

**Testimony of Commissioner John Norris
Federal Energy Regulatory Commission
Before the Subcommittee on Energy and the Environment
Of the Committee on Energy and Commerce
United States House of Representatives
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Good morning, Chairman Markey and members of the Subcommittee. As the newest FERC Commissioner, I appreciate the opportunity to participate in the discussion today. I joined the Commission about two months ago and have observed firsthand the hard work and dedication that the Chairman and my fellow Commissioners have brought to the job during their time at the Commission. I am looking forward to adding my voice to the ongoing dialogue regarding our Nation's energy future.

Today, I would like to discuss the essential role that demand response will serve as we step forward into our energy future. I will first briefly emphasize the many benefits that demand response offers and then identify actions that the Commission has taken in recent years to establish a level playing field so that demand response can fully participate in wholesale electricity markets. I will then highlight certain outcomes in these markets that are in part a direct result of the Commission's actions and policies. In addition, I will also note that our work is not done and that barriers remain to demand response participation that the Commission continues to address.

Benefits of Demand Response

Demand response can provide many benefits to our energy markets. Effective demand response can help reduce electric price volatility, mitigate market power, and enhance reliability. Demand response can in some instances serve as a fast and effective solution to address reliability needs, especially where there may be insufficient time to plan and develop new transmission. It can also increase efficient market operation and awareness of energy usage. Further, demand response can help to improve the economic operation of electric power markets by aligning prices more closely with the value customers place on electric power. In particular, consumers as a whole can realize significant savings when demand response is used to substitute for expensive power during periods of peak demand. Finally, demand response can serve as a "dance partner" to renewable generation such as wind and solar whose energy production is variable in nature. In other words, demand response can complement these renewable energy resources by

managing the sharp down-ramps in wind and solar output and providing flexibility to the grid through the use of ancillary services.

I believe that the best energy outlook will include an efficient mix of both demand-side resources and supply-side resources. By providing a level playing field and the opportunity for demand-side resources to participate on a comparable basis to traditional, supply-side resources, we can make a positive difference for our markets and consumers, allowing innovation, ingenuity, and customer choice to foster competition.

Let me take a moment to talk about what will be required to create a level playing field and ensure that demand response can participate in wholesale electricity markets on a comparable basis to other resources. While in many cases it is clear that existing reliability and market rules and structures were developed around the needs and operating characteristics of traditional generation resources, there is not always consensus as to how and whether specific rules and structures should be modified to create a level playing field for demand response resources. My expectation is that, as we gain additional experience, the Commission will continue to modify and shape its demand response policies.

Recent Commission Activity

Recognizing how critical it is for demand-side resources to participate in electricity markets, the Commission has taken many steps to encourage demand response participation in those markets. The Commission explicitly addressed demand response in several rulemakings. In its Open Access Transmission Tariff (OATT) Reform (Order No. 890),¹ the Commission took measures to encourage the participation of demand response and other resources, for example, by allowing these resources to provide ancillary services and by having transmission planning processes consider them on a comparable basis to other solutions. Similarly, in its reliability standards rulemaking (Order No. 693),² the Commission established opportunities for demand response to contribute to reliability by directing the Electric Reliability Organization, the North American

¹ *Preventing Undue Discrimination and Preference in Transmission Service*, Order No. 890, FERC Stats. & Regs. ¶ 31,241, order on reh'g, Order No. 890-A, FERC Stats. & Regs. ¶ 31,261 (2007), order on reh'g, Order No. 890-B, 123 FERC ¶ 61,299 (2008) order on reh'g, Order No. 890-C, 126 FERC ¶ 61,228 (2009).

² *Mandatory Reliability Standards for the Bulk-Power System*, Order No. 693, FERC Stats. & Regs. ¶ 31,242, order on reh'g, Order No. 693-A, 120 FERC ¶ 61,053 (2007).

Electric Reliability Corporation (NERC), to enable demand response and other demand resources that meet certain criteria to be used to comply with reliability standards governing reserves, reactive power, emergencies, and planning of the bulk power system.

In Order No. 719, the Commission made further strides towards incorporating demand response into organized markets on a comparable basis to other resources.³ Among other things, Order No. 719 required RTOs/ISOs to: (1) accept bids in its markets for ancillary services from technically capable demand response resources as it does for other resources; (2) eliminate certain charges to buyers in the energy market for voluntarily reducing demand during a system emergency; (3) in certain circumstances, permit an aggregator of retail customers to bid demand response on behalf of retail customers directly into the organized energy market; and (4) assess and report on any remaining barriers to comparable treatment of demand response resources in its organized markets.

