

The following article appeared in *Fortnightly's Spark*

FERC's Focus on Demand Response

by **Brett A. Snyder and Sonia C. Mendonca**

The Federal Energy Regulatory Commission (FERC) has shown an increased focus on demand response in wholesale electricity markets in the last few years. This is reflected in a number of initiatives ranging from measures to provide a better sense of the potential impact of demand response and current barriers to participation in wholesale markets, to measures requiring tariff language reforms to broaden demand response participation.

The U.S. Department of Energy (DOE) defines demand response as “changes in electric usage by end-use customers from their normal consumption patterns in response to changes in the price of electricity over time, or to incentive payments designed to induce lower electricity use at times of high wholesale market prices or when system reliability is jeopardized.”¹ In simple terms, through demand response, customers reduce or increase consumption of electricity (or change the times in which such electricity is consumed), motivated by changes in the price of electricity. In an electric system, supply and demand must be in balance at all times. Demand response allows the system operator to achieve balance by adjusting consumption, when ordinarily the system operator would adjust supply. Thus, from the point of view of the operator of a control area, demand response can be a valuable alternative to traditional generation resources during peak hours or at times when the reliability of the system is at risk.

From the point of view of the consumer of electricity, demand response can be a powerful tool to control costs. Depending on how demand response programs are structured, consumers are able to forego consumption at certain price levels. This is particularly important for entities that consume electricity in large amounts as part of an industrial process and for whom electricity is a significant portion of production cost. For such entities, it may make economic sense, at certain price levels, to interrupt the industrial process and forego consumption of electricity.

In addition, when used in connection with new technologies, demand response may increase the ability of the transmission system to handle larger amounts of variable generation sources (such as wind power, for example) by providing

Brett A. Snyder is a partner and Sonia C. Mendonca is an associate at Dewey & LeBoeuf LLP, in Washington, DC.

This article is reprinted with permission from the November 2009 edition of *Letter #71 issue of Fortnightly Sparks*. © 2009 the Association of Transportation Law Professionals. All rights reserved. Further duplication without permission is prohibited.

greater flexibility in the balancing of system supply and demand. Allowing the system to integrate larger amounts of variable resources could ultimately contribute to the reduction of greenhouse-gas emissions.

As noted, FERC has taken a number of initiatives to promote demand response. This article focuses on FERC's Order No. 719 issued in October 2008, Order No. 719-A issued in July 2009, FERC staff's National Assessment of Demand Response Potential issued in September 2009 and the discussion draft for the proposed national action plan, issued in October 2009.²

FERC Order No. 719 and 719-A

In Order No. 719, FERC requires changes to the terms and conditions of service of independent system operators (ISOs) and regional transmission organizations (RTOs)³ to, among other things, eliminate barriers to demand response participation in the markets administered by such entities. FERC explained that it does not intend to grant preferences to demand response resources, but rather to ensure that such resources are treated comparably to other resources participating in these markets. FERC also recognized the potential for demand response to provide competitive pressure to reduce wholesale power prices, increase awareness of energy usage, provide for a more efficient operation of electricity markets, mitigate market power, enhance reliability, and, in combination with certain new technologies, support the use of renewable energy resources, small-scale, localized generation resources (distributed generation), and advanced metering that allows for two-way communication with the electric grid.

Through prior orders, FERC already had approved a number of demand resource programs in RTOs and ISOs. For example, FERC approved programs to allow demand response to be used as a capacity resource and as a resource during system emergencies (essentially by replacing the need for additional supply with load reductions). Under such programs, wholesale buyers and qualifying large retail buyers may bid demand response directly into the day-ahead and real-time energy markets and certain ancillary service markets. There also are programs to accept bids from aggregators of retail customers (ARCs). When demand response is bid into a market, the system operator is able to count on that load reduction in the same manner it counts on supply resources. The requirements in Order No. 719 and 719-A are intended to move those markets even further in the direction of comparable treatment of demand response resources.

In Order No. 719, FERC required RTOs and ISOs to:

- accept bids from demand response resources in their markets for certain ancillary services, on a basis comparable to other resources;
- eliminate, during a system emergency, certain charges to buyers for voluntarily reducing demand;
- permit ARCs to bid demand response on behalf of retail customers directly into the RTO's or ISO's organized markets; and
- allow the market-clearing price during periods of operating reserve shortage (when the system operator does not have sufficient capacity to meet increases in peak demand) to more accurately reflect the true value of energy.

These requirements are intended to level the playing field for demand response providers and encourage greater participation. Bids by ARCs on behalf of retail customers are conditioned on state law permitting such activities. Such bids must meet the same requirements as bids from any other types of demand response resources.

