# 119 FERC ¶ 61,306 UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

(Docket Nos. RM07-19-000 and AD07-7-000)

Wholesale Competition in Regions with Organized Electric Markets

(June 22, 2007)

AGENCY: Federal Energy Regulatory Commission

ACTION: Advance Notice of Proposed Rulemaking.

<u>SUMMARY</u>: The Federal Energy Regulatory Commission (Commission) is issuing an Advance Notice of Proposed Rulemaking (ANOPR) with regard to potential reforms to improve the operation of organized wholesale electric markets. The Commission invites all interested persons to submit comments in response to specific questions.

DATES: Comments on this ANOPR are due on [Insert date 45 days after publication

# in the FEDERAL REGISTER].

<u>ADDRESSES</u>: You may submit comments identified by Docket Nos. RM07-19-000 and AD07-7-000 by one of the following methods:

Agency Web Site: http://www.ferc.gov. Follow the instructions for submitting comments via the eFiling link found in the Comment Procedures section of the ANOPR.

Mail: Commenters unable to file comments electronically must mail or hand deliver an original and 14 copies of their comments to the Federal Energy Regulatory Commission, Secretary of the Commission, 888 First Street, N.E., Washington, D.C. 20426. Please refer to the Comment Procedures section of the ANOPR for additional information on how to file

paper comments.

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# SUPPLEMENTARY INFORMATION:

# UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Wholesale Competition in Regions with Organized Docket Nos. RM07-19-000 Electric Markets

AD07-7-000

# ADVANCE NOTICE OF PROPOSED RULEMAKING

# (June 22, 2007)

Paragraph Numbers

I. INTRODUCTION	<u>1.</u>
II. BACKGROUND A. Brief History	<u>4.</u> <u>14.</u>
<ul><li>B. Competition Issues and Commission Actions</li><li>C. Issues Addressed in the ANOPR</li></ul>	<u>25.</u> <u>30.</u>
III. DEMAND RESPONSE AND PRICING DURING POWER SHORTAGES IN ORGANIZED MARKETS	34.
A. Importance of Demand Response to Competition in RTO/ISO Areas	
B. Prior Commission Actions To Address Demand Response	<u>41.</u>
C. Remaining Problems with Demand Response in Organized Markets	<u>47.</u>
D. Proposed Commission Actions To Improve Demand Response and Market Pric During a Power Shortage	cing <u>57.</u>
IV. LONG-TERM POWER CONTRACTING IN ORGANIZED MARKETS	
A. Importance of Long-Term Power Contracts and Factors Affecting Contracting	
Decisions by Buyers and Sellers	<u>84.</u>
B. Commission Actions To Support Long-Term Power Contracts	
C. Proposed Commission Actions To Facilitate Long-Term Power Contracting	<u>92.</u>
V. MARKET MONITORING POLICIES	95.
A. History of Market Monitoring	
B. Independence and Function	108.
C. Information Sharing	122.
D. Pro Forma Tariff Section	131.
E. Conclusion	132.
VI. RESPONSIVENESS OF RTOS AND ISOS	133.
A. The Challenge of Improving RTO and ISO Responsiveness to Stakeholders	134.
B. Prior Commission Actions Regarding RTO and ISO Responsiveness	140.
C. Proposed Commission Action To Improve RTO and ISO Responsiveness	146.

Docket Nos. RM07-19-000 and AD07-7-000	ii
VII. ADDITIONAL QUESTIONS	<u>164.</u>
VIII. COMMENT PROCEDURES	<u>166.</u>
IX. DOCUMENT AVAILABILITY	<u>170.</u>

# UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Wholesale Competition in Regions with Organized<br/>Electric MarketsDocket Nos.RM07-19-000<br/>AD07-7-000

## ADVANCE NOTICE OF PROPOSED RULEMAKING

(Issued June 22, 2007)

## I. <u>Introduction</u>

1. The Federal Energy Regulatory Commission (Commission) is considering potential reforms to improve the operation of organized wholesale electric markets.<sup>1</sup> In response to issues raised by various market participants and industry observers about improvements to enhance wholesale electric markets, the Commission held two conferences, on February 27, 2007 and May 8, 2007, to learn more about these issues. The first dealt with all wholesale power markets while the second focused on organized RTO/ISO markets. Based on the comments received at these two conferences, the Commission identified four specific and narrow issues, as described below, that are not already being fully addressed by the Commission in other proceedings and that may be appropriate to address in a generic proceeding.

<sup>&</sup>lt;sup>1</sup>Organized market regions are areas of the country in which a regional transmission organization (RTO) or independent system operator (ISO) operates day-ahead and/or real-time energy markets.

2. These issues are: (1) the role of demand response in organized markets, including greater reliance on market prices to elicit demand reductions during power shortages; (2) increasing opportunities for long-term power contracting; (3) strengthening market monitoring; and (4) the responsiveness of RTOs and ISOs to customers and other stakeholders. This Advance Notice of Proposed Rulemaking (ANOPR) identifies specific concerns in these four areas and presents the Commission's preliminary views on proposed reforms.<sup>2</sup> The Commission seeks comments on the proposed reforms. After receiving and considering these comments, the Commission will determine whether to issue a Notice of Proposed Rulemaking (NOPR) and the scope of the proposed rule, if a NOPR is warranted.

3. Finally, the actions proposed here are intended to complement other Commission actions, discussed further below, intended to improve the operation of wholesale competition in regions with and without RTOs and ISOs and their organized markets. There are opportunities to improve the operation of wholesale markets in both types of

<sup>&</sup>lt;sup>2</sup> Throughout this document, the term "propose" is used as a short form of stating that it is the Commission's preliminary view that the proposal that follows may be a reasonable way to achieve a regulatory objective, and that the Commission requests comments on the proposal and on alternative recommendations for achieving the objective.

regions. Many of the Commission's prior actions—such as Order No. 890<sup>3</sup>—apply to both types of regions, while others by their nature apply only to RTO/ISO regions, such as assuring load-serving entities (LSEs) of long-term transmission rights in regions with locational marginal pricing and congestion hedges. The issues being explored in this proceeding are discrete and apply to regions with organized spot markets, market monitors, and an RTO or ISO. The actions considered address concerns that numerous market participants and many of our state colleagues have raised in this proceeding and elsewhere. The Commission is not seeking to fundamentally redesign organized markets or to appropriate jurisdiction from our state colleagues. Our goal is to make incremental improvements to the operation of organized markets without undoing or upsetting the significant efforts that have already been made in providing demonstrable benefits to wholesale customers. In particular, we acknowledge and commend the ISOs and RTOs and their respective transmission owners and stakeholders for their work over the past several years in fulfilling the Commission's policies supporting wholesale competition and non-discriminatory access to transmission.

<sup>&</sup>lt;sup>3</sup> <u>Preventing Undue Discrimination and Preference in Transmission Service</u>, Order No. 890, 72 Fed. Reg. 12,266 (Feb. 16, 2007), FERC Stats. & Regs. ¶ 31,241 (2007), reh'g pending (Reform of the Open Access Transmission Tariff (OATT) rules or OATT Reform).

## II. <u>Background</u>

4. National policy for many years has been, and continues to be, to foster competition in wholesale power markets. As the third major federal law enacted in the last 30 years to embrace wholesale competition, the Energy Policy Act of 2005 (EPAct 2005)<sup>4</sup> strengthened the legal framework for continuing wholesale competition as federal policy for this country.

5. The Commission's core responsibility is to "guard the consumer from exploitation by non-competitive electric power companies."<sup>5</sup> The Commission has always used two general approaches to meet this responsibility—regulation and competition. The first was the primary approach for most of the last century and remains the primary approach for wholesale transmission service, and the second has been the primary approach in recent years for wholesale generation service.

6. The Commission has never relied exclusively on competition to assure just and reasonable rates and has never withdrawn from regulation of wholesale electric markets. Rather, the Commission has shifted the balance of the two approaches over time as circumstances changed. Advances in technology, exhaustion of economies of scale in most electric generation, and new federal and state laws have changed our views of the right mix of these two approaches. Our goal has always been to find the best possible

<sup>&</sup>lt;sup>4</sup> Pub. L. No. 109-58, 119 Stat. 594 (2005).

<sup>&</sup>lt;sup>5</sup> <u>National Association for the Advancement of Colored People v. FPC</u>, 520 F.2d 432, 438 (D.C. Cir. 1975), <u>aff'd</u>, 425 U.S. 662 (1976).

mix of regulation and competition to protect consumers from the exercise of monopoly power.

7. In each major energy bill over the last few decades, Congress has acted to open up the wholesale electric power market by facilitating entry of new generators to compete with traditional utilities. The Commission has acted quickly and strongly over the years to implement this national policy.

8. Congress has not deregulated the wholesale electric power business, however, and the Commission has not done so by regulation. To the contrary, the Commission has issued many new regulations and orders designed to foster competition nationally and to support competitive markets in specific regions. Because the United States does not have a national electric power market, our approach to implementing competition has been to recognize and foster the development of regional markets.

9. There are significant differences among the regional wholesale power markets. There are differences in industry structure, differences in the mix of ownership (such as investor-owned, cooperatively-owned, and publicly-owned utilities), differences in the mix of fuels and energy sources for electric generation, and differences in population densities and weather patterns, to name a few. Some regions pursue wholesale competition exclusively by relying on direct bilateral contracting between sellers and buyers, and others employ a mix of bilateral contracting with organized spot markets and other markets to increase opportunities for the sale or purchase of electric power. In regions with organized spot markets, the markets are administered by an RTO or ISO,

5

which themselves have differences regarding such matters as market design, transmission responsibilities, and decision-making procedures. The Commission's approach to supporting wholesale competition is to recognize and respect these differences in market structure and other differences across the various regions.

10. Wholesale competition can serve customers well in all regions, including RTO and ISO regions with organized markets and regions without such organizations and markets. There are strengths and weaknesses to the approach taken by each, and wholesale competition faces challenges in both areas.

11. The best way to address these challenges may differ among the regions, however. For example, in all regions the cost of the fuels used for electric generation has increased in recent years, as it has throughout the world. Those regions of the United States that depend on natural gas for electric generation have felt this the most. Competitive spot markets reflect these cost changes quickly in market prices, while longer-term fixed price bilateral contracts or cost-of-service regulation may reflect cost increases or decreases more gradually in the wholesale price. Wholesale customers in all regions want better long-term contracting opportunities. All regions face the problem that retail customers are often unaware of supply shortages and continue their normal consumption even on days when supplies are tight and wholesale prices are high. Allocating the costs of a major new regional transmission facility fairly is a challenge faced by every region.

12. Regions with an RTO or ISO may be better able than other regions to address some of these issues, but they may also face more difficult challenges. For example,

much of the recent dissatisfaction with organized competitive markets appears to be directly linked to rising natural gas prices.

13. National policy is to promote wholesale competition in all regions, and customers now are calling especially for actions to improve the operation of wholesale competitive markets in the organized market regions. Hence, the focus of this ANOPR is not whether wholesale competition is the correct federal policy; the focus is on further improving the operation of wholesale competitive markets in organized market regions.<sup>6</sup> The Commission seeks comment on proposed reforms to improve the operation of wholesale markets in these regions.

## A. Brief History

14. Numerous federal and state legislative and regulatory activities have supported competition in the U.S. electric industry over the last three decades. Congress enacted the Public Utility Regulatory Policies Act of 1978 (PURPA)<sup>7</sup> as a response to the energy crises of the 1970s. PURPA required electric utilities to interconnect with, and offer to purchase power from, qualifying cogeneration and small power production facilities at

<sup>&</sup>lt;sup>6</sup> There are organized markets in the following RTOs and ISOs: PJM Interconnection, L.L.C. (PJM), New York Independent System Operator, Inc. (NYISO), Midwest Independent Transmission System Operator, Inc. (Midwest ISO), ISO New England, Inc. (ISO-NE), California Independent Service Operator Corp. (CAISO), Southwest Power Pool, Inc. (SPP), and the Electric Reliability Council of Texas (ERCOT).

<sup>&</sup>lt;sup>7</sup> Pub. L. No. 95-617, 92 Stat. 3117 (codified in scattered sections of 15, 16, 26, 30, 42, and 43 U.S.C.) (1978).

avoided cost rates set by state regulatory authorities. It gave the Commission limited authority to order wholesale transmission on a case-by-case basis, upon application by an eligible entity. A consequence of PURPA was the emergence of a new class of power generators that were independent of traditional utilities.

15. Beginning in the 1980s, the Commission allowed independent power producers to sell electric energy at wholesale at negotiated rates instead of the traditional cost-based rates.<sup>8</sup> Development of a competitive generation sector was impeded, however, because independent power producers were discouraged from entering the generation business by certain provisions of the Public Utility Holding Company Act of 1935 (PUHCA)<sup>9</sup> and because the new power suppliers could not readily gain access to the transmission grid to reach wholesale buyers.

16. Congress addressed these problems in the Energy Policy Act of 1992 (EPAct 1992).<sup>10</sup> EPAct 1992 eased PUHCA restrictions so that independent and affiliate generators could more easily enter the market to compete at wholesale and it expanded the Commission's authority to order a transmitting utility to provide wholesale power transmission service, upon application on a case-by-case basis, to anyone selling power at

<sup>&</sup>lt;sup>8</sup> <u>See</u> The Electric Energy Market Competition Task Force, <u>Report to Congress on</u> <u>Competition in Wholesale and Retail Markets for Electric Energy</u>, Docket No. AD05-17-000, at 22 (April 2007).

<sup>&</sup>lt;sup>9</sup> 15 U.S.C. §§ 79a <u>et seq</u>. (2000).

<sup>&</sup>lt;sup>10</sup> Pub. L. No. 102-486, 106 Stat. 2776 (1992).

wholesale. By the mid-1990s, the Commission found that ordering wholesale transmission services case-by-case did not adequately address problems with undue discrimination in transmission access, which limited opportunities for wholesale power competition. In 1996, the Commission used its authority under section 206 of the Federal Power Act (FPA)<sup>11</sup> to issue Order No. 888, remedying undue discrimination in access to transmission by requiring all public utilities with transmission to provide transmission service under an OATT.<sup>12</sup> The Commission recently issued Order No. 890 to remedy remaining opportunities for undue discrimination in the provision of open access transmission service.

17. Also during the 1990s, many states began to allow retail customers to choose their power supplier. Retail competition was expected to lower retail prices, protect customers from shouldering generation investment risk, and introduce innovative retail services including demand response services. By 2000, 24 states and the District of Columbia had

<sup>11</sup> 16 U.S.C. § 824e (2000).

<sup>&</sup>lt;sup>12</sup> Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities, Order No. 888, FERC Stats. & Regs., Regulations Preambles January 1991-June 1996 ¶ 31,036 (1996), order on reh'g, Order No. 888-A, FERC Stats. & Regs., Regulations Preambles July 1996-December 2000 ¶ 31,048 (1997), order on reh'g, Order No. 888-B, 81 FERC ¶ 61,248 (1997), order on reh'g, Order No. 888-C, 82 FERC ¶ 61,046 (1998), aff'd in relevant part, remanded in part on other grounds sub nom. Transmission Access Policy Study Group, et al. v. FERC, 225 F.3d 667 (D.C. Cir. 2000), aff'd sub nom. New York v. FERC, 535 US 1 (2002).

enacted legislation or issued regulatory orders to restructure their electric power industries.<sup>13</sup>

18. In addition to requiring open transmission access in Order No. 888, FERC also encouraged the formation of ISOs. The Commission encouraged transmission-owning utilities to voluntarily transfer operating control of their transmission facilities to an ISO to ensure independent operation of the transmission grid. Several ISOs—some based on longstanding power pools such as PJM and ISO-NE—formed after that. Early experience with open transmission access led the Commission to issue Order No. 2000 in December 1999,<sup>14</sup> which encouraged transmitting utilities, including those that were not public utilities, to join an RTO.<sup>15</sup> More than half the United States' load is now served by RTOs or ISOs.<sup>16</sup> Most RTOs and ISOs have adopted some forms of organized

<sup>&</sup>lt;sup>13</sup> U.S. Department of Energy, Energy Information Administration, <u>Status of State</u> <u>Restructuring of the Electric Power Industry</u>, <u>at</u> http://www.eia.doe.gov/cneaf/electricity/epar1/state.html.

<sup>&</sup>lt;sup>14</sup> <u>Regional Transmission Organizations</u>, Order No. 2000, FERC Stats. & Regs. ¶ 31,089 (1999), <u>order on reh'g</u>, Order No. 2000-A, FERC Stats. & Regs ¶ 31,092 (2000), <u>aff'd sub nom. Pub. Util. Dist. No. 1 of Snohomish County, Washington v. FERC</u>, 272 F.3d 607 (D.C. Cir. 2001).

<sup>&</sup>lt;sup>15</sup> <u>See</u> Order No. 2000, FERC Stats. & Regs., Regulations Preambles July 1996-December 2000 ¶ 31,089 at 31,028.

<sup>&</sup>lt;sup>16</sup> The Commission has approved RTOs or ISOs in several regions including the Northeast (PJM, NYISO, and ISO-NE), California (CAISO), the Midwest (Midwest ISO) and the Southwest (SPP).

markets, which have continued to evolve with operating experience.<sup>17</sup> RTOs and ISOs have improved transmission reliability and enabled greater coordination and efficiency in the dispatch of resources and provision of transmission service over regions served previously by separate entities. Further, they have supported competitive power markets by eliminating pancaked rates in the region, as well as by providing a spot market to supplement traditional means of selling and buying power.

19. While RTOs and ISOs have produced benefits, they also have encountered many challenges. Security constrained least cost dispatch over a large region can reveal transmission constraints and higher locational prices in constrained areas. Previously, average prices for the large region masked these constraints. Higher prices in certain locations and the lack of investment to relieve chronic congestion are criticisms of RTOs and ISOs. Concerns about transmission investment are common to both the RTO and ISO regions and the other regions.