Our Nation has a tremendous reservoir of demand response that is still largely untapped. To help find out just how big that reservoir is, Commission staff last summer completed a National Assessment of Demand Response Potential (Assessment) out to 2019. The Commission submitted the Assessment to Congress in June 2009, as required by the Energy Independence and Security Act of 2007 (EISA). The Assessment found that the potential for peak electricity demand reductions across the country is 188 gigawatts, up to 20 percent of national peak demand. That is equivalent to the output of roughly 2,500 peaking power plants, assuming the typical average size of 75 megawatts.

To build on the Assessment, Congress also, in EISA, directed the Commission to develop a National Action Plan on Demand Response (Action Plan). The Action Plan will identify the communications strategies, technical assistance to states, and tools necessary to achieve the potential identified in the Assessment and to maximize the amount of demand response resources that can be developed and deployed. Work on the Action Plan is well underway. For example, Commission staff earlier this month released a draft of the Action Plan for a final round of public comment. As required in EISA, the Action Plan will be submitted to Congress by June 2010.

³ *Wholesale Competition in Regions with Organized Electric Markets*, Order No. 719, 73 Fed. Reg. 64100 (Oct. 28, 2008), FERC Stats. & Regs. ¶ 31,281 (2008) (Order No. 719), *order on reh'g*, Order No. 719-A, 74 Fed. Reg. 37776 (July 29, 2009), FERC Stats. & Regs. ¶ 31,292 (2009), *reh'g denied*, Order No. 719-B, 129 FERC ¶ 61,252 (2009).

Additionally, just last week the Commission issued a notice of proposed rulemaking (NOPR) to address compensation of demand response resources. The NOPR proposes, and seeks comment on, requiring RTOs and ISOs in which demand response resources participate as a resource, to pay demand response providers the market price for energy for reducing consumption below their expected levels. The Commission is seeking comment on this proposal and on the merits of alternative approaches in comparison to the approach proposed. We are also seeking comment on whether regional differences among the markets justify the current difference in compensation across the RTOs and ISOs.

Finally, FERC is mindful that the states have a large role in shaping the policies that affect demand response participation in electricity markets, and we continue to work closely with our state colleagues to ensure that our efforts are coordinated and achieve the greatest impact. To that end, I will serve as a co-chair of the Demand Response Collaborative, which is a joint effort of the Commission and members of the National Association of Regulatory Utility Commissioners (NARUC). Phyllis Reha, from the Minnesota Public Utilities Commission, is the other co-chair. Participants in the collaborative include more than a dozen state utility regulators representing all regions of the country. When I served as Chairman of the Iowa Utilities Board I was a member of the collaborative, and I believe that experience will serve me well as I work with my state colleagues toward our mutual goal of providing more opportunities to integrate demand response into the electricity markets.

The Demand Response Collaborative first convened in late 2006 and meets regularly three times a year. Since that time, the collaborative has learned of demand response activities around the country such as in Vermont, New Jersey, Florida, Connecticut, Washington, Arkansas, New York, Texas and California, as well as in the Pacific Northwest, New England, and the mid-Atlantic and mid-West states. One premise of this forum is that states can learn about other initiatives around the country and identify and adopt best practices. Important stakeholders, including large customers, retail utility companies, and demand response providers also bring their perspectives to the table. In addition, there are regular reports about key research on topics such as integrating price-responsive demand into wholesale and retail markets, cost-effectiveness guidelines for valuation of demand resources, and policy options for eliminating barriers to demand response. This forum is also an excellent opportunity for the Commission to share its expertise with its state colleagues, for example, through discussion of the National Assessment of Demand Response Potential and the upcoming National Demand Response Action Plan.

NARUC and FERC have a second collaborative on Smart Grid. Recently, NARUC and FERC decided that there was considerable overlap in the topics

discussed at both the Smart Grid and Demand Response collaborative meetings so they will now be held as one meeting so that members of both collaboratives can learn from one another. In addition, I expect that there will continue to be separate tracks for Demand Response and Smart Grid to explore relevant issues in more depth. The Smart Grid Collaborative is led by Chairman Wellinghoff and Commissioner Orjiakor Isiogu of the Michigan Public Service Commission.

