89 FERC ¶ 61,285

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

18 CFR Part 35

[Docket No. RM99-2-000; Order No. 2000]

Regional Transmission Organizations

(Issued December 20, 1999)

AGENCY: Federal Energy Regulatory Commission

ACTION: Final Rule

SUMMARY: The Federal Energy Regulatory Commission (Commission) is amending its regulations under the Federal Power Act (FPA) to advance the formation of Regional Transmission Organizations (RTOs). The regulations require that each public utility that owns, operates, or controls facilities for the transmission of electric energy in interstate commerce make certain filings with respect to forming and participating in an RTO. The Commission also codifies minimum characteristics and functions that a transmission entity must satisfy in order to be considered an RTO. The Commission's goal is to promote efficiency in wholesale electricity markets and to ensure that electricity consumers pay the lowest price possible for reliable service.

EFFECTIVE DATE: This Final Rule will become effective [on the 60th day after publication in the Federal Register.]

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SUPPLEMENTAL INFORMATION:

Docket No. RM99-2-000

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UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: James J. Hoecker, Chairman;
William L. Massey, Linda Breathitt, and
Curt Hébert, Jr.

Regional Transmission Organizations Docket No. RM99-2-000

Order No. 2000

FINAL RULE

(Issued December 20, 1999)

I. INTRODUCTION AND SUMMARY

In 1996 the Commission put in place the foundation necessary for competitive wholesale power markets in this country—open access transmission. [1] Since that time,

[1] See Promoting Wholesale Competition Through Open Access Non-discriminatory Transmission Services by Public Utilities and Recovery of Stranded Costs by Public Utilities and Transmitting Utilities, Order No. 888, 61 FR 21,540 (May 10, 1996), FERC Stats. & Regs. ¶ 31,036 (1996) (Order No. 888), order on reh'g, Order No. 888-A, 62 FR 12,274 (March 14, 1997), FERC Stats. & Regs. ¶ 31,048 (1997) (Order No. 888-A), 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), appeal docketed, Transmission Access Policy Study Group, et al. v. FERC, Nos. 97-1715 et al. (D.C. Cir.).

the industry has undergone sweeping restructuring activity, including a movement by many states to develop retail competition, the growing divestiture of generation plants by traditional electric utilities, a significant increase in the number of mergers among traditional electric utilities and among electric utilities and gas pipeline companies, large increases in the number of power marketers and independent generation facility developers entering the marketplace, and the establishment of independent system operators (ISOs) as managers of large parts of the transmission system. Trade in bulk power markets has continued to increase significantly and the Nation's transmission grid is being used more heavily and in new ways.

On May 13,1999, the Commission proposed a rule on Regional Transmission Organizations (RTOs) that identified and discussed our concerns with the traditional means of grid management. [2] In that Notice of Proposed Rulemaking (NOPR), the Commission reviewed evidence that traditional management of the transmission grid by vertically integrated electric utilities was inadequate to support the efficient and reliable operation that is needed for the continued development of competitive electricity markets, and that continued discrimination in the provision of transmission services by vertically integrated utilities may also be impeding fully competitive electricity markets. These problems may be depriving the Nation of the benefits of lower prices and enhanced

[2]Regional Transmission Organizations, Notice of Proposed Rulemaking, 64 FR 31,390 (June 10, 1999), FERC Stats. & Regs. ¶ 32,541 at 33,683-781 (1999).

reliability. The comments on the NOPR overwhelmingly support the conclusion that independent regionally operated transmissions grids will enhance the benefits of competitive electricity markets. Competition in wholesale electricity markets is the best way to protect the public interest and ensure that electricity consumers pay the lowest price possible for reliable service.

Regional institutions can address the operational and reliability issues now confronting the industry, and eliminate any residual discrimination in transmission services that can occur when the operation of the transmission system remains in the control of a vertically integrated utility. Appropriate regional transmission institutions could: (1) improve efficiencies in transmission grid management; [3] (2) improve grid reliability; (3) remove remaining opportunities for discriminatory transmission practices; (4) improve market performance; and (5) facilitate lighter handed regulation.

Thus, we believe that appropriate RTOs could successfully address the existing impediments to efficient grid operation and competition and could consequently benefit consumers through lower electricity rates resulting from a wider choice of services and

[3] As discussed more fully later, appropriate regional institutions could improve efficiencies in grid management through improved pricing, congestion management, more accurate estimates of Available Transmission Capability, improved parallel path flow management, more efficient planning, and increased coordination between regulatory agencies.

service providers. In addition, substantial cost savings are likely to result from the formation of RTOs.

Based on careful consideration of the thoughtful comments submitted in response to the NOPR, [4] the Commission adopts a final rule that generally follows the approach of the NOPR. Our objective is for all transmission-owning entities in the Nation, including non-public utility entities, to place their transmission facilities under the control of appropriate RTOs in a timely manner. Therefore, we are establishing in this rule minimum characteristics and functions for appropriate RTOs; a collaborative process by which public utilities and non-public utilities that own, operate or control interstate transmission facilities, in consultation with state officials as appropriate, will consider and develop RTOs; a proposal to consider transmission ratemaking reforms on a case-specific basis; an opportunity for non-monetary regulatory benefits, such as deference in dispute resolution and streamlined filing and approval procedures; and a time line for public utilities to make appropriate filings with the Commission to initiate operation of RTOs. As a result of this voluntary approach, we expect jurisdictional utilities to form RTOs. If the industry fails to form RTOs under this approach, the Commission will reconsider what further regulatory steps are in the public interest.

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[4] The Commission received 334 initial and reply comments in response to the NOPR. The commenters, and abbreviations for them as used herein, are listed in an Appendix to this Final Rule.

Pursuant to our authority under section 205 of the Federal Power Act (FPA) to ensure that rates, terms and conditions of transmission and sales for resale in interstate commerce by public utilities are just, reasonable and not unduly discriminatory or preferential, and our authority under section 202(a) of the FPA to promote and encourage regional districts for the voluntary interconnection and coordination of transmission facilities by public utilities and non-public utilities for the purpose of assuring an abundant supply of electric energy throughout the United States with the greatest possible economy, this rule requires the following.

First, the Commission establishes minimum characteristics and functions that an RTO must satisfy in the following areas:

Minimum Characteristics:

1. Independence
2. Scope and Regional Configuration
3. Operational Authority
4. Short-term Reliability

Minimum Functions:

1. Tariff Administration and Design
2. Congestion Management
3. Parallel Path Flow
4. Ancillary Services
5. OASIS and Total Transmission Capability (TTC) and Available Transmission Capability (ATC)
6. Market Monitoring
7. Planning and Expansion
8. Interregional Coordination

Industry participants, however, retain flexibility in structuring RTOs that satisfy the minimum characteristics and functions. For example, we do not propose to require or prohibit any one form of organization for RTOs or require or prohibit RTO ownership of transmission facilities. The characteristics and functions could be satisfied by different organizational forms, such as ISOs, transcos, combinations of the two, or even new organizational forms not yet discussed in the industry or proposed to the Commission. Likewise, the Commission is not proposing a "cookie cutter" organizational format for regional transmission institutions or the establishment of fixed or specific regional boundaries under section 202(a) of the FPA.

We also establish an "open architecture" policy regarding RTOs, whereby all RTO proposals must allow the RTO and its members the flexibility to improve their organizations in the future in terms of structure, operations, market support and geographic scope to meet market needs. In turn, the Commission will provide the regulatory flexibility to accommodate such improvement.

Second, to facilitate RTO formation in all regions of the Nation, the Commission will sponsor and support a collaborative process to take place in the Spring of 2000. Under this process, we expect that public utilities and non-public utilities, in coordination with state officials, Commission staff, and all affected interest groups, will actively work toward the voluntary development of RTOs.

Third, we provide guidance on flexible transmission ratemaking that may be proposed by RTOs, including ratemaking treatments that will address congestion pricing and performance-based regulation. We also propose to consider on a case-by-case basis incentive pricing that may be appropriate for transmission facilities under RTO control.

Finally, all public utilities (with the exception of those participating in an approved regional transmission entity that conforms to the Commission's ISO principles) that own, operate or control interstate transmission facilities must file with the Commission by October 15, 2000, a proposal for an RTO with the minimum characteristics and functions to be operational by December 15, 2001, [5] or, alternatively, a description of efforts to participate in an RTO, any existing obstacles to RTO participation, and any plans to work toward RTO participation. We expect that such proposals would include the transmission facilities of public utilities as well as transmission facilities of public power and other non-public utility entities to the extent possible. Through the required filings, public

[5] An RTO proposal includes a basic agreement filed under section 205 of the FPA setting out the rules, practices and procedures under which the RTO will be governed and operated, and requests by the public utility members of the RTO under section 203 of the FPA to transfer control of their jurisdictional transmission facilities from individual public utilities to the RTO. Most RTO proposals by public utilities are likely to involve one or more filings under FPA sections 203 and 205, but the number and types of filing may vary depending upon the type of RTO proposed and the number of public utilities involved in the proposal. Under the Rule, a utility may file a petition for a declaratory order asking, for example, whether a proposed transmission entity would qualify as an RTO or if a new or innovative method for pricing transmission service would be acceptable, to be followed by appropriate filings under sections 203 and 205.

utilities will make known to the public any plans for RTO participation and any obstacles to RTO formation.

A public utility that is a member of an existing transmission entity that has been approved by the Commission as in conformance with the eleven ISO principles set forth in Order No. 888 must make a filing no later than January 15, 2001. That filing must explain the extent to which the transmission entity in which it participates meets the minimum characteristics and functions for an RTO, and either propose to modify the existing institution to the extent necessary to become an RTO, or explain the efforts, obstacles and plans with respect to conforming to these characteristics and functions.

The goal of this rulemaking is to form RTOs voluntarily and in a timely manner. The alternative to a voluntary process is likely to be a lengthy process that is more likely to result in greater standardization of the Commission's RTO requirements among regions. Although the Commission has specific authorities and responsibilities under the FPA to protect against undue discrimination and remove impediments to wholesale competition, we find it appropriate in this instance to adopt an open collaborative process that relies on voluntary regional participation to design RTOs that can be tailored to specific needs of each region.

II. BACKGROUND

In April 1996, in Order Nos. 888 [6] and 889, [7] the Commission established the foundation necessary to develop competitive bulk power markets in the United States: non-discriminatory open access transmission services by public utilities and stranded cost recovery rules that would provide a fair transition to competitive markets. Order Nos. 888 and 889 were very successful in accomplishing much of what they set out to do. However, the orders were not intended to address all problems that might arise in the development of competitive power markets. Indeed, the nature of the emerging markets and the remaining impediments to full competition that became apparent in the nearly four years since the issuance of Order Nos. 888 and 889, and the insightful comments and information presented to us by a wide array of industry participants in this rulemaking proceeding have made clear that the Commission must take further action if we are to achieve the fully competitive power markets envisioned by those orders.

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[6] See supra note 1.

[7] Open Access Same-Time Information System (Formerly Real-Time Information Networks) and Standards of Conduct, Order No. 889, 61 FR 21,737 (May 10, 1996), FERC Stats. & Regs. ¶ 31,035 (1996), order on reh'g, Order No. 889-A, 62 FR 12,484 (March 14, 1997), FERC Stats. & Regs. ¶ 31,049 (1997), order on reh'g, Order No. 889-B, 81 FERC ¶ 61,253 (1997).

A. The Foundation for Competitive Markets: Order Nos. 888 and 889

In Order Nos. 888 and 889, the Commission found that unduly discriminatory and anticompetitive practices existed in the electric industry, and that transmission-owning utilities had discriminated against others seeking transmission access. [8] The Commission stated that its goal was to ensure that customers have the benefits of competitively priced generation, and determined that non-discriminatory open access transmission services (including access to transmission information) and stranded cost recovery were the most critical components of a successful transition to competitive wholesale electricity markets. [9]

Accordingly, Order No. 888 required all public utilities that own, control or operate facilities used for transmitting electric energy in interstate commerce to (1) file open access non-discriminatory transmission tariffs containing, at a minimum, the non-price terms and conditions set forth in the Order, and (2) functionally unbundle wholesale power services. Under functional unbundling, the public utility must: (1) take transmission services under the same tariff of general applicability as do others; (2) state separate rates for wholesale generation, transmission, and ancillary services; and (3) rely on the same electronic information network that its transmission customers rely on to

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[8] Order No. 888, FERC Stats. & Regs. ¶ 31,036 at 31,682.

[9] Id. at 31,652.

obtain information about its transmission system when buying or selling power. [10] Order No. 889 required that all public utilities establish or participate in an Open Access Same-Time Information System (OASIS) that meets certain specifications, and comply with standards of conduct designed to prevent employees of a public utility (or any employees of its affiliates) engaged in wholesale power marketing functions from obtaining preferential access to pertinent transmission system information.

During the course of the Order No. 888 proceeding, the Commission received comments urging it to require generation divestiture or structural institutional arrangements such as regional independent system operators (ISOs) to better assure non-discrimination. The Commission responded that, while it believed that ISOs had the potential to provide significant benefits, efforts to remedy undue discrimination should begin by requiring the less intrusive functional unbundling approach. Subsequent to issuance of Order No.888, it has become apparent that several types of regional transmission institutions, in addition to the kinds of ISOs approved to date, may also be able to provide the benefits attributed to ISOs in Order No. 888.

Order No. 888 set forth 11 principles for assessing ISO proposals submitted to the Commission. [11] Order No. 888 also stated:

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[10] Id. at 31,654-55.

[11] Order No. 888, FERC Stats. & Regs. ¶ 31,036 at 31,730.

> [W]e see many benefits in ISOs, and encourage utilities to consider ISOs as a tool to meet the demands of the competitive marketplace. As a further precaution against discriminatory behavior, we will continue to monitor electricity markets to ensure that functional unbundling adequately protects transmission customers. At the same time, we will analyze all alternative proposals, including formation of ISOs, and, if it becomes apparent that functional unbundling is inadequate or unworkable in assuring non-discriminatory open access transmission, we will reevaluate our position and decide whether other mechanisms, such as ISOs, should be required. [12]

Below, we summarize our experiences with functional unbundling from the date of issuance of Order Nos. 888 and 889.

B. Developments Since Order Nos. 888 and 889

In the nearly four years since Order Nos. 888 and 889 were issued, numerous significant developments have occurred in the electric utility industry. Some of these reflect changes in governmental policies; others are strictly industry-driven. These activities have resulted in a considerably different industry landscape from the one faced at the time the Commission was developing Order No. 888, resulting in new regulatory and industry challenges.

Order Nos. 888 and 889 required a significant change to the way many public utilities have done business for most of this century, and most public utilities accepted these changes and made substantial good faith efforts to comply with the new requirements. Virtually all public utilities have filed tariffs stating rates, terms and

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[12] Id. at 31,655.

conditions for comparable service to third-party users of their transmission systems. In addition, improved information about the transmission system is available to all participants in the market at the same time that it is available to the public utility's merchant function and market affiliate as a result of utility compliance with the OASIS regulations.

The availability of tariffs and information about the transmission system has fostered a rapid growth in dependence on wholesale markets for acquisition of generation resources. Areas that have experienced generation shortages have seen rapid development of new generation resources. For example, in the Northeast Power Coordinating Council (NPCC) region (including New England, New York and parts of eastern Canada), where there was deep concern about adequacy of generation supply only three years ago, approximately 30,000 MW of generation is proposed or actually under construction. [13] That response comes almost entirely from independent generating plants, which are able to sell power into the bulk power market through open access to the transmission system. Power resources are now acquired over increasingly large regional areas, and interregional transfers of electricity have increased. The very success of Order Nos. 888 and 889, and the initiative of some utilities that have pursued voluntary

[13]Based on data supplied to the Commission by Resource Data International.

restructuring beyond the minimum open access requirements, have placed new stresses on regional transmission systems—stresses that call for regional solutions.

1. Industry Restructuring and New Stresses on the Transmission Grid

Open access transmission and the opening of wholesale competition in the electric industry have brought an array of changes in the past several years: divestiture by many integrated utilities of some or all of their generating assets; significantly increased merger activity both between electric utilities and between electric and natural gas utilities; increases in the number of new participants in the industry in the form of both independent and affiliated power marketers and generators as well as independent power exchanges; increases in the volume of trade in the industry, particularly sales by marketers; state efforts to introduce retail competition; and new and different uses of the transmission grid.

With respect to divestiture, since August 1997, generating facilities representing approximately 50,000 MW of generating capacity have been sold (or are under contract to be sold) by utilities, and an additional 30,000 MW is currently for sale. In total, this represents more than ten percent of U.S. generating capacity. In all, 27 utilities have sold all or some of their generating assets and seven others have assets for sale. Buyers of this generating capacity have included traditional utilities with specified service territories as well as independent power producers with no required service territory.

Since Order No. 888 was issued, more than 40 applications have been filed for Commission approval of proposed mergers involving public utilities. [14] Most of these merger proposals involve electric utilities with contiguous service areas, although some of the proposed mergers have been between utilities with non-contiguous service areas. In addition, an increasing number of applications involve the combination of electric and natural gas assets.

There has been significant growth in the volume of trading, and particularly the number of marketers, in the wholesale electricity market. For example, in the first quarter of 1995, according to power marketer quarterly filings, marketer sales traded by only eight active power marketers, totaled 1.8 million MWh. By the first quarter of 1999, such sales escalated to over 400 million MWh, traded by over 100 power marketers. [15]

The Commission has granted market-based rate authority to more than 800 entities, of which nearly 500 are power marketers, (including over 100 marketers affiliated with investor-owned utilities). The remaining entities include approximately

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[14] See Commission's website, www.ferc.fed.us/electric/mergers.

[15] See Commission's website, www.ferc.fed.us/electric/PwrMkt. The Commission recognizes that a significant portion of the sales represent the retrading of power by a number of different market participants, such that there may be multiple resales of the same generation. Nonetheless, the volume of and intensity of trading continues to increase in the wholesale electricity market.

equal numbers of affiliated power producers, investor-owned utilities and other utilities. [16]

State commissions and legislatures have been active in the past few years studying competitive options at the retail level, setting up pilot retail access programs, and, in many states, implementing full scale retail access programs. As of November 1, 1999, twenty-one states had enacted electric restructuring legislation, three had issued comprehensive regulatory orders, and twenty-six states plus the District of Columbia had legislation or orders pending or investigations underway. [17] Fifteen states had implemented full-scale or pilot retail competition programs that offer a choice of suppliers to at least some retail customers. Eight states have initiated programs to offer access to retail customers by a date certain.

Because of the changes in the structure of the electric industry, the transmission grid is now being used more intensively and in different ways than in the past. The Commission is concerned that the traditional approaches to operating the grid are showing signs of strain. According to the North American Electric Reliability Council (NERC), "the adequacy of the bulk transmission system has been challenged to support

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[16] See Commission's website, www.ferc.fed.us/electric.

[17] See the Energy Information Administration website, www.eia.doe.gov/cneaf/electricity/chg_str/regmap.html.

the movement of power in unprecedented amounts and in unexpected directions." [18] These changes in the use of the transmission system "will test the electric industry's ability to maintain system security in operating the transmission system under conditions for which it was not planned or designed." [19] It should be noted that, despite the increased transmission system loadings, NERC believes that the "procedures and processes to mitigate potential reliability impacts appear to be working reliably for now," and that even though the system was particularly stressed during the summer of 1998, "the system performed reliably and firm demand was not interrupted due to transmission transfer limitations." [20]

An indication that the increased and different use of the transmission system is stressing the grid is the increased use of transmission line loading relief (TLR) procedures. [21] And, according to published reports, the incidence of TLRs is growing.

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[18]Reliability Assessment 1998-2007, North American Electric Reliability Council (September 1998), at 26 (Reliability Assessment).

[19]Id.

[20]Id.

[21]The TLR procedures are designed to remedy overloads that result when a transmission line or other transmission equipment carries or will carry more power than its rating, which could result in either power outages or damage to property. The TLR procedures are designed to bring overloaded transmission equipment to within NERC's Operating Security Limits essentially by curtailing transactions contributing to the overload. See North American Electric Reliability Council, 85 FERC ¶ 61,353 (1998) (NERC).

While in all of 1998 over 300 TLRs were called, in the first ten months of 1999, over 400 TLRs have been called, resulting in over 8,000 MW of power curtailment in the three-month summer period beginning June 1999. [22]

It appears that the planning and construction of transmission and transmission-related facilities may not be keeping up with increased requirements. According to NERC, "business is increasing on the transmission system, but very little is being done to increase the load serving and transfer capability of the bulk transmission system." [23] The amount of new transmission capacity planned over the next ten years is significantly lower than the additions that had been planned five years ago, and most of the planned projects are for local system support. [24] NERC states that, "The close coordination of generation and transmission planning is diminishing as vertically integrated utilities divest their generation assets and most new generation is being proposed and developed by independent power producers." [25]

The transition to new market structures has resulted in new challenges and circumstances. For example, during the week of June 22-26, 1998, the wholesale electric market in the Midwest experienced numerous events that led to unprecedented high spot

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[22] Power Markets Week, November 8, 1999 at 1, citing NERC data.

[23] Reliability Assessment at 26.

[24] Id. at 7.

[25] Id.

market prices. Spot wholesale market prices for energy briefly rose as high as $7,500 per MWh, compared with an average price for the summer of approximately $40 per MWh in the Midwest if the pricing abnormalities are excluded. [26] This experience led to calls for price caps, allegations of market power, and a questioning of the effectiveness of transmission open access and wholesale electric competition.

The Commission staff undertook an investigation of the pricing abnormalities. Staff's report concluded that the unusually high price levels were caused by a combination of factors, particularly above-average generation outages, unseasonably hot temperatures, storm-related transmission outages, transmission constraints, poor communication of price signals, lowered confidence in the market due to a few contract defaults, and inexperience in dealing with competitive markets. [27]

The Commission's staff found that the market institutions were not adequately prepared to deal with such a dramatic series of events. Regarding regional transmission entities, the staff report observed: "The necessity for cooperation in meeting reliability concerns and the Commission's intent to foster competitive market conditions underscores

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[26] See Staff Report to the Federal Energy Regulatory Commission on the Causes of Wholesale Electric Pricing Abnormalities in the Midwest During June 1998, (Sept. 22, 1998) (Staff Price Spike Report) at 3-8 to 3-11. Unusually high spot market wholesale prices also occurred during the summer of 1999. The Commission is not aware that any formal evaluations of market data have been performed for that occurrence of price abnormalities.

[27] Id. at v.

the importance of better regional coordination in areas such as maintenance of transmission and generation systems and transmission planning and operation." [28] Support for this view comes from many sources. For example, the Public Utilities Commission of Ohio, in its own report on the high spot market prices, recommended that policy makers "take unambiguous action to require coordination of transmission system operations by regionwide Independent System Operators." [29]

On September 29, 1998, the Secretary of Energy Advisory Board Task Force on Electric System Reliability published its final report. [30] The Task Force was convened in January 1997 to provide advice to the Department of Energy on critical institutional, technical, and policy issues that need to be addressed in order to maintain bulk power electric system reliability in a more competitive industry. The Task Force found that "the traditional reliability institutions and processes that have served the Nation well in the past need to be modified to ensure that reliability is maintained in a competitively neutral fashion;" that "grid reliability depends heavily on system operators who monitor and

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[28] Id. at 5-8.

[29] Ohio's Electric Market, June 22-26, 1998, What Happened and Why, A Report to the Ohio General Assembly, at iii.

[30] Maintaining Reliability in a Competitive U.S. Electricity Industry; Final Report of the Task Force on Electric System Reliability (Sept. 29, 1998) (Task Force Report). The Task Force was comprised of 24 members representing all major segments of the electric industry, including private and public suppliers, power marketers, regulators, environmentalists, and academics.

control the grid in real time;" and that "because bulk power systems are regional in nature, they can and should be operated more reliably and efficiently when coordinated over large geographic areas." [31]

The report noted that many regions of the United States are developing ISOs as a way to maintain electric system reliability as competitive markets develop. According to the Task Force, ISOs are significant institutions to assure both electric system reliability and competitive generation markets. The Task Force concluded that a large ISO would: (1) be able to identify and address reliability issues most effectively; (2) internalize much of the loop flow caused by the growing number of transactions; (3) facilitate transmission access across a larger portion of the network, consequently improving market efficiencies and promoting greater competition; and (4) eliminate "pancaking" of transmission rates, thus allowing a greater range of economic energy trades across the network. [32]

2. Successes, Failures, and Haphazard Development of Regional Transmission Entities

Since Order No. 888 was issued, there have been both successful and unsuccessful efforts to establish ISOs, and other efforts to form regional entities to operate the transmission facilities in various parts of the country. While we are encouraged by the success of some of these efforts, it is apparent that the results have been inconsistent, and

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[31] Task Force Report at x-xi.

[32] Id. at 76.

much of the country's transmission facilities remain outside of an operational regional transmission institution.

Proposals for the establishment of five ISOs have been submitted to and approved, or conditionally approved, by the Commission. These are the California ISO, [33] PJM ISO, [34] ISO New England, [35] the New York ISO, [36] and the Midwest ISO. [37] In addition, the Texas Commission has ordered an ISO for the Electric Reliability Council of Texas (ERCOT). [38] Moreover, our international neighbors in Canada and Mexico are also

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[33]Pacific Gas & Electric Company, et al., 77 FERC ¶ 61,204 (1996), order on reh'g, 81 FERC ¶ 61,122 (1997) (Pacific Gas & Electric).

[34]Pennsylvania-New Jersey-Maryland Interconnection, et al., 81 FERC ¶ 61,257 (1997), order on reh'g, 82 FERC ¶ 61,047 (1998) (PJM).

[35]New England Power Pool, 79 FERC ¶ 61,374 (1997), order on reh'g, 85 FERC ¶ 61,242 (1998) (NEPOOL).

[36]Central Hudson Gas & Electric Corporation, et al., 83 FERC ¶ 61,352 (1998), order on reh'g, 87 FERC ¶ 61,135 (1999) (Central Hudson).

[37]Midwest Independent Transmission System Operator, et al., 84 FERC ¶ 61,231, order on reconsideration, 85 FERC ¶ 61,250, order on reh'g, 85 FERC ¶ 61,372 (1998) (Midwest ISO).

