

Responses of Kenneth D. Schisler to Member Questions from the July 18, 2017, Subcommittee on Energy Hearing, “Powering America: Examining the State of the Electric Industry through Market Participant Perspectives”

Responses to the Honorable Fred Upton, Chairman, Subcommittee on Energy

- 1. Last year, your company and the demand response industry had a very big win before the Supreme Court. The landmark ruling in FERC v. EPSA preserved FERC’s jurisdiction over demand response in the wholesale electricity markets and also upheld the principle that demand response resources should be compensated at the same price as generators.
 - a. In the wake of the Court’s decision and the regulatory certainty it provided, what’s been the effect on the demand response industry? Have you seen additional opportunities for demand response participation.****

The Supreme Court decision helped stabilize the industry and ensured that over 10,000 MW of demand response participating in FERC jurisdictional wholesale markets would continue to be able to participate. This was a big win. However, the win here was primarily a preservation of the *status quo ante*, rather than the creation of significant new opportunities. The Supreme Court reviewed a D.C. Circuit decision that eliminated demand response from FERC jurisdiction, which decision greatly destabilized the industry and upended a decade of effort building DR capabilities in FERC-jurisdictional wholesale market.

The decision also affirmed a FERC regulation for determining compensation for demand response participating in wholesale energy markets, following a period in which several of the FERC-jurisdictional wholesale markets had developed several different ways to compensate demand response in energy markets. This part of the decision was favorable for the demand response industry, but the impact has been limited thus far for a variety of reasons. First, energy prices have been relatively low since the Supreme Court decision in much of the United States, making it more attractive for customers to consume energy rather than participate in demand response. Second, prior to the decision, demand response participation in energy markets had been, in comparison to capacity markets and reliability-based demand response products, relatively small. Economic demand response was virtually non-existent during the litigation because of the potential for refunds if the D.C. Circuit decision had been upheld. With the legal uncertainty removed, economic demand response should be a growth opportunity.

The Supreme Court decision has stimulated additional investment in demand response and new advanced energy technologies. It is important to understand that principle underlying the decision didn’t just impact demand response, but other distributed energy resources (DER) such as energy storage, vehicle to grid technologies, and others. If customers were prohibited from participating directly or through aggregators in FERC jurisdictional markets, it would have negatively impacted the commercialization of a variety of new energy technologies and innovation in distributed energy resources. The recent acquisition of EnerNOC by the Enel Group, one of the largest electricity companies in the world, is a clear example of the optimism for the future of DERs, including demand response, in the U.S. and around the world.

With the Supreme Court decision, technological advances in dynamic management of customer demand, and the declining costs of energy storage, there is now the potential to unleash broader participation from customers in wholesale markets, including energy and ancillary markets where participation has been limited. Still, three critical elements are necessary to achieve this potential:

1. A Non-discriminatory market design that recognizes the attributes of Distributed Energy Resources without creating unnecessary barriers to entry across all FERC-jurisdictional markets.
2. State regulators and utilities in the Midcontinent Independent System Operator (MISO) and Southwest Power Pool (SPP) markets seeking broader collaboration with third party technology and services providers, and leveraging the capabilities and private capital of non-utility agents working with or through utilities to develop demand response potential.
3. A constructive regulatory and market platform in the California Independent System Operator (CAISO) territory.

On item 2 above, FERC Order 719 allowed state regulatory authorities to prohibit end-use customers from participating in wholesale markets either directly or through third-party demand response providers. With the exception of Illinois, every state in the MISO footprint chose to enact this prohibition. While many utilities offer interruptible tariffs to their customers that can be used to offset wholesale capacity requirements, few utilities offer customers' demand response resources into the wholesale energy and ancillary markets. Participation in these markets typically requires a higher degree of technology and risk tolerance than what is found in utility interruptible programs. Moreover, traditional state regulatory structures do not stimulate efficient levels of investment in demand response by utilities.

In order to achieve efficient levels demand response participation in MISO, active collaboration is needed between state regulators, utilities, and third party DER/DR aggregators. This can be achieved in a manner consistent with the vertically integrated nature of Midwest states. It should be acknowledged that recently several Midwest states have demonstrated leadership and are actively considering how to stimulate broader distributed energy resource participation, including third parties working through or in conjunction with utilities.

With respect to Item 3 above, while California permits wholesale demand response participation, significant demand response investment and potential remains sidelined in CAISO due to significant uncertainty with regard to the management by CAISO of demand response participation. Despite its large size and good fundamentals for demand response, a number of barriers and unpredictable and disordered decision-making is a concern that has resulted in CAISO having a woefully underdeveloped market potential for demand response.

In your testimony, you noted that demand response resources reduced wholesale market costs by nearly \$10 billion dollars in PJM for the current delivery year. Can you explain how demand response accomplished such a significant reduction?

- a. **Were these savings realized in the energy markets, capacity markets, or both markets? Are these savings net of payments to demand response resources?**

This figure comes from a report from the PJM Independent Market Monitor, with a citation provided below, and is specific to capacity market savings. The quote from Page 6 of the report is:

“The inclusion of sell offers for Demand Resources and Energy Efficiency resources had a significant impact on the auction results. Based on actual auction clearing prices and quantities and make-whole MW, total RPM market revenues for the 2017/2018 RPM Base Residual Auction were \$7,512,229,630. If there were no offers for DR or EE in the 2017/2018 RPM Base Residual Auction and everything else had remained the same, total RPM market revenues for the 2017/2018 RPM Base Residual Auction would have been \$16,859,658,203, an increase of \$9,347,428,573, or 124.4 percent, compared to the actual results.”¹ We are not aware of any publically available figures on energy and ancillary market savings, and since the current delivery year is still in progress, it would not be possible to calculate savings over the entire time period.

The driver for the large savings is most likely a result of willingness from demand response resources to provide capacity at a more competitive cost than certain generation assets. If demand response had not participated in the auction, supply would have been lower, and the clearing price for PJM capacity would have been substantially higher.

¹ Monitoring Analytics. Analysis of the 2017/2018 RPM Base Residual Auction. The Independent Market Monitor for PJM. October 6, 2014