



# EnergyWashington Week

incorporating Inside Fuels and Vehicles

from Vol. 5, No. 40, October 1, 2008

## WELLINGHOFF TOUTS DEMAND RESPONSE BENEFITS OF ORGANIZED MARKETS

FERC Commissioner Jon Wellinghoff recently touted the ability of competitive markets to more effectively incorporate demand response (DR) resources than traditional vertically integrated systems, remarks that underscored FERC's support for markets amid criticisms that the systems are producing excessively high costs but insufficient new generation.

Because the markets allow for more participants to compete to serve load, third parties who manage DR programs have had more ability to deploy their programs in these markets, he said, noting that FERC can encourage DR by supporting competitive markets.

Speaking at GridWeek on Sept. 24, Wellinghoff detailed the potential for DR systems and smart grid technologies to help meet demand, reduce costs, and reduce greenhouse gas (GHG) emissions. In addition, he noted that the majority of DR resources are deployed in RTOs rather than traditionally regulated utility service areas.

His comments were made as many electricity groups eagerly await FERC's final rule to improve wholesale competition in organized markets. The rule may provide for changes to current policies governing DR in RTOs and ISOs, including increased potential for using DR for ancillary services and eliminating certain penalties for reduced use during system emergencies, according to the proposed rule issued in February of this year.

In addition, his favorable statements about competitive markets were also made as RTOs have recently come under attack from consumer groups, traditionally regulated utilities, and public power providers, who charge that the markets are plagued by high costs and market power. Although FERC, and Congress, have largely resolved to support the markets, the concerns linger. Wellinghoff's comments echo the proponents of the markets, who say the competition fosters the most innovative and efficient ways to meet demand.

"FERC is trying to bring competition into those marketplaces so we can have, beyond utilities, other entities, like [Site Controls, a DR aggregator participating in the panel discussion] and others who invest in these technologies and deliver these to markets," Wellinghoff said. "Regulators can help them with structures that allow more participants."

The Compete Coalition, a broad coalition of businesses and trade groups that actively supports competitive markets, touts RTOs as the best forums for deploying DR resources. It argues that organized markets assign greater value to kilowatts produced or saved at peak demand, creating a more meaningful — and transparent — price signal that encourages DR. In addition, it argues that the markets provide more opportunities for third parties to compete, fostering innovative DR programs. The coalition includes prominent DR companies like Comverge Inc., EnerNOC and Site Controls Inc.

"It's no accident that last year we saw 23,000 MW of DR installed in competitive markets in North America," says a source in the coalition.

Wellinghoff noted that DR has been more prevalent in competitive markets than it has in areas that have vertically integrated utilities. "DR providers are active [in PJM, NYISO, and ISO New England] but less active in ...[areas served by] traditional vertically integrated utilities, with control areas operated by utilities rather than operated by an independent operator," he said. This "doesn't mean there is not DR in the [traditionally regulated] areas...but it hasn't been as widespread there."

He also went on to explain how DR can be optimized by smart grid technologies and eventually by using plug-in hybrid electric vehicles (PHEVs). The PHEVs, for example, could be used as distributed electricity storage that, with appropriate tariffs, may enable the consumer to reduce peak demand, help balance the grid, and even make a profit by buying electricity at times of low demand and selling it during peak demand.

"To the extent we start having PHEVs sold in this country...each one of those vehicles has sufficient battery capacity that during the charging cycle you can not only charge but you can provide regulation services to the grid," he said. "To the extent those vehicles can be aggregated in larger amounts by utilities or 3<sup>rd</sup> party aggregators, that regulation service can be sold up to a grid operator — an ISO or RTO — who is operating the grid on a wholesale level and balancing the grid on a second by second basis. So there is a role for consumers to participate in that."

He continued by noting a recent study that indicates a consumer could make anywhere from \$1,000- \$3,000 a year

for providing that service. Yet, although FERC can encourage RTOs to have such tariffs in place, states determine the extent to which consumers can participate in those markets.

Finally, Wellinghoff detailed how these DR resources will likely accrue carbon credits under GHG regulations, potentially making them more lucrative if the nation commits to a cap-and-trade program.

He said that to the extent that DR systems “are supplanting a generator, a gas-fired combustion turbine generator, [and] there is substantial GHG emissions reductions” under a “cap-and-trade system, [this] should create credits, [and] should ultimately create a new revenue stream.”