20. Competitive wholesale markets for electric energy, including RTO and ISO spot markets, have had successes and failures. Competitive markets have stimulated generation investment, with much of the new generation supplied by merchant generating

<sup>&</sup>lt;sup>17</sup> RTOs and ISOs currently operate various combinations of the following organized markets: energy markets (day-ahead and real-time balancing markets), transmission rights, installed capacity markets, and other ancillary services markets.

companies.<sup>18</sup> According to data from the Energy Information Administration (EIA), the percentage of generating capacity in the United States owned by independent power producers has grown from less than 2 percent in 1990 to more than 35 percent by 2005.<sup>19</sup> A result has been to shift the risk of investment from customers to shareholders. In addition, under wholesale competition, the efficiency of existing nuclear, coal, and other types of generation has improved significantly, lowering costs to consumers and reducing environmental effects, and the increased capacity factors and availability of these units has further lowered electric generating costs.<sup>20</sup> The RTO and ISO-organized markets opened opportunities for renewable energy sources; an increasing fraction of new generation is from non-traditional sources such as wind generators. In fact, more wind generation has been added in RTO and ISO regions than in other regions, even though

<sup>&</sup>lt;sup>18</sup> See Platts Research and Consulting/RDI, <u>Review and Assessment of New</u> <u>Competitive-Market Sources of Power Generation</u> (February 5, 2003); Paul L. Joskow February 27, 2007 Comments, Docket No. AD07-7-000; New England Power Generators Association. Inc., <u>Meeting New England's Supply Needs: Regulated vs. Unregulated</u> <u>Generation, at http://www.nepga.org/contents/factsheet9041006.pdf</u>

<sup>&</sup>lt;sup>19</sup> U.S. Department of Energy, Energy Information Administration, <u>Electric Power</u> <u>Annual 2005</u>, Table 2.1 (November 2006), <u>at</u> http://www.eia.doe.gov/cneaf/electricity/epa/epat2p1.html

<sup>&</sup>lt;sup>20</sup> North American Electric Reliability Corporation, <u>Generating Availability</u> <u>Report</u> (November 2006).

13

there are many areas with good wind availability.<sup>21</sup> RTO and ISO regions with organized markets report that competitive markets promote significant investment in new transmission, improve transmission reliability, and open new opportunities for demand response.<sup>22</sup>

21. Despite all of the successes attributable to wholesale competition, there have been difficulties. The most prominent is that spot markets in California during 2000 and 2001 experienced sustained high wholesale prices resulting from supply shortages, market design flaws, and market abuses. In other RTOs and ISOs, prices in the day-ahead and real-time balancing markets have been volatile at times. This volatility can present issues for both buyers and sellers as buyers try to hedge the volatility and sellers try to project revenues from the organized markets. Even with the volatility, the RTO and ISO markets

<sup>&</sup>lt;sup>21</sup> Michael Skelly February 27, 2007 Comments, Docket No. AD07-7-000, at 1 (submitted on behalf of Horizon Wind Energy and the American Wind Energy Association) (reporting that "[w]ell-structured regional wholesale electricity markets operated independently allow far greater amounts of renewable energy and demand response resources to be integrated into the nation's electric grid. In fact, approximately 73 percent of installed wind capacity is now located in regions with such markets, while only 44 percent of wind energy potential is found in these areas. Large, regional energy markets provide for cost-effective balancing of generation and load with significant penetrations of variable, nondispatchable power sources, and they facilitate delivery of resources remote from load centers.")

<sup>&</sup>lt;sup>22</sup> <u>See, e.g., ISO/RTO Council, The Value of Independent Regional Grid Operators</u> (November 2005), http://www.caiso.com/14c6/14c6c4291aa40.pdf

have provided wholesale customers and suppliers with a new and constantly available opportunity to buy or sell power and transparent price information.

22. Much of the concern about competition in wholesale power markets can be traced to the effects of higher natural gas prices on wholesale electric power prices. As the Commission's staff reports, "natural gas currently functions as the most significant pricesetting fuel in U.S. electric generation."<sup>23</sup> Natural gas prices have increased significantly over the last decade. According to the Energy Information Administration, the average U.S. wellhead price of natural gas increased from \$2.17 in 1996 to \$6.42 in 2006 (which was down from \$7.33 in 2005).<sup>24</sup> The summer 2007 futures prices from the New York Mercantile Exchange (NYMEX) for natural gas at Henry Hub, Louisiana are up 21 percent over last summer's actual average prices traded on the Intercontinental Exchange (ICE).<sup>25</sup> As reported by Commission staff, wholesale prices for electricity are expected to be higher in the summer of 2007 in all regions of the United States, regardless of

<sup>&</sup>lt;sup>23</sup> Stephen Harvey, Office of Enforcement, Federal Energy Regulatory Commission, Presentation at the May 17, 2007 Commission Meeting: 2007 Summer Energy Market Assessment (May 17, 2007) (Summer Market Assessment), <u>at</u> http://www.ferc.gov/EventCalendar/Files/20070517112506-A-3.pdf [to fix]

<sup>&</sup>lt;sup>24</sup> See Id. See also U.S. Department of Energy, Energy Information Administration, <u>U.S. Natural Gas Wellhead Price</u>, at http://tonto.eia.doe.gov/dnav/ng/hist/n9190us3a.htm

<sup>&</sup>lt;sup>25</sup> <u>See</u> Summer Market Assessment. These NYMEX and ICE prices are not estimates but prices actually produced on those two trading systems.

regional market structure.<sup>26</sup> The principal reason is higher expected prices for natural gas. As the United States has increased its reliance on natural gas for electricity generation, particularly to meet peak loads, the forward price of natural gas has had an increasing effect on the forward price of wholesale electric power, especially during electric peak periods. The effect of wholesale prices is felt in parts of the United States that have no organized markets as well as regions with organized markets.

23. Some perceived challenges in the organized wholesale markets may be closely related to difficulties in state retail choice programs. Retail choice programs tend to be in areas served by organized wholesale markets, and the distinction between wholesale and retail competition challenges is often blurred. It appears that some areas with retail choice depend on their RTO or ISO to provide or arrange for the provision of some functions previously carried out by vertically integrated utilities. This has created challenges for wholesale market design, particularly with regard to whether it effectively provides for resource adequacy. Because wholesale and retail markets are intertwined, any examination of retail choice typically involves a critique of the combination of the particular retail choice program and the RTO's or ISO's wholesale market design.
24. The Commission continues to believe that wholesale competition benefits customers by providing more choice, spurring innovative services and technologies, shifting risk away from customers, improving efficiency, and providing incentives for

<sup>26</sup> <u>Id.</u>

cost reductions and for the construction of new resources. As stated above, the purpose of this ANOPR is to explore reasonable proposals for improving wholesale organized markets.

#### B. <u>Competition Issues and Commission Actions</u>

25. In proceedings outside this ANOPR, the Commission has addressed or is addressing many issues related to improving wholesale electric power competition in all regions, both with and without organized markets. The Commission has taken actions to improve wholesale transmission and competitive wholesale power opportunities.

26. The Commission's transmission actions have included reform of the OATT,

development of long-term transmission rights policies, incentives for new transmission infrastructure, and approval of transmission cost allocation policies. OATT reform applies to transmission-owning and operating public utilities in all regions. It adds greater consistency and transparency to available transfer capability calculations, requires an open and coordinated regional transmission planning process, and reforms energy imbalance charges. Additionally, it provides for a new "conditional firm" point-to-point transmission service. Long-term transmission rights in RTOs and ISOs were strengthened in Order Nos. 681 and 681-A. These orders, as directed by EPAct 2005, provide for long-term transmission price certainty in the organized electricity markets, which supports long-term power supply

arrangements. In Order No. 679,<sup>27</sup> the Commission acted to bolster investment in the nation's transmission infrastructure in response to section 1241 of EPAct 2005.<sup>28</sup> This rule allows those building transmission to apply for recovery of prudently incurred costs for construction work in progress, pre-operations, and abandoned facilities, and it provides for application for an incentive rate of return on equity for new transmission investment. To further encourage transmission investment, and provide certainty about who pays for new transmission, the Commission, in separate orders for each RTO or ISO—including two this year<sup>29</sup>—has approved cost allocation policies for new and existing transmission, thereby removing any barrier to new investment caused by uncertainty about transmission cost allocation.

<sup>28</sup> Section 1241 of EPAct 2005 is to be codified at section 219 of the FPA, 16 U.S.C. § 824s.

<sup>29</sup> PJM Interconnection, L.L.C., Opinion No. 494, 119 FERC ¶ 61,063 (2007), reh'g pending (approving PJM's cost allocation proposal for existing transmission facilities, and requiring revisions to its proposal for new transmission facilities); <u>Midwest Independent Transmission System Operator, Inc.</u>, 118 FERC ¶ 61,209 (2007), reh'g pending (conditionally approving cost allocation for economic upgrades). In 2006, the Commission approved the Midwest ISO's proposed cost allocation for reliability upgrades. <u>Midwest Independent Transmission System Operator, Inc.</u>, 114 FERC ¶ 61,106, order on technical conference, 117 FERC ¶ 61,241 (2006), order on reh'g, 118 FERC ¶ 61,208 (2007), reh'g pending.

<sup>&</sup>lt;sup>27</sup> Promoting Transmission Investment through Pricing Reform, Order No. 679,
71 Fed. Reg. 43,294 (July 31, 2006), FERC Stats. & Regs. ¶ 31,222, order on reh'g,
Order No. 679-A, 72 Fed. Reg. 1,152 (January 10, 2007), FERC Stats. & Regs. ¶ 31,236
(2006), order on reh'g, 119 FERC ¶ 61,062 (2007).

27. The Commission also has undertaken numerous actions in support of competitive wholesale power opportunities. For example, the Commission established interconnection rules for large, small and wind generators. In addition, the Commission has not only granted initial approval to the organized markets of the RTO and ISO regions but has continued to work with each region to improve the design of its markets as the region and the Commission have gained experience with the different regional approaches. Further, we have approved various market power mitigation rules and provided for market monitoring in the organized markets of RTOs and ISOs. Also, in response to EPAct 2005, the Commission prepared a report that assesses electric demand response resources by region.<sup>30</sup> The Commission has also opened a proceeding on demand response in wholesale markets, and we held a technical conference on April 23, 2007, to examine demand resources in markets, grid operations and expansion, and best practices for the measurement and evaluation of demand response resources.<sup>31</sup> These Commission actions, along with other prior actions of the Commission, are intended to work together to improve the operation of competitive wholesale markets across the nation, in regions with and without organized markets. The proposals in this ANOPR

<sup>&</sup>lt;sup>30</sup> Federal Energy Regulatory Commission, <u>Assessment of Demand Response and</u> <u>Advanced Metering: Staff Report</u>, Docket No. AD06-2-000 (August 8, 2006) (<u>FERC</u> <u>Staff Demand Response Assessment</u>).

<sup>&</sup>lt;sup>31</sup> <u>See</u> Supplemental Notice, <u>Demand Response in Wholesale Markets</u>, Docket No. AD07-11-000 (April 6, 2007).

complement these actions and are part of our ongoing effort to maintain and encourage competitive wholesale electric energy markets.

28. With the passage of EPAct 2005, Congress granted the Commission additional authorities to support wholesale competition. Key provisions in EPAct 2005 include authority to impose civil penalties for market manipulation, to prevent exercise of market power through expanded power to review mergers and generation facility transfers, and to require market transparency. EPAct 2005 also included a number of provisions designed to strengthen the interstate power grid, both to assure reliability and support competitive markets, encouraging the Commission to increase transmission investment through incentives, providing for backstop federal siting of transmission facilities, encouraging the deployment of advanced technologies, and authorizing the Commission to approve and enforce mandatory reliability standards. The Commission has taken these and other new responsibilities seriously and has complied with all Congressional directives and deadlines.

29. In addition, the Commission has recognized that there are issues that need to be addressed where the Commission and state commissions share an interest, such as demand response and competitive procurement. The Commission is engaged with the National Association of Regulatory Utility Commissioners (NARUC) in two collaborative efforts, the NARUC-FERC Collaborative Dialogue on Demand Response and the NARUC-FERC Competitive Procurement Collaborative.

## C. <u>Issues Addressed in the ANOPR</u>

30. Competition remains national policy with respect to wholesale power markets. Competition continues to be sound policy in wholesale markets, when combined with effective regulation. The Commission has a duty to improve the operation of wholesale power markets to support competition. One way to accomplish that is by pursuing regulatory reform. To that end, the Commission initiated this proceeding, designed to identify the challenges facing competitive wholesale power markets, identify workable solutions to those challenges that will complement other Commission actions to improve the operation of competitive wholesale markets, and determine which solutions are within the Commission's authority. This proceeding also responds to concerns raised by market participants regarding needed improvements to the operation of competitive wholesale markets.

31. In order to gather more information and allow public comment, the Commission held a conference on competition issues on February 27, 2007. At this first competition conference, most speakers addressed issues affecting the RTO and ISO regions, including the level of wholesale prices, the need for long-term power contracts, the effectiveness of market monitoring, and the lack of adequate demand response. The Commission held a second competition conference on May 8, 2007, to examine in more detail several specific concerns and challenges identified in the first conference. This second conference focused on regions with RTOs and ISOs and organized markets and dealt with: (1) demand response and market prices during a power shortage; (2) fostering

long-term power contracting; and (3) the responsiveness of RTOs and ISOs to customers and other stakeholders. The panel on demand response emphasized allowing customers to respond to high prices, particularly when generating capacity falls short of demand, providing adequate compensation for demand reductions, and allowing many small retail demand reductions to be aggregated for use in the wholesale power market. The panel on long-term power contracting discussed the role and availability of long-term contracts, as well as the importance of long-term transmission service and a robust transmission system. The RTO and ISO accountability panel discussed the need for RTOs and ISOs to be more responsive to their stakeholders; it considered several means of achieving this such as allowing a few stakeholder representatives to serve on hybrid boards of RTOs or ISOs. On April 5, 2007, the Commission also held a technical conference on market monitoring policies and heard from interested commenters on issues such as the development of the concept and functions of market monitoring and the MMUs' role with respect to the Commission, ISOs and RTOs, and various stakeholders.

32. Based on comments received at these three conferences, the Commission decided to consider in this ANOPR four issues in organized market regions that are not already being fully addressed by the Commission in other proceedings. These areas are: (1) the role of demand response in organized markets and greater use of market prices to elicit demand reductions during a power shortage; (2) increasing opportunities for long-term power contracting; (3) strengthening market monitoring; and (4) enhancing the responsiveness of RTOs and ISOs to customers and other stakeholders.

33. At this time, the Commission is not addressing in this ANOPR potential reforms outside the organized market regions. As discussed in our first technical conference, the primary concerns of wholesale customers and competitors in other regions are nondiscriminatory access to transmission and nondiscriminatory rules for power procurement. These two areas, although critically important, are being addressed by the Commission in other proceedings. In Order No. 890, the Commission reformed the OATT to ensure that it continues to provide nondiscriminatory access to transmission service. Much work remains to be done, however, and the Commission is focusing on the compliance phase of OATT reform to ensure that it is implemented properly, particularly in the area of regional transmission planning and the calculation of available transfer capability. With regard to power procurement, the Commission believes that competitive procurement can enhance the ability of LSEs to acquire reliable wholesale power supplies at reasonable prices. The Commission recognizes, however, that wholesale power procurement raises issues that are important to both the Commission and state commissions. The Commission is therefore pursuing a cooperative dialogue with NARUC to develop guidelines for best practices for power procurement. Since these two main areas of concern are being pursued in other proceedings, the Commission will not address reforms outside the RTO/ISO regions in this proceeding. Similarly, issues related to demand response are important to both this Commission and state commissions. Concerns with participation of demand response in organized and bilateral markets were voiced in our technical conferences. The Commission is pursuing a

collaborative dialogue with state commissions on best practices and coordination on demand response issues, and lessons learned there may be applicable to bilateral markets.

## III. <u>Demand Response and Pricing During Power Shortages in Organized</u> <u>Markets</u>

34. A well-functioning competitive wholesale electric market should reflect current supply and demand conditions. The Commission has expressed the view on numerous occasions that the wholesale electric power market works best when demand can respond to the wholesale price.<sup>32</sup> The Commission's policy is to facilitate the participation of demand response in the organized power markets, in part because demand response helps to hold down wholesale power prices, increases awareness of energy usage, provides for more efficient operation of markets, mitigates market power, and enhances reliability. This policy reflects the Commission's view that the value of electric power to customers is not always the same. It changes over time and varies from place to place. The value can be very different for two customers at the same time and place, one of whom may prefer to reduce consumption if the price is high and another who may be willing to pay a high price to avoid curtailment in an emergency.

<sup>&</sup>lt;sup>32</sup> <u>New England Power Pool and ISO New England, Inc.</u>, 101 FERC ¶ 61,344, at P 44-49 (2002), <u>order on reh'g</u>, 103 FERC ¶ 61,304, <u>order on reh'g</u>, 105 FERC ¶ 61,211 (2003); <u>PJM Interconnection, L.L.C.</u>, 95 FERC ¶ 61,306 (2001); <u>PJM Interconnection, L.L.C.</u>, 99 FERC ¶ 61,227 (2002); <u>Southwest Power Pool, Inc.</u>, 116 FERC ¶ 61,289 (2006).