[38]See 16 Texas Administrative Code § 23.67(p). Furthermore, on June 18, 1999, S.B.7 was enacted to restructure the Texas electric industry allowing retail competition. The bill requires retail competition to begin by January 2002. Rates will be frozen for three years, and then a six percent reduction will be required for residential and small commercial consumers.

pursuing electric restructuring efforts that include various forms of regional transmission entities. [39]

The PJM, New England and New York ISOs were established on the platform of existing tight power pools. It appears that the principal motivation for creating ISOs in these situations was the Order No. 888 requirement that there be a single systemwide transmission tariff for tight pools. In contrast, the establishment of the California ISO and the ERCOT ISO was the direct result of mandates by state governments. The Midwest ISO, which is not yet operational, is unique. It was neither required by government nor based on an existing institution. Two states in the region subsequently required utilities in their states to participate in either a Commission-approved ISO (Illinois and Wisconsin), or sell their transmission assets to an independent transmission company that would operate under a regional ISO (Wisconsin).

As part of general restructuring initiatives, several states now require independent grid management organizations. For example, an Illinois law required that its utilities become members of a FERC-approved regional ISO by March 31, 1999, and Wisconsin law gives its utilities the option of joining an ISO or selling their transmission assets to an

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[39] See Policy Proposal for Structural Reform of the Mexican Electricity Industry, Secretary of Energy, Mexico (Feb. 1999); Third Interim Report of the Ontario Market Design Committee (Oct. 1998); TransAlta Enterprises Corporation, 75 FERC ¶ 61,268 at 61,875 (1996) (recognition of the restructuring in the Province of Alberta, Canada to create a Grid Company of Alberta).

independent transmission company by June 30, 2000. In both states, the backstop is a single-state organization if regional organizations are not developed. Recently, Virginia, [40] Arkansas [41] and Ohio [42] have also enacted legislation requiring their electric utilities to join or establish regional transmission entities.

The approved ISOs have similarities as well as differences. All five Commission-approved ISOs operate, or propose to operate, as non-profit organizations. All five ISOs include both public and non-public utility members. However, among the five, there is considerable variation in governance, operational responsibilities, geographic scope and market operations. Four of the ISOs rely on a two-tier form of governance with a non-stakeholder governing board on top that is advised, either formally or informally, by one or more stakeholder groups. In general, the final decision making authority rests with the independent non-stakeholder board. One ISO, the California ISO, uses a board consisting of stakeholders and non-stakeholders.

Four of the five ISOs operate a single control area, but the large Midwest ISO does not currently plan to operate a single control area. Three are multi-state ISOs (New

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[40] See Virginia Electric Utility Restructuring Act, S1269 (Mar. 25, 1999). In Virginia, electric utilities are required by January 2001, to join or establish regional transmission entities.

[41] See The Arkansas Electric Consumer Choice Act of 1999, Act 1, 82nd General Assembly (Apr. 1999).

[42] See Amended Substitute Senate Bill No. 3, 123rd General Assembly (July 6, 1999).

England, PJM and Midwest), while two ISOs (California and New York) currently operate within a single state. The current Midwest ISO members do not encompass one contiguous geographic area. The ISO New England administers a separate NEPOOL tariff, while the other four administer their own ISO transmission tariffs.

Three ISOs operate or propose to operate centralized power markets (New England, PJM and New York), and one ISO (California) relies on a separate power exchange (PX) to operate such a market. [43] The Midwest ISO has not proposed an ISO-related centralized market for its region. [44] In addition, at least one separate PX has begun to do business in California apart from the PX established through the restructuring legislation. [45]

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[43]The California PX offers day-ahead and hour-ahead markets and the ISO operates a real-time energy market. Participation in the PX market is voluntary except that the three traditional investor-owned utilities in California must bid their generation sales and purchases through the PX for the first five years. New York will offer day-ahead and real-time energy markets that will be operated by the ISO. PJM and New England offer only real-time energy markets, although PJM has proposed to operate a day-ahead market. The ERCOT ISO is the only other ISO that does not currently operate a PX.

[44]There are indications, however, that the Midwest ISO is considering the formation of a power exchange. See Joint Committee for the Development of a Midwest Independent Power Exchange, "Solicitation of Interest-Creation of an Independent Power Exchange for the U.S. Midwest," February 5, 1999.

[45]See Automated Power Exchange, Inc., 82 FERC ¶ 61,287, reh'g denied, 84 FERC ¶ 61,020 (1998), appeals docketed, No. 98-1415 (D.C. Cir. Sept. 14, 1998) and No. 98-1419 (D.C. Cir. Sept. 14, 1998).

The existing ISOs are also evolving in terms of their governance structure and as a result of operating experience with the transmission systems and the various markets they operate. For example, the Commission rejected the original governance proposals for two ISOs: the New England ISO and New York ISO. In both cases, the Commission concluded that the vertically integrated utility members of the ISO would have too much voting power in the various advisory committees that provide advice and recommendations to the non-stakeholder Boards. The ISOs resubmitted governance proposals that gave balanced representation to the various sectors of stakeholders, and the Commission subsequently approved both revised governance structures.

In addition, the Commission has considered a number of significant modifications of market rules proposed by the existing ISOs in the seven months since issuance of the RTO NOPR. In particular, a number of rules for the California ISO and New England ISO have been modified, affecting the products traded in, and the timing of, the markets for energy, ancillary services, balancing services and transmission.

An additional few transmission restructuring proposals that were pending as of the date of issuance of the RTO NOPR have been approved by the Commission, and others have been filed since that date. In July 1999, the Commission granted a petition for declaratory order filed by Entergy Services Inc., in which the majority concluded that passive ownership of a transmission entity by a generating company or other market participant could meet the ISO principles contained in Order No. 888. The order stated,

however, that the passive ownership must be properly designed, such that the transmission entity is truly independent of the market participants. [46] Another filing that was pending when the NOPR was issued was the request by FirstEnergy to sell its transmission assets to a newly-formed affiliate. The Commission approved the disposition of jurisdictional facilities, noting that the proposed action would not adversely affect competition, rates or regulation. In addition, the Commission noted that the creation of the transmission-owning affiliate would facilitate the subsequent transfer of FirstEnergy's transmission facilities to an RTO, which FirstEnergy pledged to do within two years of Commission approval of the disposition of facilities to its affiliate. [47]

Since issuance of the RTO NOPR, the Alliance Companies filed a proposal to create an RTO. Applicants suggest that the RTO could take one of two forms, either an ISO or a transco, but note that they prefer a transco configuration in which, at least initially, the five transmission-owning participants could hold five percent ownership stakes in the transco. [48]

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[46] See Entergy Services, Inc., 88 FERC ¶ 61,149 (1999) (Commissioner Massey dissented from this order).

[47] See FirstEnergy Operating Companies, et al., 89 FERC ¶ 61,090 (1999).

[48] See Application of Alliance Companies in Docket No. ER99-3144-000 (filed June 3, 1999). The Commission issued an order on this application concurrently with the issuance of this Final Rule. See Alliance Companies, 89 FERC ¶ ___ (1999) (Alliance Companies).

Not all efforts to create ISOs have been successful. For example, after more than two years of effort, the proponents of the IndeGO (Independent Grid Operator) ISO in the Pacific Northwest and Rocky Mountain regions ended their efforts to create an ISO. [49] More recently, members of the Mid-American Power Pool (MAPP), an existing power pool that covers six U.S. states and two Canadian provinces, failed to achieve consensus for establishing a long-planned ISO. [50] In the Southwest, proponents of the Desert STAR ISO have not been able to reach agreement to date on a formal proposal after more than two years of discussion.[51] In the interim period, some of the participants in the Desert STAR ISO have filed at the Commission a proposal to create the Mountain West Independent Scheduling Administrator, which would oversee the scheduling of transmission service within Nevada. [52]

Various reasons have been advanced to explain the difficulty in forming a voluntary, multi-state ISO. Reasons include: "cost shifting," which involves increases in

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[49]Recently, however, parties in the Pacific Northwest have resumed RTO discussions.

[50]However, trade press reports suggest that while MAPP members continue to try to reach consensus, the Midwest ISO is in discussion with MAPP members to join the Midwest ISO. See Inside FERC, July 26, 1999; The Energy Report, Nov. 1, 1999 at 931.

[51]Recent press reports, however, indicate that Desert STAR has incorporated as a non-profit organization, a first step toward the launch of an ISO. See Energy Daily, Nov. 5, 1999 at 2.

[52]See Application of Mountain West Independent Transmission Administrator in Docket No. ER99-3719-000 (filed July 23, 1999).

transmission rates for some parties; disagreements about sharing of ISO transmission revenues among transmission owners; difficulties in obtaining the participation of publicly-owned transmission facilities; concerns about the loss of transmission rights and prices embedded in existing transmission agreements; and the preference of certain transmission owners to sell or transfer their transmission assets to a for-profit transmission company in lieu of handing over control to a non-profit ISO.

3. The Commission's ISO and RTO Inquiries; Conferences with Stakeholders and State Regulators

In light of the various restructuring activities occurring throughout the United States, the Commission has held 11 public conferences in nine different cities across the country to hear the views of industry, consumers, and state regulators with respect to the need for RTOs and their appropriate roles and responsibilities.

The Commission initiated an inquiry in March 1998 pertaining to its policies on ISOs. A notice establishing procedures for a conference gave the following rationale:

> In Order Nos. 888 and 889 and their progeny, the Commission established the fundamental principles of non-discriminatory open access transmission services. Nevertheless, many issues remain to be addressed if the Nation is to fully realize the benefits of open access and more competitive electric markets.
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> * * *
>
> Given the dramatic changes taking place in both wholesale and retail electric markets and the many proposals under consideration with respect to the creation of ISOs or other transmission entities, such as transmission-only utilities, it is time for the Commission to take stock of its policies in

> order to determine whether they appropriately support our dual goals of eliminating undue discrimination and promoting competition in electric power markets. [53]

Accordingly, the Commission held a series of eight conferences in 1998 to gain insight into participants' views on the formation and role of ISOs in the electric utility industry. The first conference was held in April 1998 at the Commission's offices in Washington, D.C. Between May 28 and June 8, 1998, the Commission held seven regional conferences in Phoenix, Kansas City, New Orleans, Indianapolis, Portland, Richmond and Orlando. As a result of these conferences, the Commission heard approximately 145 oral presentations and received a large number of written comments on the appropriate size, scope, organization and functions of regional transmission institutions. A number of different of viewpoints were expressed. [54]

On October 1, 1998, the Secretary of Energy delegated his authority under section 202(a) of the FPA to the Commission. In doing so, the Secretary stated that section 202(a) "provides DOE with sufficient authority to establish boundaries for Independent System Operators (ISOs) or other appropriate transmission entities." [55] The Secretary also stated: "FERC is also increasingly faced with reliability-related issues. Providing

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[53]Inquiry Concerning the Commission's Policy on Independent System Operators, Notice of Conference, Docket No. PL98-5-000, at 1-2 (March 13, 1998).

[54]A summary of those views was included as Appendix A to the NOPR in this docket.

[55]63 FR 53,889 (Oct. 7, 1998).

FERC with the authority to establish boundaries for ISOs or other appropriate transmission entities could aid in the orderly formation of properly-sized transmission institutions and in addressing reliability-related issues, thereby increasing the reliability of the transmission system."

On November 24, 1998, we gave notice in this docket of our intent to initiate a consultation process with State commissions pursuant to section 202(a). [56] The purpose of the consultations was to afford State commissions a reasonable opportunity to present their views with respect to appropriate boundaries for regional transmission institutions and other issues relating to RTOs. Conferences with State commissioners were held in St. Louis, Missouri, on February 11, 1999; in Las Vegas, Nevada, on February 12, 1999; and in Washington, D.C., on February 17, 1999. In all, we heard oral presentations by representatives of 41 state commissions during these consultations, with others monitoring or providing written comments. [57] During these sessions, we received much valuable advice. Furthermore, we have had additional consultations since issuance of the RTO NOPR in May 1999.

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[56] Regional Transmission Organizations, Notice of Intent to Consult with State Commission, 63 FR 66,158 (Dec. 1, 1998), FERC Stats & Regs. ¶ 35,534 (1998).

[57] See Appendix for a list of commenters.

III. DISCUSSION

A. Existing Barriers and Impediments to Achieving Fully Competitive Electricity Markets

In the NOPR, the Commission expressed its belief that there remain important transmission-related impediments to a competitive wholesale electric market. The Commission grouped these remaining impediments into two broad categories: (1) the engineering and economic inefficiencies inherent in the current operation and expansion of the transmission grid, and (2) continuing opportunities for transmission owners to unduly discriminate in the operation of their transmission systems so as to favor their own or their affiliates' power marketing activities. [58]

With respect to engineering and economic inefficiencies, the NOPR noted that the transmission facilities of any one utility in a region are part of a larger, integrated transmission system which, from an electrical engineering perspective, operates as a single machine. [59] Engineering and economic inefficiencies occur because each separate operator usually makes independent decisions about the use, limitations and expansion of its piece of the interconnected grid based on incomplete information, even though any action taken by one transmission provider can have major and instantaneous effects on the transmission facilities of all other transmission providers. The Commission noted

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[58] FERC Stats. & Regs. ¶ 32,541 at 33,696.

[59] Id. at 33,697.

that, while this was not a new phenomenon, the demands placed on the transmission grid had changed in recent years due to (1) increases in bulk power trade, (2) large shifts in power flows, and (3) an increasingly de-integrated and decentralized competitive power industry. [60] As a consequence of these changes in trade patterns and industry structure, certain operational problems had become more significant and difficult to resolve.

Engineering and Economic Inefficiencies

The NOPR identified a number of specific economic and engineering inefficiencies. First, the NOPR noted that the reliability of the nation's bulk power system was being stressed in ways that have never been experienced before, and questioned the continued feasibility of one-on-one coordination of an interconnected transmission grid encompassing more than 100 transmission owners and 140 separate control areas. [61] Second, the NOPR observed that there were increasing difficulties in accurately computing Total Transmission Capacity (TTC) and Available Transmission Capacity (ATC), assessments that require reliable and timely information about load, generation, facility outages and transactions on neighboring systems, as well as consistency in methodologies among systems. [62] Third, the NOPR noted that efficient congestion management required regional actions, and that the current methods for

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[60] See id.

[61] See id. at 33,699.

[62] Id. at 33,700.

managing congestion (e.g., Transmission Line Loading Relief procedures in the Eastern Interconnection), which do not attempt to optimize regional congestion relief, were cumbersome, inefficient and disruptive to bulk power markets. [63] Fourth, the NOPR expressed concern that the uncertainty associated with transmission planning and expansion had increased with the increasing number and distance of unbundled transactions and the wider variation in generation dispatch patterns. The NOPR pointed to a noticeable decline in planned transmission investments and expressed concern that, without a regional approach to planning and expansion, it would be difficult to address complex and controversial issues that arise when the benefits of an expansion do not necessarily accrue to the transmission system that must undertake the expansion. [64] Finally, the NOPR explained that pancaked transmission rates (where a separate access charge is assessed every time the transaction contract path crosses the boundary of another transmission owner) restrict the size of regional power markets. The Commission added that the balkanization of electricity markets hurts consumers who pay higher transmission rates and have access to fewer generation options. [65]

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[63] Id. at 33,701-02.

[64] See id. at 33,702-03.

[65] Id. at 33,703.

Continuing Opportunities for Undue Discrimination

With respect to continuing opportunities for undue discrimination, the NOPR observed that, when utilities control monopoly transmission facilities and also have power marketing interests, they have poor incentives to provide equal quality transmission service to their power marketing competitors. [66] The NOPR explained that the Commission had made this point in Order No. 888:

> It is in the economic self-interest of transmission monopolists, particularly those with high-cost generation assets, to deny transmission or to offer transmission on a basis that is inferior to that which they provide themselves. The inherent characteristics of monopolists make it inevitable that they will act in their own self-interest to the detriment of others by refusing transmission and/or providing inferior transmission to competitors in the bulk power markets to favor their own generation, and it is our duty to eradicate unduly discriminatory practices. [67]

In the NOPR, the Commission noted that functional unbundling does not change the incentives of vertically integrated utilities to use their transmission assets to favor their own generation, but instead attempt to reduce the ability of utilities to act on those incentives. [68]

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[66] Id. at 33,704.

[67] Order No. 888, FERC Stats. & Regs. ¶ 31,036 at 31,682.

[68] As noted in the NOPR, in Order No. 888, the Commission received and considered numerous comments that functional unbundling was unlikely to work, and that more drastic restructuring, such as corporate unbundling, was needed. For example, the Federal Trade Commission advised the Commission that a functional unbundling approach ". . . would leave in place the incentive and opportunity for some utilities to

(continued...)

The NOPR expressed concern about continuing indications that transmission service problems related to discriminatory conduct remain and concluded that these problems are impeding competitive wholesale power markets. [69] The NOPR also noted that instances of actual discrimination may be undetectable in a non-transparent market and, in any event, it is often hard to determine, on an after-the-fact basis, whether an action was motivated by an intent to favor affiliates or simply reflected the impartial application of operating or technical requirement. The NOPR added that, while continued discrimination may be deliberate, it could also result from the failure to make sufficient efforts to change the way integrated utilities have done business for many years. The Commission expressed concern that the difficulty in determining whether there has been compliance with our regulations raises the question as to whether functional unbundling is an appropriate long-term regulatory solution.

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[68](...continued)
exercise market power in the regulated system. Preventing them from doing so by enforcing regulations to control their behavior may prove difficult." However, the Commission decided at the time to adopt the less intrusive and less costly remedy of functional unbundling. FERC Stats. & Regs. ¶ 32,541 at 33,707.

[69]The NOPR described specific examples of undue discrimination that had been brought to its attention through formal complaints, informal complaints made to the Commission's enforcement hotline, oral and written comments made in conjunction with public conferences held by the Commission, and pleadings filed with the Commission in various dockets. The complaints generally involved: (1) calculation and posting of ATC in a manner favorable to the transmission provider; (2) standards of conduct violations, (3) line loading relief and congestion management, and (4) OASIS sites that are difficult to use. See id. at 33,707-13.

The NOPR explained that the Commission considers allegations of discrimination, even if not reduced to formal findings, to be a serious concern for two reasons. First, this can be indicative of additional, unreported, discriminatory actions, because there are significant disincentives to filing and pursuing formal complaints that would result in definitive findings. [70] The NOPR expressed a concern that actual problems with functional unbundling may be more pervasive than formally adjudicated complaints would suggest. Second, the NOPR explained that allegations of discrimination are serious because, if nothing else, they represent a perception by market participants that the market is not working fairly. If market participants perceive that other participants have an unfair advantage through their ownership or control of transmission facilities, it can inhibit their willingness to participate in the market, thus thwarting the development of robust competition. The NOPR added that such mistrust can also harm reliability. [71]

The NOPR explained the potential for undue discrimination increases in a competitive environment unless the market can be made structurally efficient and transparent with respect to information, and equitable in its treatment of competing

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[70] As noted in the NOPR, transmission customers are reluctant to make even informal complaints because they fear retribution by their transmission supplier; the complaint process is costly and time-consuming; the Commission's remedies for violations do not impose sufficient financial consequences on the transmission provider to act as a significant deterrent; and, in the fast-paced business of power marketing, there may be no adequate remedy for the lost short-term sales opportunities in after-the-fact enforcement. See FERC Stats. & Regs. ¶ 32,541 at 33,706.

[71] Id.

participants. Also, a system that attempts to control behavior that is motivated by economic self-interest through the use of standards of conduct will require constant and extensive policing and requires the Commission to regulate detailed aspects of internal company policy and communication. The NOPR added that functional unbundling does not necessarily promote light-handed regulation and undoubtedly imposes a cost on those entities that have to comply with the standards of conduct and abide by rules that limit the flexibility of their internal management activities. The NOPR stated that the perception that many entities that operate the transmission system cannot be trusted is not a good foundation on which to build a competitive power market, and it created needless uncertainty and risk for new investments in generation. [72]

Comments

Engineering and Economic Inefficiencies

Virtually all commenters support the NOPR's premise that engineering and economic inefficiencies exist in the operation, planning and expansion of the regional transmission grid and that these inefficiencies hinder electric system reliability and a fully competitive bulk power market. [73] Many commenters state further that, in the new

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[72] See id. at 33,714.

[73] See, e.g., Duquesne, Entergy, Florida Power Corp., NU, Kentucky Commission, NECPUC, Ohio Commission, Texas Commission, DOE, American Forest, Arkansas Cities, East Texas Cooperatives, EPSA, First Rochdale, FMPA, Oglethorpe, PNGC, Powerex, Public Citizen, SoCal Cities, Sonat, Williams.

industry structure, coordinated regional transmission planning has become a thing of the past and new transmission additions that will benefit reliable grid operations are being delayed. [74]

FMPA states that grid fragmentation harms reliability. [75] NU and EPRI note that recent demand growth has meant new stresses on grid reliability and there is less coordination of generation and transmission planning. TXU Electric states that, as the shift from regulation to competition accelerates, and restructuring efforts proliferate, the regional transmission grid is being exposed to stresses that cannot be alleviated without regional solutions.

WPPI describes a situation in 1997 in which the 345-kV transmission facility between MAPP and MAIN was overloaded as a result of transactions scheduled within MAPP, and Wisconsin operators became aware of the problem only when the constrained 345-kV facility automatically separated in response to the overload. WPPI explains that, with the 345-kV facility shut down, other transmission facilities in the region overloaded, causing the transmission system over a large region to come perilously close to a blackout. WPPI adds that, because transmission providers do not have information about their neighbors' on-system transactions to serve native load, they are unable to predict the

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[74] See, e.g., EPRI, Florida Power Corp, Duquesne, Entergy, SoCal Cities, Merrill Energy, TAPS, IPCF, Powerex.

[75] FMPA at 24.

impact of potential TLR events. WPPI says that, in the face of this uncertainty, transmission providers have to make overly conservative, but inaccurate assumptions which unnecessarily reduce the amount of transmission capacity available to the market.

TAPS states that, when the owners of a constrained interface between MAPP and MAIN tried to remove the line for service for maintenance, they found that 500 MW of flow remained on the line even after all scheduled transactions were terminated. TAPS explains that there were so many transactions in the region at the time that transmission operators could not determine the source of this 500 MW loop flow and were unable to ask other parties to cut their schedules to permit the necessary maintenance. [76] TAPS asserts that transmission owners have engaged in "creative" concepts such as CBM to reduce ATC and argues that price spikes are exacerbated, if not caused by the failure to have regional transmission information and control in one place. [77]

TDU Systems complaint that the current system balkanizes regions into a series of submarkets, each with its own dominant incumbent transmission owner/generator that collects its own transmission toll.

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[76] TAPS, Appendix A, at 8

[77] TAPS, Appendix A at 2-5.

EPRI contends that the current off-line ATC calculations result in inconsistencies of ATC values. Entergy argues that the accuracy of ATC will continue to be a problem as long as contract path pricing is used. [78]

Minnesota Power notes that reliability across the broader region suffers simply because of different standards for ATC calculations within and across NERC regions and, indeed, different terminology and operating practices. Minnesota Power states that: the market currently suffers as participants attempt to deal with multiple OASIS sites; existing tagging and reservation practices that limit transactions due to the complexity of arrangements; its transactions are subject to curtailment pursuant to two different procedures, NERC TLR and MAPP LLR; and congestion management alternatives to line loading relief have not succeeded because they lack regional coordination. Minnesota Power argues that energy price volatility will continue to increase unless there is a viable process, supported by transmission rights and secondary transfer markets, where a participant can secure transmission daily, or as needed, to bring the least cost supply to its customers.

EPSA asserts that one of the major impediments to robust competitive bulk power markets is the current balkanization of the system with dozens of individual utilities, NERC Regional Councils, and security coordinators, and state laws and regulations

[78] Entergy at 8.

imposing a patchwork of often inconsistent and incompatible rules for the use of the interstate transmission system. EPSA argues that the operational and economic inefficiencies detailed in the NOPR are not unique to certain region as and may be most pronounced in those regions where competition has yet to take hold. [79]

SoCal Edison states that existing transmission systems were designed to serve native load customers in a defined area, in the most efficient manner possible, in conjunction with the generation that it owned and operated, and were not designed to function as common carriers. SoCal Edison concludes that that radical changes in downstream generation markets are having, and will continue to have, significant and largely adverse effects of transmission systems. Consumers Energy echoes this concern, noting that it should be obvious that the current transmission system was designed to deliver locally generated power to local markets with interfaces used primarily for reliability purposes. Consumers Energy states that the system is simply not engineered to move large quantities of power from many distant generation sources to millions of end users.

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[79] EPSA specifically points to the SERC as a region where "state commissions and utilities may be arguing that they don't 'need' RTOs to promote competitive markets," at a time when Southeastern markets trail the rest of the nation in proposed merchant plant development and power trading, "both hallmarks of robust wholesale competition and workable open access policies." EPSA notes that SERC is the largest NERC region, both in load and peak demand, yet SERC and FRCC together constitute only 5.2 percent of the wholesale power trades nationwide.

Williams concludes that problems with congestion management, pancaked transmission rates, parallel path or loop flows, inaccurate ATC postings, and transmission facilities management and expansion planning continue to impede the development of robust, competitive wholesale electric markets in the United States.

PECO states that current TLR procedures allow one entity to cause the curtailment of numerous third party transactions on a regular basis to preserve power delivery in its single control area, regardless of the impact on other control areas. PECO argues that, while physical operation of the grid is maintained under these TLR procedures, reliable, inter-control area power delivery is not assured and market participants are denied fair access to the grid.

Tampa Electric states that, within peninsular Florida, transmission users must often go to several individual transmission providers and OASIS nodes, sign multiple agreements with various providers and attempt to piece together and navigate through various partial paths to connect a power sale to a buyer. Tampa Electric concludes that access to transmission services within this region is not as open as it could be to facilitate an efficient, robust wholesale market.