In Order No. 719, FERC also directed each RTO or ISO with an organized energy market to ensure that market value of such energy during an operating reserve shortage. The RTOs and ISOs are required to make a compliance filing reforming or demonstrating the adequacy of their existing market rules according to certain criteria specified by FERC, and to address potential market power issues. In response to commenters, FERC noted that this requirement does not eliminate or otherwise revise existing market power mitigation measures and none of the four approaches suggested by FERC as potential ways of reforming market rules precludes the imposition of a limit on prices. FERC also allows RTOs and ISOs to phase in any new pricing rules over a period of several years, provided that this period is not protracted.

Finally, FERC directs RTOs and ISOs to assess and report on any remaining barriers to comparable treatment of demand response resources and to submit findings and any proposed solutions along with a timeline for implementation. The RTOs' and ISOs' market monitors are also directed to submit a report describing their views on the same issues.

In Order No. 719-A, FERC clarified the provisions of Order No. 719 that directed RTOs and ISOs to amend their market rules to permit an ARC to bid demand response on behalf of retail customers directly into the RTO's or ISO's organized markets. Specifically, FERC modified the rule to establish separate requirements for small utilities, which distributed up to 4 million MWh during the previous year, and larger utilities, which distributed more than 4 million MWh during the previous year. For small utilities, the RTO/ ISO may not accept bids from ARCs that aggregate the demand response of such utilities' customers unless the relevant electric retail regulatory authority permits such demand response to be bid into organized markets.

RTOs and ISOs have made compliance filings in response to Orders No. 719 and 719-A, which are being considered by FERC. In some of these cases, industrial customers argue that the proposed modifications are not sufficient to eliminate the barriers to demand response programs in those markets. A key issue for industrial customers is the definition of comparable treatment. In most cases, they claim, comparable treatment has been interpreted as imposing requirements for participation that are identical to those imposed on generation resources without regard for the differences in operations of demand response resources. FERC specifically declined to define "comparable treatment" and noted that it would have an opportunity to review any concerns in the context of the compliance filings that would be made to implement the rule.

National Assessment and Action Plan

In September 2009, in response to a statutory requirement in the Energy Policy Act of 2005 (EPAAct 2005), FERC staff issued an Assessment of Demand Response and Advance Metering (Assessment). The Assessment draws heavily from a prior report to Congress on the potential for demand response on a state-by-state basis that had been submitted pursuant to the Energy Independence and Security Act of 2007.

This article is intended only as a general discussion of these issues. It is not considered to be legal advice. We would be pleased to provide additional details or advice about specific situations. For additional information on this important topic, please feel free to call upon your Dewey & LeBoeuf relationship partner.

No part of this publication may be reproduced, in whole or in part, in any form, without our prior written consent.

© 2009 Dewey & LeBoeuf LLP
All rights reserved.

For further information on
Dewey & LeBoeuf,
please visit www.dl.com

8393 REV01 11-30-2009

Among other things, the Assessment discusses the saturation and penetration rates of advanced meters and estimates that in 2009 there were 7.95 million advanced meters installed nationwide. The Assessment also estimates that the 2009 national reduction in peak demand from demand response was 37 gigawatts. The Assessment discusses a number of regulatory initiatives at the wholesale and retail levels associated with demand response, and identifies remaining barriers to improved customer participation.

In addition, FERC staff prepared, with the support of a team of consultants, a discussion draft for a national action plan on demand response. This document, which is a requirement under the EISA, was made available to the public in October 2009. The draft was open for discussion by interested parties at a technical conference on November 19 and 20, 2009. Written comments also will be accepted until December 4, 2009.

Future of Demand Response

FERC Chairman Jon Wellinghoff is a strong supporter of demand response.

He has characterized the staff assessment on demand response as the “first step in a years-long process” and stated that the potential benefits to consumers and the environment from wide-scale demand response deployment is enormous. One can expect that he will push the agency and market participants to develop the necessary action plan to realize that potential. Therefore, expect even further advances in this area in the near future.

Brett A. Snyder is a partner and Sonia C. Mendonca is an associate at Dewey & LeBoeuf LLP, in Washington, DC. Email them at: bsnyder@dl.com and sonia.mendonca@dl.com. For more information go to: www.dl.com.

Endnotes:

¹ See U.S. Department of Energy, *Benefits of Demand Response in Electricity Markets and Recommendations for Achieving Them*:

A Report to the United States Congress Pursuant to Section 1252 of the Energy Policy Act of 2005, February 2006.

² In addition to these initiatives, FERC also initiated a Notice of Proposed Rulemaking to incorporate by reference certain business practice standards adopted by the North American Energy Standards Board to categorize various demand response products and services and to support the measurement and verification of these products and services in wholesale electric energy markets.

³ ISOs and RTOs are the entities responsible for the operation of organized wholesale electricity markets in the United States.