35 While the Commission and the various RTOs and ISOs have done much to facilitate demand response in organized power markets, more can be done. In response to a requirement of EPAct 2005 to assess demand response capability nationally, the August 2006 FERC Staff Demand Response Assessment estimated the total installed demand response capability from existing programs nationally to be 37,500 megawatts (MW), or about five percent of current peak demand. Several reports indicate that the potential demand response capability available in the United States may be much greater than this.<sup>33</sup> The Commission's preliminary view is that RTO and ISO wholesale market design changes or additions, particularly for energy and ancillary services markets, may be needed to help tap that potential. Our goal is for RTOs and ISOs to develop rules to ensure the treatment of supply and demand resources on a comparable basis to the extent each is technically capable of providing the service. Our aim is not to afford demand resources preferential treatment over supply resources. For example, even under the mechanisms contemplated by this ANOPR, demand resources must satisfy all requirements for service provision comparable to those applied to supply resources, including but not limited to procedures for measurement and verification of performance, as well as penalties. Further, our aim is not to require demand resources to participate in these or any other resource programs. Rather, we are merely ensuring that the wholesale

<sup>&</sup>lt;sup>33</sup> <u>See, e.g.</u>, Ahmad Faruqui <u>et al.</u>, The Brattle Group, <u>The Power of Five Percent:</u> <u>How Dynamic Pricing Can Save \$35 Billion in Electricity Costs</u> (May 16, 2007), http://www.brattle.com/\_documents/Publications/ArticleReport2441.pdf.

markets are designed to accommodate demand resources in a manner comparable to supply resources, unless not permitted by state law. Therefore, the mechanisms should not intrude on state jurisdiction. The Commission's proposals do not require action by states but can benefit from such action.

## A. <u>Importance of Demand Response to Competition in RTO/ISO Areas</u>

36. The value of demand response to properly functioning RTO and ISO markets has been described in detail by many experts, such as Nobel Prize-winning economist Vernon Smith and Lynne Kiesling, in their paper titled "A Market-Based Model for ISO-Sponsored Demand Response Programs."<sup>34</sup> Demand response assists competitive wholesale markets in at least three ways.

37. First, demand response can help reduce wholesale prices and wholesale price volatility. The reduction is valued especially during peak periods, but demand response can also lower price and volatility during off-peak periods. Demand response can lower wholesale prices directly and indirectly. The direct effect occurs when a demand reduction is bid directly into the wholesale market: lower demand means a lower wholesale price. Demand response at retail, if not bid directly into the wholesale market by a large retail customer, affects the wholesale market indirectly because it reduces the need for power by the retail customers' LSE and in turn reduces that LSE's need to

<sup>&</sup>lt;sup>34</sup> Vernon Smith and Lynne Kiesling, <u>Market-Based Model for ISO-Sponsored</u> <u>Demand Response Programs</u>, (September 2005), http://www.defgllc.com/Downloads/051018\_DEFG\_DRwp02.pdf.

purchase power from the wholesale market. For example, where an LSE offers retail customers some form of time-of-use rates, the retail customers' response to rates during a higher-priced period reduces the LSE's wholesale demand and helps lower wholesale prices. This lower wholesale price may result in lower retail prices.

38. Second, demand response tends to flatten an area's load profile. With a flatter load profile, the distribution of generation types tends to shift toward lower-cost base load generation and away from higher-cost peaking generation, and this tends to lower the overall average cost to produce energy.

39. Third, demand response can help reduce the potential for market manipulation by reducing generator market power. As more demand response is available during peak periods, power suppliers need to account more for the price responsiveness of load when they consider higher-price bids. The more demand response is able to reduce the peak price, the more downward pressure it places on generator bidding strategies by increasing the risk to a supplier that it will not be dispatched if it bids too high.

40. RTOs such as PJM, NYISO, and ISO-NE have quantified the cost-effectiveness of demand response in their wholesale markets. They assessed both the reduction in market prices due to demand reductions and the value of demand response to system reliability. These assessments conclude that the demand response programs they operate produce net benefits associated with lower wholesale prices. For example, ISO-NE found that the benefits of its various economic and emergency demand response programs in 2005 more than compensate for its costs, largely payments to demand response participants and its

own extra operating costs.<sup>35</sup> PJM and NYISO found similar positive results in evaluations of their programs.<sup>36</sup>

## B. Prior Commission Actions To Address Demand Response

41. The Commission has issued numerous orders over the last several years on various aspects of electric demand response in organized markets. A goal of most of these orders was to remove unnecessary obstacles to demand response participating in the wholesale power markets of RTOs and ISOs.<sup>37</sup>

42. These orders approved various types of demand response programs, including programs to allow demand response to be used as a capacity resource and as a resource during system emergencies,<sup>38</sup> programs to allow wholesale buyers and qualifying large retail buyers to bid a demand reduction directly into the day-ahead and real-time energy

<sup>36</sup> NYISO, <u>NYISO 2006 Demand Response Programs</u>, Docket No. ER01-3001-016 (Feb. 16, 2007),; PJM, <u>Assessment of PJM Load Response Programs</u>, Docket No. ER02-1326-006 (Aug. 29, 2006).

<sup>37</sup> See, e.g., New York Independent System Operator, Inc., 92 FERC ¶ 61,073, order on clarification, 92 FERC ¶ 61,181 (2000), order on reh'g, 97 FERC ¶ 61,154 (2001); New England Power Pool and ISO New England, Inc., 100 FERC ¶ 61,287, order on reh'g, 101 FERC ¶ 61,344 (2002), order on reh'g, 103 FERC ¶ 61,304, order on reh'g, 105 FERC ¶ 61,211 (2003); PJM Interconnection, L.L.C., 95 FERC ¶ 61,306 (2001); PJM Interconnection, L.L.C., 99 FERC ¶ 61,139 (2002); PJM Interconnection, L.L.C., 99 FERC ¶ 61,227 (2002).

<sup>38</sup> <u>See</u>, <u>e.g.</u>, <u>PJM Interconnection, L.L.C.</u>, 117 FERC ¶ 61,331 (2006); <u>Devon</u> <u>Power L.L.C.</u>, 115 FERC ¶ 61,340 (2006). These orders allow demand resources to provide capacity resources.

<sup>&</sup>lt;sup>35</sup> ISO-NE, <u>An Evaluation of the Performance of the Demand Response Programs</u> <u>Implemented by ISO-NE in 2005</u>, Docket No. ER02-2330-040 (Dec. 30, 2005).

markets and certain ancillary service markets, particularly as a provider of operating reserves, as well as programs to accept bids from aggregators of retail customers (ARCs).<sup>39</sup> The Commission also has approved special demand response applications such as use of demand response for synchronized reserves and regulation service.<sup>40</sup> The theme underlying the Commission's approval of these programs has been to allow demand resources to participate in these markets on a basis that is comparable to other resources.

43. An important type of demand response program is one that allows demand response bids in the day-ahead and real-time energy markets by a group of retail customers. There is usually a minimum size bid allowed in an RTO or ISO market for any participating retail customer. The Commission has approved programs that allow smaller retail customers to combine their individual demand reductions into a larger block for bidding into the organized markets, if permitted by state law, without having to

<sup>40</sup> See, e.g., PJM Interconnection, L.L.C., 114 FERC ¶ 61,201 (2006).

<sup>&</sup>lt;sup>39</sup> We will use the phrase "aggregation of retail customers" to refer to RTOs and ISOs accepting bids from parties that aggregate demand response bids (which are mostly from retail loads), or ARCs. See, e.g., New York Independent System Operator, Inc., 95 FERC ¶ 61,223 (2001); New England Power Pool and ISO New England, Inc., 100 FERC ¶ 61,287, order on reh'g, 101 FERC ¶ 61,344 (2002), order on reh'g, 103 FERC ¶ 61,304, order on reh'g, 105 FERC ¶ 61,211 (2003); PJM Interconnection, L.L.C., 99 FERC ¶ 61,227 (2002).

go through their LSE.<sup>41</sup> A third party ARC, often called a curtailment service provider, typically provides this aggregation service. The aggregate demand reduction may be bid directly into the energy and ancillary services markets.

44. In addition, the Commission has explicitly addressed demand response in its recent final rules on OATT Reform (Order No. 890) and reliability standards (Order No. 693).<sup>42</sup> Order No. 890 requires any public utility with an OATT to allow qualified demand resources to participate in its regional transmission planning process on a comparable basis and to allow qualified demand response to provide certain ancillary services. Specifically, we agreed with a request by Alcoa that load resources (<u>i.e.</u>, demand response) should be permitted to self-supply and sell ancillary services to third parties.<sup>43</sup> In doing so, we also made clear that a Transmission Provider may use non-generation resources in meeting its OATT obligation to provide ancillary services, so long as those resources are capable of providing the service.<sup>44</sup> Order No. 890 did not

<sup>&</sup>lt;sup>41</sup> See, e.g., New York Independent System Operator, Inc., 95 FERC ¶ 61,223 (2001); New England Power Pool and ISO New England, Inc., 100 FERC ¶ 61,287, order on reh'g, 101 FERC ¶ 61,344 (2002), order on reh'g, 103 FERC ¶ 61,304, order on reh'g, 105 FERC ¶ 61,211 (2003); PJM Interconnection, L.L.C., 99 FERC ¶ 61,227 (2002).

<sup>&</sup>lt;sup>42</sup> See Mandatory Reliability Standards for the Bulk Power System, Order No. 693, 72 Fed. Reg 16,416 (April 4, 2007), FERC Stats. & Regs. ¶ 31,242 (2007).

<sup>&</sup>lt;sup>43</sup> Order No. 890 at P 887-88.

<sup>&</sup>lt;sup>44</sup> <u>E.g.</u>, Order 890, OATT Schedule 5 (Operating Reserve – Spinning Reserve Service).

require Transmission Providers to purchase ancillary services from non-generation resources or generation resources. Our proposal here would require RTO/ISO ancillary service markets to allow bidding by non-generation resources if they are capable of providing such services. Order No. 693 requires the Electricity Reliability Organization to revise its reliability standards so that all technically feasible resource options, including demand response and generating resources, may be employed in the management of grid operations and emergencies.<sup>45</sup>

45. The Commission has also encouraged demand response outside of its orders. The Commission has conducted several technical conferences on demand response over the last several years, most recently on April 23, 2007.<sup>46</sup> The NARUC-FERC Collaborative Dialogue on Demand Response began in November 2006 to explore state/federal coordination of efforts to promote and integrate demand response into retail and wholesale markets and planning. Also, as mentioned, in August 2006 the Commission published the staff report on demand response and advanced metering as directed by EPAct 2005 section 1252(e)(3).<sup>47</sup>

<sup>47</sup> See FERC Staff Demand Response Assessment.

<sup>&</sup>lt;sup>45</sup> Order No. 693 directed the Electricity Reliability Organization to develop new versions of its BAL-002, BAL-005, and EOP-002 reliability standards to allow demand side resources to provide contingency reserves. Order No. 693 at ¶ 330-35, 404-06, 573.

<sup>&</sup>lt;sup>46</sup> For example, the Commission conducted a technical conference on January 25, 2006 to support the <u>FERC Staff Demand Response Assessment</u> in Docket No. AD06-2-000. The April 23, 2007 conference was convened in Docket No. AD07-11-000.

46. In this ANOPR, the Commission's focus is on exploring market rules that allow both wholesale and qualifying retail customers to bid demand response into the dayahead, real-time energy, and ancillary services markets.

## C. Remaining Problems with Demand Response in Organized Markets

47. While progress has been made to increase demand-responsiveness and priceresponsiveness in organized markets, more needs to be done.

48. An effective way for demand to respond to price is at the retail level, through some form of time-based retail rates (time-based retail rates include rates that vary by hour, such as real-time pricing, or by blocks of time, such as time-of-use rates or critical peak pricing). Demand response is more effective when retail rates are tied to current wholesale market-clearing prices. Effective demand response can be achieved by linking the wholesale and retail markets. While the Commission can remove some obstacles to demand participation in organized markets, more effective demand response also requires the action of state commissions.

49. As discussed in the <u>FERC Staff Demand Response Assessment</u>, some forms of demand response are well-suited to provide the ancillary services of spinning reserves, supplemental reserves, energy imbalance, and regulation and frequency response.<sup>48</sup> Because demand is always connected and demand reduction, in principle, can always be

<sup>&</sup>lt;sup>48</sup> For an explanation of each of these ancillary services, see the <u>pro forma</u> OATT, Schedules 3 through 6, contained in Order No. 890.

available, some forms of demand resources may be able to provide a rapid, near real-time response.<sup>49</sup> Nevertheless, except for a few markets, demand response is not able to participate in these ancillary services markets. ISO-NE, NYISO, and CAISO allow demand resources to provide supplemental (non-spinning) reserves. As of mid-2007, only PJM allows demand resources to provide synchronized reserves (PJM's term for spinning reserves) and regulation service (although no resource has yet qualified to provide this service in PJM).

50. Several factors may account for the lack of participation of demand resources in some ancillary services markets. System operators responsible for maintaining reliable operation have little or no experience with the responsiveness of demand resources and may lack confidence in them. To qualify to provide ancillary services, a resource must satisfy certain requirements such as having a minimum size<sup>50</sup> and real-time telemetry. These requirements can limit which customers may participate and may also obligate customers to invest in real-time metering and monitoring equipment at their sites.

<sup>&</sup>lt;sup>49</sup> For example, electric-arc steel furnaces have the capability to adjust their consumption rapidly, and air conditioner cycling programs can respond within several minutes of execution.

<sup>&</sup>lt;sup>50</sup> ISO-NE places a minimum size of 5 MW for participation. <u>See</u> ISO-NE, <u>ISO</u> <u>New England Manual for Market Rule 1 Accounting</u> (May 31, 2007), at section 12.3.5.3, http://www.isone.com/rules\_proceds/isone\_mnls/m\_28\_market\_rule\_1\_accounting\_(revision\_27)\_05\_3

<sup>1</sup>\_07.doc
51. In addition, market rules for bidding and participating in ancillary services markets were developed with generation in mind and may not make sense for demand response resources. Distinguishing among rules that must apply to all resources to maintain reliability and those that can be amended to accommodate inflexible or special case resources is an important market design issue. For example, many demand resources can respond quickly and at a low cost if called on for a short duration, which may make them well suited for providing operating reserves. A large industrial customer, such as a steel mill, provides an operating reserve when it reduces its load quickly within seconds or minutes, in response to direction from a system operator. However, if market rules require that bids be made into a joint energy-plus-reserves market, those offering operating reserves must also be available to provide energy or other ancillary services. The result is that the operating reserve provider that risks being called on frequently or for a prolonged period in the energy market may simply decide not to participate in the energy market, and consequently not provide demand reduction as operating reserves. Because energy use is necessary to a customer's business, frequent or lengthy unplanned interruptions could disrupt that business. As a result, market rules that do not allow a demand response provider to limit the frequency and duration of interruption creates a disincentive for a demand resource to bid into the operating reserves market.<sup>51</sup>

<sup>&</sup>lt;sup>51</sup> See FERC Staff Demand Response Assessment at 123.

52. Demand response providers need market rules that allow bids to be flexible and that reflect bidders' willingness to offer various levels of service depending on the market prices. In fact, the design of today's organized markets does allow some flexible and some price-sensitive bidding into day-ahead and real-time energy markets. Nevertheless, the Commission is concerned that some market features may inhibit LSEs and other demand response providers from bidding load reductions into energy markets. For example, in most organized markets, if an LSE's actual purchase from the real-time market differs from the purchase it scheduled in the day-ahead market, it may be assessed an uplift charge (separate from any imbalance charge)<sup>52</sup> While it is important to have mechanisms in place that encourage LSEs to accurately forecast and schedule their loads in the day-ahead market, these types of charges may unnecessarily discourage an LSE from urging retail customers to conserve energy during a system emergency.

53. Organized energy market rules may restrict the type of bid that a LSE or ARC may submit. In some cases, this may be intended to treat a demand response bid the same as a generation bid, but, in other cases there may be a restriction on a demand response bid

<sup>&</sup>lt;sup>52</sup> During reserve shortages on August 1 in the Midwest ISO region, LSEs contributed close to 3,000 MW of demand reductions but were assessed revenue sufficiency guarantee charges – charges that ensure that any generator scheduled or dispatched by the Midwest ISO after the close of the day-ahead energy market will receive no less than its offer prices for start-up, no-load and incremental energy. Wisconsin Public Service Commission Chairperson Daniel Ebert reported on these charges at the April 23, 2007 technical conference on demand response. <u>See</u> Technical Conference on Demand Response in Wholesale Markets on April 23, 2007, Tr. 83-84 (Daniel Ebert, Wisconsin Public Service Commission) (Docket No. AD07-11-000).

that does not apply to a generation bid. Bidding features available to generation, such as a guaranteed minimum price and a minimum duration of service, are often not available to demand reductions. Some generators need such features if, for example, they are not able to start and stop frequently or if cycling output up and down produces excessive stress on their equipment. Providers of demand reductions may have their own limitations on cycling but not be allowed to express these in their bids. For example, if a factory reduces consumption in response to a dispatch signal, it may be required to stop production for an entire work shift or until equipment can be restarted. Frequent directions to reduce load for short durations could be disruptive to production. Allowing demand response providers to make bids with provisions for minimum duration and price limits would make participation by such customers in the energy market more attractive. 54. As mentioned above, the Commission has approved some demand response programs that allow retail customers, if it is consistent with state law, to bid their combined demand reductions through an ARC into wholesale day-ahead and real-time markets. PJM, ISO-NE and NYISO have allowed such ARCs to become market

participants, and these RTOs accept bids from ARCs.<sup>53</sup> If these load reduction bids are accepted, the RTO or ISO directs the customers to reduce their consumption as bid and

<sup>&</sup>lt;sup>53</sup> These aggregation of retail customers programs go by various names. PJM operates the Economic Load Response Program that allows direct bidding in day-ahead and real-time markets. NYISO operates the Day-Ahead Demand Response Program. ISO-NE operates the Day-Ahead Load Response Program and the Real-Time Price Response Program.

the customers are paid the market-clearing price. The aggregation of retail customers programs in PJM and ISO-NE allow program participants to reduce their demand before the real-time market runs without being subject to uplift charges for unscheduled changes from the day-ahead schedule.