Both collaboratives are designed to explore issues that cut across wholesale and retail energy markets. The dialogue that occurs through this process helps regulators understand that we now have a critical opportunity to develop coordinated policies that will accelerate smart grid and demand response programs, moderate the cost of electricity to consumers, and protect the environment. At the most recent meeting of the collaboratives in February 2010, the members discussed the development of interoperability standards for the smart grid. I expect that topics for future meetings will include, among other things, how to bring a new focus on customers and communication strategies – to learn how to better engage them in responding to energy market signals. I look forward to working with my colleagues across the country in this important effort that we all hope will lead to a more efficient system for electricity consumers.

Results for Demand Response in Wholesale Markets

Evidence points to increased demand response participation in electricity markets. The most recent Commission survey results for demand response show a total potential peak load reduction across the nation of 37,335 MW, which is up 26 percent from the 2006 Commission survey results, and represents approximately five percent of total forecasted U.S. peak demand for summer 2008 (752,579 MW). In its 2009 Long-Term Reliability Assessment, NERC estimates that demand response and energy efficiency resources will account for roughly 40,000 MW (or four percent) of the peaking resource portfolio by 2018, effectively offsetting peak demand growth for nearly five years. NERC has also noted that demand response accounts for over six percent of peak demand in Florida and the Midwest and that demand response is increasingly being used as reserves. According to the ISO/RTO Council, demand response capacity in organized markets under Commission jurisdiction approximately doubled from 13,000 MW to 26,000 MW between the years 2006 and 2008.

I want to offer two examples of how the organized markets have made strides in recent years to capture greater potential from demand response and other distributed resources such as energy efficiency. In PJM's forward capacity auctions, the total quantity of demand response resources that cleared in PJM's latest auction -- for the 2012-2013 delivery year -- was over 7,000 megawatts of unforced capacity. That figure represents about five percent of the total resources

that cleared the market. Also, PJM's latest auction for the first time permitted energy efficiency resources to bid offers into the auction as a capacity supply. The amount of energy efficiency resources cleared in that auction was nearly 570 megawatts.

Similarly, one of the most notable features of the first two auctions in ISO New England's forward capacity market is the large amount of qualified and cleared capacity from demand resources. Demand resources accounted for seven percent of the cleared capacity in the first forward capacity auction, including 2,046 megawatts of demand response resources and 890 megawatts of energy efficiency resources. In the second forward capacity auction, total cleared capacity from demand resources increased by about 500 megawatts and accounted for eight percent of the total cleared capacity. Most of the demand resources in both of these auctions were existing resources. Also in both auctions, approximately two-thirds of the capacity from cleared demand resources came from active demand resources, such as real-time demand response or real-time emergency distributed generation. Most of these resources came from third-party providers, while the bulk of passive demand resources came from state-sponsored utility energy efficiency programs.

Remaining Barriers to Demand Response

More work remains to be done to ensure that demand response resources are fully integrated into electricity markets on a comparable basis to generation resources. While the Commission has diligently worked to remove barriers to demand response participation, tough issues remain to be resolved. For example, robust methods to measure and verify reductions in consumption that are a result of demand response have yet to be finalized and/or agreed upon. The Commission is conducting a rulemaking proposing to incorporate by reference into its regulations the North American Energy Standards Board (NAESB) measurement and verification standards.⁴ In the NOPR, the Commission stated that, while the NAESB standards provide a starting place to develop a more comprehensive set of standards, more work needs to be done. The Commission emphasized that the industry should take the lead in developing and implementing demand response standards that will be both practical and workable.

⁴ *Standards for Business Practices and Communication Protocols for Public Utilities*, Notice of Proposed Rulemaking, 74 Fed. Reg. 48,173 (Sept. 22, 2009), FERC Stats. and Regs. ¶ 32,646 (2009).

Still other barriers to entry remain. For example, some market participants have noted that the rules and software that system operators use in organized markets to schedule and dispatch resources has been developed around the needs and operating characteristics of traditional generation resources and may pose a barrier to demand response and other resources. Others point to market rules and business practices that are unclear as they apply to demand response resources. The Commission is analyzing these and other issues, and, if appropriate, may conduct one or more rulemakings to help eliminate barriers to demand resources.

Thank you for the opportunity to testify today. I look forward to meeting the challenges of a diversifying electricity market during my time here at the Commission. I believe the Commission is well-placed to meet those challenges.