AEP states that coordination that previously existed in a fully integrated electric system of the construction of new generation and transmission facilities has eroded due to the separation of these functions. AEP states that congestion constraints could potentially inhibit the development of additional generation capacity or provide a disincentive to add

generating capacity where needed. AEP also notes that the priorities of state regulatory agencies sometimes favor the needs of native load customers that can create conflicts among competing interest at the regional level. AEP also states that developers of new merchant generation plants have become less willing to share their long-term planning goals with transmission owners due to the business strategies that accompany a more competitive power market. However, AEP argues that removal of pancaking is not consistent with economic efficiency and may distort future transmission expansion because the cost of transmission should be based on distance and location. [80]

Several commenters state that needed transmission expansion is not taking place because of a lack of pricing incentives to build new transmission. [81] EPRI states that failure to satisfy grid expansion needs is resulting in increasing frequency and duration of power disturbances and outages costing $50 billion per year.

WPPI points out that transmission planning must be undertaken on a regional, not a state basis, noting that import capability from MAPP into Wisconsin is sometimes constrained by facilities located outside of Wisconsin, e.g., transformers and lines located in Illinois and Minnesota. On the other hand, Allegheny asserts that the industry has not

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[80] AEP at 1, and Attachment to AEP's comments (Statement of Paul Moul). As discussed in the Transmission Ratemaking section (Section G), elimination of pancaked rates (multiple access charges assessed only because the transaction crosses a corporate boundary) does not constitute a prohibition on distance sensitive rates.

[81] See, e.g., Transmission ISO Participants, H.Q. Energy Services, Powerex.

failed to plan and coordinate on a regional basis and cites examples of study groups and planning committees, such as VEM (Virginia-ECAR-MAAC) and GAPP (General Agreement on Parallel Paths).

Most commenters assert that pancaked transmission access charges prevent efficient access to regional markets and distort the generation market. [82] A few commenters, however, question the benefits associated with eliminating rate pancaking. Southern Company observes that the severity of pancaking effects may vary from region to region. [83]

Continuing Opportunities for Undue Discrimination

Comments dealing with continuing opportunities for undue discrimination fall generally into two camps. On the one side, transmission customers and some transmission providers agree with the NOPR's premise that opportunities for discrimination exist, that perceptions of discrimination are also a serious impediment to competitive bulk power markets, and that functional unbundling does not reflect the

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[82] See, e.g., FMPA, IMEA, NECPUC, Ohio Commission, Texas Commission, American Forest, Arkansas Cities, East Texas Cooperatives, Oglethorpe, PNGC, Powerex, Williams, WPSC.

[83] For illustration, Southern Company points out that a customer in its service area can transmit power 500 miles away for $3/MWh whereas a customer wanting to transmit power from Boston to Washington, DC (also a distance of 500 miles) will have to go through the three PJM, New England and NY ISOs and pay a total of approximately $14/MWh.

optimal long-term regulatory solution. [84] On the other side, a number of transmission providers disagree with these premises. [85]

Comments Asserting That Discrimination Still Exists

AMP-Ohio points to an event last summer when it was unable to transmit power from a generator on AEP's system to a load on the FirstEnergy system and was forced to purchase power from FirstEnergy at $4000/MWh. AMP-Ohio contends that AEP and FirstEnergy were simultaneously reporting zero ATC during the hour, i.e., an event that cannot be rationalized by AMP-Ohio (i.e., an interface that is fully loaded in both directions at the same time would, in AMP-Ohio's view, cancel out).

UAMPS argues that three transmission owners that jointly own segments of a single transmission line have avoided releasing the capacity of this line under their open access tariffs through a series of contractual arrangements that distributes transmission rights directly to each of their merchant functions. As a result, only the transmission owners' merchant functions have the ability the schedule transmission service over the line. UAMPS contends that this example, and others, confirm the Commission's

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[84] E.g., American Forest, Los Angeles, TAPS, UAMPS, Steel Dynamics, Turlock, Cinergy, Statoil, WPPI, NJBUS, MidAmerican, LG&E, Clarksdale, Michigan Commission, New Smyrna Beach, Industrial Consumers, IMPA, First Rochdale, East Texas Cooperatives, FMPA, TDU Systems, Canada DNR, Allegheny, IMEA, Sonat, Public Citizen, EPSA, CCEM/ELCON, UtiliCorp and FTC.

[85] United Illuminating, Southern Company, MidAmerican, Duke, PSE&G, FP&L, Entergy, FirstEnergy, Alliance Companies, Lenard and Florida Power Corp.

perception that the remedies mandated in Order No. 888 have not eliminated discrimination. UAMPS states that it is intuitively obvious that when the transmission function and merchant function ultimately serve the same master, neither can be truly independent.

Hogan contends that, without an efficient regional spot market and its ease of access, the problems of discrimination will persist. FTC concludes that several years of industry experience confirm the concern that discrimination remains in the provision of transmission services by utilities that continue to own both generation and transmission. FTC concludes that reliance on behavioral rules have proved to be less than ideal.

Cinergy contends that reliance on CBM by some transmission providers this summer provided their native load an unfair operational edge over network service in the import of power through interconnects that were the subject of TLR orders. Cinergy argues that the more severe impact on market efficiency is caused by the lack of information underlying the transmission provider's implementation of TLRs, and raises significant opportunities for transmission providers to use alleged reliability reasons to hide conduct actually motivated to protect their own or their affiliate's own power market. Cinergy concludes that market participants will never know the real answer because it may be impossible to prove abuse of the TLR procedures with access to information on the nature and cause of constraints and the lack of consistency in implementing TLRs across the regions. Cinergy adds that, even where there may be sufficient evidence to

prove discrimination, potential complainants may fear retribution by the transmission provider, and may also be hesitant to file complaints because of the litigation costs of the complaint process and the lack of remedy for lost short-term market opportunities.

Enron/APX/Coral Power state that the following types of relatively overt, although difficult to detect, discrimination occur: (1) offers of attractive transmission service to a transmission owner's affiliate or merchant function that are not similarly offered to others; (2) advance notification to the affiliate or merchant function of the availability of transmission service or the availability of a new service; and (3) changes in procedures, such as scheduling deadlines, for obtaining transmission service in ways that benefit the affiliate or merchant function. Enron/APX/Coral Power (as well as CCEM/ELCON, UtiliCorp and EPSA) also argue that a "principal form of discrimination grows out of the exemption from the pro forma OATT and OASIS that is enjoyed by transmission bundled with service to captive 'native-load' customers." Enron/APX/Coral Power believes that, if the Commission were to conduct an investigation of compliance with the Commission's open access requirements and the uses of their own transmission system during periods of extreme peak loads and volatile prices during the past summer, the Commission would uncover evidence of widespread abuses. According to Enron/APX/Coral Power, these abuses would include instances where the transmission provider imported power on a network basis, as if it were intended to service captive, native load customers, only to turn around and sell that power competitively, off-system; where scheduling requirements

or deadlines were changed without adequate notice to third parties; and where ATC amounts that either were not posted or were posted in an untimely manner.

NASUCA concludes that, despite Order No. 888, there is still reason for concern that continued discrimination in the provision of transmission services by vertically integrated utilities may be impeding competitive electric markets.

EPSA states that the prospect of real competition continues to be threatened by (1) arbitrary and discriminatory curtailment and line loading relief policies, and (2) needlessly complex and overly restrictive transmission planning, expansion and interconnection practices.

TAPS argues that the anticompetitive effects of allowing a subset of competitors to control essential facilities have been long recognized. [86] TAPS provides specific examples that it claims show that discrimination exists: (1) the price spikes in June 1998 and Summer of 1999 where the asserted ATC was inadequate to allow external generation resources to meet the needs of the market; (2) failure of a transmission owner to provide necessary upgrades; and (3) a transmission owner taking negotiating positions contrary to a clear provision of the Open Access Transmission Tariff (OATT). In its reply comments, TAPS describes a recent situation where AEP, acting in its role as the

[86] TAPS cites to a 1912 Supreme Court case involving the control of a railway terminal by several railroads which their competitors were required to use. See United States v. Terminal RR Ass'n, 224 U.S. 383, 397 (1912).

NERC Security Coordinator, informed IMPA that it had implemented a TLR seven minutes earlier, too late for IMPA to replace the curtailed schedule with another transaction at market prices, which were $35/MWh. TAPS contends that IMPA had no effective choice but to make up the shortfall by purchasing emergency energy from AEP at $100/MWh. In following hours that day, IMPA elected to purchase power from AEP at $35/MWh rather than continue its other purchase options (at $17/MWh) and risk further curtailments. TAPS observes that AEP substantially profited from delayed communication of the TLR, by selling power to IMPA at nearly three times the then-market price. TAPS states that, even assuming AEP was acting properly on this occasion, this example illustrates the inherent conflict of interest in combining security coordinator functions with that of market participant. TAPS argues that this diminishes the faith in the market place and breeds mistrust. Based on the examples it provides and on the evidence reviewed in the NOPR, TAPS recommends that the Final Rule make formal findings that undue discrimination remains widespread throughout the industry.

Steel Dynamics states that the Commission needs to build confidence that transmission customers will not be victimized when markets get tight and claims the Commission's record to date has been uneven. Steel Dynamics cites a case in which the Commission determined that Niagara Mohawk Power Corporation had committed several violations of the OASIS posting requirements and standards of conduct in order to favor its marketing affiliate over a third-party user.

Clarksdale states that it has experienced problems with the posting of ATC by Entergy on the OASIS. Clarksdale states that on July 21, 1999, it attempted to purchase from Cajun Electric Cooperative 20 MW of power for whatever length of time that Cajun would have had it available up to one week. Entergy denied the transaction on the basis that the ATC between Entergy and Cajun was zero. Clarksdale complained and the next day the ATC for this interface was shown to be 1,700 megawatts; however, by that time Cajun had sold the power to another entity and it was no longer available for Clarksdale. Clarksdale submits that the incident, along with others Clarksdale reported, compels the conclusion that the function of security coordination should be entirely separate from the transmission owner and from the generation owner and that participation in an absolutely independent RTO should be mandated by the Commission in the final rule.

FMPA states that, whether because of discriminatory motivations or simply because of balkanized perspectives (or both), there have been numerous instances of Florida's dominant transmission owners falling short on the transmission planning performance. According to FMPA, Florida's dominant transmission owners have failed to promptly address regionally significant constraints (until addressing them became advantageous for their own merchant function), and have continued to impose discriminatory transmission-related construction requirements. FMPA claims that relying

on functional separation rules to curb the self interest of market-interested transmitters when huge sums of money are at stake is like "relying on words to hold back the tide." [87]

WPPI states that it routinely experiences and observes subtle and difficult to detect problems in the marketplace. WPPI states that, because they are subtle and difficult to detect, they are not susceptible to any prompt and effective regulatory remedy. WPPI adds that prosecution of complaints is expensive and time consuming and customers do not have the ability to prosecute each such incident.

WPPI contends that transmission owners are able to dispatch their resources in order to manipulate their exposure to TLRs, while customers cannot. WPPI characterizes this tactic as a "shell game" because it is purportedly accomplished by designating fictional sources and sinks and treating one transaction as two separate transactions. WPPI contends that these actions leave other transmission users to bear the costs of curtailments and denials of service. WPPI argues that these manipulations of TLRs are "rampant."

WPPI states that during summer peak periods, when it claims power prices exceeded $5,000/MWh in the Eastern Interconnection, at least one Midwestern transmission-owning utility appears to have been able to abuse its control-area operator authority to gain a market advantage. According to WPPI, as a control-area operator, the

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[87] FMPA at 23-24.

transmission owner at issue declared that power shortages had created an emergency situation which allowed it to relax the transmission limitations that it had imposed on other market participants, enabling the transmission owner to acquire less expensive power from the MAPP region. WPPI claims that the transmission owner thereby gained a market advantage, at a time when market advantages were worth huge sums. WPPI claims that most if not all other control-area operators in the region played by the rules and did not abuse the system to access less expensive power for which ATC ostensibly was not available. WPPI asserts that utilities that are not control-area operators had no choice other than to buy high cost, locally generated power, and that they "lack not only the right, but also the might" [88] to declare an emergency or to recalculate ATC to help themselves. WPPI and Cinergy maintain that this recent event provides a clear example of the continuing potential, under present industry structure, for vertically integrated utilities to abuse their transmission control to gain market advantages and for that reason, among others, the Commission should mandate that entities under its jurisdiction participate in RTOs.

TDU Systems provide a number of examples which raise their concerns about undue discrimination, including: (1) failure of an incumbent IOU to reduce its own out-of-region power sales during a period when the system was experiencing overloads and

[88] WPPI at 31.

the transactions of other transmission users were jeopardized; (2) overly aggressive and selective enforcement of tariff requirements on transmission customers than are imposed on the transmission providers' own merchant function; (3) selectively targeting generating units that are jointly owned by competitors when redispatch of the transmission system is required to relieve line loading; (4) self-serving ATC calculations in circumstances when transmission customers have no way of knowing whether access is being denied legitimately or through manipulation for competitive gain; and (5) onerous and lengthy negotiations to obtain system studies. TDU Systems contend that there is a fire under the smoke of allegations of discrimination, and those complaining of the anecdotal nature of its information haven't provided any evidence to show that discrimination is not occurring.

TXU Electric states that, if a truly successful, restructured competitive electric industry is to achieve its full potential, it is incumbent of all concerned, transmission providers, users and regulators alike, to move beyond the impediments of the past, including hidden motivations on the part of some, unfounded fears of hidden motivations on the part of others, and a general environment of distrust. TXU Electric adds that, transmission users and regulators must have confidence that the transmission grid is truly an open, non-discriminatory and robust commercial highway and transmission providers must inspire that confidence. TXU Electric concludes that the Commission's voluntary collaborative approach is an important step in the right direction.

LG&E states that, under the current system, transmission owners' operational decisions, even if well intentioned, are surrounded by a cloud of suspicion that, acting in the name of reliability, the transmission owner has enhanced its position in the generation market. LG&E agrees that this perception that the transmission system is not being operated in an even handed manner undermines confidence in the non-discriminatory open access implemented under Order No. 888.

Virginia Commission agrees that allegations of discrimination represent only known problems, and there may be many unknown ones remaining given that it is difficult for transmission users to identify and demonstrate instances of discrimination.

Canada DNR states that discriminatory behavior by transmission operators, identified in the NOPR as the second significant driver for establishment of RTOs, is not perceived as a key impediment to the evolution of efficient bulk power markets in Canada.

Dynegy argues that transmission provides have the incentive and ability to discriminate in today's markets due to the combination of control over transmission with participation in power markets and the existing regulatory structure that exempts transmission providers from the open access rules of Order Nos. 888 and 889 for its bundled, native load customers. Dynegy argues that the "native load" exemption can be and is often manipulated to favor the transmission providers' own or affiliated merchant functions.

PECO notes that, in their capacity as vertically integrated utilities, transmission providers have access to critical market sensitive information with respect to each transaction (e.g., source, sink), at a time when they are in direct competition in the same markets and with the same transmission customers whose market information they have. PECO argues that, in spite of the existence of functional unbundling and codes of conduct, the serious potential for conflicts of interest and abuse inherent in the current structure cannot be ignored.

Comments Asserting That Discrimination Is Not a Problem

A number of commenters, mostly transmission owners, do not believe that significant discrimination problems remain with respect to wholesale transmission access pursuant to Order No. 888. As a general matter, those transmission owners whose actions are cited in other pleadings as examples of undue discrimination disagree with those characterizations of the cited events and declare that they provide non-discriminatory transmission service under their OATT. These transmission owners contend that the disputes cited in the pleadings are not the result of discriminatory practices; rather, they are the result of the priority accorded native load customers under the OATT, and good faith errors on the part of the transmission provider trying to administer complex rules and tariff changes that have necessitated fundamental changes to the structure of companies and the way they do business.

EEI contends that many of the difficulties transmission customers encounter in obtaining price, availability and transmission service result in a technology gap that can be, and often is, interpreted as discriminatory behavior. EEI also contends that many allegations of discrimination are "rooted at their heart" on the scarcity of transmission resources and not overt attempts to discriminate against specific customers.

PSE&G argues that supposition and anecdotal evidence of alleged abuses by transmission owners does not justify a radical change in the existing regulatory scheme. PSE&G contends that, while the incentive to maximize shareholder value is certainly a powerful force in the marketplace, the requirements of law, such as Order Nos. 888 and 889, will prevail.

Duke argues that mere anecdotes of discrimination, involving unnamed parties and without reference to specific facts, are not evidence of anything, let alone discrimination, and cannot form the basis of a reasoned decision. Duke also lists a number of formal complaint proceedings where the Commission found the transmission provider to have acted properly. Entergy argues that those alleging discrimination, as competitors of transmission providers, have an economic incentive to make their own allegations. Entergy adds that, if perceptions of discrimination were impeding competitive markets, there would not be 20,000 MW of generation investment proposed in its region.

United Illuminating complains that many of the allegations of undue discrimination presuppose that all utilities are the same, i.e., vertically integrated

transmission, distribution and generation companies, and do not recognize that a number of utilities are divesting their generation business.

Southern Company states that the goal of non-discriminatory transmission service is already being satisfied in the Southeast. Southern Company asserts that it has separated its transmission and reliability functions from its wholesale merchant function up to the level of "very senior management." Southern Company submits that it is unaware of any pending allegations of discrimination against it. Southern Company adds that the Southeast is characterized by large transmission systems such as Southern Company, Tennessee Valley Authority, and Entergy and that these transmission systems are already planned and operated on a regional basis. Southern Company also points out that it alone covers a region as large as (if not larger than) many ISOs currently in existence. Under these circumstances, Southern Company believes that the Commission's open access initiatives have worked in the Southeast and that additional steps are not required to ensure non-discriminatory transmission service.

MidAmerican asserts that complaints received by the Commission about alleged discrimination should not be the primary basis for determining if the market is successful. According to MidAmerican, if it is assumed that an adequate number of parties are competing successfully, it could be concluded that the complaints may be indications of ill-defined problems not yet resolved, isolated market flaws, or indications of a successful market with somewhat inadequate tools.

Duke believes that its transmission organization is meeting the needs of its customers as evidenced by the very few and relatively insignificant complaints Duke has received regarding the administration of its OATT. Duke believes that Order No. 888 has been quite successful and, although it agrees with the Commission that elimination of balkanized transmission operations through the formation of larger, regional operations is ultimately preferred, Duke does not believe Order No. 888 should be abandoned hastily.

Duke argues that disputes are primarily the result of the complexity of the priority scheme in the Commission's pro forma tariff, the rules for which are still being developed; the inherent tension between the Commission's comparability requirement and the requirements of state-regulated native load customers; and the obligation to ensure reliability of the transmission grid on a real time basis. Duke asserts that the vast majority of transactions occurring as a result of Order No. 888 do not produce transmission disputes and, to the extent that isolated instances of discrimination have occurred, the Commission has adequate authority to address the problem.

Duke also maintains that a major source of confusion involves the rights of native load customers versus wholesale transmission users under the pro forma tariff and that this issue remains subject to disagreement and needs further clarification. Duke says its conclusion is reinforced by its experience as a market participant in areas where there are ISOs. Duke asserts that the establishment of ISOs in California, NEPOOL and PJM has not resulted in the elimination of disputes over tariff ambiguities. Duke questions the

assertion that disagreements between customers and individual transmission owners are indicative of significant ongoing discrimination.

Florida Power Corp. and FP&L's comments are similar to Duke's. Florida Power Corp. and FP&L state that they have not received any formal complaints alleging undue discrimination with regard to their OATT. Florida Power Corp. and FP&L agree that the increasing number of transactions has led to a concomitant increase in transmission disputes; however, they characterize the disputes as legitimate disagreements over policy or meaning of the pro forma tariff as opposed to true allegations of discriminatory conduct. Like Duke, Florida Power Corp. and FP&L believe that many of the allegations of potentially discriminatory conduct are attributable to two primary areas: (1) rights of native load customers versus wholesale wheeling customers; and (2) disputes arising from the complex priority scheme in the pro forma tariff. According to FP&L, disputes will still occur until the issues relating to priority rights are resolved. FP&L argues that the Commission cannot expect that any remedy will eliminate discrimination claims in light of the Eighth Circuit Court's decision in Northern States Power Co. v. FERC. [89]

[89] See Northern States Power Co. (Minnesota) and Northern States Power Co. (Wisconsin), 83 FERC ¶ 61,098, clarified, 83 FERC ¶ 61,338, reh'g, clarification and stay denied, 84 FERC ¶ 61,128 (1998), remanded, Northern States Power Co., et al. v. FERC, 176 F.3d 1090 (8th Cir. 1999), reh'g denied (unpublished order dated Sept 1, 1999), order on remand, 89 FERC ¶ 61,178 (1999) (request to withdraw curtailment procedures pending) (Northern States).

FPL and Florida Power Corp. argue that unsubstantiated allegations do not constitute evidence of discrimination and should be characterized as legitimate disputes over tariff interpretation, while EEI describes some of the allegations as "one-sided characterizations of cases now being litigated." FPL also contends that some intervenors adopt the stance that, whenever the transmission provider and customer are in disagreement, it evidences discrimination. Florida Power Corp. states that, if undue discrimination exists outside of Florida, it is a function of the newness of the Commission's open access rules, and it is far too soon to declare functional unbundling ineffective. Florida Power Corp. agrees with the Commission's statement that it may be impossible to distinguish an inaccurate ATC presented in good faith from an inaccurate ATC posted for the purpose of favoring the transmission provider's marketing interests, but concludes that, once technical issues have been resolved about ATC calculations, the volume of disputes will be greatly diminished. Florida Power Corp. adds that there is no evidence of a pattern of industry-wide undue discrimination, and concludes that mere perceptions cannot provide a justification for generic remedial action.

Entergy, FirstEnergy, Alliance Companies and Lenard argue that there is no credible or substantial evidence in the record that transmission owners have been engaging in discriminatory practices in providing transmission services under Order Nos. 888 and 889 and, therefore, the Commission should not, and lawfully cannot, rely on mere allegations of discriminatory conduct. FirstEnergy states that it has doubled its

control area reservation and back office staff to handle the five percent of its transmission business that is wholesale related and still is having difficulty keeping pace with OASIS and tagging administrative processes. FirstEnergy asserts that due to relatively new processes associated with open access transmission, there are often good faith disputes over the proper interpretation of the Commission's requirements and these disputes should not be mischaracterized as continued discrimination.

Commission Conclusion

Engineering and Economic Inefficiencies

In this Final Rule, we affirm our preliminary determination that the engineering and economic inefficiencies identified in the NOPR [90] are present in the operation, planning and expansion of regional transmission grids, and that they may affect electric system reliability and impede the growth of fully competitive bulk power markets. The sources of these inefficiencies involve: difficulty determining ATC; parallel path flows; the limited scope of available information and the use of non-market approaches to managing transmission congestion; planning and investing in new transmission facilities; pancaking of transmission access charges; the absence of clear transmission rights; the absence of secondary markets in transmission service; and the possible disincentives created by the level and structure of transmission rates. Virtually all commenters agree

[90] FERC Stats. & Regs. ¶ 32,541 at 33,697.

that at least some of these inefficiencies exist. There is substantial agreement among commenters that most of the engineering and economic obstacles identified by the NOPR arise from the current industry structure and can be rectified through development of regional transmission entities.

As noted by Allegheny, the industry historically has done an excellent job of regional coordination in implementing voluntary standards to maintain the security of the transmission system through various study groups and planning committees. However, virtually all commenters agree that new competitive pressures are interfering with the use of traditional methods of coordinated regional transmission planning. As a result, new transmission additions that will benefit reliable grid operations are being delayed. Some commenters state that the increasing frequency and duration of power outages have cost the economy billions of dollars, and they predict that unless this problem is addressed now the reliability of power supply will worsen. The traditional use of regional coordination through study groups and planning committees is no longer effective because these entities are usually not vested with the broad decisionmaking authority needed to address larger issues that affect an entire region, including managing congestion, planning and investing in new transmission facilities, pancaking of transmission access charges, the absence of secondary markets in transmission service, and the possible disincentives created by the level and structure of transmission rates.

We recognize, as some commenters point out, that the degree to which these inefficiencies act as obstacles to electric competition and reliability varies from system to system. However, we believe it is clear that such inefficiencies exist and are sufficiently widespread that they must be addressed to prevent them from interfering with reliability and competitive electricity markets.

Continuing Opportunities for Undue Discrimination

As noted, many transmission customers and some transmission providers argue that there are continuing opportunities for undue discrimination under the existing functional unbundling approach. A number of the commenters provide examples of events that, in their view, indicate that transmission owners are engaging in undue discrimination. These commenters also generally believe that even the perception of undue discrimination is a significant impediment to the evolution of competitive electricity markets. A number of transmission providers challenge the relevancy of these examples, characterizing them as unsubstantiated or anecdotal allegations that do not rise to the level of evidence of undue discrimination necessary to support generic action. These transmission providers further contend that many disputes simply reflect good faith efforts of transmission providers to interpret the Commission's pro forma tariff and standards of conduct. These commenters also generally share the view that the Commission should not base its decisions in this rule on mere perceptions that may be prevalent in the industry.

For the most part, the challenges mounted by these commenters are focused against a determination by the Commission that it should mandate participation in RTOs in this Rule. As noted in Section C.1 of this Rule, we have also determined that a measured and appropriate response to the evidence presented and concerns raised is to adopt a voluntary approach to the formation of RTOs. However, as discussed below, we do conclude that opportunities for undue discrimination continue to exist that may not be remedied adequately by functional unbundling. We further conclude that perceptions of undue discrimination can also impede the development of efficient and competitive electric markets. These concerns, in addition to the economic and engineering impediments affecting reliability, operational efficiency and competition, provide the basis for issuing this Final Rule.

At the outset, it is important to note that the conclusion that there are continuing opportunities for undue discrimination should not be construed as a finding that particular utilities, or individuals within those utilities, are acting in bad faith or deliberately violating our open access requirements or standards of conduct. However, we cannot ignore the fact that the vertically integrated structure reflected in the industry today was created to support the business objectives of a franchised monopoly service provider that owned and operated generation, transmission and distribution facilities primarily to serve requirements customers at wholesale and retail in a non-competitive environment. Clearly, there are aspects of this vertically integrated structure that are difficult to

transition into a competitive market. As we noted in the NOPR and Order No. 888, vertically integrated utilities have the incentive and the opportunity to favor their generation interests over those of their competitors. If a transmission provider's marketing interests have favorable access to transmission system information or receive more favorable treatment of their transmission requests, this obviously creates a disadvantage for market competitors.