Another factor that may limit participation by LSEs and retail customers in demand 55. response programs is the use of bid caps and price caps in the market design. Bid caps and price caps in RTO and ISO markets are designed to limit the opportunity to exercise market power in these markets, but they also may prevent the markets from expressing prices that are legitimately high due to a shortage. These caps may not permit buyers in RTO and ISO wholesale energy markets to see prices high enough to signal that there is a power shortage and reliability is at risk. Moreover, when power is in short supply and price is high, retail prices remain fixed, and retail customers do not adjust their demand to react to wholesale price signals because these price signals are not seen. Consequently, both generation and demand response can be in short supply at once, and the marketclearing price may not reflect the actual cost of providing more power or the value to customers of not being interrupted. Further, as discussed in the long-term contracting section below, capping the exposure of LSEs to higher prices may reduce their incentive to explore various hedging activities, such as participating in interruptible demand response programs, entering into long-term contracts or similar power supply procurement options, and building new generating units.

56. Certain demand response programs may themselves act to dampen prices during a power shortage. Emergency demand response programs are those intended to ensure reliability, which are called on by RTOs and ISOs only during a system emergency. They may be paid a fixed price such as \$500 per MWh when called on. Typically, these emergency resources are not paid the market-clearing price. As a result, the market-clearing price may decrease because demand is reduced when an emergency demand response resource is used, even though it is the highest-valued resource used at the time. The reduced price signals that buyers should consume more and suppliers produce less, which is contrary to the signal that should be sent in an emergency. Only NYISO has integrated its emergency demand response programs into the market-clearing process, <sup>54</sup> and Midwest ISO is discussing a similar integration based on its 2006 experience.

# D. <u>Proposed Commission Actions to Improve Demand Response and</u> Market Pricing During a Power Shortage

57. The Commission's preliminary view is that the following proposals, if adopted, would address market rules to ensure that demand response can participate directly and would be treated on a comparable basis to supply resources in the organized electric energy and ancillary services markets. This would benefit customers by allowing market prices to reflect the need for demand response (or more generation) during a power shortage. The Commission seeks comment on these proposals. In addition, the

<sup>&</sup>lt;sup>54</sup> The Commission approved this change in 2003. <u>New York Independent System</u> <u>Operator, Inc.</u>, 102 FERC ¶ 61,313 (2003).

Commission does not intend the following proposals to be the only mechanisms open to consideration for ensuring that demand resources be treated comparably to supply resources. Commenters may propose other mechanisms for the organized markets to adopt that would ensure that demand resources and supply resources are treated on a comparable basis in the energy and ancillary services markets.

58. The Commission is considering four proposals to modify the design of wholesale RTO and ISO markets to ensure that demand resources may participate directly in the energy and ancillary services markets on a comparable basis to supply resources. As a complement to these potential reforms, the Commission is also considering revisions to existing mitigation rules to enable the wholesale market prices to help balance supply and demand when power supplies are tight so as to better ensure power system reliability. 59. First, the Commission is considering a proposal to obligate each RTO or ISO to purchase demand resources in its markets for certain ancillary services, similar to any other resources, if the resources meet the necessary technical requirements and the resources submit a bid under the generally-applicable bidding rules at or below the market-clearing price, unless the seller is not permitted to do so by state retail laws or regulations. The Commission proposes modifications to RTO and ISO tariffs that would apply this requirement for energy imbalance, spinning reserves, and supplemental reserves, as defined in the pro forma OATT, or their functional equivalents in an RTO or

ISO tariff.<sup>55</sup> To be eligible to supply these ancillary services, demand resources must be capable of reducing demand within seconds or minutes. Demand resources must meet the RTO's or ISO's reasonable size, telemetry, metering, and bidding requirements. For example, the Commission approved a one-megawatt minimum bid by demand resources to provide certain operating reserves in PJM. The RTO or ISO may propose reasonable standards for metering and telemetry needed by system operators to call on these reserves and measure their compliance. Bidding rules for demand resources should not differ from the rules for generation resources unless the reason for the difference is adequately explained and justified. An RTO or ISO may propose other requirements for demand resources to provide these ancillary services that are necessary for reliability and effectiveness.

60. The Commission also proposes to modify RTO and ISO tariffs to provide that demand resources must be allowed to provide spinning and supplemental reserves without also being required to sell into the energy market. This change to market rules is intended to address the disincentive for demand response to be an operating reserve. Without this modification, customers may hesitate to offer demand reductions as operating reserves due to concerns about disruptions to their businesses. The

<sup>&</sup>lt;sup>55</sup> Order No. 890 also allows qualified demand resources to provide the other ancillary services of reactive supply and voltage control, regulation and frequency response and generator imbalance.

Commission has approved market rules adopted by the California ISO and PJM that reduce this disincentive.<sup>56</sup>

61. The Commission requests comment on the feasibility and effectiveness of the proposal to require RTOs and ISOs to allow demand resources to provide these ancillary services. It also requests comment on whether to allow each RTO and ISO to propose its own minimum requirements (for example, as to minimum size bids, measurement and telemetry) or to specify appropriate minimum requirements in a Commission rule. In particular, the Commission requests comment on what size a minimum bid should be. Any proposal must comply with the ERO mandatory reliability standards.<sup>57</sup>

62. Second, the Commission is considering a proposal to modify RTO and ISO tariffs to eliminate, during a system emergency, a charge to a buyer in the energy market for taking less electric energy in the real-time market than purchased in the day-ahead market. This proposal is intended to eliminate a disincentive for demand response in the real-time market. We refer to the charge that we propose to eliminate during an emergency as a "deviation charge," which covers certain uplift costs, as explained below.

<sup>&</sup>lt;sup>56</sup> <u>See, e.g., PJM Interconnection, L.L.C.</u>, 114 FERC ¶ 61,201 (2006) (approving the use of demand resources as operating reserves in PJM). PJM allows demand resources to submit separate bids in its various energy and operating reserve markets.

<sup>&</sup>lt;sup>57</sup> In particular, any proposal must comply with BAL-002 (Disturbance Control Performance) and EOP-002 (Capacity and Energy Emergencies).

63. Before setting out the specific proposal to eliminate this deviation charge, it is necessary to summarize first how the day-ahead and real-time markets relate. A buyer that makes a purchase in the day-ahead market has a commitment to pay for the amount of energy it purchases at the day-ahead market price. If that buyer consumes more energy in real-time than it bought the day before, it pays the day-ahead market price for the amount purchased in the day-ahead market and in addition pays the real-time market price for the extra energy consumed. The real-time price may be higher or lower than the day-ahead price. If the buyer takes less energy in the real-time market than it purchased in the day-ahead market, in effect it sells the reduction back to the market at the real-time market price. The buyer profits if it sells the energy reduction back when the real-time price is higher than the day-ahead price, and suffers a loss when the real-time price is lower.<sup>58</sup> Nothing in the proposal here would change this effect. If many buyers were to systematically purchase more energy in the day-ahead market than they expect to take in real time, the reduced real-time demand is likely to result in a lower real-time price. The potential loss to the buyers should effectively discourage purchasing more energy than needed in the day-ahead market.

64. Aside from the buyer's market profit or loss, some RTOs and ISOs assess buyers a charge when real-time consumption deviates from day-ahead purchases. This charge

<sup>&</sup>lt;sup>58</sup> This true-up process substitutes for an energy imbalance charge in most RTO and ISO spot markets.

recovers at least some types of "uplift" costs, which are the portion of the generators' costs (such as start-up costs) that exceed their energy market revenues. These uplift costs may include the cost of the extra operating reserves needed when the total real-time demand of all buyers exceeds the total scheduled day-ahead demand. The extra reserves are not needed, however, when real-time demand is less than the day-ahead demand. Nevertheless, the deviation charge may apply to any deviation from the day-ahead schedule.<sup>59</sup>

65. Notwithstanding that these charges are typically meant to serve as an incentive for accurate scheduling, they tend to discourage demand response. When supplies are tight and the real-time price is high, a buyer that reduced load but nevertheless has to pay a deviation charge may be penalized for taking the appropriate action. This unintended disincentive may lead a buyer to maintain a high load or discourage an LSE from calling on the demand response capabilities of its retail customers. This negative incentive is especially troublesome during a system emergency when load reduction is needed most. 66. The Commission requests comment on a proposal to require RTOs and ISOs to eliminate this deviation charge for a load reduction during a system emergency. The

<sup>&</sup>lt;sup>59</sup> Although covering operating reserve costs, the deviation charge may also cover other costs not affected by the direction of the deviation.

Commission has already approved a PJM proposal to apply no deviation charge for a load reduction from day-ahead to real-time during a system emergency.<sup>60</sup>

67. The Commission also requests comment on whether an RTO or ISO should assess a deviation charge for a day-ahead to real-time load reduction when there is no system emergency. Eliminating the charge would encourage demand response, but might have unintended consequences. The Commission understands that these deviation charges cover real costs. Would eliminating the deviation charge for taking less energy in realtime result in an unfair reallocation of these costs to others? Would the incentive described above—for a buyer to avoid purchasing more than it needs in the day-ahead market—adequately discourage poor scheduling practices, or is it important to retain the deviation charge for this reason? Would eliminating the deviation charge for a real-time load reduction introduce any new opportunity for gaming behavior?

68. As background for the third proposal, demand resources currently participate in every organized real-time market, with the exception of SPP, which is considering such a proposal. Demand resources also currently participate in the organized day-ahead markets of NYISO, ISO-NE, and PJM, while CAISO and the Midwest ISO are considering such a proposal. In addition to participation by individual customers, ARCs

<sup>&</sup>lt;sup>60</sup> During an emergency situation a deviation is only assessed if "that deviation increases [the load's] spot market purchases..." PJM, <u>Manual 28: Operating Agreement Accounting</u>, at 65 (March 7, 2007), http://www.pjm.com/contributions/pjm-manuals/pdf/m28.pdf

aggregate demand reductions by retail customers and bid these aggregated reductions into the energy markets. The <u>FERC Staff Demand Response Assessment</u> and comments during our technical conferences indicate that more needs to be done to facilitate direct participation in the energy markets by ARCs who bid into the wholesale markets aggregated demand reductions on behalf of retail customers and other customers. The potential contribution from ARCs has increased with technological developments that make demand response more automated.

69. The Commission is considering a proposal to require RTOs and ISOs to amend their market rules as necessary to permit an ARC to bid a demand reduction on behalf of retail customers directly into the RTO's or ISO's organized markets. This proposal is intended to remove a barrier to demand response in some RTO and ISO energy markets<sup>61</sup> by allowing an ARC to act as an intermediary for many small retail loads that cannot individually participate in the organized market because they lack standing as an LSE or because they individually cannot meet a requirement that a demand response bid be of minimum size.

<sup>&</sup>lt;sup>61</sup> Aggregation of retail customers is used now in the energy markets of PJM, ISO-NE, and NYISO and in PJM's Synchronized Reserve and Regulation Service market in PJM. PJM's aggregation of retail customers is integrated into its market rules for PJM's Interchange Energy Market. Aggregation of retail customers in ISO-NE and NYISO are separate programs that are not yet part of the market rules.

70 Under this proposal, the market rules may not exclude a demand response bid from a third-party ARC that is not a LSE unless state retail electric laws or regulations do not permit this. This proposal would apply to each of the RTO's or ISO's organized markets into which an LSE may submit a demand response bid. The market rules for ARCs may not differ from the rules for LSEs, except as needed to comply with state retail service laws and regulation, unless the RTO or ISO satisfactorily explains the reason for any such difference in its compliance filing. RTOs and ISOs may, however, set rules for ARC participation that are the same as or equivalent to its rules for LSEs. Such rules may address such subjects as bidding requirements; technical requirements for communicating demand response bids and measuring demand response performance; a minimum organized market price above which the ARC may offer to reduce load and below which it may not; a minimum or maximum number of contiguous hours for which the load reduction must be committed; and how to account for start-up costs associated with reducing load, creditworthiness, and settlement procedures.

71. Under this proposal, the Commission also would direct the RTOs and ISOs to coordinate to identify common issues, best practices solutions, and market rules that are consistent between regions, particularly in the areas of market procedures, bidding protocols, communication protocols, and measurement and verification. The Commission would direct the RTOs and ISOs to report, within 90 days of the effective date of any Final Rule in this proceeding, on how they intend to explore best practices, common issues, and market rules for the direct participation of demand resources in their

markets.<sup>62</sup> Although we would direct RTOs and ISOs to consider best practices, the Commission does not intend that every region would have to adopt the same practices, rules, or procedures.

72. The Commission requests comments on the proposal to require RTOs and ISOs to amend their market rules to permit demand response of aggregated retail customers. Are there other requirements the Commission should consider to improve the efficiency of aggregation of retail customers? The Commission also requests comments on the conditions under which a RTO or ISO aggregation of retail customers program would no longer be needed.

73. The Commission also requests comment on whether aggregation of retail customers allows inappropriate compensation when a retail customer is paid for wholesale demand reduction and also saves in its retail bill from the same demand reduction. The Edison Electric Institute (EEI) has argued that the payments to customers represent subsidies that are not justified or a form of double payment.<sup>63</sup> For example, because a customer's bill decreases for every megawatt-hour (MWh) not consumed, if

<sup>&</sup>lt;sup>62</sup> The Commission would also encourage the RTOs and ISOs to work within the ISO/RTO Council to consider best practices that may be applicable to the members' regions. The Commission also encourages continued participation in the North American Energy Standards Board's (NAESB) measurement and verification initiative.

<sup>&</sup>lt;sup>63</sup> <u>See</u> Technical Conference on Demand Response and Advanced Metering on January 25, 2006, Tr. 26 (Richard Tempchin, EEI) (Docket No. AD06-2-000), http://elibrary.ferc.gov:0/idmws/file list.asp?document id=4378387

that customer is also paid an amount by the RTO or ISO for the same MWh not consumed, EEI and others allege that the customer has been compensated twice. They contend that use of time-based rates is the correct way to achieve price-responsive demand and that any additional payment to retail customers by RTOs and ISOs is inappropriate and should be considered a temporary measure at best. Others disagree with this criticism, arguing that the price reduction does not fully reflect the social benefits produced by the demand reduction.<sup>64</sup> Further, critics of aggregation of retail customers programs charge that the incentives for aggregation of retail customers programs in energy markets are inconsistent across RTOs and ISOs and the programs are susceptible to gaming behavior.<sup>65</sup>

74. The Commission requests comments on how to appropriately compensate a customer for demand response. We seek comment on whether there is any inappropriate double compensation. We also solicit comments on whether providing an additional payment is appropriate to compensate for the value of the demand response. For

<sup>&</sup>lt;sup>64</sup> R.N. Boisvert and B.F. Neenan, Neenan Associates, <u>Social Welfare Implications</u> of Demand Response Programs in Competitive Electricity Markets (August 2003), http://eetd.lbl.gov/ea/EMP/reports/LBNL-52530.pdf.

<sup>&</sup>lt;sup>65</sup> The potential for gaming occurs if an aggregator submits a demand reduction bid on behalf of customers that will have reduced consumption anyway for another reason such as maintenance, vacation, or holiday. The Commission approved NYISO's bid floor of \$75/MWh in its Day Ahead Demand Response Program to eliminate or reduce the incentive for this behavior. <u>New York Independent System Operator, Inc.</u>, 109 FERC ¶ 61,101 (2004).

example, PJM pays the market-clearing price less the generation and transmission component of each retail customer's retail rate (this price reduction is sometimes called the generation offset).<sup>66</sup> Would a PJM-type generation offset reduce the amount of the alleged double compensation?<sup>67</sup> Would a generation offset encourage demand response more so during a period of high price, when it is needed most?

75. Fourth, the Commission is considering whether to modify RTO and ISO market power mitigation rules and other market rules when demand is nearing the amount of available supply. When supplies are short relative to demand and reliability is threatened, market rules that limit the market price may have the unintended effect of making demand response less attractive to its providers. The Commission seeks comment on four potential ways to modify mitigation rules to allow the market price to better reflect the value of lost load in an emergency situation.

76. One way to address this issue to require that RTOs and ISOs increase the energy bid caps and price caps above the current levels only during an emergency. When the market price is constrained, it is not possible to distinguish customers who place a high value on uninterrupted electric service from other customers who would reduce demand

<sup>&</sup>lt;sup>66</sup> For example, if the market-clearing price is \$100 per MWh and the generation component of a customer's retail rate is \$75 per MWh, the payment for the load curtailment would be \$25 per MWh (\$100 - \$75). In PJM's Economic Load Response Program, this netting is applied when the market-clearing price is below \$75/MWh. <u>See</u> section 3.3A.4(d) of the PJM Operating Agreement.

<sup>&</sup>lt;sup>67</sup> PJM Interconnection, L.L.C., 99 FERC ¶ 61,227 (2002).

rather than pay a price that reflects that high value. An emergency situation typically occurs when a system faces a shortage of operating reserves—a reliability standard violation. Demand for energy in the real-time market then competes with the need for spare generation for operating reserves to maintain grid reliability. To maintain operating reserves, electric energy service must be reduced immediately, either by prorating the load reduction across all customers or by using the market price to allocate the limited energy available to those who value it most. In defined periods of tight supply, PJM's market rules remove sellers' bid caps, but keep the market-wide \$1,000 per MWh offer cap. If the market-wide cap was also raised, the real-time market could clear at a price above the current cap, customers could decide whether to purchase energy at this higher price, and those who place a higher value on energy could continue to buy it while those who do not value it as highly could reduce their demand. All bid caps could be raised to a high level, for example, when ten-minute operating reserves are about to drop below required levels. Raising caps in an emergency would allow each customer to decide the value of its own lost load. To use this method, an RTO and ISO would have to establish market rules to specify the emergency conditions for raising the caps and the higher bid levels allowed. RTO and ISO markets would have to establish procedures for vigorous oversight and monitoring for the exercise of market power during a system shortage.

77. The Commission requests comment on this proposal to raise energy bid caps and market-wide caps in an emergency, and on what operating conditions should constitute an emergency shortage.

