Columbia as well.) One World Energy customer, Gerber's Poultry of Kidron, OH, says that it will earn over \$100,000 in demand response payments as a result of the agreement it reached through a reverse auction. "We found watching the auction unfold very exciting," Gerber's chief financial officer John Metger said in a press statement prepared by World Energy. "There wasn't much bidding activity at first, but as the end point of the auction drew near, the bids were flying, driving up our overall share of revenue."

Adams emphasizes that World Energy brings value to the demand response market by handling a lot of the spade work that curtailment service providers might otherwise have to do themselves. "It is very expensive to acquire customers in the demand response space," he says. "There's a

lot of market education and preparing customers and helping them figure out how much they can curtail. Oftentimes that makes the transaction more cost-effective on both sides. We're not trying to pit one side against the other—we're here in the middle trying to make the process easy for the buyer and the seller."

Back at EnerNOC, however, Gregg Dixon argues an auction provider like World Energy isn't really qualified to help customers increase the return on their participation in a demand response program. "Demand response is a very nuanced service in terms of how you maximize the dollars you get," he says. In fact, EnerNOC lists 19 "points of value" that it delivers to its customers, including site visits that help to identify all of the ways they can curtail electrical demands, and installing equipment that delivers the full amount of curtailment promised in demand response agreements.

In the absence of such measures, customers wind up leaving money on the table during demand-response events, he argues, even if they did win a higher percentage split. "We have a saying internally, '80 percent of nothing is nothing,'" Dixon says. "If you get a provider to say they'll give you 80 percent of the revenue stream but then they don't communicate it to you when there is a demand response event and you miss it, you get nothing. If you have 1,000 kilowatts of load that you can reduce but you don't have the technology supporting your program participation, on average that capacity is going to perform far below that."

But the way Adams sees it, EnerNOC makes far too much of the “nuances” behind demand response. He says utility customers are quickly getting savvy about smart-grid technology.

“I don’t think it would have been possible for us to do what we’re doing three or four years ago, because the markets weren’t as mature,” Adams says. “The initial set-up cost was way too high. But now those costs are coming down, and there are simpler Internet-based solutions that require fewer site visits and less equipment. We didn’t have any CSP say to us, when we announced these auctions with two to three days’ notice, ‘Hey, hold on guys, we’ve got to fly out to Gerber’s Poultry and look at their buildings to see if we can bid.’ They are taking it as an article of faith that they can get the customer ready for the summer season without any big complications.”

To Dan Mees, vice president of corporate communications at World Energy, it’s not surprising that EnerNOC is unenthused about the arrival of auction-based markets in the demand response industry—but he predicts that the Boston company will change its tune eventually. “The analogy is to our experience with the retail energy market, where we have run so many auctions,” says Mees. “When we first started doing it, were all of the suppliers delighted to be put into hypercompetitive auction format and have their margins squeezed? No, they weren’t. But we now work with 400 suppliers around the country and they value us as a channel to market.”

At the moment, the idea that World Energy and EnerNOC will eventually see eye to eye seems optimistic, as a little story from one of World Energy’s early demand response auctions reveals. EnerNOC was one of the bidders in a January auction for a demand response contract with a wastewater treatment facility in the PJM region. “We still don’t know the outcome” of that auction, Gregg Dixon told me. “In fact one of the misperceptions about auctions is that they always end in a finalized agreement. I can almost guarantee that what happened in this case was that somebody was dumb enough to say, ‘We will give you 90 percent of the revenue stream,’ and then when the customer went to contract with them and saw all the fine print around the other 18 points of value, they said, ‘Wait a minute.’”

But according to Andrew Thomas, senior vice president of operations at World Energy, the auction in question led to a finalized agreement—and all participants in the auction, including EnerNOC, got e-mails announcing the outcome weeks ago. “They were definitely notified,” Thomas says. “And in general, we overlay standard terms and conditions to make sure that all of the auction participants are very comfortable. There aren’t any surprises at the end for the seller or for the CSP.”

While EnerNOC and World Energy circle one other warily, major electric consumers interested in profiting from demand response contracts have some new options to think about. With the cost and regulatory difficulties of building new power plants increasing—meaning that utilities are

willing to pay more and more for “negawatts”—there’s too much money at stake for major electricity users to ignore the opportunity. Indeed, the demand response market is going to grow to \$20 billion a year by 2020, according to Barclays Capital. Yet the percentage of the potential market that has been penetrated by curtailment service providers so far is still in the single digits. So while World Energy may end up forcing EnerNOC and its brethren into accepting a smaller slice of the demand response pie, the pie itself is still huge—and largely uneaten. ■

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