While we have attempted to rely on functional unbundling to address our concerns about undue discrimination, there are indications that this is difficult for transmission providers to implement and difficult for the market and the Commission to monitor and police. In cases in which the Commission has issued formal orders, we have found serious concerns with functional separation and improper information sharing with respect to at least four public utilities. [91] In addition, our enforcement staff is receiving an increasing number of telephone calls about standards of conduct issues, ranging from simple questions about what is permissible conduct to more serious complaints alleging

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[91] See Wisconsin Public Power Inc. SYSTEM v. Wisconsin Public Service Corporation, 83 FERC ¶ 61,198 at 61,855, 61,860, order on reh'g, 84 FERC ¶ 61,120 (1998) (WPSC's actions raised "serious concerns" as to functional separation; WP&L's actions demonstrated that it provided unduly preferential treatment to its merchant function); Washington Water Power Co., 83 FERC ¶ 61,097 at 61,463, further order, 83 FERC ¶ 61,282 (1998) (utility found to have violated standards in connection with its marketing affiliate); Utah Associated Municipal Power Systems v. PacifiCorp, 87 FERC ¶ 61,044 (1999) (finding that PacifiCorp had failed to maintain functional separation between merchant and transmission functions).

actual violations of the standards of conduct. In a number of cases, our staff has verified non-compliance with the standards of conduct. [92] The petitioners for rulemaking in Docket No. RM98-5-000 allege that there are common instances of "unauthorized exchanges of competitively valuable information on reservations and schedules between transmission system operators and their own or affiliated merchant operation employees." [93] They also cite OASIS data showing an instance where a transmission provider quickly confirmed requests for firm transmission service by an affiliate, while service requests from independent marketers took much longer to approve. We believe that some of the identified standards of conduct violations are transitional issues resulting from a new way of doing business, and we acknowledge that many utilities are making good-faith efforts to properly implement standards of conduct. However, we also believe that there is great potential for standards of conduct violations that will never even be reported or detected. Moreover, as we stated in the NOPR, [94] we are increasingly concerned about the extensive regulatory oversight and administrative burdens that have resulted from policing compliance with standards of conduct. The use of standards of

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[92] See, e.g., Communications of Market Information Between Affiliates, Docket No. IN99-2-000, 87 FERC ¶ 61,012 (1999) (Commission issued declaratory order based on hotline complaint clarifying that it is an undue preference in violation of section 205 of the FPA for a public utility to tell an affiliate to look for a marketing offer prior to posting the offer publicly).

[93] Petition at 15.

[94] FERC Stats. & Regs. ¶ 32,541 at 33,711-12.

conduct is not the best way to correct vertical integration problems. Their use may be unnecessary in a better structured market where operational control and responsibility for the transmission system is structurally separated from the merchant generation function of owners of transmission.

We also cannot dismiss the significance of reports of undue discrimination simply because they are not reduced to formal complaints. As many intervenors have asserted, the cost and time required to pursue legal channels to prove discrimination will often provide an inadequate remedy because, among other things, the competition may have already been lost. [95] The fact that evidence of discrimination in the fast-paced marketplace is not systematic or complete is not unexpected. The fact remains that claims of undue discrimination have not diminished, and there is no evidence that discrimination is becoming a non-issue.

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[95] For example, EPSA has told us:

> Furthermore, even if the exercise of such discrimination could be adequately documented and packaged in the form of a complaint under section 206 of the Federal Power Act under a more streamlined complaint process contemplated by the Commission, it would still be extremely costly and inefficient to deal with such complaints on a case-by-case basis. More than likely, the potential power transactions for which transmission principally was sought would disappear by the time a Commission ruling was obtained. Motion to Intervene and Comments of Electric Power Supply Association in Support of Petition for Rulemaking, Docket No. RM98-5-000 (filed Sept. 21, 1998), at 3.

Finally, we continue to believe that perceptions of discrimination are significant impediments to competitive markets. Efficient and competitive markets will develop only if market participants have confidence that the system is administered fairly. [96] Lack of market confidence resulting from the perception of discrimination is not mere rhetoric. It has real-world consequences for market participants and consumers. As stated by NERC, there is a reluctance on the part of market participants to share operational real-time and planning data with transmission providers because of the suspicion that they could be providing an advantage to their affiliated marketing groups, [97] and this can, in turn, impair the reliability of the nation's electric systems. Lack of market confidence may deter generation expansion, leading to higher consumer prices. Fears of discriminatory curtailment may deter access to existing generation or deter entry by new sources of generation that would otherwise mitigate price spikes of the type that have been experienced during peak periods in the last two summer peak periods. Mistrust of ATC calculations will cause transactions involving regional markets to be viewed as more risky

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[96] For example, a representative of Blue Ridge told us:

> There simply is no shaking the notion that integrated generation and transmission-owning utilities have strategic and competitive interests to consider when addressing transmission constraints. Functional unbundling and enforcement of [standard of] conduct standards require herculean policing efforts, and they are not practical. Regional ISO Conference (Richmond), Transcript at 20.

[97] NERC Reliability Assessment 1998-2007, at 39.

and will unnecessarily constrain the market area, thereby reducing competition and raising prices for consumers. The perception that a transmission provider's power sales are more reliable may provide subtle competitive advantages in wholesale markets, e.g., purchasers may favor sales by the transmission provider or its affiliate, expecting greater transmission service reliability. We believe that the potential for such problems increases in a competitive environment unless the market can be made structurally efficient and transparent with respect to information, and equitable in its treatment of competing participants.

In summary, we affirm our conclusion in the NOPR that economic and engineering inefficiencies and the continuing opportunity for undue discrimination are impeding competitive markets. As noted below, we conclude that RTOs will remedy these impediments and that it is essential for the Commission to issue this Final Rule.

B. Benefits That RTOs Can Offer to Address Remaining Barriers and Impediments

In the NOPR the Commission explained how the use of independent RTOs could help eliminate the opportunity for unduly discriminatory practices by transmission providers, restore the trust among competitors that all are playing by the same rules, and reduce the need for overly intrusive regulatory oversight. [98] The Commission further identified a number of significant benefits of establishing RTOs: (1) RTOs would

[98] FERC Stats. & Regs. ¶ 32,541 at 33,714.

improve efficiencies in the management of the transmission grid; [99] (2) RTOs would improve grid reliability; (3) RTOs would remove opportunities for discriminatory transmission practices; (4) RTOs would result in improved market performance; and (5) RTOs would facilitate lighter-handed governmental regulation. [100] The Commission requested comments on the benefits of RTOs and the magnitude of these benefits.

Comments

Description of Benefits

Many commenters support the establishment of RTOs throughout the United States to effectively remove the remaining impediments to competition in the power markets. [101] Illinois Commission states that the pursuit of competition as the driving force for markets in the electric industry requires developing new institutions and accepting new practices, and RTOs are the logical next organizational step in the electric industry restructuring process. Entergy agrees that significant benefits can be achieved by the creation of properly-structured, large RTOs and that the Commission has accurately described many of those benefits in the NOPR. Ohio Commission believes

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[99] These efficiencies include, among other things, regional transmission pricing, improved congestion management of the grid, more accurate ATC calculations, more effective management of parallel path flows, reduced transaction costs, and facilitation of state retail access programs.

[100] FERC Stats. & Regs. ¶ 32,541 at 33,716-20.

[101] See, e.g., PJM, DOE, Illinois Commission.

that a properly structured RTO will facilitate efficient regional generation markets, while preventing incumbent holding companies from improperly exercising their market power.

PG&E acknowledges that the benefits of Order No. 888 have been largely reaped, and still significant impediments to an efficient competitive marketplace remain in place where RTOs are not yet operational. Moreover, industry restructuring has led to new and complex operational issues that were unanticipated at the time Order No. 888 was issued. RTOs represent the most promising and efficient regulatory method for the Commission to address these issues. Without RTOs, it would be incumbent on the Commission to take very detailed and intrusive actions because the transmission grid cannot operate reliably and efficiently unless the competitive and operational issues are resolved.

Ontario Power agrees that the electric power industry should now move beyond the functional unbundling approach prescribed in Order Nos. 888 and 889. TDU Systems asserts that wholesale electric markets will benefit immensely if RTOs can simply provide transmission service on an unbiased basis, treating all customers fairly, and take the lead role in regional transmission planning.

On the other hand, a number of vertically integrated utilities do not support government action to form RTOs. For example, Duke recognizes that there may be transmission functions performed today within individual company control centers, within existing control areas, or within existing reliability councils that may be better and/or more efficiently performed by a regional transmission organization. However,

Duke also believes that the industry is voluntarily working to identify such functions or processes and is effecting meaningful changes and improvements in a timely manner. Accordingly, Duke believes that this progress should not be pre-empted by regulatory mandates, and that there are insufficient data, at this time, to draw meaningful conclusions regarding the magnitude of benefits that will result from RTO formation.

Similarly, MidAmerican argues that benefits of RTOs can be realized without RTOs. MidAmerican claims that existing regional organizations, such as MAPP, are capable of meeting the Commission's concerns about eliminating existing impediments to an efficient competitive marketplace. FP&L states that the NOPR does not attempt to quantify any of the claimed benefits of RTOs. FP&L is unaware of any data that specifically and objectively show that ISOs have saved ratepayers money in those areas where ISOs have been established. Nor is it aware of any specific quantification of any other actual or projected benefits of ISOs.

Some commenters contend that the costs of establishing RTOs must not exceed the benefits. Cal DWR argues that significant start-up costs and costs associated with duplicative efforts have been higher than the NOPR appears to recognize. These costs entail not only costs of the new organization itself, but also market participants' costs in travel, staffing, and other expenses and investments necessary to participate or operate in

new structures. Other commenters suggest that each proposal contained in the NOPR should be carefully evaluated for its cost consequences. [102]

Seattle notes that its region has the lowest cost electricity in the Nation and an already thriving wholesale market with little price volatility. Assuming that an RTO is projected to result in additional transmission costs, Northwest consumers will be less willing to incur these costs than consumers in regions where power costs are high and wholesale prices are extremely volatile. Snohomish and Aluminum Companies assert that one of fatal flaws of the IndeGO proposal [103] was that its demonstrable benefits did not clearly outweigh the costs of its start-up and operation. Snohomish requests that the Commission not impose an RTO with similar flaws upon the Northwest. A number of commenters also urge the Commission to reject any RTO filing for the Northwest or other regions that fails to provide a strong demonstration that its benefits will substantially outweigh its projected costs. [104]

To ensure that RTOs are formed in a cost effective and efficient manner, SRP proposes a phased approach to RTO development that would allow RTOs to gradually

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[102] See, e.g., Cal DWR, California Board, Southern Company, Aluminum Companies.

[103] IndeGO is an independent grid operator proposal that has been discussed for the Pacific Northwest and Rocky Mountain area.

[104] See, e.g., Big Rivers, Chelan, California Board, Industrial Customers, Arizona Commission, EEI, Idaho Commission, Washington Commission.

take on new functions and responsibilities in response to the needs to the market. In addition, the Commission should require RTOs to establish criteria against which they will measure cost effectiveness and efficient performance and to make adjustments where criteria are not being met.

Canada DNR states that structural differences between the Canadian and American electric power industries mean that there may be fewer potential benefits from the formation of RTOs in Canada than those identified by the Commission for the United States. Consequently, it believes that Canadian jurisdiction should be able to assess the costs and benefits of RTO proposals. In addition, it notes that some may find that, although the benefits do warrant the associated costs, they may address impediments to efficient electricity markets through other means.

Comments on RTOs Improving Efficiencies in the Management of the Transmission Grid [105]

PJM agrees with the Commission that placing as many grid management functions as possible under an RTO is the best means of bringing the benefits of RTOs to the marketplace. A number of commenters address specific RTO actions as examples of grid management efficiencies, including use of regional transmission pricing, accurate

[105] As noted earlier, many of the principal benefits of RTOs (e.g., congestion management, improved reliability, parallel path flow resolution) are discussed in greater detail later as RTO minimum characteristics and functions; however, some of the commenters cited here mention these benefits as part of their overall discussion of RTOs improving efficiencies in the management of the transmission grid.

estimation of ATC, efficient planning for grid expansion, and facilitating state retail access programs.

FMPA claims that a just and reasonable RTO transmission rate, with a unified regional loss factor or factors, would provide a regionally rational approach, which is not provided by the existing fragmented regime. Pancaking has long prevented FMPA and its members located on the Florida Power Corp. transmission system from economically delivering the output from their portions of the St. Lucie nuclear plant to their loads. Similarly, WPSC notes that without an RTO that encompasses the Midwest region, unjustified pancaked transmission rates may inhibit the efficient flow of power across the region.

PacifiCorp supports the Commission goal of eliminating transmission pancaking, to the extent practical. PacifiCorp maintains that such a goal could be furthered by the creation of the most geographically expansive RTOs that are technically workable. The goal also could be met, however, if multiple RTOs within the western United States agree to reciprocally eliminate charges in connection with the "export" or "import" of power from one RTO to another. In the western United States, such "reciprocity" agreements may be preferable to the creation of a single RTO that otherwise is too large to be efficient, safe and reliable, or of a single RTO for which operating principles must be unreasonably compromised to attract all necessary transmission owners.

Allegheny asserts that even with an RTO, grid inefficiencies such as rate pancaking and congestion will continue unless an appropriate pricing mechanism is adopted. The various RTO structures, regardless of size and number, would still need to work cooperatively to ensure that the various interfaces are sufficient to maintain the reliable operation of the system. The formation of an RTO, by itself, does not bring a particular benefit.

Rochdale asserts that a properly structured independent RTO, with a broad geographic scope, could eliminate incorrect calculations of ATC and TTC. Furthermore, the motive for discrimination and possible manipulation that exists where transmission owners with affiliated power marketers are responsible for reporting ATC and TTC would become moot. FMPA contends that, without an RTO, most market participants would remain unable to replicate or trust the transmission owners' ATC calculations. FMPA indicates that customers and regulators cannot properly review transmission providers' ATC accounting without access to their TTC starting points; however, existing Florida OASIS sites do not provide TTC information. In addition, ATC calculations require extensive application of engineering judgment. FMPA questions whether market-interested transmission providers can be trusted to exercise such judgment disinterestedly. Consequently, FMPA believes that an RTO could provide unbiased ATC information.

Many commenters believe that RTOs would provide more efficient planning for transmission and generation investments. [106] For example, Entergy agrees that the creation of RTOs can lead to more efficient and effective planning and expansion of the transmission system. However, to ensure efficient investment in the transmission system, Entergy proposes that the Commission encourage innovative pricing policies to replace traditional cost-of-service ratemaking in certain respects. Minnesota Power also agrees that an RTO would help identify the best place on the grid to locate new generation. It believes that the centralization of regional reliability planning is a big step forward for enabling independent power producers to build projects and also is a significant benefit to each transmission owner who deals with requests from generation groups.

Illinois Commission and Texas Commission state that electricity consumers in states adopting retail direct access can directly and fully benefit from the operation of properly constituted RTOs and their concomitant improvements in system efficiency, reliability and market competition.

Comments on RTOs Improving Grid Reliability

Many commenters agree that an RTO could provide improved reliability. [107] Minnesota Power supports the formation of a single regional body that operates the

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[106] Comments are addressed in greater detail in the discussion of planning and expansion as an RTO minimum function.

[107] Comments are addressed in greater detail in the discussion of short-term reliability as an RTO minimum characteristic.

regional grid and enforces reliability rules for the entire region. It suggests that a non-profit RTO can be expected to enforce reliability rules fairly and aggressively and, thus, require minimal Commission oversight. On the other hand, a for-profit RTO may be perceived as biased towards making a profit at the expense of reliability and may require additional scrutiny by the Commission.

Michigan Commission strongly supports creating an RTO for the Midwest that is large enough to ensure reliability. It is very concerned that splitting the Midwest region into improperly sized competing ISOs, RTOs, and/or Transcos will affect regional reliability and delay the benefits of competition. Also, splitting a region into multiple RTOs reduces access to economic generation due to increased transmission charges. Michigan Commission believes competition and reliability within the region will be served best if the Transmission Alliance and Midwest ISO are joined.

Comments on RTOs Removing Opportunities for Discriminatory Transmission Practices

Many commenters, mostly transmission customers, agree that RTOs will remedy continuing opportunities for undue discrimination. [108]

As both a buyer and seller of wholesale electricity, Oglethorpe supports the evolution of competitive markets for generation service. To ensure that competitive

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[108] See, e.g., American Forest, TDU Systems, WPPI, Sonat, Illinois Commission, Arizona Commission, FMPA, Tampa Electric, Advisory Committee ISO-NE. Comments are addressed in more detail later in the discussion of existing discriminatory conduct.

markets evolve and perform in a workable manner, market participants should be assured access to the transmission system on a fair and comparable basis, without regard to transmission ownership. It believes that true competition can occur only with widespread, open and nondiscriminatory access to the transmission system. UtiliCorp claims that removing control over access to transmission from the remaining large transmission-owning utilities and placing such control in properly structured RTOs will go a long way toward eliminating the remaining obstructions to effective competition in wholesale markets for electric power.

Virginia Commission agrees that discrimination exists and that RTOs can help facilitate competition and police non-competitive activities. However, Virginia Commission believes that it is premature to conclude that there is no role for rigorous governmental regulation. Virginia Commission urges that the Commission not rely exclusively on RTOs to detect, prevent and penalize violations of the FPA and should itself provide for expedited handling of allegations regarding discrimination and market power abuses.

On the other hand, a number of commenters, mostly transmission owners, do not believe that RTOs are needed to address undue discrimination because they do not believe that significant discrimination problems remain with respect to wholesale

transmission access pursuant to Order No. 888. [109] PSE&G argues that, if a misperception exists in the marketplace as to the trustworthiness or incentives of transmission owners as a whole, it may signal a need for an industry-wide educational campaign that discusses transmission operation and system reliability. However, such a misperception does not, in and of itself, warrant altering the structure of the industry.

Comments on RTOs Resulting in Improved Market Performance

DOE asserts that open and comparable transmission access can reduce both concentration in generation markets (by expanding the boundaries of the relevant market) and the potential to discriminate through vertical control but cannot, in its view, eliminate all market power. The establishment of an independent RTO can and should substantially mitigate the potential exercise of market power through vertical control, because dispatch and related transmission services will be provided by an independent entity with no financial interest in wholesale market participants. Furthermore, the expected contribution of an RTO in reducing the risk of horizontal market power will be realized only if RTOs have sufficient "critical mass." Appropriately sized RTOs are necessary to assure a transparent and fair marketplace for all generation.

EPA notes that RTOs can play an important role in the development of environmentally preferred or "green" electricity products for use by states that are

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[109] See, e.g., United Illuminating, Southern Company, MidAmerican, Duke, PSE&G, FP&L, Entergy, FirstEnergy, Alliance Companies, Lenard, Florida Power Corp.

implementing retail electricity competition. As the operator of the transmission system, an RTO will have access to detailed information on the operations of individual generators as well as fuel type and air emissions, even where such information is considered confidential. RTOs are uniquely situated to assemble the information necessary to determine environmental attributes of specific retail electricity products for purposes of consumer information disclosure. EPA notes that this is already occurring in New England, where ISO-NE has agreed to provide the states with information on environmental attributes and resource mix for individual generators. In addition to facilitating consumer information disclosure, EPA notes that this information will support other state policies, such as renewable portfolio standards and generation performance standards.

Comments on RTOs Facilitating Lighter-Handed Governmental Regulation

Although most commenters agree that properly-designed RTOs can be self-governing to a certain extent, the vast majority of commenters believe that the Commission has either overstated the reliance it should place on self-governance or has reached this conclusion prematurely. Most of these commenters suggest that there is insufficient evidence at this time to reach the conclusion that RTO formation would necessarily result in lighter-handed regulation. A number of commenters also caution that the Commission should not significantly reduce its oversight of RTOs until they are

proven to be effective. British Columbia Ministry states that the structure of future RTOs should minimize additional layers of administration and oversight. However, at least one commenter, Cal DWR, noting that RTOs are themselves transmission monopolies subject to the FPA, argues that the Commission should continue its course of regulating RTOs to ensure compliance with legal and policy requirements.

PJM generally supports the Commission's conclusion regarding light-handed regulation. It notes that, where ISOs' decisions are independent and conducted through an extensive stakeholder processes to produce collaborative solutions to market issues, the Commission can defer confidently to those decisions. Under such circumstances, the Commission can be assured that ISO proposals to changes market rules and procedures would promote competitive markets and are not designed to favor any one group of market participants.

PJM argues further that the Commission accord greater flexibility to properly structured RTOs to change market rules and procedures without Commission filings. An RTO with an established stakeholder process could publish some changes in market rules on its internet site, without requiring prior Commission approval. In the event that a market participant objected, it could file a complaint with the Commission. PJM says the benefit is that the market would not be hindered by delay in implementing new rules. Other rules could be permitted to go into effect upon filing, rather than at the end of the Commission review process.

Some commenters suggest that the Commission be particularly deferential to decisions that result from ADR processes. For example, PNGC supports strong and broad dispute resolution power in an RTO. It argues that many small transmission users currently have no effective way to be heard regarding service complaints, outage restoration, and adequacy of equipment or maintenance because of the high cost of bringing such a dispute to the Commission. In addition, Desert STAR asserts that where the Commission has approved the charter governance and ADR processes of an RTO as being sufficiently broad-based and independent, the Commission should give some deference to decisions reached through the RTO's ADR processes. However, deference in dispute resolution to an RTO should not impair a transmission user's fundamental rights under section 211 of the FPA. Because the RTO will be a jurisdictional entity, the Commission is an appropriate appeals forum. Similarly, Seattle supports the Commission proposal to defer to RTOs on matters involving commercial, operating and planning practices, as well as to resolve disputes, but argues that it is too early to tell whether ISOs, transcos or other forms of RTOs can be deferred to in lieu of regulatory filings.

MidAmerican welcomes the Commission's proposed lighter-handed approach to regulation, but questions whether lighter-handed regulation, in fact, will be derived from the proposed rule. MidAmerican proposes that the Commission issue a policy statement to provide general guidance on how it intends to give deference to RTOs. For example, the policy should outline that, if a transmission owner follows RTO directives, it will be

presumed that the transmission owner does not have transmission market power and that it is not capable of transmission market discrimination. The Commission should give deference to RTOs to design tariffs that include rate incentives and should permit returns on equity that compensate transmission owners for additional risks and for competitive market development.

A number of commenters argue that there is as yet no evidence to support the conclusion that RTO formation should lead to lighter-handed regulation. Duke and Entergy argue that each of the existing ISOs has been mired in significant litigation with market participants, and the Commission's dockets are loaded with cases arising out of decisions made by ISOs. They and NECPUC suggest that this raises the possibility that RTOs represent a new layer of regulatory oversight of market activities, supplementing rather than replacing federal and state regulation. FP&L states that the independence and objectivity of the Florida Public Service Commission make it unnecessary to create a formal (and costly) separate entity to operate and oversee the Florida grid as an RTO.

Other commenters suggest that the probability that RTOs can be self-regulating may be overstated. APPA argues that existing ISOs still represent the interests of the transmission owners that formed these ISOs. In addition, it argues that each ISO is a market participant because its revenue recovery is affected by the performance of transmission, ancillary services, and energy imbalance spot markets. It suggests that the

right to self-regulation must be earned in the marketplace, not bestowed by regulators in advance.

NECPUC argues that not only must an RTO be properly structured to be self-regulating, so must the utilities involved, or the RTO will constantly be involved in the business of dispute resolution. It suggests that during a transition phase, a certain level of active regulation may be inescapable. For example, it notes that the Commission stepped in quite definitively in developing the governance of the New England Power Pool. NECPUC believes that strong intervention by the Commission was effective at achieving progress when the parties in New England stalemated.

PG&E claims that an RTO is uniquely situated to handle a number of responsibilities, including reliability enforcement and sanctions, market monitoring, and reporting non-reliability market-related violations. However, a single entity, no matter how well-structured and independent, cannot successfully fulfill several competing roles simultaneously, i.e., serve as judge, jury and advocate. While the RTO can do much to create region-specific processes that meet the needs of market participants, the Commission must retain ultimate oversight. The RTO is not a substitute for this function. With the tremendous volume of transactions flowing through an RTO, even small errors in energy or financial accounting can lead to huge cost shifts. Market participants need to have a remedy at the Commission if issues are not resolved adequately by the RTO.

Other commenters believe that the Commission may have to play a strong role in ADR. Arizona Commission urges the Commission to give respect rather than deference to decisions reached through an RTO's ADR processes. TDU Systems state that the ability of an RTO transmission customer to obtain ultimate Commission review of a dispute with the RTO (or another RTO customer) should not be cut off. RTO tariffs should contain ADR provisions that allow for mediation or other low-cost forms of ADR so disputes can, if possible, be resolved without resort to the Commission. If this is not possible, the Commission should consider any dispute that comes to it after the conclusion of ADR at an RTO on a de novo basis.

In dealing with disputes between RTOs and their customers, TDU Systems suggests that the Commission be sensitive to the issue of "minority rights." The Commission should ensure that transmission customers with complaints against their RTOs get due process and a full and fair opportunity to air their concerns. Just because a customer may take a position in a dispute not shared by many others does not mean that it is automatically wrong.

Moreover, TDU Systems believe that the Commission, in considering the ADR issue, should make a distinction between ISOs or other RTOs that are not-for-profit or quasi-governmental in nature and for-profit RTOs. For-profit RTOs may not necessarily be well suited to be the arbiters of disputes, especially where they are an involved party. It would be inappropriate for the Commission simply to "off load" dispute resolution

duties to a private for-profit entity, especially if the entity is an interested party in the dispute. ISOs, on the other hand, are more quasi-governmental in nature, and if fully independent, may be in a better position to attempt to resolve a dispute, subject to Commission review.

Duke asserts that streamlined filings and approval procedures could reduce costs that would otherwise be borne by market participants. Reducing regulatory burdens could constitute one form of incentive to encourage RTO participation. The policy could be applied equally for non-profit and for-profit RTOs. On the other hand, TDU Systems argues that opportunities for streamlined RTO filings could set a very dangerous precedent, especially if applied to incentive rate filings of for-profit RTOs. RTOs will still be monopolies (although hopefully large horizontal ones, rather than smaller, vertically integrated ones). The norm for RTO filings should still be full Commission scrutiny. Entergy argues that the Commission should encourage proposals submitted by RTOs designed to increase regulatory efficiencies and reduce regulatory burdens imposed on RTOs. The Commission should specifically declare its willingness to entertain proposals to streamline filing requirements. The Commission could encourage innovative ways to reduce regulatory costs by authorizing performance-based rates that reward RTOs for reducing regulatory costs.