78. A second way to allow the market price to reduce demand during an emergency is to raise bid caps above the current level only for demand bids<sup>68</sup>—the offers by buyers to purchase a certain amount of energy at a given price—in the day-ahead and real-time markets, while keeping generation bid caps in place. That is, a buyer would be allowed to inform the RTO or ISO about how much energy it would purchase at various prices above the current bid caps. Under this proposal, such high demand bids would not only be allowed but also would be allowed to set the market price if they clear the market.<sup>69</sup> The high market price under this approach would create an incentive for all buyers to lower their demands during an emergency. To the extent the buyers are not also sellers, this approach raises fewer concerns about market power than the first approach, which raises bid caps for all market participants. The Commission requests comment on

<sup>&</sup>lt;sup>68</sup> A demand bid is different from a demand reduction bid. The first is an offer by a potential purchaser to buy a certain amount of energy at a given market price, and the second is an offer by a purchaser to reduce his normal purchase by a given amount in return for compensation.

<sup>&</sup>lt;sup>69</sup> For example, a demand bid of \$1,500 could set the market price under the following conditions. If there is not enough generation capacity to meet all demand after the RTO or ISO reserves enough generating capacity to meet ancillary service requirements and if there is just enough generating capacity to meet the combination of: (1) all ancillary service requirements, (2) all price-insensitive demand (<u>i.e.</u>, buyers who are willing to purchase energy at any price), and (3) all demand with price bids above \$1,500 per MWh, the market would clear at a price of \$1,500 per MWh. In this case, a demand bid of \$1,500/MWh would set the market price. Buyers bidding less than this price for all or part of their total demand are in effect choosing not to purchase energy for \$1,500 per MWh, and thus would have to reduce their demand accordingly. All other buyers would receive their requested energy.

whether this method would be more effective, less subject to the exercise of market power, or otherwise easier to implement than raising all bid and price caps.

79. A third way to allow the market price to reduce demand during an emergency is to require a demand curve for operating reserves in each RTO or ISO market. Under this approach, when available generating capacity falls short of combined energy demand and operating reserve requirements, the market price for energy and operating reserves would increase to specified levels (typically above the market-wide seller offer cap) and the price level would increase with the severity of the shortage. This approach would ensure that market prices reflect tight conditions on the grid without altering any of the market power mitigation restrictions on either supply or demand bids. The market rules in NYISO and ISO-NE include a demand curve for operating reserves that sets the real-time market price when operating reserves are low. These rules are intended to help assure reliability by reducing demand significantly during a shortage. The Commission could require each RTO and ISO to establish market rules that set real-time market prices at specific pre-determined values during an emergency when operating reserves are low. The Commission requests comment on whether it should require all ISOs and RTOs to adopt such a demand curve, how to set its parameters, and how to apply these rules to any local shortages with high locational prices that do not have a significant effect throughout the entire RTO or ISO region. In particular, how should an emergency be defined now that mandatory reliability rules are in effect?

80. A fourth way to allow the market price to reduce demand during an emergency is to set the market-clearing price at the payment made to participants in an emergency demand response program, described above. For example, if payments to participants in emergency demand response programs are set at \$500 per MWh, the market-clearing price when these resources are called would be set at \$500 per MWh. This approach would avoid the problem caused by the drop in market price that results from calling on an emergency demand response provider, which sends the wrong price signal to both suppliers and consumers. To implement this approach, the Commission would propose to amend RTO and ISO market rules to allow the payment to emergency demand response providers to set the market-clearing price for all supply and demand resources dispatched. RTOs and ISOs would have to amend their market rules on unit commitment and settlement to adjust wholesale energy prices outside the normal clearing process. RTOs and ISOs may also have to review and adjust the emergency conditions under which these emergency demand response resources would be called.

81. The Commission requests comment on these four ways to allow the market price to reduce demand during an emergency. Should any be used and, if so, which way or combination of ways would be most beneficial? For any of these ways to allow the market price to elicit demand reduction during an emergency, the Commission requests comments on whether it should require a specific method, or, given the differences in market design among the RTOs and ISOs, adopt the general requirement and direct each RTO and ISO to develop its own compliance mechanism.

82. Finally, as discussed above, some RTOs and ISOs have quantified the costeffectiveness of demand response in their wholesale power markets. The Commission requests comments on whether it should require all RTOs and ISOs to do this for their markets that have demand response.

# IV. Long-Term Power Contracting in Organized Markets

83. Competitive wholesale markets need a strong infrastructure—both adequate electricity supply and a robust interstate transmission grid. Long-term contracts are an important tool to achieve and maintain a strong power infrastructure, particularly for new entrants into the generation sector and especially for many renewable energy developers. Long-term contracts are important to effective competition both in regions with organized wholesale markets and in regions without organized markets. Competitive solicitation is a sound vehicle to support long-term contracts in regions with and without organized markets. Order No. 890 and long-term firm transmission rights support longterm transmission service contracts in both kinds of regions. In this proceeding, the Commission proposes additional steps to facilitate opportunities for long-term power contracting in organized markets. Although long-term contracts are important in all regions, the Commission has a special responsibility in organized markets to ensure that our market rules support long-term contracting. The Commission seeks comment on whether there are additional steps that can be taken to support increased long-term contracting. The Commission discusses below the advantages of long-term power contracting in organized market regions and various factors that affect the degree to

which such contracts are executed. The Commission then considers potential steps that could facilitate greater long-term power contracting in organized market regions, such as encouraging or requiring development of standardized long-term products and providing greater market transparency by posting on the internet information about recent long-term power contracts and offers for future long-term sales and purchases. Given the importance of long-term contracts to development of the strong infrastructure necessary to support competitive markets, the Commission also recognizes the need to provide contract certainty. The Commission believes it can discharge its legal duties under the FPA while providing contract certainty.

# A. <u>Importance of Long-Term Power Contracts and Factors Affecting</u> <u>Contracting Decisions by Buyers and Sellers</u>

84. The Commission believes that the organized market regions facilitate long-term contracting in several ways, such as eliminating pancaked rates for long distance power sales, eliminating internal loop flow problems that might otherwise lead to unplanned curtailment of long distance transmission service, and ensuring reliable transmission operation over a large area that encompasses many potential sellers and buyers of long-term power. These and other features of RTO and ISO transmission services expand the geographic scope of markets available to sellers and buyers of long-term power. Our goal here is to further improve opportunities for long-term contracting in RTO and ISO regions.

85. It is important that wholesale sellers and buyers have adequate opportunities to sell and buy electric power through long-term power contracts to allow them to manage their exposure to uncertain future spot market prices. Sellers and buyers should also have the opportunity to sell and buy electric power in the spot market. The Commission believes that it is important for buyers and sellers in organized markets to be able to choose a portfolio of short-term, intermediate-term, and long-term power supplies. Having portfolio choice allows market participants to manage the risk that comes from uncertainty. Forward power contracting by buyers combined with purchases from a spot market with demand response can be an efficient and low-cost way of meeting customer needs because both buyers and sellers can hedge risk as well as adapt to actual real-time supply and demand conditions. Competitive forward power contracting allows many sellers to compete to provide electric service, and greater reliance on long-term power contracting could decrease the incentive for sellers to exercise market power in the spot market if there is reduced opportunity to profit from such action.

86. At the Commission's technical conference on May 8, 2007, speakers on the longterm power contracting panel agreed that long-term power contracts are important to a well functioning electric market.<sup>70</sup> Customers argued that long-term contracts are essential to providing price stability and supporting the adequacy of supply over the long

<sup>&</sup>lt;sup>70</sup> Transcript of Conference at 111, Conference on Competition in Wholesale Power Markets, Docket No. AD07-7-000 (May 8, 2007).

run.<sup>71</sup> Sellers argued that long-term contracts are important and often essential to financing new generation sources.

87. Customers and sellers differed sharply, however, on the nature and extent of any impediments to long-term contracts. Customers argued that suppliers are reluctant to sell power under long-term contracts at a price attractive to those customers.<sup>72</sup> They argued that the presence of liquid spot markets gives suppliers an incentive to sell most of their output on a daily or hourly basis, not through long-term contracts. By contrast, suppliers and their representatives said they are willing to sign long-term power contracts but asserted that buyers simply do not want to pay the long-term cost of power. In particular, they alleged that customers do not want to pay enough to finance new generation and any needed transmission investment. With respect to existing assets, suppliers argued that customers often want a price pegged to a particular fuel (e.g., coal or nuclear), even if that price does not reflect the long-term market value of electric power.

# B. <u>Commission Actions To Support Long-Term Power Contracts</u>

88. The Commission fully supports reliance on long-term contracts to provide price stability, hedge risk, and support financing for new investments. In this regard, the Commission has taken a number of steps to facilitate long-term contracting. The

<sup>71</sup> *Id.* at 107.

<sup>&</sup>lt;sup>72</sup> <u>See</u>, <u>e.g.</u>, Post-Technical Conference Comments of the American Public Power Association, Docket No. AD07-7-000 (Mar. 13, 2007); Supplemental Comments of the Electricity Consumers Resource Council, Docket No. AD07-7-000 (Mar. 12, 2007).

Commission adopted a final rule on long-term transmission rights for organized market regions in Order No. 681.<sup>73</sup> The assurance of long-term transmission availability at a predictable cost is an important component of a buyer's decision to sign a long-term power contract with a distant supplier.

89. Also, the Commission adopted transmission planning reforms in Order No. 890.

These reforms provide an open and transparent process for wholesale entities and

transmission providers to plan for the long-term needs of their customers, including

making transmission investments that can support long-term contracts for generation.

90. The Commission has also sought to lower barriers to entry for new generation that can support long-term contracts. In a series of orders (Order Nos. 2003, 2006, and 661),<sup>74</sup> the Commission adopted interconnection rules for large, small, and wind

<sup>&</sup>lt;sup>73</sup> <u>Long-Term Firm Transmission Rights in Organized Electricity Markets</u>, Order No. 681, 71 Fed. Reg. 43,564 (August 1, 2006), FERC Stats. & Regs. ¶ 31,226, <u>order on reh'g</u>, Order No. 681-A, 117 FERC ¶ 61,201 (2006).

<sup>&</sup>lt;sup>74</sup> Standardization of Generator Interconnection Agreements and Procedures, Order No. 2003, FERC Stats. & Regs., Regulations Preambles 2001-2005 ¶ 31,146 (2003), order on reh'g, Order No. 2003-A, FERC Stats. & Regs., Regulations Preambles 2001-2005 ¶ 31,160, order on reh'g, Order No. 2003-B, FERC Stats. & Regs., Regulations Preambles 2001-2005 ¶ 31,171 (2004), order on reh'g, Order No. 2003-C, FERC Stats. & Regs., Regulations Preambles 2001-2005 ¶ 31,190 (2005), aff'd sub nom. Nat'l Ass'n of Regulatory Util. Comm'rs v. FERC, 475 F.3d 1277 (D.C. Cir. 2007); Standardization of Small Generator Interconnection Agreements and Procedures, Order No. 2006, FERC Stats. & Regs., Regulations Preambles 2001-2005 ¶ 31,180, order on reh'g, Order No. 2006-A, FERC Stats. & Regs., Regulations Preambles 2001-2005 ¶ 31,196 (2005), order granting clarification, Order No. 2006-B, FERC Stats. & Regs. ¶ 31,221 (2006), appeal pending sub nom. Consolidated Edison Co. of New York, Inc., et al. v. FERC (U.S.C.A., D.C. Circuit, Docket Nos. 06-1018, et al.); Interconnection for (continued)

generators that provide a known and stable process for requesting interconnection, receiving timely responses from transmission service providers, and determining who pays for various costs associated with the interconnection process and facilities. The Commission also reformed capacity markets in several regions to shift reliance from short-term purchases to forward markets held sufficiently in advance of delivery (e.g., three years) to be more consistent with the time necessary to construct new generation.<sup>75</sup> 91. Through this ANOPR the Commission intends to consider whether there are other concrete steps that can be taken to facilitate long-term contracting.

# C. <u>Proposed Commission Actions To Facilitate Long-Term Power</u> <u>Contracting</u>

92. The Commission seeks comments on any concrete steps it can take to facilitate voluntary long-term power contracting in organized market regions. In seeking comment on this issue, however, the Commission is mindful of the limits of its jurisdiction. The Commission cannot compel buyers and sellers to enter into long-term contracts, and the purchasing practices of LSEs are often dictated by state policies, not those of this Commission.

<sup>75</sup> <u>See Devon Power L.L.C.</u>, 115 FERC ¶ 61,340, <u>order on reh'g</u>, 117 FERC ¶ 61,133 (2006); <u>PJM Interconnection, L.L.C.</u>, 117 FERC ¶ 61,331 (2006).

Wind Energy, Order No. 661, FERC Stats. & Regs., Regulations Preambles 2001-2005 ¶ 31,186, order on reh'g, Order No. 661-A, FERC Stats. & Regs., Regulations Preambles 2001-2005 ¶ 31,198 (2005).

93. Based on the comments received in the technical conferences and other actions being considered in various markets, the Commission seeks comment on whether it should:

- Provide greater market transparency by requiring RTOs and ISOs to post information that could facilitate long-term contracts, such as by aggregating and posting information on long-term contract prices and quantities on a periodic basis. Would this information prove helpful to buyers and sellers? If so, how could the information be reported in a way that protects the confidentiality of individual contracts? Would other information be helpful to long-term contracting, such as the posting of estimates of transmission constraints and congestion costs on a long-term basis?
- Require or encourage efforts to develop new standardized forward products. Would standardized products better facilitate long-term contracting? If so, what role should the Commission play? Should it encourage RTOs or ISOs to play an active role in this area or would that place them in a position of undertaking commercial functions? Is this a role better played by NAESB or other industry groups?
- Take other steps such as having a dedicated portion of the ISO or RTO website for market participants to post offers to buy or sell power long-term? Would this prove helpful or is it a service that is better provided by the market?

94. Further, the Commission requests comments on whether we should consider any modification of the data requirements of the Electric Quarterly Report (EQR)—for example, to report the start date, term, and end date of long term power contracts—to

Docket Nos. RM07-19-000 and AD07-7-000 60 provide information that would make transparent the average prices of long term power contracts of various terms and vintages.

#### V. **Market Monitoring Policies**

95. Market monitors have played an integral role in the organized electric markets since the latter's inception, providing valuable reporting and analysis services not only to the Commission, but also to the RTOs and ISOs, to market participants, and to state commissions. In light of their importance, the Commission has required that all RTOs and ISOs incorporate a market monitoring function.<sup>76</sup>

96. Market monitoring units (MMUs) take different forms and perform differing functions, depending on the individual tariffs of their respective RTO or ISO. The span of years over which market monitors have been in existence has given the Commission and others in the industry a track record upon which to evaluate the appropriate roles MMUs should play and the protections that might be adopted to assist them in performing those roles. Based both on our own experience with MMUs and on concerns raised by many interested entities, the Commission decided to initiate a comprehensive review of its market monitoring policies. To that end, the Commission held a technical conference on April 5, 2007, and received comments from 29 entities and individuals.

<sup>&</sup>lt;sup>76</sup> Order No. 2000, FERC Stats. and Regs., Regulations Preambles July 1996-December 2000 ¶ 31,089 at ¶ 31,016 (regarding RTOs).

97. The Commission has considered those comments and drawn on our own extensive interaction with market monitors in formulating a proposed set of market monitoring policies. In this ANOPR, the Commission solicits comments and suggestions from the industry regarding these proposals.

# A. <u>History of Market Monitoring</u>

# 1. <u>Order No. 2000</u>

98. The Commission undertook its first generic consideration of market monitoring in Order No. 2000, which was issued in 1999 to encourage the formation of RTOs. In that Order, the Commission required an RTO to include market monitoring as one of its minimum functions, and to submit a market monitoring plan as part of its RTO proposal. The Order did not, however, impose a specific MMU structure on the RTOs.<sup>77</sup>

99. The Commission noted in Order No. 2000 that while MMUs were not intended to supplant Commission authority, they should be designed in such a way as to provide the Commission with an additional means of detecting market power abuses, market design

<sup>&</sup>lt;sup>77</sup> Prior to this first generic consideration of MMUs, the Commission addressed market monitoring in connection with individual RTO/ISO proposals. See Pacific Gas and Electric Co., 77 FERC ¶ 61,265 (1996), order on reh'g, 81 FERC ¶ 61,122 (1997), order on clarification, 83 FERC ¶ 61,033 (1998) (requiring the ISO to file a detailed monitoring plan and listing minimum elements for such a plan); Pennsylvania-New Jersey-Maryland Interconnection, 81 FERC ¶ 61,257 (1997) (PJM Formation Order) (requiring PJM to develop a market monitoring program to evaluate market power and design flaws).

flaws and opportunities for improvements in market efficiency.<sup>78</sup> The Commission ordered RTOs to incorporate in their market monitoring plans certain standards to be met by the MMUs, which include ensuring objective information about the markets that the RTO operates or administers, proposing appropriate action regarding opportunities for efficiency improvement, identifying market design flaws or market power abuses, and evaluating whether market participants comply with market rules.<sup>79</sup> The Commission observed that the information to be gleaned from market monitoring would be beneficial not only to the Commission, but also to state commissions and market participants.<sup>80</sup>

# 2. <u>Market Behavior Rules Order</u>

100. The Commission next addressed the role of market monitors in its 2003 Order Amending Market-Based Rate Tariffs and Authorizations,<sup>81</sup> issued in connection with the promulgation of Market Behavior Rules applicable to entities possessing market-based rate authority. In that order, the Commission clarified the duties of MMUs in connection with enforcement matters, directing that MMUs refer compliance issues to the Commission and limiting direct enforcement action by the MMUs to objectively

<sup>80</sup> <u>Id</u>.

 $<sup>^{78}</sup>$  Order No. 2000, FERC Stats. & Regs., Regulations Preambles July 1996-December 2000  $\P$  31,089 at  $\P$  31,156.

<sup>&</sup>lt;sup>79</sup> <u>Id</u>.