Commission Conclusion

We conclude that properly structured RTOs throughout the United States can provide significant benefits in the operation of the transmission grid. The comments received reinforce our preliminary determination in the NOPR that RTOs can effectively remove existing impediments to competition in the power markets.

Description of Benefits

We conclude that RTOs will provide the benefits that we described in detail in the NOPR, and others that commenters mention. [110] While we acknowledge that the level of RTO benefits may vary from region to region depending on the current transparency and efficiency of markets, the Commission believes that benefits from RTO's would be universal. These benefits will include: increased efficiency through regional transmission pricing and the elimination of rate pancaking; improved congestion management; more accurate estimates of ATC; more effective management of parallel path flows; more efficient planning for transmission and generation investments; increased coordination among state regulatory agencies; reduced transaction costs; facilitation of the success of state retail access programs; facilitation of the development of environmentally preferred generation in states with retail access programs; improved

[110]The benefits described in this section are not intended to include all benefits that RTOs could provide. Some of the principal benefits of RTOs (e.g., more effective management of parallel path flows, improved congestion management) are addressed in later discussions of RTO minimum characteristics and functions.

grid reliability; and fewer opportunities for discriminatory transmission practices. [111] All of these improvements to the efficiencies in the transmission grid will help improve power market performance, which will ultimately result in lower prices to the Nation's electricity consumers.

As stated in the NOPR, we expect that RTOs can reduce opportunities for unduly discriminatory conduct by cleanly separating the control of transmission from power market participants. An RTO would have no financial interests in any power market participant, and no power market participant would be able to control an RTO. This separation will eliminate the economic incentive and ability for the transmission provider to act in a way that favors or disfavors any market participant in the provision of transmission services.

Most commenters support the premise that RTOs can be beneficial in addressing the remaining transmission-related impediments to full competition in the electricity markets. Although we recognize certain differences in perspective about the existence of, or potential for, widespread discrimination by current transmission owners, no one seriously disputes the benefits of a marketplace where service quality and availability are uniform, where users of the network are treated equally, and where commercially important data are readily available to all. Although some commenters support the NOPR proposal only if the costs of establishing RTOs do not exceed the benefits, a subject

[111] FERC Stats. & Regs. ¶ 32,541 at 33,716-20.

discussed further below, most believe that the benefits listed in the NOPR are accurate and can be achieved through an RTO.

We recognize that some commenters believe that either RTOs alone will not solve all of the identified problems, or individual benefits can be achieved in ways other than creating RTOs. Both of these observations may have some merit. However, we believe that the creation of RTOs is one action that can address all of the identified impediments to competition and provide all or most of the identified benefits.

We also recognize that there are those who worry that the costs of establishing an RTO will outweigh the benefits. We believe this concern fails to account for the flexibility we have built into this rule. While many look at the high costs involved with respect to establishing some existing ISOs and PXs, this rule does not require an RTO to follow any specific approach. For example, this rule does not require the consolidation of control areas nor does it require the establishment of a PX. We are allowing significant flexibility with respect to how and, in some cases, when the minimum characteristics and functions are satisfied. Accordingly, we do not believe it will be necessary to expend the same level of resources that were expended, e.g., in California, to create an RTO satisfying our minimum characteristics and functions. We therefore conclude that the flexibility built into the Final Rule will allow RTOs to create streamlined organizational structures that are not overly costly. Moreover, with five ISOs now operating in the United States, there is considerable experience available regarding

what works and what does not with respect to regional transmission entities. This experience should make it somewhat easier, and more cost efficient, to create new RTOs.

As we stated in the NOPR, by improving efficiencies in the management of the grid, improving grid reliability, and removing any remaining opportunities for discriminatory transmission practices, the widespread development of RTOs will improve the performance of electricity markets in several ways and consequently lower prices to the Nation's electricity consumers. To the extent that RTOs foster fully competitive wholesale markets, the incentives to operate generating plants efficiently are bolstered. The evidence is clear that market incentives can lead to highly efficient plant operations. The incentives for more efficient plant operation can also affect existing generation facilities. Especially noteworthy is the recent experience that indicates improvements in the generation sector in regions with ISOs. Regions that have ISOs in place are undergoing dramatic shifts in the ownership of generating facilities. Large-scale divestiture and high levels of new entry in California and the Northeast are changing the ownership structure of these regions' generators. Access to customers and the presence of competing suppliers are creating the incentives for better-performing plants.

By improving competition, RTOs also will reduce the potential for market power abuse. As discussed earlier, eliminating pancaked transmission prices will expand the scope of markets and bring more players into the markets. By eliminating the mistrust in the current grid management, entry by new generation into the market will become more

likely as new entrants will perceive the market as more fair and attractive for investment. And with more players, the market becomes deeper and more fluid, allowing for more sophisticated forms of transacting and better matching of buyers and sellers.

Estimation of Benefits

The full value of the benefits of RTOs to improve market performance cannot be known with precision before their development, and we do not yet have a sufficiently long track record with existing institutions with which to measure. The Commission staff has estimated a subset of the potential cost savings from RTOs as part of its National Environmental Policy Act analysis. In the Environmental Assessment (EA) for this rulemaking, three scenarios were developed to estimate potential economic and environmental effects of the rulemaking. [112] The scenario analysis was conducted using a computer simulation model of the continental U.S. electric power system over the period 1997 to 2015. [113] The Commission adopts staff's analysis.

The results of the EA modeling present a range of potential cost savings resulting from the changes in modeling assumptions in each scenario. Although this Final Rule does not mandate RTO formation, full development of RTOs as envisioned by the

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[112]One of these scenarios assessed transmission effects only, the second assessed generation efficiencies in addition to transmission effects, and the third posited increased entry of new supply and demand choices.

[113]The Integrated Planning Model (IPM) was developed for the U.S. Environmental Protection Agency by ICF Inc. See 3.3.1 of the Commission Staff's Environmental Assessment in this proceeding.

Commission in this rule could offer substantial economic benefits. The EA scenarios modeled resulted in average annual savings of up to $5.1 billion per year over the 2000-2015 period. Based upon review of the EA scenarios and comparison with other existing analyses of competitive electric power markets, the best estimate from the EA analysis of annual benefits that could result from RTO formation is $2.4 billion per year. This estimate results from a scenario in which the modeling assumptions for transmission and generation efficiency are selected for consistency with other economic analyses of competitive power markets, including the Order No. 888 Environmental Impact Statement analysis conducted by Commission staff in 1996. [114]

These estimates do not represent a complete economic analysis of the rulemaking because the EA analysis addressed only factors that may change the dispatch of power plants or future generating capacity decisions. The model accounts for production costs (capital additions, operations and maintenance expenses, and fuel) equal to roughly one-third of the annual sales revenue now passing through the industry, and does not include such cost categories as existing (sunk) capital, the distribution system, and end user charges such as taxes. If other cost savings were realized, for example, from merger-like consolidation savings in the transmission grid, these savings would be additional to those estimated in the EA. Benefits from elimination of market power and improved intra-

[114] Order No. 888, Final Environmental Impact Statement, FERC/EIS-0096, FERC Stats. & Regs. ¶ 31,036 at 31,860-96.

regional congestion management are also not included in the calculation and could represent significant additional savings.

The costs of RTO formation are not explicitly captured in the EA analysis, nor are any potential costs associated with the provision of incentives for RTO formation or operation. Costs of RTO formation cannot be well estimated because of the wide range of design choices that the rule allows for a new RTO. For instance, the choice of building a dedicated telecommunications and data infrastructure, as opposed to relying on existing infrastructures, can have a large effect on the initial cost of an RTO. [115]

Based on review of cost studies for existing ISOs, it appears unlikely that the costs of RTO formation will exceed RTO cost savings on an annualized basis over time. This is because most of the costs are capital investments that occur at the beginning of the RTO's operation. But whether the costs in the initial period are under $10 million or up to several hundred million dollars (and more likely between these two figures) for an RTO, they are small in comparison with the ongoing annual savings that RTOs may provide.

As discussed above, our best estimate of cost savings from RTO formation is $2.4 billion annually, with potential cost savings estimated to be as high as $5.1 billion annually. This represents about 1.1 to 2.4 percent of the current total costs of the U.S.

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[115] See, e.g., California ISO, Cost Performance Benchmarking Study of Independent System Operators, revised version of Feb. 17, 1999.

electric power industry. [116] Such savings can be considered in the context of recent analysis of the economic benefits of further industry restructuring. [117] The wholesale cost savings the Commission is anticipating from the formation of RTOs are properly viewed as distinct from the larger savings that may result from competitive retail power markets. However, RTOs can also help achieve retail access and its associated benefits by creating a robust wholesale power market. In this sense the cost savings from retail access depend on the Commission fulfilling its RTO objectives. [118]

Light-Handed Regulation

One of the benefits of RTOs that we identified in the NOPR was that the existence of a properly structured RTO would reduce the need for Commission oversight and scrutiny, which would benefit both the Commission and the industry. We stated that to the extent an RTO is independent of power marketing interests, there would be no need for the Commission to monitor and attempt to enforce compliance with the standards of conduct designed to unbundle a utility's transmission and generation functions. We also

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[116] Defined as revenue from sales to ultimate users, which were reported as $215 billion in 1997. See Energy Information Administration, Annual Energy Review 1997, DOE/EIA-0384(97) (July 1998).

[117] See, e.g., Department of Energy, Supporting Analysis for the Comprehensive Electricity Competition Act, DOE-PO-0059 (May 1999).

[118] DOE's Economic Analysis of the Comprehensive Electricity Competition Act shows an estimated cost savings from a national policy of retail access to be $20 to $32 billion per year. See id.

stated that an independent RTO with an impartial dispute resolution mechanism could resolve disputes without resort to the Commission complaint process, and that it is generally more efficient for these organizations to resolve many disputes internally rather than bringing every dispute to the Commission. Further, we noted that the Commission has in the past indicated its willingness to grant more latitude to transmission pricing proposals from appropriately constituted regional groups [119] and, to the extent that RTOs increase market size and decrease market concentration, the competitive consequences of proposed mergers would become less problematic and thereby help further streamline the Commission's merger decision-making process.

We continue to believe that the types of reduced regulatory scrutiny mentioned in the NOPR, and summarized above, are possible and appropriate for RTOs. A number of commenters, however, have expressed concern that it is premature to reduce regulation of RTOs, and that RTOs will be monopolies that will require continued regulation. We believe that this concern stems from a misunderstanding of our concept of light-handed regulation. Admittedly, this concept is subject to varying interpretations.

We clarify that we will continue to apply the level of regulation and scrutiny that is necessary to ensure that public utilities comply with the FPA and our regulations. Only

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[119] Inquiry Concerning the Commission's Pricing Policy for Transmission Services Provided by Public Utilities Under the Federal Power Act, 59 FR 55031 (Nov. 3, 1994), FERC Stats. & Regs. ¶31,005, at 31,140, 31,145, 31,148 (1994) (Transmission Pricing Policy Statement).

when we determine that a different form of regulation will adequately protect the public interest, we will allow a reduced oversight role for the Commission.

Furthermore, our encouragement of the use of ADR by participants in RTOs to resolve disputes without resort to formal complaint proceedings is not new. In our RTG Policy Statement, we encouraged RTGs to develop alternative dispute resolution procedures for resolving transmission issues, particularly technical and reliability issues. We also stated that we would be willing to entertain proposals for some degree of deference to decisions rendered pursuant to an ADR process, pursuant to procedures that are specified in an agreement and assure due process for all participants. [120] We stated there, and we reaffirm here, that while the Commission cannot delegate its authority, it can give deference to resolutions that meet the standards of the FPA.

We reiterated this concept in the eleven ISO principles we set forth in Order No. 888. We stated there that an ISO should provide for a voluntary dispute resolution process that allows parties to resolve technical, financial, and other issues without resort to filing complaints at the Commission. [121] We have also expressed our willingness to grant some deference to changes to an open access tariff by an ISO concerning a regional

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[120]Policy Statement Regarding Regional Transmission Groups, 58 FR 41626 (Aug. 5, 1993), FERC Stats. & Regs. ¶ 30,976 (1993) (RTG Policy Statement).

[121]Order No. 888, FERC Stats. & Regs. ¶ 31,036 at 31,732.

solution to an identified regional problem based on what we understand is a broad consensus. [122]

Accordingly, we believe that some degree of deference can be granted on certain issues to independent RTOs that have appropriate procedural mechanisms in place to ensure fair representation of viewpoints. We cannot delineate here precisely the degree of deference that is appropriate, or on what issues. To the extent some issues can be fairly resolved within a region without formal Commission procedures, a benefit accrues to both the parties and the Commission.

In addition, we note that some of the innovative ratemaking policies discussed later in this Final Rule are consistent with light-handed regulation, since we expect that these policies may result in reduced levels of regulatory scrutiny. We emphasize, however, that we will not delegate or fail to exercise our regulatory responsibilities. We also recognize that the degree of deference and reduced regulatory scrutiny accorded to an RTO may necessarily depend on the ability of the RTO to reach consensus solutions to regional issues.

C. Commission's Approach to RTO Formation

The NOPR proposed an approach to RTO formation that embraces several general principles: first, as a matter of policy, we should strongly encourage transmission owners

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[122] See PJM Interconnection, L.L.C., 84 FERC ¶ 61,212 (1998).

to participate voluntarily in RTOs; second, we should be neutral as to organizational form (e.g., ISO or transco) of an RTO as long as it satisfies our minimum characteristics and functions; and third, we should provide maximum flexibility as to the specifics of how an RTO can satisfy the minimum characteristics and functions. We sought comment on these principles and specifically asked whether we should generically mandate RTO participation [123] or whether market-based rates or merger approvals should be conditioned on RTO participation. [124]

Based on the wide array of comments received, which we discuss next, and the voluminous record compiled in this rulemaking proceeding, we conclude that a voluntary approach to RTO formation represents a measured and appropriate response to the technical impediments to competition that have been identified as well as the lingering discrimination concerns that have been raised. We believe that voluntary formation of RTOs will address the fundamental economic and engineering issues which confront the industry and the Commission, and will help eliminate any actual or perceived discriminatory conduct by entities that continue to control both generation and transmission facilities. [125] Further, we believe that the voluntary process adopted in this

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[123]FERC Stats. & Regs. ¶ 32,541 at 33,762.

[124]Id.

[125]These engineering, economic and discrimination issues are discussed in Section III.A above.

rule, in conjunction with the innovative transmission pricing reforms that we will permit RTOs to seek, will be successful in achieving widespread formation of RTOs in a timely manner. Our adoption of a voluntary approach to RTO formation in this Final Rule does not in any way preclude the exercise of any of our authorities under the FPA to order remedies to address undue discrimination or the exercise of market power, including the remedy of requiring participation in an RTO, where supported by the record.

1. Voluntary Approach

Comments

Comments as to whether the Commission should require formation of and/or participation in RTOs break down into five main categories: (1) the Commission should require formation of and participation in RTOs; (2) formation of and participation in RTOs should be voluntary; (3) the Commission should encourage voluntary RTOs, but with strong enforcement mechanisms; (4) RTOs should be voluntary, but if they do not form or if utilities do not participate, the Commission should mandate them; and (5) RTOs should be voluntary, but the requirements of the NOPR effectively create a mandate.

Most investor-owned utilities argue that RTOs should be voluntary. Most municipal utilities, customer groups, consumer advocates, and marketers argue that the Commission should require RTOs. State commissions and cooperatives are more evenly

split. These characterizations, however, are broad generalizations, and there are strong exceptions to each statement.

Comments That the Commission Should Require Formation of and Participation in RTOs

The most extensive argument for mandating RTOs comes from TAPS and is representative of the positions of a number of public power utilities and other transmission customers. [126] TAPS argues that the non-mandatory approach leaves the keys to reform in the hands of the wrong people—the monopolists who have market power— and that the voluntary creation of RTOs will give opportunities for monopolists to maintain their market power. TAPS presents extensive arguments as to the Commission's authority to mandate and its obligation under the FPA to do so. They state:

> Only by mandating that jurisdictional utilities participate in . . . RTOs will the Commission protect against . . . utilities' inclinations to form alternative RTOs that are structured to perpetuate or enhance their competitive position. Compelling such participation is also the only way for the Commission to satisfy its statutory obligations to eradicate undue discrimination and protect against unjust and unreasonable pricing of both transmission service and wholesale generation sales.

TAPS further argues that past attempts to allow voluntary formation of RTOs have not been successful. Only where states have required ISOs or where the Commission has required them as part of a merger proceeding have effective ISOs been formed.

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[126] E.g., APPA, Empire District, FMPA, Great River, Lincoln, UAMPS, UMPA.

TDU Systems also presents extensive arguments for a mandate. It argues that the need for a national system of RTOs is urgent; that the Commission cannot rely purely on voluntary actions of transmission owners; that only a mandate will create RTOs in a timely fashion; and that inducements are counterproductive. WPPI states that the financial incentive to protect a transmission owner's generation investment is much stronger than any transmission incentive FERC can give to induce RTO participation. First Rochdale argues that voluntary RTOs will create too great an emphasis on forcing parties to litigation and other costly, time consuming dispute resolution.

Some investor-owned utilities support a mandate. [127] For example, Cinergy presents arguments similar to those of TAPS, and believes that "all jurisdictional utilities must be required to transfer control of their transmission facilities to a qualified ISO, which shall integrate those facilities into an RTO approved by the Commission."

A number of marketers believe that RTOs must be mandated. Sonat is not convinced that incentives alone are sufficient to persuade transmission providers to follow through with RTO formation. NEMA believes that participation by all transmission owners should be mandatory, but that the form of the RTO should be allowed to evolve.

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[127] E.g., Minnesota Power, WEPCO, PG&E, PECO.

Many industrial customers agree that RTOs must be required. PJM/NEPOOL Customers argue that the goals of the Commission cannot be achieved without mandatory participation by all transmission owners in RTOs. They go further to state that experience from both the Midwest ISO/Alliance debate over formation of ISOs and from the natural gas industry demonstrates monopolists will not act effectively to eliminate discrimination without strong mandates attached to strong penalties.

Residential consumer advocates and environmental organizations concur. Public Citizen says that the Commission should order the creation of three non-profit public transmission companies (one each for the Eastern, Western, and ERCOT interconnections) and order each public transco to purchase all of the transmission facilities needed to provide customers with transmission service.

Project Groups recommends that the final rule be strengthened to require that if owners do not voluntarily transfer control of facilities to an approved RTO by a date certain, the Commission will either order the transfer (in the case of jurisdictional utilities) or take other actions designed to minimize the opportunities for resisting owners to use their facilities in anti-competitive ways.

A number of state commissions support a mandatory RTO regime imposed by the Commission. Illinois Commission does not believe that the voluntary approach set out in the NOPR is likely to obtain its objectives and especially not in a timely manner, noting that voluntary efforts "for more than six years" have failed and that the encouragements

and incentives contained in the NOPR are unlikely to change the situation. Indiana Commission points to its experience with the Midwest ISO/Alliance debates as indicating that the Commission must take a more assertive role. Montana Commission agrees, pointing to unwillingness of transmission owners to give up control and to concerns about cost-shifting. It recommends that the Commission strengthen the NOPR to ensure the prompt formation of RTOs using all the tools at its disposal. Pennsylvania Commission argues that in order to be stable, both as to their authority and with respect to membership participation, RTOs must be mandatory. Virginia Commission argues that the goal of independence is in conflict with a voluntary approach.

Wisconsin Commission argues that the Commission should move forward quickly and require all transmission facilities to be placed under the control of an RTO. In the absence of any action from FERC to require utility membership, it states, it is unclear how any effort to resolve the "Swiss cheese" problems already experienced in the Midwest can succeed. Ohio Commission argues that it continues to believe that the mandatory participation and boundary drawing approach is more appropriate.

Comments That Formation of and Participation in RTOs Should Be Voluntary

The most extensive presentation of the argument that RTOs should and must be voluntary comes from Indianapolis P&L and FP&L, which make mostly legal arguments that are addressed below. Southern Company argues that a voluntary, flexible RTO

policy is consistent with desires of the states as reflected in statements given at the consultations with the states held by the Commission. It also avers that an RTO is not required to achieve the goals of the NOPR. Alliance Companies and Trans-Elect argue that voluntary formation is the key to RTO success, noting that the Commission's voluntary approach of encouraging regionalization of the transmission grid has been successful and there is no reason to doubt its continued success.

EEI suggests that the voluntary approach is working well, indicating that five ISOs have been approved serving 46 percent of U.S. customers and 38 percent of total MWh sales. They state that four other regions have proposed or are about to propose RTOs which will result, within three years since the issuance of Order No. 888, in nearly 63 percent of the nation's electricity customers being served by regional transmission entities. They go on to argue that a mandate could stimulate litigation that would slow this voluntary development. [128]

A number of public power entities, including municipal utilities, cooperative utilities, Federal Power Marketing Administrations, and others, also support a voluntary approach. TVA argues that FERC's proposal to make RTO participation voluntary is a wise one, that as RTOs demonstrate their effectiveness and the benefits of RTOs become

[128]Other transmission-owning utilities supporting voluntary development and opposing mandates are Detroit Edison, Duke, Entergy, Florida Power Corp., SCE&G, Metropolitan, MidAmerican, NEPCO et al., NU, NSP, Montana-Dakota, Tampa Electric, TXU Electric, United Illuminating, CP&L, Central Maine and Virginia Power.

more evident, transmission owners likely will be persuaded to participate and the holes in the RTOs should disappear. CMUA argues that mandatory RTOs are not likely to be formed through collaborative processes and therefore are not likely to take into account broad stakeholder input. Tacoma Power supports voluntary formation because some utilities may not find that the cost savings are sufficient to warrant the expenditure necessary. Also, it states that public power utilities may face legal obligations or restrictions that inhibit their participation and that such utilities should not face penalties or sanctions for not participating. [129]

A number of state commissions support voluntary formation of RTOs. Alabama Commission argues that the Commission does not have authority to mandate RTOs. Florida Commission agrees and states that any action by the Commission must be on a case-by-case basis, and the Commission should defer to states in developing regional approaches. Michigan Commission believes that there is a solution short of mandating RTO formation, but that uses FERC's unique national perspective and authority to facilitate larger RTO formation. Wyoming Commission urges the Commission not to

[129]Other public power and cooperative entities supporting voluntary formation of RTOs include Big Rivers, East Kentucky, Georgia Transmission, South Carolina Authority, SMUD, Seattle, JEA, LPPC, NRECA, Los Angeles, MEAG, Oglethorpe, Platte River, NPRB, NPPD, RUS and Tri-State.

codify or mandate anything other than the general framework for RTOs and thereby allow the voluntary process an opportunity to work. [130]

Comments That the Commission Should Encourage Voluntary RTOs But With Strong Enforcement Mechanisms

The Justice Department argues that the NOPR makes a strong case for mandating RTOs. It recommends that a regime of "carrots and sticks" be carefully designed to reasonably guarantee complete voluntary compliance, rather than merely promote greater voluntary compliance.

Enron/APX/Coral Power argue that the Commission should take steps to induce transmission owners to participate in RTOs. [131] They doubt, however, that performance-based ratemaking alone will be a sufficient inducement and recommend Commission procedures to prevent transmission owners that fail to participate in RTOs from misusing their transmission systems to favor their own or affiliated uses of their systems. These could include regional proceedings to impose added safeguards against violations, presumptions of ineligibility for market-based rates, and presumptions that mergers are inconsistent with public interest absent membership in an RTO.

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[130] Other state commissions supporting voluntary formation include South Carolina, Iowa, New York, and Washington. Other entities supporting voluntary formation of RTOs include NYPP, SRP and Cal ISO.

[131] Concurring are H.Q. Energy Services, Midwest Energy and Oregon Office.

Comments That RTOs Should Be Voluntary, But if They Do Not Form, the Commission Should Mandate Them

PNGC argues that if a voluntary RTO encompassing the Pacific Northwest does not come about in a reasonably short time, the Commission should explore its authority or seek new authority to mandate participation in RTOs. Fertilizer Institute believes that the Commission has sufficient authority to mandate RTOs but would likely be bogged down in endless litigation should it do so, and so recommends that the Commission pursue a voluntary approach, but, should that not work, proceed with a requirement. WPSC argues that encouraging voluntary participation in RTOs is the appropriate starting place. However, the Commission must be prepared to take more direct action, including increased legislative authority, to ensure the participation of utilities that do not voluntarily choose to join an RTO.

Comments That RTOs Should Be Voluntary, But the Requirements of the NOPR Effectively Create a Mandate

Puget states that if the Final Rule continues to reflect a position that nonparticipation in the RTO will result in negative regulatory consequences for the nonparticipant, then the RTO proposal cannot really be said to be voluntary. CP&L argues that mandatory filings, coupled with threats of withholding benefits and/or leveling penalties for those that do not choose to "voluntarily" join and RTO, do not present a picture of a truly voluntary process.

Comments on Sanctions for Non-Participation

Most vertically integrated public utilities oppose conditioning market-based rates and merger approval on RTO participation, while most transmission customers favor the Commission using conditioning authority. A number of utilities express concern that the Commission may be exceeding its legal authority, and that conditioning would undermine the voluntary nature of the RTO initiative. Florida Power Corp. argues that the Commission cannot impose penalties for failure to participate voluntarily in an RTO in contravention of the FPA. Puget contends that the possibility of penalties for non-participation means that no provision is made for participation to be truly voluntary. Duke expresses concern that potential revocation of market-based rate authorization and refusal to find a merger in the public interest are actions that make it legally or economically impossible for any public utility not to participate in an RTO. EEI observes that such linkage would change settled law requiring reasoned analysis or factual findings. Similarly, Consumers Energy submits that summary withdrawal of existing market-based rate authorization must be justified by substantial evidence of changed circumstances. CP&L claims that the Commission cannot impose RTO participation conditions on a proposed merger that go beyond the consistency with the public interest standard under the FPA.

Two commenters suggest that the Commission must proceed on a case-by-case basis. MidAmerican contends that there is no clear indication that the number of parties

competing in generation markets is so small to cause inadequate levels of competition. Since changes to restructure the industry into RTOs will be costly and difficult for all parties, mandates or sanctions should be based only on willful violations of Commission policy. LG&E concurs that only where the record supports a case-specific finding that a transmission owner's failure to participate in an RTO will result in undue discrimination or the ability to exercise market power should the Commission take remedial steps to address the situation so that the Commission is on firm legal grounds.

On the other hand, a number of commenters believe the Commission must require RTO participation as a condition of future market-based rate transactions and authorizations. TAPS notes that this is necessary for the Commission to meet its obligation to protect consumers from unjust and unreasonable rates if it intends to pursue a lighter-handed regulatory approach, adding that only RTOs of appropriate size and structure will be able to meet fully the Commission's statutory obligation to protect consumers. Oneok and New Smyrna Beach argue that manipulation and undetectable anticompetitive conduct for which there is no practical after-the-fact remedy are concerns that could be alleviated by an RTO and that, accordingly, denial of merger approval or market-based rate authorization is well within the Commission's authority when anticompetitive factors have not been mitigated.

PJM/NEPOOL Customers, Great River, East Texas Cooperatives and PNGC support revoking market-based rate authorization to remedy inherent discrimination

resulting from non-participation and also using non-participation as a factor in merger analysis. APPA favors imposing the merger condition in the form of an immediate requirement to participate given the Commission's prior experience with conditioning mergers with commitments to join an ISO. American Forest supports conditioning all future market-based rate transactions on participation. H.Q. Energy Services encourages the Commission to explore the full extent of its authority under the FPA to compel participation in RTOs.

Enron/APX/Coral Power recommend that the Commission create a rebuttable presumption that RTO participation is required for approval of market-based pricing or a transfer of facilities under section 203 of the FPA. For market-based rate authorizations, the Commission should establish a presumption that a decision by a transmission owner not to participate in an RTO is evidence that it is misusing its transmission facilities to advantage its merchant function. This presumption could be rebutted through a demonstration that stand-alone operation of the non-participant's grid serves the public interest as well as or better than participating in an RTO. They suggest that utilities currently with market-based rate authorizations should be ordered to show cause by the December 15, 2001, implementation deadline why their market rate authorizations should not be revoked. Enron/APX/Coral Power also recommend that all sales, leases, mergers and consolidations of transmission systems be conditioned on RTO participation based on a presumption that it is inconsistent with the public interest to dispose of transmission

facilities without eliminating the incentive to discriminate by committing the operation of those facilities to an RTO.

Industrial Consumers believes that the engineering and economic efficiencies of RTO participation loom so large that the Commission is justified in adopting a presumption that a decision by a transmission owner not to participate in an RTO is evidence that it is misusing its transmission facilities. Industrial Consumers recommends that the Commission assert jurisdiction over the transmission component of bundled sales, and order that the rates, terms and conditions offered under the OATT apply to all eligible customers. This would deprive vertically-integrated utilities of the incentive to resist RTO participation.

State commission commenters tend to favor the Commission using conditioning authority, but some are not sure this will necessarily encourage participation in RTOs. Oregon Commission comments that unless a utility can demonstrate that it cannot manipulate the transmission system to its advantage or that an RTO is impossible, the Commission should revoke its ability to sell at market-based rates. Complaints of unfair practices without credible reasons should be prima facie evidence of market power. Pennsylvania Commission recommends that the Commission revisit previously granted market-based rate authorizations. Indiana Commission cautions, however, that a recalcitrant utility that does not join an RTO may not perceive loss of market-based pricing authorization as detrimental. Illinois Commission does not oppose conditioning

merger and market-based rate approvals on RTO participation, but it also believes that the threat of these penalties may be inadequate to induce RTO participation.

Comments on Consequences for Failure to File, or Filing Alternative Explanation

The majority of comments on this issue support the Commission taking additional action if adequate RTOs do not form. PJM/NEPOOL Customers suggests that strict penalties must be assessed against actions inconsistent with RTO formation. Oneok suggests that certain benefits that are within the Commission's authority and discretion to grant or deny should be withheld from utilities unwilling to participate. Project Groups recommend that the Final Rule provide that the Commission itself create RTOs if the stakeholders are unable or unwilling voluntarily to do so by a reasonable date certain. PNGC suggests that if RTOs do not form within a reasonable time, the Commission should explore its authority or seek new authority to mandate participation by all utilities.

On the other hand, Duke is concerned that the Commission may not accept valid reasons for nonparticipation and use the October 15, 2000, alternative filings as vehicles to mandate RTO membership. Duke offers that the Commission cannot consider imposing penalties for non-participation while simultaneously claiming that its policy on participation is voluntary. Seattle cautions that the Commission should exercise care not to unfairly sanction transmission-owning utilities that cannot participate in an RTO (e.g.,

where good cause is shown that participation would violate state and local legal obligation, or the costs of RTO participation outweighs the benefits).

Commission Conclusion

Based on the record before us with respect to undue discrimination and market power, as well as with respect to economic and engineering issues affecting reliability, operational efficiency, and competition in the electric industry, it is clear that RTOs are needed to resolve impediments to fully competitive markets. However, we continue to believe, as we proposed in the NOPR, that at this time we should pursue a voluntary approach to participation in RTOs.

We acknowledge that there are many commenters who are skeptical that a voluntary approach will be able to accomplish our stated objective, which, as we stated in the NOPR, [132] is for all transmission-owning entities to place their transmission facilities under the control of RTOs in a timely manner. In general, they argue that those with a market advantage will not easily give it up, and that voluntary efforts to date have not been very successful in creating effective regional entities.

However, we believe that a voluntary approach as we have structured it, with guidance and encouragement from the Commission, is most appropriate at this time. Given the rapidly evolving state of the electric industry, we want to allow involved

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[132] FERC Stats. & Regs. ¶ 32,541 at 33,685.

participants the flexibility to develop mutually agreeable regional arrangements with respect to RTO formation and coordination. Further, we want the industry to focus its efforts on the potential benefits of RTO formation and how best to achieve them, rather than on a non-productive challenge to our legal authority to mandate RTO participation.

We believe the voluntary approach to RTO formation can be more successful now than in the past for several reasons. The pace of industry restructuring is accelerating. Many formerly vertically integrated utilities have recently recognized the strategic benefits to them of concentrating solely in one of the traditional utility areas (generation, transmission, or distribution). Moreover, the NOPR has focused industry attention on RTOs and their benefits. Further, this Final Rule is providing clear rules and guidance on what is necessary to form an RTO. Through this Final Rule, we are also committing the Commission to act as a catalyst in RTO discussions by initiating and encouraging a collaborative process. Finally, we have provided in this Final Rule for certain favorable ratemaking treatments for those who assume the risks of the transition to a new structure, which should, at a minimum, eliminate any rate disincentives to RTO formation.

We are not adopting as a generic policy in this Final Rule either that RTO participation is required in order to retain or obtain market-based rate authorization for wholesale power sales, or that RTO participation is required for a disposition of jurisdictional facilities to be in the public interest. However, in response to those who argue that the Commission has a statutory responsibility to remedy undue discrimination

and anticompetitive effects when evaluating market-based rate and merger requests, we recognize that we may have to consider, in individual cases, issues that arise as to whether market power has been mitigated in the absence of RTO participation or as to whether a merger would be in the public interest without RTO participation.

While we have concluded on this record that it is in the public interest to provide for a voluntary approach to RTO formation that relies upon encouragement, guidance, and support from the Commission, this does not mean that all aspects of this Rule are voluntary. The filing requirements set forth in section 35.34(c) of the new regulations are mandatory. In other words, public utilities must file either an RTO proposal or a report on the impediments to RTO participation. In addition, to qualify as an RTO, an applicant must comply with the minimum characteristics and functions and other specific RTO requirements set forth in the new regulations. We will also expect that all transmission owners will participate in good faith in the collaborative process that we are establishing herein.

2. Organizational Form of an RTO

Comments

A number of commenters address the proposal to allow flexibility in the type of structure allowed for RTOs. Several of those commenting recommend maintaining the NOPR's flexibility and that the Commission not prescribe either a transco, ISO or some

other structure. [133] FirstEnergy advocates flexibility and says that no one knows today what the best structure will be for the future so, therefore, the Commission should allow customization reflecting regional needs. Several commenters, such as APPA, argue that the Commission's flexibility on type of organization should go beyond the standard ISO and transco structures and include gridcos, wirecos, not-for-profit and for-profit forms of each organization, and hybrid organizations.

Numerous commenters state a preference in favor of for-profit transcos although many of these commenters still recommend that other structures be allowed at each region's option. [134] In favoring transcos, commenters cite the greater efficiency due to a transco's profit motive. [135] Commenters further argue that for-profit transcos can better serve the goal of independence because the transco would make all business decisions, [136] can more cleanly divide Commission-regulated transmission from state-regulated distribution, [137] and can operate more efficiently by integrating investment decisions,

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[133] See, e.g., EEI, Lincoln, LG&E, SERC and Washington Commission.

[134] See, e.g., Allegheny, Entergy, INGAA and Trans-Elect.

[135] See, e.g., Sierra Pacific, H.Q. Energy Services and Detroit Edison.

[136] MidAmerican.

[137] CTA.

facility design, construction and O&M into a unified strategy. [138] A few additional supporters of transcos prefer that they be not-for-profit. [139] Gainesville recommends further that transcos in Florida become an instrumentality of the state.

In contrast to the above, ISOs are preferred by a number of commenters. [140] PJM argues that ISOs are necessary to ensure independence, provide more independent market monitoring and have a fiduciary duty to the public interest. PJM also notes that ISOs can meet the Commission's objectives more quickly than transcos. NASUCA reports that some of its members oppose for-profit transcos because of their "natural incentive to extract monopoly rents from consumers." [141] Some of those who prefer ISOs contend that transcos would favor transmission solutions over generation solutions to congestion. [142] This argument is contested in the reply comments of Trans-Elect and others. NEPCO et al. maintains that the alleged bias in favor of transmission solutions can be overcome by using performance-based rates to replace standard rate base regulation.

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[138] Duke.

[139] LPPC, Los Angeles, Gainesville and Public Citizen.

[140] See, e.g., NASUCA, PJM and ICUA.

[141] NASUCA at 20.

[142] See, e.g., PJM and ISO-NE.

Some commenters favor a hybrid involving an ISO with a gridco or with another type of organization. [143] As noted above, many commenters recommend flexibility and believe that either an ISO or transco would satisfy the needs of an RTO if designed properly.

Several commenters cited problems that need to be worked out for both transcos and ISOs. Professor Joskow notes that ISOs would suffer efficiency losses from the separation between ownership and operation of transmission assets. This separation makes it harder to apply incentive regulation because it divides decisions that affect the costs of transmission between two organizations. On the other hand, Professor Joskow says that an ISO may be superior to a transco where transmission ownership is presently so balkanized that loop flow and congestion cannot be managed, but he asserts that this advantage may decline over time as the industry changes. Southern Company says that while some see ISOs as ineffective bureaucracies which add to transmission risk, the creation of transcos presents substantial tax and financial problems.

A few commenters contend that the NOPR's provisions produce a bias in favor of ISOs even though this intent is not noted. [144] For example, Duke argues that the NOPR provisions for stakeholder participation in formation, governance and market monitoring

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[143] See, e.g., ISO-NE.

[144] See, e.g., Sierra Pacific, Duke and Enron/APX/Coral Power.

functions seem more geared toward the ISO form of organization. These commenters recommend that the Final Rule not include such a bias.

A number of commenters suggest multi-layered structural alternatives. For example, ISO-NE proposes an ISO and gridco operating in tandem. A non-profit ISO would direct the operation of the transmission system and run day-ahead and real-time power markets coupled with a grid entity that owns and maintains the transmission in the area operated by the ISO. This, they claim, would require a final rule that defines an RTO as an entity, or a combination of entities working in collaboration, that satisfies the minimum characteristics set forth in the NOPR. Under the model discussed by ISO-NE, the ISO would have responsibility for assuring open transmission access, operating the regional transmission assets (including provision of switching orders to the gridco), monitoring power markets, serving as a clearing agent and possibly serving as a clearinghouse, and maintaining short-term reliability. The gridco would own and maintain transmission assets, operate transmission assets in response to ISO directions consistent with safety requirements, and build new transmission facilities (including licensing, permitting and siting responsibilities). Joint responsibilities would include planning upgrades to transmission system.

ISO-NE argues that ISOs alone would have disadvantages in the realm of transmission expansion due to fragmentation of transmission ownership. A gridco, however, could raise investment capital, bring parallel and complementary strengths to an

ISO, and should bring crisp and decisive implementation of transmission planning and expansion decisions. Pairing an ISO with a gridco, ISO-NE argues, would eliminate the problems inherent in a transco by separating transmission ownership from market administration and market monitoring.

Midwest ISO suggests a structure that it believes could meld the best of both ISOs and transcos, i.e., an ISO that would allow an independent transmission company to operate under the Midwest ISO. This model would not require that all transmission be owned by a single gridco—transmission owners could decide whether to operate directly through the ISO, or spin assets off to a gridco that would operate under the ISO. Midwest ISO argues that this proposal overcomes the problems encountered in expecting all transmission owners to divest their transmission assets to separate companies.

PGE points out that, "for an RTO to achieve . . . critical mass in the near term, it must be capable of managing a regional transmission market in which a variety of subsidiary transmission structures will be in place. Such subsidiary structures may include single-company and sub-regional ITCs, integrated utilities located in states that already have restructured their retail electric markets, integrated utilities located in states that have not yet restructured, and publicly-owned and federal utilities." PJM argues that ISOs should be present even in regions that form separate transmission-owning companies to avoid continued conflict regarding the neutrality and commercial consequences of grid management decisions.

Professor Hogan states that it is very unlikely that a pure transco model is viable at all. He further indicates that, "the advantages of an independent transmission company can be pursued through the gridco model with an accompanying ISO." He suggests that this approach is already well advanced in the United States and elsewhere, and that by separating ownership of the wires from control of system operations, it would be easy to accommodate a complex pattern of ownership.

ComEd says that characteristics and functions should be performed by two linked organizations that make up a binary RTO: a for-profit ITC under the oversight of an independent not-for-profit regional transmission board.

Michigan Commission believes that wirecos, transcos and ISOs are all interim transitional organizations along the path toward very large RTO-like organizations. Even if vestiges of the smaller interim organizations continue to exist, they should operate under some kind of RTO umbrella to assure appropriate regional control. Missouri Commission proposes a zonal model in which the zones are areas where generation is integrated through the transmission grid in such a way as to minimize restrictions on sources of generation used in the area. In the future, independent transmission companies may form with the possibility that adjacent control areas will join to form larger zones. In such a case, an RTO is a collection of zones for purposes of administering the regional gatekeeper function and providing markets for transmission congestion. Each zone would

be responsible for maintaining its transmission facilities and coordinating both the use and expansion of those facilities with the RTO.

WEPCO proposes that each RTO should be composed of two parallel organizations to serve the same region under a common, independent board: a Regional Reliability Council to develop regional reliability rules and a not-for-profit ISO that operates under those regional rules.

Cal DWR suggests a three-tiered structure that builds on existing organizations. Existing NERC regional councils should set broad governing criteria for ISO reliability issues, parallel path flow issues, and for regional planning. More than one ISO may be located in each NERC region. These should control area reliability, administer transmission terms and conditions, and create market mechanisms to manage congestion, among other functions. Transmission owners should support, but not duplicate the roles of NERC regional councils.

Commission Conclusion

We will not limit the flexibility of proposed structures or forms of organization for RTOs. We are prepared to accept a transco, ISO, hybrid form, or other form as long as the RTO meets our minimum characteristics and functions and other requirements.

Some of the commenters argue that the NOPR's requirements either favor one form of organization over others or make one or the other forms very difficult to construct. It is not our intention to favor or disfavor transcos, ISOs, or other organizational form. We

acknowledge that some of our minimum requirements might affect transcos and ISOs differently, but there also may be different acceptable ways for an ISO or transco to satisfy the minimum requirements. However, we designed this Final Rule to be neutral as to organizational form, and we do not believe that the requirements for forming an RTO in this Final Rule favor any particular RTO structure.

Arguments are made that an ISO is the better form of RTO because an ISO has no incentive either to favor transmission solutions to solve congestion constraints or to perpetuate congestion. ISOs are easier to form, in most cases, because there are fewer tax and mortgage consequences as there is no actual transfer of ownership.

On the other hand, some argue that transcos are preferable because they introduce a profit motive for efficient operation and expansion. Performance-based rates are normally considered more effective with transcos than with ISOs. Advantages are cited for having the same entity both propose and carry out transmission expansion and maintenance.

The transco and ISO forms of organization each has its advantages and disadvantages as do combination forms and other forms that have been suggested. In many cases, the situation facing transmission owners in a particular region may influence the appropriate form of organization to propose. In other cases it may be a matter of preference for how the participants wish to do business. Some may propose to start operation in one form and transform to another form at a future date. Tax consequences,

public ownership, bond indentures and current organization will each have an impact on the decision of what form of organization a particular RTO will propose.

This Rule does not necessarily require that a single organization perform all of the functions itself. To mention but a few examples, we specifically clarify in other parts of this Final Rule that the security coordinator function and the OASIS function could be shared with another RTO or contracted out, and that appropriate scope may be achieved in creative ways. We will entertain appropriate tiered or other structures. We require only that the RTO be responsible for ensuring that the requirements are met in a way that satisfies our Rule.

Because of the differing conditions facing various regions, we offer flexibility in form of organization. We welcome innovative structures and forms that meet the needs of the market participants while satisfying the minimum requirements of this Rule.

3. Degree of Specificity in the Rule

Comments

Many commenters believe that our proposed flexible approach is either still too rigid, or that it should provide clearer guidance. INGAA argues for less specificity in the Final Rule. INGAA points to the success of Order No. 636, wherein the Commission required open access, functional unbundling, and a new rate design, and it established specific requirements for operational control and pipeline capacity trading, all without having to specify the structure of the conforming gas transmission entity. NU similarly

points to the precedent of the restructured gas industry. It states that the Commission should avoid the perils of imposing a rigid system pursuant to the mistaken belief that it can be easily and swiftly changed later to respond to future needs of the marketplace. CP&L also cautions that the principle of flexibility could prove illusory in practice and that there is a danger that, if guidance from the Commission takes the form of overly restrictive rules, it will stifle the development of innovative proposals. PG&E submits that the Commission should simply define a broad standard that provides for independence and evaluate particular RTO proposals on a case-by-case basis. South Carolina Commission also counsels that the Commission should not attempt to mandate a particular form of RTO, or establish its size or region, because this will not ensure that an efficient market will develop. It posits that any RTO policy should be flexible enough and dynamic enough to allow for both regional and organizational differences and for growth and changes in the future.

SCE&G claims that the NOPR is overly prescriptive with respect to both scope and timing. TXU Electric submits that the NOPR's approach to reliance on minimum characteristics and functions seems to reflect a significant number of fundamental policy decisions that have already been made without the benefit of any of the very experimentation the NOPR extols. Southern Company argues that the Commission should recast the characteristics and functions as voluntary guidelines at this early stage in the development of RTOs, since it is unclear what the best form of RTO will be.

ISO supporters, such as NYPP and Central Maine, recommend that the Commission reject proposals to impose rigid and inflexible rules on RTOs and remain flexible especially with regard to existing ISOs and RTO pricing. ISO-NE counsels that tolerance for a diversity of approaches is essential, as well as politically pragmatic, due to the fact that different regions will have different histories, industry elements, and local regulatory policies that need to be accommodated.

FirstEnergy supports the NOPR's flexibility because there is no best model to deal with regional variations. Alliance Companies and Washington Commission also recommend that the Commission adhere to a flexible RTO policy, open to voluntary regional experimentation in the design of RTO structures. In addition, both Southern Company and Trans-Elect recommend that the Commission maintain flexibility toward transcos. And while a transco supporter, Entergy, sees the NOPR as properly flexible in regard to for-profit and not-for-profit RTOs. Finally, Duke agrees that RTOs should satisfy key principles, as long as they are not so prescriptive as to promote only one type of RTO.

On the other hand, Illinois Commission submits that the NOPR's minimalist approach will lead to creation of lowest common denominator RTOs that minimally comply with the characteristics and functions and general guidance as to geographic scope and membership. Project Groups suggests that the Commission expand and strengthen the minimum characteristics. TDU Systems recommends that the Commission resist calls to

water down its Final Rule and urges more substance. TAPS claims that calls for more flexibility are really a cover for diluted, ineffective RTOs that will lack the scope, independence and authority to get the job done.

Commission Conclusion

While many commenters think that our proposal to rely on guidance and flexibility to promote establishment of appropriate RTOs is either too rigid or too non-specific, we conclude that we struck an appropriate balance in the NOPR.

Although we and the electric industry see many problems associated with the operation of the Nation's transmission systems and we see a general need for regional transmission solutions, we cannot at this time foresee the best organizational means to resolve every problem. Given this situation, we believe that the right balance is a minimally intrusive, solution-oriented approach that provides guidance and specifies only the fundamental RTO characteristics and functions.

We do not agree with those commenters who contend that the NOPR approach adopted herein is either overly or insufficiently prescriptive. Certainly the minimum characteristics and functions do reflect a number of threshold requirements, but collectively, these requirements serve to define the minimum necessary to improve the operation of the Nation's transmission systems. While we agree that there is no best answer and we encourage regional innovation, we cannot simply define a standard of

independence and nothing else. This would leave the industry without direction and provides no guidance on how we would evaluate the various RTO proposals.

Finally, we do not agree with those who suggest that our electric regulation must follow our natural gas pipeline industry Order No. 636 model, where the Commission did not attempt structural unbundling of the pipeline industry but simply relied on more limited, functional unbundling. The situations in the two industries are different regarding the need for regional entities. Most importantly, there was not in the gas industry the degree of vertical integration of production, transmission, and distribution that historically existed in the electric industry. In addition, the gas industry has no analog to loop flow, transmission loading relief, the need for large regional calculations of ATC, or the use of generation energy and reactive power output to manipulate transmission flow, among other reasons.

4. Legal Authority

In the NOPR, we noted that sections 205 and 206 of the FPA, 16 U.S.C. 824d and 824e, give the Commission both the authority and responsibility to ensure that the rates, charges, classifications, and services of public utilities (and any rule, regulation, practice, or contract affecting any of these) are just and reasonable and not unduly discriminatory, and to remedy undue discrimination in the provision of such services. We stated that in fulfilling its responsibilities under FPA sections 205 and 206, the Commission is required to address, and has the authority to remedy, undue discrimination and anticompetitive

effects. [145] We also noted that the Commission has the authority and responsibility under section 203 of the FPA to review mergers and other transactions involving public utilities, including dispositions of jurisdictional facilities by public utilities, and that the Commission may grant an application under section 203 upon such terms and conditions as it finds necessary to secure the maintenance of adequate service and the coordination in the public interest of jurisdictional facilities.

Further, we noted that section 202(a) of the FPA authorizes and directs the Commission "to divide the country into regional districts for the voluntary interconnection and coordination of facilities for the generation, transmission, and sale of electric energy." The purpose of this division into regional districts is for "assuring an abundant supply of electric energy throughout the United States with the greatest possible economy and with regard to the proper utilization and conservation of natural resources." Section 202(a) states that it is "the duty of the Commission to promote and encourage such interconnection and coordination within each such district and between such districts."

We solicited comments on whether the Commission should generically mandate RTO participation by all public utilities to remedy undue discrimination under sections 205 and 206 of the FPA, whether market-based rates for generation services could continue to be justified for a public utility that does not participate in an RTO, whether a

[145] FERC Stats. & Regs.¶ 32,541 at 33,695.

merger involving a public utility that is not a member of an RTO would be consistent with the public interest, whether non-participants that own transmission facilities should be allowed to use the non-pancaked transmission rates of the RTO participants in that region, whether transmission services provided by a transmitting utility need to be under RTO control to satisfy the discrimination standards of sections 211 and 212 of the FPA, and whether a public utility's lack of participation would otherwise be in violation of the FPA. [146]

Comments

The comments on the Commission's legal authority to mandate participation in RTOs span the spectrum from those asserting that we clearly have that authority to those asserting that we clearly do not, with others taking a less definitive position in between.

Supporting Commission's Authority to Mandate RTO Participation

Representative of those asserting that the Commission has the authority to mandate RTO participation are the joint comments filed by APPA, ELCON, TAPS, and TDU Systems ("APPA et al. (WP)"). These parties argue that the FPA as presently constituted gives the Commission "ample" legal authority to require participation by public utilities in properly structured and configured RTOs. APPA et al. assert that section 202(a) permits the Commission to determine rational and efficient regional boundaries; section 203

[146] Id. at 33,762.

provides authority to require RTO participation as a standardized condition to mitigate the increased generation and transmission concentration brought about by mergers; "it would be fully consistent with, and indeed required by" FPA section 205 to insist on RTO participation as a condition necessary to yield competition robust enough to produce just and reasonable market-based rates; requiring RTO participation falls within the Commission's broad discretion to fashion a remedy for undue discrimination under FPA sections 205 and 206; and the Commission could reasonably conclude that it is no longer just and reasonable for transmission service to be planned, implemented, or priced on a less-than-regional basis. Other commenters echo some or all of these points in asserting that the Commission currently has sufficient legal authority to mandate RTO participation. [147]

Some other commenters emphasize the authority contained in particular statutory sections. One commenter states that FPA section 202(a) is an express delegation of authority to the Commission to make policy, and the stated goal of that section of assuring an abundant supply of electric energy with the greatest possible economy provides ample authority to support the conclusion that transmission facilities should be operated by an RTO. This commenter states that it is well established administrative law that there is

[147] E.g., UAMPS, PJM/NEPOOL Customers, Illinois Commission, Michigan Commission, Cinergy, Industrial Consumers, First Rochdale, East Texas Cooperatives, FMPA.

great deference given to an agency charged with policymaking responsibility. [148] Another commenter, FMPA, argues that the Commission's interconnection authority under FPA sections 202(b) and 210 provides ample basis for mandating RTO participation. According to FMPA, the Commission could find that RTO participation is necessary to "make effective" an interconnection, pursuant to FPA section 210, that has been rendered ineffective by fragmented and anticompetitive practices of transmission owners. FMPA also asserts that the Commission could use this authority through a rulemaking without following the individual procedural requirements of section 212. [149]

In addition to those commenters finding clear authority in the FPA for an RTO mandate, a number of commenters support the suggestion, as one commenter put it, that certain benefits and rights that are within the Commission's authority and discretion to grant or deny should be withheld from utilities unwilling to participate in an RTO. [150] PNGC states that the Commission should use "big sticks" to obtain RTO participation, and Michigan Commission says the Commission "should use every stick, carrot, orange-colored stick and tool it can." Some commenters assert specifically that the Commission has the authority, and should use its authority, to condition mergers under section 203 and

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[148] Professor Koch, citing Chevron U.S.A., Inc. v. Natural Resources Defense Council Inc., 467 U.S. 837 (1984).