<sup>&</sup>lt;sup>81</sup> <u>Investigation of Terms and Conditions of Public Utility Market-Based Rate</u> <u>Authorizations</u>, 105 FERC ¶ 61,218 (2003) (<u>Market Behavior Rules</u>), <u>order on reh'g</u>, 107 FERC ¶ 61,175 (2004) (<u>Market Behavior Rules Rehearing Order</u>).

identifiable and sanctioned behavior expressly set forth in the RTO/ISO tariffs.<sup>82</sup> 101. In its subsequent Order on Rehearing, the Commission clarified that MMU personnel were not a substitute for Commission enforcement staff.<sup>83</sup> Rather, the Commission held that MMUs were to provide information to the Commission and its staff, so that the Commission could take appropriate action under the FPA. The Commission also announced the intention to make a thorough evaluation of the appropriate role of MMUs, which would lead to the issuance of a policy statement on the subject.<sup>84</sup>

# 3. <u>Policy Statement</u>

102. The Commission issued the Policy Statement on Market Monitoring Units in May of 2005.<sup>85</sup> In this Policy Statement, the Commission identified four tasks which MMUs perform,<sup>86</sup> and for which they needed access to data and other resources.<sup>87</sup> Those duties were listed as follows:

a. To identify ineffective market rules and tariff provisions and recommend

<sup>82</sup> <u>Market Behavior Rules</u>, 105 FERC ¶ 61,218 at P 182, 184.

<sup>83</sup> <u>Market Behavior Rules Rehearing Order</u>, 107 FERC ¶ 61,175 at P 165.
<sup>84</sup> <u>Id.</u> P 168.

<sup>85</sup> <u>Market Monitoring Units in Regional Transmission Organizations and</u> <u>Independent System Operators</u>, 111 FERC ¶ 61,267 (2005) (<u>Policy Statement</u>).

<sup>86</sup> <u>Id.</u> P 2.

<sup>87</sup> <u>Id.</u> P 3.

proposed rule and tariff changes to the ISO or RTO that promote wholesale competition and efficient market behavior.

- b. To review and report on the performance of wholesale markets in achieving customer benefits.
- c. To provide support to the ISO or RTO in the administration of Commission-approved tariff provisions related to markets administered by the ISO or RTO (<u>e.g.</u>, day-ahead and real-time markets).
- d. To identify instances in which a market participant's behavior may require investigation and evaluation to determine whether a tariff violation has occurred, or which may be a potential Market Behavior Rule violation, and immediately notify appropriate Commission staff for possible investigation.

103. In an Appendix to the Policy Statement, the Commission set forth detailed Protocols for the MMUs to follow in referring potential tariff or Market Behavior Rule violations to the Commission.<sup>88</sup> This Policy Statement, together with the Protocols it incorporates, represents the last generic pronouncement by the Commission on the duties of MMUs.

<sup>&</sup>lt;sup>88</sup> Id. at Appendix A. The Market Behavior Rules extant at the time of the <u>Policy</u> <u>Statement</u> have since been in part rescinded, with the remainder codified. <u>See Conditions</u> for <u>Public Utility Market-Based Rate Authorization Holders</u>, Order No. 674, FERC Stats. & Regs. ¶ 31,208 (2006). Rescinded Market Behavior Rule 2 has been replaced by the Commission's Anti-Manipulation Rules. <u>See Prohibition of Energy Market</u> <u>Manipulation</u>, Order No. 670, FERC Stats. & Regs. ¶ 31,202 (<u>Market Manipulation</u> <u>Order</u>), order on reh'g, 114 FERC ¶ 61,300 (2006).

104. In 2006, PJM Interconnection, L.L.C. (PJM) filed proposed revisions to the MMU sections of its tariff, with the general aim of conforming its tariff to the provisions of the Policy Statement. Several parties filed comments, declaring a need to safeguard and advance the independence, clarity of function, and transparency of the MMU. The commenters argued that PJM's tariff should contain a clear statement of the MMU's independence, and should set forth all the rules relevant to the responsibilities and functions of the MMU. In the Order on Rehearing and Compliance Filing, the Commission noted that these concerns were of a generic nature and not necessarily limited to PJM.<sup>89</sup> The Commission decided to initiate a generic review of our MMU policies and announced that it would hold a technical conference to explore the issues raised by the commenters.<sup>90</sup>

# 4. <u>Technical Conference</u>

105. The Commission held the technical conference on market monitoring policies on April 5, 2007. At the conference, the Commissioners heard from interested commenters on the following general subjects: the development of the concept and functions of market monitoring, the MMUs' role with respect to the Commission, the MMUs' role with respect to ISOs and RTOs, and the MMUs' role with respect to the various

<sup>&</sup>lt;sup>89</sup> <u>PJM Interconnection, L.L.C.</u>, 117 FERC ¶ 61,263, at P 19 (2006) (<u>PJM Tariff</u> <u>Rehearing Order</u>).

stakeholders such as states, generators, transmission providers, and customers.<sup>91</sup> 106. Two principal issues received the bulk of attention from the commenters at the technical conference. Those were: (i) the need for, and suggested methods of achieving, independence on the part of MMUs so they can perform their assigned functions; and (ii) the content and proper recipients of the market data and analysis developed by the MMUs. Every commenter touched upon these issues in one fashion or another. 107. The Commission is mindful of the fact that both independence and information sharing raise complex concerns, which require a careful weighing of the needs of various interests and constituencies. Nonetheless, the Commission is in general agreement with the importance both of safeguarding MMU independence and ensuring useful and transparent market analysis by the MMUs. Indeed, since the very beginnings of market monitoring, the Commission has emphasized the importance of independence and objectivity on the part of market monitors,<sup>92</sup> and has required that MMUs analyze and report on any inefficiencies and structural flaws they detect in the market.<sup>93</sup> In our own independent review of our market monitoring policies, the Commission has identified concerns which also fall within both these areas. Therefore, in this ANOPR, the

<sup>&</sup>lt;sup>91</sup> <u>Review of Market Monitoring Policies</u>, Second Notice of Technical Conference, Docket No. AD07-8-000 (2007).

<sup>&</sup>lt;sup>92</sup> <u>PJM Formation Order</u>, 81 FERC at 62,282; Order No. 2000, FERC Stats. & Regs., Regulations Preambles July 1996-December 2000 ¶ 31,089 at 31,061.

<sup>&</sup>lt;sup>93</sup> <u>PJM Formation Order</u>, 81 FERC at 62,282; Order No. 2000, FERC Stats. & Regs., Regulations Preambles July 1996-December 2000 ¶ 31,089 at 31,156.

Commission structures the proposals for modifying and standardizing the market monitoring function within these two general categories.

## B. <u>Independence and Function</u>

108. The functions MMUs are expected to perform, as well as the independence needed to carry out those functions, have always been critical concerns in discussions of market monitoring. There were some differences of opinion expressed at the technical conference regarding the appropriate functions MMUs should perform, but virtually every commenter agreed with the need for independence. The commenters, however, offered many varying proposals as to how to achieve that goal, as well as how to provide for MMU accountability. The Commission believes that there are several means by which to balance independence and accountability on the part of MMUs, and therefore proposes a balanced and flexible approach to the problem which includes oversight protection, tariff safeguards and tools, and the elimination of conflicts of interest. The Commission also proposes certain changes in the functions MMUs are expected to perform, which we believe will strengthen both their independence and accountability. We solicit comments regarding our proposed changes, as well as comments as to whether the MMUs' existing functions need to be clarified and whether MMUs should perform any additional functions.

# 1. <u>Structure and Tools</u>

109. The Commission has never required that MMUs conform to any standardized organizational structure. As a result, RTOs and ISOs have developed varying structural

relationships between themselves and their MMUs. PJM, for instance, has an internal market monitor; MISO has an external market monitor, and the other RTOs and ISOs have hybrid structures. Some commenters at the technical conference favored an internal market monitor, one whose personnel are employees of the RTO or ISO. These commenters contended that such employees are closer to the actual operations of the RTO or ISO and as a result have better access to information. Other commenters favored an external market monitor, an independent contractor who is hired by the RTO or ISO. These commenters contended that such an entity inherently has more independence from the RTO or ISO than do employees of the organization. However, most commenters were of the opinion that the particular structural relationship between the MMU and the RTO or ISO was of secondary importance, provided that the RTO/ISO tariff contained provisions ensuring independence on the part of the MMU.

110. From our own experience, the Commission has observed no appreciable difference among the performance of the market monitors that can be attributed to whether they are external or internal to their RTO or ISO. The Commission therefore declines to impose a "one size fits all" approach toward the structure of MMUs.

111. It is axiomatic that independence can be achieved only if MMUs have adequate tools with which to perform their job. Therefore, the Commission proposes requiring each RTO and ISO to include in its tariff a provision imposing upon itself the obligation to provide its MMU with access to market data, resources, and personnel sufficient to
enable the MMU to carry out its functions.<sup>94</sup> In addition, the tariff should include a provision directing the MMU to report to the Commission any concerns it has with inadequate access to market data, resources, or personnel, and describe the steps it has taken with the RTO or ISO to resolve these concerns. We also seek comment on the question of how independence on the part of MMUs can best be achieved.

#### 2. <u>Oversight</u>

112. As several commenters pointed out at the technical conference, there is an inherent tension in a structure that requires MMUs to report to RTO/ISO management yet, at the same time, perform evaluations and issue reports that may be critical of that management. For example, MMUs are expected to evaluate and report on RTO/ISO market designs and performance, and to include RTO/ISO operations in their analyses of market flaws or inefficiencies. Further, if an MMU detects a potential tariff violation on the part of its RTO or ISO, it is obligated to bring the matter to the attention of the Commission. It can be difficult for an MMU to discharge these oversight and reporting obligations effectively unless it has some degree of independence from RTO/ISO management. Such a reporting relationship can create a conflict of interest because the MMU may temper its opinions out of deference to management, or those opinions may be overruled by

<sup>&</sup>lt;sup>94</sup> PJM's tariff, for instance, requires PJM to provide appropriate staffing for its MMU, and to ensure that the MMU has adequate resources, access to required information, and the cooperation of PJM staff. PJM Interconnection, L.L.C., FERC Electric Tariff, Attachment M, Section V.

management. Importantly, these concerns can be present whether the MMU personnel are in an internal or external structural relationship to their RTO or ISO.

113. Therefore, the Commission proposes that each RTO and ISO, in addition to maintaining a market monitoring function, be required to have its MMU report either directly to the RTO's or ISO's board of directors or directly to a committee of independent board directors. This requirement would apply to all structural types of MMU, whether internal, external or a hybrid combination of the two.<sup>95</sup> The Commission is of the view that it has the authority to impose this type of requirement on RTOs and ISOs, but seeks comment on this issue as well as on the proposal itself.

# 3. <u>Functions</u>

114. The issue of independence is integrally related to the functions that the MMUs are expected to perform. Most of the functions performed by MMUs have remained relatively constant since the inception of market monitoring, and center around market analysis and the evaluation of participant behavior. Commenters at the technical conference were generally supportive of the functions which the Commission identified in its 2005 Policy Statement, with one exception discussed below.

<sup>&</sup>lt;sup>95</sup> The Commission notes that, if adopted, this policy would mark a departure from the holding in <u>PJM Interconnection, L.L.C.</u>, 116 FERC ¶ 61,038, at P 38, <u>order on</u> <u>reh'g</u>, 117 FERC ¶ 61,263 (2006). After giving due consideration to the comments submitted at the technical conference, and for the reasons stated above, the Commission believes that a generic change in policy may be appropriate and is therefore seeking comment on the issue.

115. The MMU functions upon which there was general agreement at the technical conference were: (1) identifying ineffective market rules and tariff provisions and recommending proposed rule and tariff changes, (2) reviewing and reporting on the performance of the wholesale markets, and (3) identifying and notifying the Commission staff of instances in which a market participant's behavior may require investigation. The Commission supports these three functions and proposes to continue them, with one important modification. In the Policy Statement, the MMUs were directed to advise the RTO or ISO of any recommendations for rule or tariff changes, with no mention being made of also advising the Commission. The Commission proposes adding the requirement that the MMUs also advise the Commission and other interested entities, which would include relevant state commissions and market participants. This added requirement would go a long way toward ensuring the transparency desired by many of the commenters. Furthermore, as noted above, MMUs should refer to the Commission any suspected rule or tariff violation committed by an RTO or ISO, as well as those committed by market participants.

116. The Commission also proposes retaining the Protocols governing referral of potential market violations to the Commission, which are included as an Appendix to the Policy Statement. However, since issuance of the Policy Statement, Market Behavior Rule 2, referred to in the Protocols, has been rescinded and replaced by the Commission's

Anti-Manipulation Rules.<sup>96</sup> Therefore, violations currently to be referred to the Commission include conduct suspected of violating the Anti-Manipulation Rules, as well as tariff violations and violations of the remaining, codified Market Behavior Rules. In addition, the Commission proposes that the MMU also refer any suspected violations of other Commission-approved rules and regulations, such as Codes of Conduct<sup>97</sup> and Standards of Conduct.

# 4. <u>Mitigation and Operations</u>

117. As mentioned, one of the four MMU functions listed in the Policy Statement was the source of some debate at the technical conference. The function in question is that of providing support to the RTO or ISO in the administration of its tariff, which usually takes the form of MMU-conducted market power mitigation.<sup>98</sup> Certain commenters were concerned that such mitigation is being conducted without an adequate theoretical or empirical basis and is having a deleterious effect on the electric power market.

118. The Commission does not believe this rulemaking is the appropriate forum to address issues of market power and mitigation. However, the Commission is concerned

<sup>&</sup>lt;sup>96</sup> See Market Manipulation Order, FERC Stats. & Regs. ¶ 31,202.

<sup>&</sup>lt;sup>97</sup> The term "Code of Conduct" has been replaced by "Affiliate Restrictions" in the Final Rule for <u>Market-Based Rates for Wholesale Sales of Electric Energy, Capacity, and</u> <u>Ancillary Services by Public Utilities</u>, 119 FERC ¶ 61,295 (2007).

<sup>&</sup>lt;sup>98</sup> This function was not part of the original conception of market monitoring as expressed in Order No. 2000.

that an MMU's performance of these mitigation functions can compromise its independence in evaluating and reporting on market performance. In order for the MMU to support the RTO or ISO in tariff administration, it must be subordinate to RTO and ISO management. The operations and mitigation functions performed by MMUs directly affect market outcomes and performance. Because of this, there is an inherent conflict between an MMU reporting on market outcomes that the MMU itself has influenced. This conflict is of particular concern where the MMU has significant discretion in affecting offers, bids, and prices. There is significant potential for conflict between an MMU maintaining independence of RTO and ISO management and supporting tariff administration in a subordinate capacity. It may not be possible for MMUs to maintain independence while supporting tariff administration.

119. For the foregoing reasons, the Commission believes operational activities affecting the market, including mitigation, are more properly performed by the RTOs and ISOs themselves as part of their responsibility to administer their Commission-approved tariffs. Maintaining a clear functional separation in this regard between RTOs and ISOs and the MMUs would free the MMUs to report objectively on whether the RTOs and ISOs have done an appropriate job in designing and administering wholesale power markets. Therefore, the Commission proposes requiring that MMUs refrain from assisting the RTO or ISO in tariff administration, from participating in RTO/ISO market operations, and from taking direct actions to influence the market, and instead concentrate on their role of providing market evaluation, reports, and advice.

## 5. <u>Ethics</u>

120. In order for an MMU to carry out its functions, an activity which requires disinterested objectivity, it is vital that MMU personnel maintain the highest ethical standards. Removal of the conflicts of interest noted above should go a long way toward facilitating the achievement of those standards. However, as a further safeguard, the Commission proposes imposing certain minimum ethics standards upon market monitor personnel, whether the MMU is internal or external to its RTO or ISO, in particular prohibiting such personnel from owning financial interests in any market participants. The Commission notes that all existing RTOs and ISOs have some type of conflict of interest or standard of conduct provision, although not always in their tariffs. The Commission proposes standardizing such provisions and requiring their inclusion in the tariffs themselves. The Commission solicits comments as to whether the provisions should be standardized and, if so, what particular provisions would be appropriate.

## 6. <u>Tariff Provisions</u>

121. In order for MMUs to achieve transparency of function, the detailed obligations imposed upon them must be made clear and accessible. Likewise, the provisions safeguarding MMU independence and delineating MMU functions must be included in the tariffs of the RTOs and ISOs in order to be reviewed, approved and enforced by the Commission. Currently, MISO and SPP are the only RTOs or ISOs that centralize the

MMU provisions in their tariffs.<sup>99</sup> Others scatter their MMU provisions in multiple sections of their tariffs and in other documents or, in the case of NYISO, not in the tariff at all.<sup>100</sup> The Commission proposes that each RTO and ISO set forth all its provisions involving market monitoring in one section of its tariff.

# C. Information Sharing

122. As noted in the Policy Statement, a key function which MMUs are expected to perform is that of analyzing the markets to determine if they are competitive, and proposing actions which might be useful in eliminating design flaws. Although RTOs and ISOs are subject to the exclusive jurisdiction of the Commission, we recognize the relationship between wholesale and retail markets. The Commission also recognizes the state commission interest in the performance of wholesale power markets. In Order No. 2000, the Commission acknowledged that information developed by MMUs would be beneficial not only to itself, but to others as well.<sup>101</sup> However, inasmuch as there is a wealth of data gathered by MMUs, it is important to identify the types of information that each constituency needs to assist it in performing its tasks. The Commission favors both

<sup>&</sup>lt;sup>99</sup> Midwest Independent Transmission System Operator, Inc., Open Access Transmission and Energy Markets Tariff, Module D; Southwest Power Pool, Inc., Open Access Transmission Tariff, Attachments AG, AH.

<sup>&</sup>lt;sup>100</sup> NYISO's market monitoring plan is available on its website and may be found at http://www.nyiso.com/public/documents/tariffs/market\_services.jsp.

<sup>&</sup>lt;sup>101</sup> Order No. 2000, FERC Stats. & Regs., Regulations Preambles July 1996-December 2000 ¶ 31,089 at 31,156.

a fuller sharing of information and identification of the relevant information desired, so that the needs of the Commission, the state commissions, market participants, and the public may be satisfied.