[149] Citing American Paper Institute, Inc. v. American Elec. Power Serv. Corp., 461 U.S. 402, 419-20 (1983).

[150] Oneok.

condition market-based rate authority under section 205 of the FPA on RTO participation. [151] Some commenters also favor limiting access to non-pancaked transmission rates of RTOs to those who participate in RTOs. [152]

Even some commenters that generally oppose the idea of an RTO mandate acknowledge that market-based rate authority or mergers could, on a case-by-case basis, be conditioned on RTO participation. For example, Florida Power Corp. states that the Commission could find, "given certain factual circumstances," that the granting of market-based rate authority would not be appropriate "unless the entity agreed to commit its transmission facilities to an RTO." United Illuminating states that whatever conditioning authority the Commission may have for market-based rates or mergers could not be used as a basis for a generic rulemaking.

NECPUC cites to other sections of the FPA that the Commission might rely upon to promote RTO establishment. It supports the use of the complaint process under section 206 of the FPA in specific cases. It also suggests the use of FPA section 207 proceedings, which can be initiated by state commissions, as a vehicle for requiring RTOs where the Commission finds interstate service inadequate or insufficient. NECPUC also urges the

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[151] E.g., Oneok, TAPS, APPA, PJM/NEPOOL Customers, Illinois Commission, Industrial Consumers, East Texas Cooperatives, FMPA, TDU Systems and PNGC.

[152] E.g., TDU Systems, PNGC and PJM/NEPOOL Customers.

use of joint boards and cooperative procedures between the Commission and the states under FPA section 209 as a means of resolving RTO issues.

Opposing Commission's Authority to Mandate RTO Participation

At the other end of the debate on the Commission's legal authority with respect to RTOs are those that assert that the Commission's authority to mandate RTOs is non-existent or very limited. [153] A number of commenters emphasize that FPA section 202(a) is explicitly voluntary and therefore provides no support for the Commission's authority to mandate RTOs. [154] FP&L states that it is questionable whether the Commission could use FPA section 202(a) as a tool to promote competition, given that section 202(a) is for the "coordination and interconnection of facilities," and coordination is arguably inconsistent with competition.

Some argue that the exercise of FPA section 206 authority to remedy discrimination on a generic basis by requiring RTOs would have to be supported by more explicit findings of discrimination than are contained in the NOPR. [155] For example, Florida Power Corp. and United Illuminating contend that the Commission cannot use an industry-

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[153] E.g., Southern Company, Puget, Avista, CP&L, Duke, STDUG, FirstEnergy, NYPP, Indianapolis P&L, FP&L, Detroit Edison, Florida Power Corp., Florida Commission, Alabama Commission.

[154] E.g., EEI, United Illuminating, Southern Company, Central Maine, CP&L, Duke, NYPP, Florida Power Corp, Florida Commission.

[155] E.g., EEI, Central Maine, Southern Company, Duke, NYPP, Dalton Utilities, Indianapolis P&L, Florida Power Corp., Entergy.

wide solution to remedy a problem that does not exist industry-wide, [156] and the record does not demonstrate an industry-wide problem. EEI and others argue that the Commission may only impose a remedy that is reasonable and appropriate in light of the specific discriminatory findings made and the actual practices to be corrected, and the NOPR fails to demonstrate such a nexus. Southern Company notes that the Commission has not made any finding of discrimination and that the "perception" of discrimination is an insufficient basis on which to invoke FPA sections 205 and 206. CP&L asserts that section 206 may give the Commission some authority with respect to requiring RTOs, but only in individual cases after hearings and substantial evidence of discriminatory practices. Southern Company contends that the Commission's remedial authority under section 206 must be construed in light of the voluntary nature of section 202(a) and the Commission cannot do anything indirectly under section 206 that it cannot do directly under section 202(a). Central Maine asserts that discrimination findings would not apply against a "wires only" company such as itself, and similarly, Indianapolis P&L argues that it has no ability to discriminate in favor of its own wholesale generation and therefore could not be forced to join an RTO as a remedy for discrimination.

Some commenters question the Commission's authority to condition market-based rates or mergers on RTO participation. Central Maine argues that the Commission could

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[156] Citing Associated Gas Distributors v. FERC, 824 F.2d 981 (D.C. Cir. 1987), cert. denied, 485 U.S. 1006 (1988).

not conclude on a generic basis that an RTO is needed in every market-based rate case, and that the Commission could not change its existing policy on market-based rates without substantial evidence and reasoned decisionmaking. CP&L states that the Commission cannot use FPA section 205 authority to grant market-based rates merely to advance preferred policies, and cannot use FPA section 203 to condition mergers absent specific findings in a particular case. Duke contends that the Commission has no authority to issue a rule that imposes sanctions for non-participation that would make non-participation practically or economically unfeasible. Similarly, NYPP states that mergers, market-based rates, and access to non-pancaked transmission rates are economic necessities, and using them as conditions would effectively require RTO participation. Indianapolis P&L asserts that it would be inequitable and unjustifiable to withhold market-based rate authority from a utility that has a good reason not to participate in an RTO, and further, that the Commission may not pressure a utility to engage in an activity that it may not require through direct regulation. [157] Similarly, Puget states that if the Commission is not mandating RTOs, which is beyond its authority, then the rule must contain no penalties for non-participation.

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[157] Citing Altamont Gas Transmission Co., v. FERC, 92 F.3d 1239, 1246 (D.C. Cir. 1996).

Several commenters point to the recent court decision in Northern States [158] as limiting the Commission's authority with respect to RTOs. [159] These parties assert that Northern States stands for the proposition that the Commission may not directly or indirectly interfere with state regulation of retail service, and that the NOPR would result in traditional utility retail responsibilities being shifted to RTOs. Specifically, for example, Puget alleges that redispatch and planned maintenance are reliability functions that affect the utility's ability to serve native load and are subject to state law. Indianapolis P&L asserts that Northern States makes clear that the Commission may act only under authority given by Congress.

A variety of other legal arguments are made in opposition to any Commission efforts to mandate RTO participation. Southern Company contends that since there has been no finding that Order Nos. 888 and 889 have failed, there has been no reasonable explanation as to why the Commission should change that policy. CP&L argues that the Commission's authority to enforce FPA section 205 is in the enforcement provisions of FPA sections 314, 316, and 317. CP&L also states that it would be discriminatory to have higher pancaked rates for non-participants in RTOs while participants get the advantage of non-pancaked rates. Duke and Florida Power Corp. assert that requiring involuntary

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[158] See Northern States, supra note 89.

[159] E.g., Southern Company, Puget, Indianapolis P&L, FP&L, Florida Commission.

wheeling and imposing common carrier status is outside the Commission's authority, [160] and likewise, so is mandating RTOs. Florida Power Corp. contends that requiring RTO participation would force a utility to join an ISO or divest its transmission or generation assets, and the Commission cannot compel divestiture. Florida Power Corp. and Southern Company make the point that the Public Utility Holding Company Act granted the SEC, not the FERC, the authority to restructure the electric utility industry. Florida Power Corp. further argues that requiring RTO participation would be a "taking" of utility property for which just compensation would be owed, and that the "taking" problem is exacerbated by utilities being liable for facilities no longer under their control. Florida Commission states that the Energy Policy Act of 1992 indicated that the Commission should proceed with transmission access issues case-by-case, not generically.

Other Comments On Legal Authority

DOE submitted comments strongly supporting the Commission's efforts to establish RTOs. DOE states that while the Commission has substantial authority to accomplish much of what needs to be done, Federal legislation clarifying Commission authority, especially with respect to non-jurisdictional utilities, would greatly facilitate RTO formation.

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[160] Citing Richmond Power & Light Co. v. FERC, 574 F.2d 610 (D.C. Cir. 1978) and Otter Tail Power Co. v. U.S., 410 U.S. 366 (1973).

One commenter raised the issue of what authority the Commission would rely upon to require the filings in proposed section 35.34(c). This commenter wants the Commission to clarify that the filings would be required pursuant to the information gathering authority under FPA sections 304, 307, and 311, and not under authority of section 205, which the commenter asserts provides no such authority. [161]

There were only a few comments in response to the Commission's inquiry about sections 211 and 212 or other FPA standards. Florida Power Corp. submits that the Commission cannot rely on FPA sections 211 and 212 to mandate RTOs. Florida Power Corp. notes that in Order Nos. 888 and 888-A, the Commission recognized that it does not have the authority to order wheeling pursuant to FPA sections 211 and 212 except on a case-by-case basis after an evidentiary hearing resulting in specific findings. Florida Power Corp. argues that because the Commission is fashioning an industry-wide generic solution and not acting on a case-by-case basis, the Commission cannot rely on sections 211 and 212 in this proceeding.

NARUC also notes that Congress revised FPA sections 211 and 212 to provide FERC with authority to address requests for non-discriminatory transmission service on a case-by-case basis. NARUC argues that the goal of promoting regional flexibility is more readily served by case-by-case consideration. In this way, NARUC believes that the

[161] Consumers Energy.

Commission can use FPA sections 211 and 212 to take a more tailored approach rather than "one-size-fits-all" regulations that ignore market development and local conditions.

Commission Conclusion

Much of the discussion in the comments on the Commission's legal authority with respect to RTOs focuses on whether the Commission has the statutory authority to mandate that transmission owners participate in an RTO. As discussed elsewhere in this Final Rule, we have decided not to mandate generically that all public utility transmission owners must join an RTO. We conclude that the Commission possesses both general and specific authorities to advance voluntary RTO formation. We also conclude that the Commission possesses the authority to order RTO participation on a case-by-case basis, if necessary, to remedy undue discrimination or anticompetitive effects where supported by the record. [162] Of course, RTO participation is not the only remedy that the Commission might employ to address these problems.

FPA sections 205 and 206

As we stated in the NOPR, the Commission is granted the authority and responsibility by FPA sections 205 and 206, 16 U.S.C. 824d and 824e, to ensure that the rates, charges, classifications, and service of public utilities (and any rule, regulation, practice, or contract affecting any of these) are just and reasonable and not unduly

[162] We need not decide in this case the extent of the Commission's authority to mandate generically RTO participation.

discriminatory, and to remedy undue discrimination in the provision of such services. In fulfilling its responsibilities under FPA sections 205 and 206, the Commission is required to address, and has the authority to remedy, undue discrimination and anticompetitive effects. The Commission has a statutory mandate under these sections to ensure that transmission in interstate commerce and rates, contracts, and practices affecting transmission services, do not reflect an undue preference or advantage (or undue prejudice or disadvantage) and are just, reasonable, and not unduly discriminatory or preferential. [163] Additionally, as discussed in Order No. 888, [164] there is a substantial body of case law that holds that the Commission's regulatory authority under the FPA "clearly carries with it the responsibility to consider, in appropriate circumstances, the anticompetitive effects of regulated aspects of interstate utility operations pursuant to [FPA] §§ 202 and 203, and under like directives contained in §§ 205, 206, and 207." [165]

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[163] Once such a finding is made, the Commission is required to remedy it. See, e.g., Southern California Edison Company, 40 FERC ¶ 61,371 at 62,151-52 (1987), order on reh'g, 50 FERC ¶ 61,275 at 61,873 (1990), modified sub nom., Cities of Anaheim v. FERC, 941 F.2d 1234 (D.C. Cir. 1991); Delmarva Power and Light Company, 24 FERC ¶ 61,199 at 61,466, order on reh'g, 24 FERC ¶ 61,380 (1983).

[164] Order No. 888, FERC Stats. & Regs. ¶ 31,036 at 31,669.

[165] Gulf States Utilities Co. v. FPC, 411 U.S. 747, 758-59, reh'g denied, 412 U.S. 944 (1973). See City of Huntingburg v. FPC, 498 F.2d 778, 783-84 (D.C. Cir. 1974) (Commission has a duty to consider the potential anticompetitive effects of a proposed Interconnection Agreement.)

There are two principal contexts in which the authority of FPA sections 205 and 206 has been raised. One is the use of requiring participation in RTOs as a remedy for undue discrimination by public utilities. As discussed above, many commenters believe that the evidence of undue discrimination is sufficient to justify generically mandating RTO participation as a remedy, and many others argue that the record on undue discrimination is insufficient to impose a generic, industry-wide solution. We have concluded in our discussion elsewhere in this Rule that continuing opportunities for undue discrimination exist in the electric transmission industry. However, we have also concluded that a voluntary approach to eliminating such opportunities through RTO formation (including the filing requirements and Commission supported collaboration efforts identified herein) represents a measured and appropriate response to the significant undue discrimination and other competitive impediments identified in this record.

The other context in which our authority under FPA sections 205 and 206 is raised is whether permitting a public utility to charge market-based rates for wholesale electricity sales can continue to be justified if the seller or its affiliate owns or operates transmission assets that have not been placed under the control of an RTO. The Commission has a responsibility under FPA sections 205 and 206 to ensure that rates for wholesale power sales are just and reasonable, and has found that market-based rates can be just and reasonable where the seller has no market power. The Commission has determined that to show a lack of market power, the seller and its affiliates must not have, or must have

adequately mitigated, market power in the generation and transmission of electric energy, and cannot erect other barriers to entry by potential competitors. [166] In the past, the Commission has found that an open access transmission tariff mitigated transmission market power. [167]

As discussed above, some commenters believe that the Commission should insist upon RTO participation as a condition necessary to yield competition robust enough to support market-based rates, while others argue that we cannot use market-based rate authority to advance preferred policies or as a penalty. We are not adopting in this Final Rule a generic policy that participation in an RTO is a necessary condition to a public utility receiving, or retaining, market-based rate authority, nor do we propose to use the denial of market-based rate authority as a penalty for not voluntarily complying with this Rule. However, we do have an obligation to ensure that rates for wholesale power sales are just and reasonable, and we adhere to our precedent that market-based rates can be just and reasonable only where transmission market power has been mitigated and there are no other barriers to entry.

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[166] See, e.g., Heartland Energy Services, Inc., 68 FERC ¶ 61,233 at 62,060 (1994); Louisville Gas & Electric Company, 62 FERC ¶ 61,016 at 61,143-44 (1993) (Heartland). See also Louisiana Energy and Power Authority v. FERC, 141 F.3d 364 (D.C. Cir. 1998) (court upholds Commission's use of market-based rate authority).

[167] See, e.g., Heartland, 68 FERC at 62,061, 62,063-64.

FPA section 202(a) and PURPA section 205

Section 202(a) of the FPA, the authority for which has been delegated to the Commission by the Secretary of Energy, [168] authorizes and directs the Commission "to divide the country into regional districts for the voluntary interconnection and coordination of facilities for the generation, transmission, and sale of electric energy." The purpose of this division into regional districts is for "assuring an abundant supply of electric energy throughout the United States with the greatest possible economy and with regard to the proper utilization and conservation of natural resources." Section 202(a) of the FPA states that it is "the duty of the Commission to promote and encourage such interconnection and coordination within each such district and between such districts."

Some commenters assert that FPA section 202(a) gives us broad authority and discretion to promote RTOs to support an abundant supply of electric energy with the greatest possible economy, while others contend that the authority is limited by the "voluntary" nature of the provision. We need not decide the precise confines of section 202(a) authority here. Clearly, this section gives the Commission the authority, after consultation with state commissions, to establish boundaries for regional districts for the voluntary interconnection and coordination of facilities in order to assure an abundant supply of electric energy with the greatest possible economy. We have decided in this

[168] 63 FR 53889 (Oct. 7, 1998).

Rule that we will exercise this authority, at least in the first instance, by allowing transmission owners, in consultation with other interested parties and state commissions, to propose to us what they believe to be appropriate regional districts. In this regard, we conclude that the Commission, pursuant to FPA section 202(a), clearly has the authority to direct public utilities as well as non-public utilities [169] to consider the regional coordination that would result from joining an RTO and to participate in Commission-sanctioned RTO discussions.

As we are not in this Final Rule mandating any particular interconnection or coordination of facilities, we need not address whether the language in FPA section 202(a) referring to "voluntary" interconnection and coordination limits our authority. It is clearly the intent and requirement of this section that the Commission encourage and promote a regional approach, which is what we are doing in this Final Rule.

Section 205 of PURPA [170] also supports the Commission's authority to encourage and promote regional coordination. This section, which addresses power pooling, gives the Commission the authority to exempt electric utilities from state laws or regulations which prohibit or prevent voluntary coordination, and to recommend to electric utilities to

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[169] The legislative history, as well as the Commission's past use of section 202(a), indicates that the provision applies to both public utilities and non-public utilities. See S. Rep. No. 621, at 49 (1935) ("public as well as private plants are included"); Reliability and Adequacy of Electric Service, Order No. 383, 41 FPC 846,47 (1969) (information on coordination requested pursuant to section 202(a) from public and non-public utilities).

[170] 16 U.S.C. 824a-1.

enter voluntarily into negotiations for pooling arrangements where opportunities for conservation, efficiency, and increased reliability exist. The Commission has previously interpreted section 205 of PURPA as essentially complementing the functions under section 202(a). [171]

FPA Section 203

The Commission has the authority and responsibility under section 203 of the FPA to review mergers and other transactions involving public utilities, including dispositions of jurisdictional facilities by public utilities. There are two aspects of this authority that relate to RTO formation. First, public utilities' transfers of control of jurisdictional transmission facilities to entities such as RTOs would require section 203 approval. Under section 203 of the FPA, the Commission must approve a proposed disposition of jurisdictional facilities if it is consistent with the public interest.

Second, the Commission may grant an application under section 203 upon such terms and conditions as it finds necessary to secure the maintenance of adequate service and the coordination in the public interest of jurisdictional facilities. FPA section 203(b)

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[171] In Public Service Company of New Mexico, 25 FERC ¶ 61,469 at 62,038 (1983), the Commission stated that, "Our mandate under PURPA to promote voluntary coordination is similar to that exercised by our predecessor, the Federal Power Commission, for more than 40 years under Section 202(a) of the Federal Power Act." Accord Pacific Gas and Electric Company, 38 FERC ¶ 61,242 at 61,791 (1987) (PURPA "reaffirms the Commission's authority to promote voluntary coordination of electric utilities").

explicitly gives the Commission authority to condition a public utility's proposed disposition of jurisdictional assets "upon such terms and conditions as it finds necessary or appropriate to secure the maintenance of adequate service and the coordination in the public interest of facilities subject to the jurisdiction of the Commission." Thus, for instance, the Commission has used section 203 conditioning authority to require that all mergers be conditioned on the offer of comparable open access transmission. [172] In the Commission's Merger Policy Statement, it was recognized that the development of fully competitive generation markets is in the public interest and that turning over control of transmission assets to an ISO might be an appropriate remedy for anticompetitive effects of a merger. [173]

Some commenters urge the Commission to make RTO participation a standardized condition to all mergers in order to mitigate increased generation and transmission concentration, while others claim that RTO imposition as a section 203 condition would require specific findings in a particular case. We do not find as a generic matter in this proceeding that no merger could be consistent with the public interest in the absence of RTO participation. However, as noted in the Merger Policy Statement with respect to

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[172] El Paso Electric Company and South West Services, 68 FERC ¶ 61,181 at 61,914-15 (1994), dismissed, 72 FERC ¶ 61,292 (1995).

[173] Inquiry Concerning the Commission's Merger Policy Under The Federal Power Act, 61 FR 68595 (Dec. 30, 1996), FERC Stats. & Regs. ¶ 31,044 at 30,115, 30,121, 30,137 (1996).

ISOs, turning control of transmission assets over to an RTO might be an appropriate remedy for the anticompetitive effects of a merger. In general, our processing of merger applications can be facilitated to the extent the merging parties have resolved potential anticompetitive issues through means such as RTO participation.

Other Legal Issues

Commenters have suggested other statutory authorities that may be relevant to our efforts to encourage RTOs. These include FPA section 207, which upon state commission complaint authorizes the Commission to remedy inadequate or insufficient interstate service; FPA sections 202(b) and 210, which address the Commission's authority to order interconnections and make effective an interconnection; FPA section 209, which authorizes the Commission to refer matters to joint boards composed of Commission and state representatives; and FPA sections 211 and 212, which address the Commission's authority to require transmission services. We agree that, under appropriate circumstances, these authorities may indeed be relevant to RTO formation. However, we do not, and need not, rely upon them for what we are requiring in this Final Rule, so we will not address here what authority they might confer.

In response to those commenters who assert that the Northern States [174] court decision somehow limits our authority with respect to RTOs, we disagree. As reflected in

[174] See Northern States, supra note 89.

our recently issued order on remand [175] of the Northern States court decision, that decision addresses narrow circumstances involving transmission curtailment where the third-party transmission customer has redispatch options. We do not interpret the decision as limiting our authority to encourage or require RTO participation. Moreover, we note that formation of RTOs is likely to eliminate or significantly reduce the potential for the type of conflict encountered in Northern States.

With respect to the commenter seeking clarification of the authorities we are relying upon to require the filings we are mandating in this Rule, we clarify that we are relying upon the authorities contained in FPA sections 202(a), 304, 307, and 309 for the filings we are requiring under new sections 35.34(c) and (g). To the extent a public utility proposes to participate in an RTO, we will process that application pursuant to FPA sections 203, 205 or other sections as appropriate.

D. Minimum Characteristics of an RTO

In the NOPR, we proposed minimum characteristics and functions for a transmission entity to qualify as an RTO. These characteristics and functions are designed to ensure that any RTO will be independent and able to provide reliable, non-discriminatory and efficiently priced transmission service to support competitive regional

[175] Northern States Power Co. (Minnesota) and Northern States Power Co. (Wisconsin), 89 FERC ¶ 61,178 (1999).

bulk power markets. In the section that follows, we discuss the four minimum characteristics for an RTO, which are:

(1) independence from market participants;

(2) appropriate scope and regional configuration;

(3) possession of operational authority for all transmission facilities under the RTO's control; and

(4) exclusive authority to maintain short-term reliability.

In our discussion below, we clarify and revise to some extent our discussion in the NOPR, but we affirm these as the minimum characteristics of an RTO.

1. Independence (Characteristic 1)

As a first required characteristic, the Commission stated that all RTOs must be independent of market participants. To achieve independence, we proposed that RTOs must satisfy three conditions. First, the RTO, its employees, and any non-stakeholder directors must not have any financial interests in any market participants. [176] Second, the RTO must have a decision-making process that is independent of control by any market participant or class of participants. [177] The NOPR defined market participant as any entity or its affiliate that buys or sells electric energy in the RTO's region or in any neighboring

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[176] FERC Stats. & Regs. ¶ 32,541 at 33,726.

[177] Id. at 33,727.

region that might be affected by the RTO's actions. We said that this second condition would be judged on a case-by-case basis. However, the Commission also proposed, by way of example, that an RTO could satisfy this second condition with (a) a non-stakeholder governing board and (b) a prohibition on market participants having more than a de minimis (one percent) ownership interest in the RTO. Third, the RTO must have exclusive and independent authority to file changes to its transmission tariff with the Commission under section 205 of the FPA. [178]

Comments

A large number of commenters address different facets of the independence characteristic. To make the summary of comments more manageable, we grouped the comments by key sub-issues: the basic principle; who is a market participant; RTO economic interests in market participants and energy markets; voting interests of one market participant and affiliates; voting interests of classes of market participants; passive ownership interests; RTO governing boards; role of state agencies; and section 205 filing rights.

The Basic Independence Principle

In the NOPR, the Commission reiterated its earlier statement that "the principle of independence is the bedrock upon which the ISO must be built" and that this standard

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[178] Id. at 33,729.

should apply to all RTOs, whether they are ISOs, transcos or variants of the two. [179] Virtually all commenters agree with this principle. For example, EEI states that "[a] decisionmaking process independent of the control of any market participant or class of market participants should be an important aspect of the independence principle." [180] The TDU Systems say that "[f]ull independence is vitally important to the success of RTOs . . . and cannot be safely compromised." [181] The Nine Commissions urge that RTOs must be "truly independent of market participants in word, deed and appearance." [182] Despite the almost unanimous acceptance of the principle, there are fundamental disagreements (discussed in later sections) among commenters as to how the principle should be implemented, especially for RTOs that would operate as stand alone, for-profit transcos

Some commenters question whether complete independence comes at too high a cost. For example, FP&L recommends that the Commission "not consider independence in a vacuum." It contends that "it would make little sense to trade off the greatest degree of independence for the highest cost structure." [183] Salomon Smith Barney makes a similar point. It contends that strict application of the independence standard could thwart

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[179] Id. at 33,726.

[180] EEI at 25.

[181] TDU Systems at 41.

[182] Nine Commissions at 8.

[183] FP&L at 32.

the development of for-profit RTOs. Therefore, it urges the Commission "not to promulgate rules that maintain absolute purity but also throttle the . . . voluntary formation of RTOs." [184] Konoglie/Ford/Fleishman, three individuals from the financial community, express concern that independence will usually be interpreted to mean a separation between ownership and control as currently practiced in ISOs. They argue that, if the ISO model becomes the norm, it could lead to higher capital costs because those who own the transmission assets would not be able to make basic investment and operating decisions. They point out that ownership usually imparts control in most U.S. industries and that transmission operating and investment efficiencies are unlikely to be achieved unless this becomes the norm in a restructured U.S. electricity industry.