### 1. <u>Information Needs</u>

123. Representatives of state commissions and several other interested parties submitted comments at the technical conference expressing their desire to receive more information from the MMUs. The state commission representatives argue that they need such information to assist them in performing their regulatory functions, given the integral relationship between wholesale and retail rates. The Commission is sympathetic to these requests. The Commission recognizes that state commissions are not stakeholders, but a separate class from market participants. As noted above, although RTOs and ISOs are subject to the exclusive jurisdiction of the Commission, state commissions have a legitimate interest in the performance of wholesale power markets. However, their requests for information must be balanced, in some cases, against confidentiality concerns. Public disclosure of certain information, such as participant-specific offers or cost data, could harm market participants or could facilitate collusion under some circumstances. The Commission must therefore balance state concerns regarding information access with these countervailing confidentiality concerns.

124. The comments submitted at the technical conference did not identify the particular categories of information needed by state commissions. The Commission therefore proposes below general areas of information which it believes could be provided to the

states without jeopardizing the need for confidentiality on the part of market participants. The Commission requests comments as to whether our proposal meets the needs of the state commissions, and whether there are other kinds of information that are needed by state commissions to fulfill their regulatory responsibilities. We further request comment on whether there is a generic standard or test that could be used to determine what specific information should be provided to a state commission. The Commission also proposes that some, but not all, of the information to be supplied to the state commissions also be made available to market participants. Finally, the Commission sets forth the information which it believes must remain protected, and solicits comment on whether harm could result from our proposed information disclosures.

#### 2. Information to be Provided

125. The Commission proposes that MMUs be required to report comprehensively on aggregate market and RTO/ISO performance on a regular basis, no less frequently than quarterly, to the Commission staff, to staff of interested state commissions, and to the management and board of directors of the RTOs and ISOs. The MMUs would be required to deliver materials supporting their conclusions, and make one or more of their staff members available for a conference call attended by representatives of these constituencies. During this process, the MMU representative would be expected to work cooperatively to develop any further materials which might be useful to the Commission, to the state commissions and to the RTOs and ISOs. The Commission envisions that such combined reporting and conference calls would permit targeted requests for

information and encourage a fuller exchange of relevant data than may be provided in the MMUs' yearly State of the Market reports, which are currently required by tariff or the internal policies of all the RTOs and ISOs.

126. The Commission cautions that such reports and meetings are in no way intended to restrict the MMU from meeting individually with Commission staff, staff of state commissions, market participants, or other stakeholders, or sharing information with these various constituencies, subject to appropriate restrictions on confidentiality. The Commission is of the view that, in general, as much helpful and appropriate information about the performance of RTO/ISO markets as possible should be made public.

127. The Commission proposes that offer and bid data, without identification of the market participants, be posted on the RTO's or ISO's website, where it will be available to the Commission, to interested state commissions, and to stakeholders. The Commission proposes a lag of three months for posting this data and solicit comments as to whether that time period is sufficient to protect commercially sensitive data and to guard against misuse of the data.

### 3. <u>Tailored Requests for Information</u>

128. The Commission proposes that state commissions may make requests for additional information from the MMUs. The Commission understands that information such as general analyses of the market and aggregated price data may assist state commissions in performing their regulatory functions, and believes reasonable requests along those lines may be appropriate. The Commission seeks comment on how to

structure this proposal to ensure that the information requests are useful to the states, while at the same time respectful of the limited resources of the MMUs, and how to ensure confidentiality with respect to certain market data.

129. The Commission believes that the foregoing proposal allowing states to request tailored information should be for information regarding general market trends and performance, not information designed to aid state enforcement or related actions against individual companies. States have their own enforcement agencies which are more properly employed for such tasks. The limited resources of the MMUs should be confined to providing information regarding the workings of the market itself and identifying any structural flaws which the MMUs think should be addressed.<sup>102</sup> However, a state commission would remain free, on a case-by-case basis, to request that the Commission authorize the release of otherwise proscribed data. The Commission would evaluate any such request to determine if it demonstrates a compelling need for the requested information, and decide whether adequate protections can be fashioned for commercially sensitive material.

# 4. <u>Commission Referrals</u>

130. The Commission continues to believe that MMUs should respect the confidentiality of their referrals of suspected tariff and rule violations to the Commission,

<sup>&</sup>lt;sup>102</sup> However, if during the ordinary course of its activities an MMU were to discover evidence of wrongdoing that was within a state commission's jurisdiction, it is expected that the MMU would report such information to the state commission.

and not disclose such referrals to other entities, including state commissions.<sup>103</sup> Nor does the Commission intend to share such information, or the result of its activities that are initiated based upon a MMU referral, on a generic basis. The Commission notes that its rules require that such information be kept nonpublic unless the Commission authorizes, in any given case, that it be publicly disclosed.<sup>104</sup> Such disclosure is the exception and not the rule, and each such instance is carefully considered by the Commission with due regard to the commercially sensitive nature of the material and to the effect disclosure may have on the willingness of jurisdictional entities to file self reports with the Commission and otherwise cooperate in its investigations. As the Commission has observed previously, confidentiality provides reasonable protection to persons who become involved in these investigations and fosters cooperation with the Commission. It also protects innocent persons who might be erroneously alleged to have committed wrongdoing or be otherwise adversely affected by simply being associated with an investigation.<sup>105</sup> The Commission notes, however, that its staff does give MMUs generic feedback regarding enforcement issues, and we intend to continue this practice in order to provide guidance in matters relating to their referral function.

<sup>105</sup> <u>PJM Tariff Rehearing Order</u>, 117 FERC ¶ 61,263 at P 27.

<sup>&</sup>lt;sup>103</sup> See PJM Tariff Rehearing Order, 117 FERC ¶ 61,263 at P 27.

<sup>&</sup>lt;sup>104</sup> 18 CFR § 1b.9 (2006). Other exceptions include cases where the information has been made a matter of public record in an adjudicatory proceeding, and where disclosure is required by the Freedom of Information Act, 5 U.S.C. 552 et seq. (2006).

## D. <u>Pro Forma Tariff Section</u>

131. The Commission intends to include in its subsequent Notice of Proposed Rulemaking a proposed pro forma MMU section for the RTOs' and ISOs' OATTs. The Commission anticipates that each RTO and ISO may wish to modify certain provisions, or add others, to such pro forma tariff to suit its particular needs. Nonetheless, the Commission believes it will be useful to develop specific core provisions that are standardized across the various RTOs and ISOs, particularly in the areas of independence, MMU functions, and information sharing. The Commission anticipates including in the pro forma tariff protocols for the referral of tariff and market manipulation violations to the Office of Enforcement, as well as protocols for the referral of perceived market design flaws and recommended tariff changes to the Office of Energy Markets and Reliability. The Commission solicits comments on the structure and content of such a pro forma section.

## E. <u>Conclusion</u>

132. The Commission's goal is to strengthen market monitoring, and we advance proposals in this ANOPR that respond to concerns expressed by commenters at the technical conference, as well as that reflect our own observations formed over the years from working within the framework of the existing market monitoring provisions. The Commission seeks comment on its proposals and on other matters germane to market monitoring.

#### VI. <u>Responsiveness of RTOS and ISOS</u>

133. This section of the ANOPR addresses proposals to increase RTO/ISO responsiveness to stakeholders. The Commission proposes one reform to increase the responsiveness of RTO/ISO boards and seeks comment on whether any other reforms are necessary.

# A. <u>The Challenge of Improving RTO and ISO Responsiveness to</u> <u>Stakeholders</u>

134. Order Nos. 888 and 2000 require that an ISO or RTO be independent from market participants. The Commission requires this independence to ensure that market participants have nondiscriminatory access to the grid and market rules are developed and administered in a manner that does not favor one market participant over another. After five to ten years of experience with several such entities, however, some stakeholders are concerned that RTOs and ISOs have achieved independence without being adequately sensitive to the needs of their customers and members.

135. Given the size and complexity of RTOs and ISOs today, it is not surprising that tension has arisen between the goals of independence and responsiveness. An RTO or ISO cannot satisfy every group on every issue. When an RTO or ISO makes a difficult decision, those who support the decision often believe it has acted "objectively" and "independently," while those who oppose that decision often believe the RTO or ISO has not been "responsive" to their concerns.

136. This natural tension between independence and responsiveness is compounded by

the number of functions that an RTO or ISO performs and for which it is ultimately held accountable by these several types of entities. An RTO or ISO has the primary responsibility to operate the regional transmission system safely in accordance with good utility practice and reliably in accordance with Commission-approved reliability standards. It is responsible for providing open and non-discriminatory transmission access under a regional transmission tariff. The provision of open-access transmission service in itself requires that many subordinate functions be carried out, such as maintaining an efficient transmission reservation system, scheduling transmission services, managing congestion on the grid, coordinating local transmission system enhancements, and developing the region's long-term transmission plan. RTOs and ISOs typically have adopted innovative transmission pricing mechanisms such as locational pricing with allocations or auctions of financial transmission rights that hedge transmission congestion.

137. An RTO or ISO is also responsible for administering the organized energy markets. Depending on the region, there are day-ahead and real-time energy markets, markets for various ancillary services, and forward capacity markets, with provisions for ensuring that demand response resources can participate in these markets. It is responsible for all aspects of operation of these markets and for providing an independent market monitor. The RTO or ISO may also have responsibilities regarding resource adequacy. Every RTO or ISO must maintain a reliable system for metering and measuring power flows

and customer services systems for billing and settling accounts for many large financial transactions.

138. As an RTO's or ISO's functional responsibilities grow, some customers may value the new functions while others prefer the regional organization to focus on its original basic functions. New services come at a cost. Start-up costs can be significant for new services, and the RTO or ISO must decide how to recover the costs from its customers. These decisions may be controversial. In particular, determining who benefits from new transmission facilities and how their costs should be allocated can be very contentious and can lead to customer dissatisfaction with the RTO or ISO. Decisions related to resource adequacy, such as whether to adopt capacity markets or to rely more heavily on energy price signals to incent new generation and demand response, have also become very contentious.

139. Given these challenges, the Commission is considering, as discussed further below, proposals to improve RTO/ISO responsiveness in a manner that does not compromise their independence.

## B. Prior Commission Actions Regarding RTO and ISO Responsiveness

140. In Order No. 888, the Commission encouraged but did not require the formation ofISOs. Order No. 888 delineated eleven principles defining the operations and structure of

a properly functioning ISO.<sup>106</sup> Similarly, in Order No. 2000, the Commission encouraged utilities to join RTOs voluntarily and set out the characteristics that an RTO must possess and the minimum functions that it must perform.<sup>107</sup> Embodied in both Order Nos. 888 and 2000 is the requirement that the regional transmission entity be independent from market participants so that it can provide regional transmission and energy market services on a non-discriminatory basis.

141. Although it required independence, Order No. 2000 did not mandate detailed governance requirements for an RTO board of directors. Instead, it stated that the Commission would review governance proposals on a case-by-case basis.<sup>108</sup> The Commission emphasized the importance of stakeholder input regarding both RTO formation and ongoing operations, and it required the RTO or ISO to consult with its members and other stakeholders through an advisory committee prior to taking action. The Commission stated that, because there is a non-stakeholder board, it is important that this board not become isolated.<sup>109</sup> For this reason, the Commission explained that there

<sup>&</sup>lt;sup>106</sup> Order No. 888, FERC Stats. & Regs., Regulations Preambles January 1991-June 1996 ¶ 31,036 at 31,730-32.

<sup>&</sup>lt;sup>107</sup> Order No. 2000, FERC Stats. & Regs., Regulations Preambles July 1996-December 2000 ¶ 31,089 at 30,993-94.

<sup>&</sup>lt;sup>108</sup> <u>Id.</u> at 31,073-74.

<sup>&</sup>lt;sup>109</sup> <u>Id.</u>

should be both formal and informal mechanisms to ensure that stakeholders can convey their concerns to the non-stakeholder board.

142. The Commission also required that RTOs have an "open architecture" so that the organization and its members have the necessary flexibility to improve the structure, geographic scope, market scope, and operations of the organization, as long as proposed changes continue to satisfy RTO minimum characteristics and functions.<sup>110</sup> Stated another way, "open architecture" meant that the original RTO design could evolve as needed to reflect changes in member needs.

143. Over the past few years, many RTO and ISO customers have raised concerns at the Commission about RTO or ISO responsiveness to customers on such matters as the level or growth rate of RTO or ISO administrative costs and the effectiveness of the customer voice in processes for deciding whether to undertake new expenditures. In response to concerns over accounting and financial reporting rules for RTOs and ISOs, the Commission issued a Financial Reporting Notice of Inquiry (NOI) on September 16, 2004. It asked for comments on RTO and ISO accounting matters and whether RTOs and ISOs have appropriate incentives to be cost-effective.<sup>111</sup> This led directly to Commission Order No. 668, Accounting and Financial Reporting for Public Utilities

<sup>&</sup>lt;sup>110</sup> <u>Id.</u> at 31,170.

<sup>&</sup>lt;sup>111</sup> <u>Financial Reporting and Cost Accounting and Recovery Practices for Regional</u> <u>Transmission Organizations and Independent System Operators</u>, Notice of Inquiry, FERC Stats. & Regs. ¶ 35,546 (2004).

<u>Including RTOs</u>.<sup>112</sup> Order No. 668 amended the Commission's regulations to update the accounting requirements for public utilities and licensees, including RTOs and ISOs. Specifically, Order No. 668 created new financial accounts to better categorize costs and changed the reporting requirements for all public utilities, including RTOs and ISOs, to improve financial reporting of operations, revenue, and expense accounts. The new financial reporting requirements allow the Commission and other interested persons to compare public utility expenditures more readily than under the prior rule, which improves the transparency of financial information and facilitates clear understanding of RTO/ISO costs.<sup>113</sup>

144. In addition to Commission actions, RTOs and ISOs themselves have undertaken efforts to improve relations and communications with customers and other stakeholders. For example, the CAISO has enhanced its participatory budget development process to allow stakeholders to ask questions and raise concerns well before the budget becomes final. PJM, at the request of its stakeholders, has introduced procedures under which

 <sup>&</sup>lt;sup>112</sup> Accounting and Financial Reporting for Public Utilities Including RTOs, Order No. 668, 70 Fed. Reg. 77,626 (Dec. 30, 2005), FERC Stats. & Regs., Regulations
Preambles 2001-2005 ¶ 31,199 (2005), order on reh'g, Order No. 668-A, 71 Fed. Reg. 28,513 (May 16, 2006), FERC Stats. and Regs. ¶ 31,215 (2006).

 $<sup>^{113}</sup>$  Order No. 668, FERC Stats. & Regs., Regulations Preambles 2001-2005  $\P$  31,199 at P 5.

stakeholder issues may be immediately reviewed by the board.<sup>114</sup> PJM has also proposed to reintroduce a stakeholder "liaison committee"—a committee of stakeholder representatives that will advise the PJM board directly—and is seeking stakeholder input on how that committee should be structured.<sup>115</sup>

145. The Commission is considering below whether additional reforms should be adopted to further increase RTO and ISO responsiveness.

# C. <u>Proposed Commission Action To Improve RTO and ISO</u> <u>Responsiveness</u>

146. In this section, the Commission proposes reforms related to ISO and RTO boards and seeks comment on whether any other reforms are appropriate.

# 1. <u>A Responsive RTO or ISO Board of Directors</u><sup>116</sup>

147. Customer responsiveness must begin with the RTO/ISO board. A well-functioning and responsible board of directors is necessary for establishing the strategic direction of the RTO or ISO, including customer orientation. Board members are expected to have

<sup>&</sup>lt;sup>114</sup> <u>See</u> May 4, 2007 letter from Phillip G. Harris, Chairman and CEO, PJM Interconnection, L.L.C., to PJM Members and Stakeholders, at http://www.pjm.com/committees/members/postings/20070504-letter-to-memberspost.pdf. <u>See also</u> Transcript of Conference at 204, Conference on Competition in Wholesale Power Markets, Docket No. AD07-7-000 (May 8, 2007).

<sup>&</sup>lt;sup>115</sup> <u>Id.</u>

<sup>&</sup>lt;sup>116</sup> The term "board of directors" is used in this ANOPR to refer to the highest governing body. Certain RTOs and ISOs may use another term. For example, the California Independent System Operator Corporation uses the term "Board of Governors."

the expertise needed to set such direction and assess whether it is being followed successfully. When approving an application for RTO status, the Commission has considered primarily the independence of board members in the board selection process.<sup>117</sup>

148. The Commission's preliminary conclusion is that representatives of customers and other stakeholders must have some form of effective direct access to the board of directors. Each RTO or ISO would be required to develop and implement a means to ensure that customers and other stakeholders have effective direct access to the board. The mechanism would not have to be the same for each RTO or ISO. One RTO or ISO might choose to form a committee of stakeholder representatives with some form of direct access to the board, and this committee may be distinct from the various technical committees that have already been formed. Another RTO or ISO might choose to create direct access by having a hybrid board of directors composed of both independent members and representatives of stakeholders. A third RTO or ISO might devise a distinct third means. However, each mechanism would have to be effective in allowing customers and other stakeholders to present their views on major issues directly to the board.

<sup>&</sup>lt;sup>117</sup> <u>Grid Florida, L.L.C.</u>, 94 FERC ¶ 61,020 (2001); <u>Arizona Public Service Co.</u>, 101 FERC ¶ 61,033, <u>order on reh'g</u>, 101 FERC ¶ 61,350 (2002).

149. The Commission seeks comment on whether RTO or ISO responsiveness to stakeholders requires some form of direct board access. If so, what steps can be taken to ensure that both majority and minority interests have access to the board? If not, is there a better way to ensure that RTO and ISO boards of directors are responsive to customers? 150. The Commission stresses its intent to be flexible regarding how the RTOs and ISOs may improve responsiveness to stakeholders. As mentioned, at least two mechanisms, if carefully designed and implemented, could accomplish this, hybrid boards and board advisory committees.

151. A hybrid board would be composed of both independent members and stakeholder members. Each member would have a seat on the board and participate fully in board decisions with an equal vote. The Commission believes it should be possible to structure a hybrid board that does not sacrifice overall board independence.<sup>118</sup> Adding non-independent stakeholders to the board would expose the board to the concerns of stakeholders in the most direct manner.

152. An RTO or ISO that intends to satisfy this proposed requirement with a hybrid board would have to address certain matters. Stakeholder members must not be allowed to serve their own interests inappropriately. Accordingly, the Commission presents here for comment certain restrictions that may be necessary for a hybrid board proposal. First,

<sup>&</sup>lt;sup>118</sup> We remind RTOs and ISOs that the Commission's regulations regarding RTO governance require periodic audits of the RTO or ISO governance by an independent auditor. <u>See</u> 18 C.F.R. § 35.34(j)(1)(iv)(A) (2006).

the number of stakeholder members must be a minority of the board. The stakeholder members cannot make up more than forty-nine percent of the board, and a lower percentage such as twenty-five percent may be more appropriate. Second, all subcommittees of the board should be structured so that the stakeholder members together cannot overcome the unanimous vote of the independent board members. Third, any appointment to an RTO or ISO board of a senior official or director of a stakeholder company that would constitute an interlocking directorate position under FPA section  $305^{119}$  would require prior Commission approval before the member would join the RTO/ISO board.<sup>120</sup>

153. A second way to satisfy the proposed requirement would be a board advisory committee. It would be comprised of senior executives of the various stakeholder groups, serving as an expert panel that would inform the board of stakeholder views. The board advisory committee would have no voting authority on board decisions. It would, however, have authority to make recommendations directly to the board on matters before the board and on matters it believes the board should address. The board advisory committee the board about the expected effect on customers and other

<sup>&</sup>lt;sup>119</sup> 16 U.S.C. § 825d (2000).

<sup>&</sup>lt;sup>120</sup> See 16 U.S.C. §§ 825d(b) – (c) (2000); 18 C.F.R § 45 (2006). Pursuant to section 305(b) of the FPA, interlocks between unaffiliated public utilities, interlocks between a public utility and other specified entities, and interlocks among affiliated public utilities must be submitted to the Commission for approval before a prospective director holds and assumes the duties of the interlocking position.

stakeholder groups of proposals before the board. The board advisory committee would not necessarily make decisions on what to recommend to the board; instead, minority views could also be presented directly to the board.

154. The Commission envisions a board advisory committee of senior stakeholder representatives that would not necessarily consist of those on technical stakeholder committees in RTOs and ISOs today. Members of the board advisory committee would be selected to represent a reasonable range of diverse interests. The number of members should be decided with attention to forming a committee of reasonable size that can engage the board in thoughtful discussion.

155. The Commission encourages interested parties to comment regarding the proposal and possible approaches. In addition, the Commission seeks responses to the following questions about customer access to the board of an RTO or ISO:

- How should any hybrid board be structured? What is an appropriate limit on the percentage of non-independent board members? If a variety of customer views are to be represented, what implications does this have for the size of the board?
- What, if any, rules and restrictions should be placed on the stakeholder board members of a hybrid board?
- Can the reform proposed here be met through other means such as increased direct board interaction with customers and other stakeholders, <u>e.g.</u>, through open board meetings or through required attendance of board members at major stakeholder meetings of the RTO?

 Are there measures—such as customer satisfaction measures, cost oversight benchmarks, or stakeholder participation measures—that RTOs and ISOs should use to assess the success of the mechanism for improving responsiveness?

# 2. <u>Inquiry Regarding Better Responsiveness Through Improved</u> <u>Practices and Processes</u>

156. The Commission also requests comment about whether any other reforms should be adopted to improve RTO and ISO responsiveness to its customers and other stakeholders. The Commission is interested in particular in whether RTOs and ISOs could achieve better responsiveness—or make their responsiveness more apparent to their stakeholders—through improvements in the areas of (1) RTO and ISO executive management practices, (2) effective RTO and ISO stakeholder processes, and (3) transparent RTO and ISO budget processes.

### a. <u>RTO and ISO Executive Management Practices</u>

157. Executive management ensures that RTO and ISO goals set by the board are met, including any goal to be responsive to customers and other stakeholders. Executive management evaluates such things as how to improve RTO/ISO services, whether to provide new services, and how to contain administrative costs. Management is likely to be the first to hear directly from customers about their concerns with current RTO/ISO operations or proposed new programs or expenditures.

158. Managers should be responsive to stakeholders but cannot be beholden to any particular stakeholder group. At a minimum, managers should seek out customer

concerns and pay serious attention to these concerns. Managers should evaluate whether some appropriate action is needed to address these concerns. They may decide to address some concerns and not others, keeping in mind the independence of the RTO or ISO, its appropriate role in the region as transmission provider and market administrator, and the trade-off between new services and cost containment.

159. The Commission requests comment on whether any reforms are necessary to increase management responsiveness to stakeholder concerns. For example, should the Commission encourage or require RTOs or ISOs to:

- Publish a strategic plan that includes plans for assuring responsiveness to customers and other stakeholders.
- Measure or otherwise assess customer satisfaction periodically, through a survey or other means.
- Have a formal process for gathering and evaluating recommendations for improving services to customers.
- Set performance criteria for executive managers based in part on responsiveness to stakeholders.
- Relate executive compensation to a measure of responsiveness to stakeholders.

# b. Effective RTO and ISO Stakeholder Processes

160. The stakeholder processes in RTOs and ISOs today serve several purposes. They are intended to provide the views of various customer and stakeholder groups to the

RTOs and ISOs. Some are also intended to help the RTOs and ISOs make decisions on sometimes contentious transmission and market matters. The Commission is interested in comments about how well these processes are working and how their effectiveness might be improved.

161. The Commission requests replies to the following questions about RTO and ISO stakeholder processes:

- What stakeholder processes have proved to be particularly effective?
- How can the effectiveness of a stakeholder process be assessed?
- Does the voting structure of RTO and ISO stakeholder groups achieve balanced representation?
- Are minority interests adequately represented in stakeholder processes?
- How should an RTO or ISO respond when it must make a decision, such as deciding how to comply with a Commission regulation, and a stakeholder consensus cannot be reached?
- What actions, if any, can the Commission take to improve stakeholder processes? For example, should the Commission ask each RTO or ISO to review and report on the strengths and weaknesses of its current stakeholder processes?

# c. <u>Transparent RTO and ISO Budgeting Processes</u>

162. Some market participants contend that they do not have an adequate opportunity to review or understand an RTO's or ISO's budget in time to influence the budget decision.

They point in particular to RTOs and ISOs that use a formula rate to pass costs through to customers. Although the Commission has found the current cost recovery mechanisms for all these entities to be just and reasonable,<sup>121</sup> stakeholders express concern about ineffective review of significant cost increases before the costs flow through a formula rate. The NYISO and Midwest ISO, for example, recover their costs of administering the transmission grid and market operations through a formula rate.<sup>122</sup> Some customers believe that the budget for an RTO or ISO with a formula rate may not include enough details to understand the reason for an expenditure or its effect on their rates.<sup>123</sup> This

suggests that, in an RTO or ISO with a formula rate, there may be a greater need for

<sup>122</sup> The CAISO, PJM, and ISO-NE, in contrast, use stated rates for their grid administration and market services charges.

<sup>123</sup> After-the-fact review is considered insufficient. Even if the Commission were to disallow an expenditure after the fact as not used and useful or otherwise imprudently incurred, an RTO or ISO has no profits to be reduced by the amount of any disallowed costs. Many market participants assert that there is no good remedy for these RTOs and ISOs once imprudent costs are incurred. RTO and ISO customers are among the first to tell the Commission that, in practice, once costs are incurred by a not-for-profit RTO or ISO with a formula rate, these costs must be passed through to its customers.

<sup>&</sup>lt;sup>121</sup> See California Independent System Operator Corp., 103 FERC ¶ 61,114 (2003), order on reh'g, 106 FERC ¶ 61,032 (2004); California Independent System Operator Corp., 110 FERC ¶ 61,090 (2005); Midwest Independent Transmission System Operator, Inc., 97 FERC ¶ 61,033 (2001); Midwest Independent Transmission System Operator, Inc., 101 FERC 61,221 (2002), order on reh'g, 103 FERC ¶ 61,035 (2003); New England Power Pool, 96 FERC ¶ 61,261 (2001); ISO New England, Inc., 105 FERC ¶ 61,397 (2003); New York Independent System Operator, 86 FERC ¶ 61,062 (1999); PJM Interconnection, L.L.C., 112 FERC 61,236 (2005), order approving settlement, 115 FERC ¶ 61,249 (2006).

customer discussion of budget decisions with major cost consequences before the costs are incurred.

163. The Commission requests comment on possible approaches to address these concerns. For example, should each RTO and ISO:

- Review its cost accountability processes with its customers and other stakeholders and consider how to improve them?
- Present budget information to customers with adequate detail, transparency, and cost support? For example, an RTO or ISO with a formula rate could develop its budget presentation to stakeholders using the format required for a filing with the Commission to change a previously-filed stated rate. This would provide stakeholders with clear information about the proposed expenditures, its effect on rates, and how the proposed budget relates to recent budgets.
- Provide its customers a timely opportunity to review budget proposals, ask budget questions, and comment before major expenditures are finally decided?
- Submit to the Commission as an informational filing the budget materials provided to stakeholders for review?

## VII. Additional Questions

164. It is our preliminary view that that the Commission should institute a proceeding under section 206 of the FPA<sup>124</sup> to reform RTO and ISO tariffs to address certain issues discussed above. The Commission may conduct this process either through a notice-and-comment rulemaking under the Administrative Procedure Act<sup>125</sup> or an adjudicative process.

165. The Commission requests comment on which of these procedures is likely to produce the most effective reforms, and on the appropriate time frame in which to conduct the proceedings. The Commission also seeks input as to the length of time that might be necessary for RTOs and ISOs to implement any reforms that result from this process. Specifically, the Commission requests input as to how much time – including time for stakeholder processes – might be needed for technical development of compliance filings.

# VIII. <u>Comment Procedures</u>

166. The Commission invites interested persons to submit comments on these matters and any related matters or alternative proposals that commenters may wish to discuss. Comments are due [insert date 45 days after publication in the FEDERAL

**REGISTER**]. Comments must refer to Docket No. AD07-7-000 and must include the

<sup>&</sup>lt;sup>124</sup> 16 U.S.C. § 824e (2000).

<sup>&</sup>lt;sup>125</sup> 5 U.S.C. § 553 (2000).

commenter's name, the organization he or she represents, if applicable, and his or her address.

167. Comments may be filed electronically via the eFiling link on the Commission's web site at http://www.ferc.gov. The Commission accepts most standard word processing formats and commenters may attach additional files with supporting information in certain other file formats. Commenters filing electronically do not need to make a paper filing.

168. Commenters that are not able to file comments electronically must send an original and 14 copies of their comments to: Federal Energy Regulatory Commission, Secretary of the Commission, 888 First Street, N.E., Washington, D.C., 20426.

169. All comments will be placed in the Commission's public files and may be viewed, printed, or downloaded remotely as described in the Document Availability section below. Commenters are not required to serve copies of their comments on other commenters.

### IX. Document Availability

170. In addition to publishing the full text of this document in the <u>Federal Register</u>, the Commission provides all interested persons an opportunity to view and/or print the contents of this document via the Internet through FERC's Home Page (http://www.ferc.gov. and in FERC's Public Reference Room during normal business hours (8:30 a.m. to 5:00 p.m. Eastern time) at 888 First Street, N.E., Room 2A, Washington, D.C. 20426.

171. From the Commission's Home Page on the Internet, this information is available in its eLibrary. The full text of this document is available in the eLibrary both in PDF and Microsoft Word format for viewing, printing, and/or downloading. To access this document in eLibrary, type the docket number of this document, excluding the last three digits, in the docket number field.

172. User assistance is available for eLibrary and FERC's website during normal business hours from our Help line at (202) 502-8222 or the Public Reference Room at public.reference@ferc.gov.

By direction of the Commission. Commissioner Kelly concurring in part and dissenting in part with a separate statement attached.

(S E A L)

Kimberly D. Bose, Secretary.

# UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Wholesale Competition in Regions with Organized Electric Markets Docket Nos. RM07-19-000 AD07-7-000

(Issued June 22, 2006)

KELLY, Commissioner, concurring in part and dissenting in part:

I generally support the efforts of this Advanced Notice of Proposed Rulemaking (ANOPR) in setting forth proposals and seeking comment on improvements to the operation of organized wholesale electric markets. I am writing separately to express my views on certain of the proposals related to strengthening market monitoring, improving demand response and promoting RTO/ISO responsiveness.

First, I would have added certain proposals to the ANOPR to strengthen market monitoring. For reasons I have previously explained,<sup>1</sup> I would have proposed requiring RTOs/ISOs to file tariff provisions to allow them to take enforcement action with respect to objectively identifiable behavior that does not subject the seller to sanctions or consequences other than those expressly approved by the Commission and set forth in the tariff, and with the right of appeal to the Commission, consistent with the *Policy Statement on Market Monitoring Units*.<sup>2</sup> In addition, the ANOPR states that the Commission does not intend to share with the MMU information about suspected tariff and rule violations referred by the MMU to the Commission. I believe the Commission should generally provide information to the MMUs on the referrals they have made to the Commission, subject to appropriate confidentiality restrictions. Such feedback could be structured so as to provide responsible disclosure of information while preserving confidentiality. In addition, I would have proposed requiring the MMU to make recommendations related to its reports on RTO/ISO performance. Therefore, I concur in part on the ANOPR.

Second, I disagree with two of the proposals being made in the ANOPR. One proposal involves facilitating greater participation of demand response in organized markets by modifying market power mitigation rules in organized markets, such as raising the energy bid caps and market-wide caps in an emergency situation. Before the Commission considers whether to pursue such market rule modifications, I think it is

<sup>&</sup>lt;sup>1</sup> See PJM Interconnection, L.L.C., 116 FERC ¶ 61,038, order on reh'g, 117 FERC ¶ 61,263 (2006).

<sup>&</sup>lt;sup>2</sup> See 111 FERC ¶ 61,267 (2005) at P 5.

important to address other barriers that may significantly restrict demand response participation. For example, the *FERC Staff Demand Response Assessment* concluded that the technologies needed to support significant deployment of demand resources, such as advanced metering, have little market penetration.<sup>3</sup> Without the necessary technology already in place that would allow demand resources to respond to price signals in wholesale or retail markets, it is unclear how quickly they could develop the ability to respond after energy bid caps or market-wide caps are raised or eliminated. In other words, the technology and associated demand response capability must be in place before we consider raising or eliminating these price caps. Otherwise these higher energy prices may not elicit any demand reduction in a fashion capable of disciplining those prices and keeping them just and reasonable. In addition, rather than asking questions in this ANOPR on how to value demand response, I think the Commission should have proposed a compensation method and postponed consideration of modifying market power mitigation rules until after the valuation issue had been addressed.

Third, although I recognize that some stakeholder groups have raised concerns about the responsiveness of the RTO/ISO, I disagree with the ANOPR's proposal to promote responsiveness by establishing a hybrid RTO/ISO board of directors composed of both independent members and non-independent stakeholder members. Under this proposal, each member would have a seat on the board and participate fully in board decisions with an equal vote. I think it would be inadvisable and difficult to implement such a proposal.

Order Nos. 888 and 2000 require that an ISO or RTO be independent from market participants so that they can provide regional transmission and energy market services on a non-discriminatory basis. A fundamental principle for ISOs, as set forth in Order No. 888, is that the ISO should be independent of any individual market participant or any one class of participants (e.g., transmission owners or end-users).<sup>4</sup> Similarly, Order No. 2000 emphasized that independence is the bedrock principle on which the ISOs and RTOs must be built and stressed that an RTO "needs to be independent in both reality and perception."<sup>5</sup> I believe that establishing a hybrid board would jeopardize the fundamental principle of independence upon which ISOs and RTOs are based.

Moreover, although the ANOPR states that stakeholder members would be directed not to serve their own interests inappropriately, it is not clear to me how one would distinguish between "inappropriate" advocacy for one's interests, and perfectly reasonable advocacy for one's interests. Additionally, a hybrid board composed of independent and non-independent board members could needlessly complicate the board

<sup>&</sup>lt;sup>3</sup> FERC Staff Demand Response Assessment, Docket No. AD06-2-000, at page xii.

<sup>&</sup>lt;sup>4</sup> Order No. 888, FERC Stats. & Regs. ¶ 31,036 at 31,730-31.

<sup>&</sup>lt;sup>5</sup> Order No. 2000, FERC Stats. & Regs. ¶ 31,089 at 31,061.

fair to all.

dynamic and make cooperative decision-making more difficult and time consuming. Currently, the independent board coupled with the stakeholder process, can be viewed as similar to the judicial model of governance. The stakeholders are like adversaries in a judicial proceeding arguing their cases to a disinterested judge, the independent board, which is capable of balancing the various equities in reaching a timely decision that is

A stakeholder board, even a hybrid one, would be more akin to the legislative model with no overarching independent judge making the final calls. Such a model requires constant negotiation and can often lead to stalemate or decisions that address only the lowest common denominator rather than the ideal approach. While that model is certainly appropriate in many situations, I do not believe it is workable for the board of an RTO or ISO given the many important and time-critical issues they deal with. Furthermore, most investor owned utilities, with whom RTOs and ISOs share many features, do not appear to follow the legislative model of governance and it is not clear to me why the RTOs and ISOs should be treated differently. If the Commission is to consider providing stakeholders with some form of direct board access, I think that the board advisory committee proposed in this ANOPR would more effectively serve this purpose.

Accordingly, for the reasons stated above, I concur in part and dissent in part on this ANOPR.

Suedeen G. Kelly