PJM and WEPCO contend that a for-profit transmission company can never be independent because it will always be biased in its operating and investment decisions. Specifically, they assert that a for-profit transco will always be biased toward transmission solutions over other solutions (such as generation redispatch) and its own transmission assets over transmission assets owned by others. WEPCO, therefore, concludes that independence can be achieved only if there is an ISO operating over a for-profit transmission company. [185]

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[184] Salomon Smith Barney at 5.

[185] WEPCO at 9.

Other commenters argue that it would be naive to believe that independence, by itself, will lead to an effective RTO. They argue that an RTO may be completely independent but it must also have sufficient operational and decisionmaking authority if it is to be effective. For example, the TDU Systems assert that independence will not be sufficient if transmission owners attempt to reserve certain decisions for themselves. It points to the transco proposals of the Entergy and the Alliance Companies as examples of a proposed RTO having insufficient decisionmaking authority. NECPUC, representing six New England commissions, argues that an RTO must have independent funding and urges the Commission to include this as an explicit requirement in the final rule. NCPA states that an RTO will not be truly independent unless it is able to make and implement independent procurement decisions.

Who Is a Market Participant?

There is substantial disagreement among commenters about the proposed definition of market participant. Some commenters argue that it should be expanded; others contend that it should be narrowed. In the first group, Illinois Commission urges us to expand the definition of a stakeholder because "[a] market interest can arise through functions and activities other than just buying or selling electricity." [186] Enron/APX/Coral Power echo this point and contend that an RTO should "not be subject to control by, and has no

[186] Illinois Commission at 29.

interest in the success of any vendor or buyer in the competitive functions of the industry." [187] Duke recommends expanding the definition to include "any distribution company or neighboring transmission company and/or any buyer or seller of ancillary services." [188] PJM urges that the definition of a market participant include any entity that owns transmission facilities or provides or buys transmission service. [189]

TAPS, representing an informal group of transmission dependent utilities in 24 states, also urges us to adopt a broad definition of market participant to ensure RTO neutrality. It argues that millions of dollars of investments and operating costs will be affected by RTO decisions. It gives several examples of how RTO decisions can have major economic impacts. As a transmission planner, an RTO will have substantial responsibility for routing new transmission lines. Depending on its decisions, it can help or hurt one gas pipeline or another or one generator or another. As a transmission tariff administrator, it will have significant discretion in choosing how to price congestion. Any decision that it makes (e.g., zonal versus nodal pricing) could have significant impacts on the profitability of particular generators. As the supplier of last resort for ancillary

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[187] Enron/APX/Coral Power at 8.

[188] See Duke Power at 27. See also Midwest Municipals, Avista and American Forest.

[189] United Illuminating disagrees. It asserts that "transmission owners without power marketing interests" should not be considered as market participants. United Illuminating at 37.

services, it will have considerable discretion in defining the types and quantities of ancillary services that are needed. Depending on its decisions, some generators "will win, and others will lose." [190] Finally, as the "transmission-request gatekeeper," it will have substantial influence on who gets service and on what terms. To ensure both the appearance and reality of neutrality in these various decisions, TAPS urges us to adopt a broad definition of market participant.

In contrast, others contend that the proposed definition is too broad. CP&L states that a literal application of the proposed definition "would make every single residential, commercial, industrial and wholesale electric customer (and all of their affiliates) market participants." [191] It recommends that the definition be narrowed by changing it to "those entities that are active in wholesale and non-regulated retail power markets using transmission of the RTO." [192] LPPC asks that the Commission define the term "affiliate" because it is not defined anywhere in the NOPR. It also suggests that the definition of affiliate be limited to "common control" rather than using the five-percent ownership interest standard of PUHCA. [193]

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[190]TAPS at 63.

[191]CP&L at 23-24. American Forest believes that "the Commission did not intend such a broad exclusion, and seeks clarification on this point." American Forest at 4.

[192]CP&L at 23-24.

[193]LPPC points out that the term "affiliate" is used in defining market participant

(continued...)

A number of commenters focus specifically on the question of whether a "distribution only" entity (i.e., an entity that performs the sole function of transporting electricity at distribution voltages) should be considered a market participant. Montana Power urges us against expanding the definition to include an entity that operates "distribution-only facilities." It argues that an RTO and a distribution entity are both "delivery entities" and efficiencies can be gained by having one entity provide "total delivery service" from high to low voltages. These efficiencies of vertical integration could include the savings that would result from having maintenance performed on both transmission and distribution facilities by the same crews, the sharing of shop and warehouse space and the sharing of various administrative support functions. Sierra Pacific generally supports this view and asserts that it does not believe that a "transmission owner could so operate its facilities to materially assist affiliated transmission and distribution interests to the disadvantage of unaffiliated entities." [194]

Salomon Smith Barney takes a more cautious view. It states that an RTO owned by distribution entities "could manipulate the grid to favor their customers over the customers of other distributors." [195] Trans-Elect argues that the Commission's recent attempt to

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[193](...continued)
but is not defined anywhere in the proposed rule.

[194]Sierra Pacific at 17.

[195]Salomon Smith Barney at 5.

impose non-discriminatory curtailment procedures on all users of the grid in the NSP service territory demonstrates that this problem already exists. [196] Arguing that it would be undesirable to lose distribution entities as potential investors in RTOs, Salomon Smith Barney recommends that the Commission require RTOs to follow market-based priority rules in curtailment situations to reduce the likelihood that an RTO would favor affiliated distribution entities.

Both Sierra Pacific and NEPCO et al. raise concerns about the interaction of the market participant definition and "state-mandated backstop power supply obligations." NEPCO et al. asserts that all 23 states that have opted for retail competition to date have usually imposed a default supplier obligation (which also is referred to as a "standard offer supplier" or a " provider of last resort" obligation) on one party which is usually the incumbent provider. Sierra Pacific notes that the nature and duration of this mandated obligation varies from state to state "but at least some of the programs are structured so that the POLR [provider of last resort] does not compete for new customers and has no incentive to retain existing POLR customers." [197] Both commenters argue that providers of last resort should not automatically be considered as market participants, even though they buy and sell electricity, because this would reduce the pool of potential transco

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[196] Trans-Elect at 5 citing Northern States Power Co. v. FERC, 176 F.3d 1090 (8th Cir. 1999).

[197] Sierra Pacific at 16.

investors. Sierra Pacific states that the Commission should "leave the door open to consider the POLR issue on a case-by-case basis" and that the final regulations should explicitly say that a provider of last resort would not be deemed a market participant if its state mandated obligation gives it no incentive to make such sales. [198]

Finally, NEPCO et al. raises the issue of incumbent utilities that have tried to divest themselves of their generating assets but have not yet succeeded. It points to its difficulties in divesting its minority ownership interests in nuclear plants. It requests that an entity not be automatically deemed a market participant because of these minority ownership interests especially if it has taken actions to eliminate its control over the retained ownership interest (e.g., through a long-term contract that would give marketing rights to a non-affiliated entity).

RTO Economic Interests in Market Participants and Energy Markets

Many commenters, representing a wide range of industry constituencies, agree with the NOPR's proposal that the RTO, its employees and any non-stakeholder directors must not have any financial interests in electricity market participants. [199] Duke recommends that, where divestment is required, the Commission should continue its past practice of

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[198] Id.

[199] One exception is Salomon Smith Barney. It argues that this requirement is "altogether unreasonable, in that it could require the most qualified directors and employees to dispose of mutual funds, pension plans and old investments whose tax base makes disposition unreasonable." Salomon Smith Barney at 3.

allowing employees to divest personal investments in a manner that does not cause them significant financial harm.

Most commenters agree that the focus should be on current financial interests. [200] Several commenters point out that it would be virtually impossible for an RTO to hire knowledgeable and experienced employees if the Commission were to require no past financial connections to market participants. They assert that some of the most knowledgeable candidates for RTO positions, at least in an RTO's early years of operation, are likely to be individuals who have retired from companies that are market participants and it is likely that these individuals will be receiving pensions from their former employers. In situations like this, NASUCA urges the Commission to "exclude from this prohibition . . . employee pension plans and other post-employment benefits received while a former employee of a market participant." [201] Others urge that the Commission follow the precedent that was established in the Midwest ISO decision. [202] Individuals would not be automatically excluded from RTO employment or directorships if their pension does not directly depend on the economic performance of their former

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[200] With respect to future financial interests, Salomon Smith Barney states that "[p]rivate enterprises do not normally, control the lives of their ex-employees." Salomon Smith Barney at 3.

[201] NASUCA at 17.

[202] See Midwest Independent System Operator, 85 FERC ¶ 61,250 (1998). See also Southern Company, Duke, TDU Systems and Avista.

employers (e.g., a defined benefit pension plan). TDU Systems suggests that reasonable exceptions should be made "in the case of defined benefit pension plans, general mutual funds (as opposed to utility/energy sector funds) that hold stock or bonds of market participants, or other similar financial holdings where the holder cannot direct specific investments or benefit directly from stock performance." [203]

In the NOPR, we asked whether there was a need to "define the financial independence requirement in more specific terms." [204] The answer from almost all respondents was "no." For example, TDU Systems recommend that we issue a general rule with a set of guidelines and then allow for its application on a case-by-case basis. Avista agrees and states that any financial independence standard "require[s] case-by-case consideration as well as the common sense application of the rule of reason." [205] PJM/NEPOOL Customers states that RTOs will have the benefit of the conflict of interest standards that have been drafted for each of the functioning ISOs. They also recommend that the Commission commence a separate rulemaking on this issue.

Some commenters contend that the NOPR's treatment of financial independence is too narrowly drawn. For example, Dynegy argues that while ISOs "may ostensibly be

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[203] TDU Systems at 39.

[204] FERC Stats. & Regs. ¶ 32,541 at 33,727.

[205] Avista at 11.

independent of market participants—they are not independent of the market itself." [206] As evidence of this phenomenon, it points to instances when the California ISO has tried to impose price caps on energy prices. EPSA expresses a similar view and points to the price caps proposed by ISO New England and approved by this Commission during the June 1999 heat wave, when energy prices reached $1,600 a megawatt-hour, as another example of undesirable and inappropriate intervention by a transmission provider in energy markets. In crafting a definition of independence, EPSA urges the Commission to require that RTOs "should be indifferent to the price at which the commodity they transport clears the market." [207]

Others argue that this conflict is unavoidable as long as the Commission imposes a requirement that RTOs be the supplier of last resort for certain ancillary services. [208] According to these commenters, this obligation will often require that the RTO be a buyer in certain ancillary service markets. If the supplier of last resort obligation is also combined with a requirement that the RTO buy efficiently, then it is inevitable that the RTO will be interested in whether the prices are high or low (i.e., it is no longer simply a disinterested market operator).

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[206] Dynegy at 35.

[207] EPSA Reply Comments at 12.

[208] See NEMA at 19. See also EPSA Reply Comments.

Active (Voting) Ownership Interests in the RTO

a. By Individual Market Participants and Their Affiliates

A number of commenters oppose a one-percent cap on allowed voting interests of market participants in RTOs as a necessary requirement for achieving independence. [209] EEI states that such a cap is not "necessary, rational or supportable" for achieving the goal of independence. [210] It recommends that the Commission allow market participants or their affiliates to own up to ten-percent voting interests in RTOs. EEI also asks for a clarification of whether an ownership restriction would "apply only to ownership in the RTO itself or does it also apply to ownership interests in the transmission facilities under the operational control of the RTO." [211] PJM, which is organized as a non-profit limited liability corporation (LLC), asks the Commission to clarify whether its "members" would be considered owners.

CTA also argues for a higher cap. It states that the NOPR's emphasis on ownership is misplaced. Instead, the Commission should be concerned with the "actual control over

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[209] See, e.g., EEI, Duke, CP&L and PacifiCorp.

[210] EEI notes that the NOPR mentions the one percent cap on voting interests by market participants in the National Grid Company in England and Wales but observes that there was no obvious justification given at the time the decision was made.

[211] EEI at 26.

the day-to-day affairs of the system, not some arbitrary percent ownership test." [212] The Alliance Companies express the concern that, even though the one percent cap appears to have been proposed as a "safe harbor," it could quickly become "the only port of entry to Commission approval." [213]

EEI observes that other government agencies allow five or ten percent ownership in voting shares before assuming that these ownership interests conveyed control. [214] For example, it notes that the SEC definition of an "affiliate" under PUHCA is limited to entities that own or control more than five percent of the voting stock of a public utility. It also observes that this Commission, in determining whether a company is an affiliate of a natural gas pipeline or an electric utility, applies a rebuttable presumption of control only when a utility owns ten percent or more of a company's voting stock. Entergy states that "there do not appear to be instances under U.S. law where one-percent ownership is considered to give rise to a risk of control." [215]

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[212] CTA at 4.

[213] Alliance Companies at 18.

[214] Most investor-owned utilities agree with EEI. An exception is Cinergy which urges the Commission to incorporate the one-percent ownership standard in the final regulations "exactly as proposed" because such a prohibition "is vital to preserving a RTO's financial independence characteristic." Cinergy at 17.

[215] Entergy at 28.

Several commenters question why there should be any limits on the amount of voting shares that can be held by a market participant. For example, Allegheny asserts that "[t]he desire to maintain or obtain ownership of transmission assets by market participants should not be regarded as an evil to be avoided at all costs." [216] FP&L states that there is no need to prohibit affiliated transcos. [217] It argues that the Commission should allow 100-percent ownership of voting equity and ensure non-discriminatory transmission access through codes of conduct and state commission oversight, in the case of a single state RTO. It observes that "in the natural gas industry there are numerous transcos (pipelines) that are affiliated with gas producers, marketers and/or distribution companies and there is no basis to conclude that this structure would be less likely to succeed in the electric power industry." [218]

Other commenters disagree and urge the Commission to adopt even stricter standards on ownership than those presented in the NOPR. [219] For example, APPA recommends that the final rule prohibit any ownership interests in RTOs by market

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[216] Allegheny Reply Comments at 10.

[217] In contrast, APPA states that affiliated transcos should be allowed "only where such private companies operate under the direct, ongoing supervision of a strong, fully functional regional Independent System Operator." APPA at 28.

[218] FP&L at 26.

[219] See, e.g., Midwest Municipals, APPA, TDU Systems and Industrial Consumers.

participants. [220] APPA states that even a one-percent ownership would represent an unjustifiable and unnecessary exception to the independence standard. South Carolina Authority agrees with APPA and argues that the NOPR failed to present a "public policy benefit" for allowing even a de minimis ownership interest. [221] NASUCA also shares this view. In addition, it asserts that as soon as the Commission allows any ownership by market participants it will be forced to continually track the share of each market participant, including affiliates. NASUCA argues that this would be "time-consuming, difficult and expensive" and would represent the very antithesis of the independent, lightly regulated structure that the Commission wished to foster.

TDU Systems concurs and observes that any ownership by market participants will trigger the "chasing after conduct" regulation that the Commission said it hoped to avoid. [222] In addition, TDU Systems criticizes EEI's ten percent proposal. TDU Systems asserts that EEI fails to understand the rationale for the "safe harbor" proposal in the NOPR. TDU Systems argues that the regulatory purpose of a "safe harbor" is to ensure that "no

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[220] APPA clarifies that it does not oppose market participants owning "for-profit" transcos if the transcos come under the supervision of strong fully functional ISOs. Industrial Consumers recommend that a one-percent cap should be adopted in the final rule as a general requirement rather than as a possible safe harbor. In addition, it recommends that the cap be calculated on a corporate-wide basis to avoid the situation of multiple affiliates each with a one-percent interest. See Industrial Consumers at 30.

[221] See South Carolina Authority at 18.

[222] TDU Systems at 41 citing FERC Stats. & Regs. ¶ 32,541 at 31,145.

case-by-case review of the regulatory agency is required." [223] Therefore, TDU Systems contends that it would be inappropriate to adopt EEI's proposed ten percent because this percentage is not in the "safe harbor" but, as recognized by other regulatory agencies, raises a clear risk of control. Consumer Groups supports this view and points to one case in which a court decided that a three-percent ownership interest of a company's common stock was found to be "sufficient to assert control over the corporation because the ownership of the other common shares was widely dispersed." [224]

The Alliance Companies, who support a ceiling of five percent ownership in voting interests by market participants, state that they "are aware of no practical means of tracking who has an ownership interest at a threshold of less than five percent " because SEC regulations require reporting of ownership in publicly traded companies only at five-percent ownership and above. In contrast, Cinergy asserts that enforcing a lower ownership limit should not be a problem. It states that the Commission could keep track of ownership interests "through transmission owners' representations and subsequent audits if the need arises." [225]

APPA, which argues for absolute and total prohibition on voting ownership by market participants, asserts that even with access to SEC data it will be difficult for the

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[223] TDU Systems Reply Comments at 14 (italicized in the original).

[224] Consumer Groups Reply Comments at 8.

[225] Cinergy at 18.

Commission to keep track of who really owns voting shares since they are often registered in "street" names. Therefore, it urges the Commission to impose a total prohibition on ownership by market participants. South Carolina Authority agrees and further argues that anything less would fail to achieve the Commission's characterization of an RTO as entity in which "the control of transmission operation is cleanly separated from power market participants." [226] It concludes that "[t]here is nothing 'clean' about permitting incumbent transmission owners to indefinitely maintain an ownership interest, voting or otherwise, in the newly created RTO." [227]

EPSA suggests a compromise that would allow greater flexibility with respect to initial ownership interests. It proposes that the Commission establish time limits on voting ownership. TDU Systems makes a similar recommendation with respect to passive ownership. While TDU Systems states that it would prefer an absolute prohibition on market participants owning voting shares, it suggests that the Commission might consider allowing transmission owners to "hold passive, non-voting ownership interests. in excess of one percent as an extraordinary transition measure." [228] However, TDU Systems

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[226] South Carolina Authority at 8 (quoting from FERC Stats. & Regs. ¶ 32,541 at 33,718 (emphasis added by the quoter)).

[227] South Carolina Authority at 14.

[228] TDU Systems at 42.

recommends that such interests be reduced to one percent or below in a "relatively short period of time."

b. By Classes of Market Participants

SRP asserts that the NOPR is flawed because it is not sufficient to place a limitation on the ownership interests that can be held by a single participant and its affiliates while ignoring the possibility that other owners may have similar interests. SRP urges the Commission to recognize that "[a]n interest that may be considered de minimis, when viewed in isolation, could still result in effective control when aggregated for a group with common interests." [229] Therefore, it recommends that limits be placed not only on the ownership interests of an individual market participant but also on the ownership interests by other market participants with similar economic interests. SRP does not recommend a specific percentage for a group cap, but Industrial Consumers urge the Commission to cap the voting interests of any group at five percent.

FP&L contends that there is no need for ownership caps for a group of market participants because they will often have conflicting economic interests. It gives the example of a group of transmission owners with ownership interests in an RTO who also own affiliated power marketers. FP&L argues these marketing affiliates will compete

[229] Salt River at 11. United Illuminating agrees and states that if the Commission "were to adopt a higher de minimis standard, such as five or ten percent ownership interest, it would be relatively easy for five or six market participants owning such percentages to control the operations of an RTO." United Illuminating at 39-40.

against each other and this rivalry will mitigate the potential for collusion among the parent companies that jointly own the RTO. Alliance Companies agree with this view. They assert that "[i]n today's competitive power markets, all market participants, including those traditionally classified within the same stakeholder group are likely to be competitors" and, therefore, that it is unlikely that there will be a "nexus of interest." [230]

EEI argues that ownership caps on groups of market participants would be "impractical and extremely burdensome on Commission resources" because the Commission would have to keep track of ownership levels by every market participant and also align market participants into specific groups with "alleged common interests." [231] In addition, it contends that this task would be difficult to do because markets are evolving and the business objectives of individual firms will change as they buy or sell assets. Moreover, while accepting that "some market participants may have common interests at certain times" EEI believes that such "coalitions" would be "fragile, short-lived and unlikely to result in a serious threat to the independence of the RTO." [232]

A number of commenters assert that a cap on voting interests will thwart capital formation in new and existing transmission facilities. For example, UtiliCorp contends that such a cap "may potentially choke off significant sources of capital" for the formation

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[230] Alliance Companies at 21-22.

[231] EEI Reply Comments at 21.

[232] Id.

of for-profit transcos. [233] Various commenters from the financial community argue that such a cap would make it difficult to create RTOs that function as for-profit transcos. Salomon Smith Barney states that current owners of transmission assets need to retain a larger ownership interest, at least for a transition period, in order to avoid heavy capital gains taxes. It estimates that many current transmission owners would have to pay capital gains taxes on about 35 to 50 percent of the current book value of their transmission assets if they were to sell these assets.

Alliance Companies asserts that restrictions on ownership would reduce the potential pool of investors (i.e., buyers of transmission assets) and therefore reduce the price that current owners could receive for their assets. They contend that this would be especially damaging because it would place limits on ownership by "those entities that are most likely to understand the potential value of the business model." [234] Alliance Companies states that the Commission should allow five-percent individual ownership interests by industry participants because this will provide confidence to other, non-energy industry investors that the transco will be a financial success. [235] In general, the Alliance Companies and other commenters that share this view take the position that a one-percent

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[233] UtiliCorp at 7.

[234] Alliance Companies at 19.

[235] In contrast, APPA asserts that "if the underlying business model is sound, investors will come." APPA at 36.

cap for market participants will be a major impediment to the creation of for-profit transcos and that the de facto effect of such a cap will be to limit the industry to the ISO model.

Passive (Non-Voting) Ownership Interests in the RTO

A number of privately-owned utilities stress that the final rule must distinguish between passive and voting interests in RTOs. [236] For example, while EEI is willing to accept a ten-percent cap on ownership of voting interests by individual market participants, it states that "[t]here should be no limit on the amount of passive ownership interest" because "[p]assive owners who lack voting rights have no ability to control the firm." [237] Enron/APX/Coral Power also support this position. They urge the Commission to "explicitly and unambiguously allow incumbent utilities and other power industry participants to possess passive but not controlling ownership interests in an RTO." [238] Southern Company states that "[p]assive ownership of transmission facilities—even up to 100 percent—should not be a concern." [239] United Illuminating, while recommending that the Commission allow passive ownership, recommends that we should not issue generic

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[236] See, e.g., EEI, Enron/APX/Coral Power and UtiliCorp.

[237] EEI at 26. EEI relies on a legal memorandum that concludes that passive ownership interests are "necessarily permissible, no matter how large and no matter what other interests they are combined with." EEI Appendix H at 17.

[238] Enron/APX/Coral Power at 14.

[239] Southern Company at 42.

rules because passive ownership is a "complex matter that must be reviewed on a case-by-case basis." [240]

EEI contends that some of the opposition to passive ownership by market participants may simply reflect a misunderstanding of the fiduciary responsibilities that the board of a for-profit transco has to its passive owners. EEI asserts that, under Delaware law and various model statutes, the fiduciary responsibilities of a for-profit transco board, its managers and owners that hold voting rights to a passive owner are limited to maximizing the value of the transmission assets and "not the value of any other assets that may be held by the passive owner." [241] According to EEI, a transco board has no fiduciary obligation to take actions to produce economic benefits for other assets such as generating units that happen to be owned by its passive owners. Entergy states that if there are any lingering doubts about the fiduciary obligation of the board and its voting members, a provision could be inserted in the "transco's limited liability agreement that specifically directed that managers would have no fiduciary duty to consider the private interests of members" and that such a provision would be enforceable under Delaware law. [242]

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[240] United Illuminating at 7.

[241] EEI at 26.

[242] Entergy at 29.

Consumer Groups, however, questions the legal feasibility of this approach. It cites to several law review articles which it argues raise doubts as to whether fiduciary duties assigned by a state law to the directors of a subsidiary corporation can be removed by private agreement. It also cautions the Commission not to get lost in "a lawyer's duel over conflicting citations about the treatment of passive and affiliated ownership interests" when the fundamental issue is the need to safeguard independence and "avoid any appearance of partiality." [243]

EEI points to our recent decision in Entergy Services, Inc., as demonstrating that the Commission recognizes that passive ownership is not inconsistent with the independence principle under the ISO principles of Order No. 888. [244] It asks that the Commission reach the same policy conclusion for any similar independence requirement in the final RTO rule. In contrast, the South Carolina Authority observes that the while the Entergy decision could be read to imply that the Commission has "prejudged this issue," the Commission should now use the opportunity of this NOPR to take another look at the issue. [245]

EEI also points to actions or policies taken by other federal regulatory agencies that it argues support its contention that passive ownership does not necessarily convey

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[243]Consumer Groups Reply Comments at 9.

[244]EEI at 26 citing Entergy Services, Inc., 88 FERC ¶ 61,149 (1999).

[245]South Carolina Authority at 22.

control. It observes that the definitions of "holding company," "affiliate" and "subsidiary company" in PUHCA are all tied to ownership of voting rather than non-voting shares. Similarly, EEI states that the FCC "attribution rules" used to determine when broadcasters and cable companies own or control another broadcaster or cable company are keyed to voting rather than passive ownership interests. According to EEI, these policies demonstrate that other federal regulatory agencies do not believe that passive ownership conveys control and that the Commission should adopt a similar policy.

EEI also contends that the Commission has already allowed a "passive economic interest" in all of the ISOs that have been approved to date. Sierra Pacific makes a similar argument. Sierra Pacific contends that "profits" made by an ISO go back to the transmission owners even though they may have relinquished operational and decisionmaking control. It argues that "this arrangement [in ISOs] is the essence of a passive ownership interest." [246] The principal difference is that "the passive ownership interest in a Transco involves ownership in the transco itself rather than the assets operated by the Transco." [247] However, it argues that in substance both types of interests are the same since they allow the owner to share in the profits derived from operating their transmission facilities without having any influence over that operation. Sierra Pacific concludes by urging the Commission to allow passive ownership in both types of

[246] Sierra Pacific at 11.

[247] Id.

institutions to avoid creating "an artificial incentive in favor of ISOs instead of Transcos." [248]

Enron/APX/Coral Power point to the example of National Grid Company (NGC) in England and Wales as a real world example of passive ownership of a for-profit transco by market participants. For several years after privatization in 1990, the regional electricity companies (RECs) were allowed to own NGC but were "expressly barred from participating in day-to-day management or interfering with the ability of NGC to fulfill the purpose of privatization." [249] However, in reply comments TDU Systems contends that Enron/APX/Coral Power fails to mention that this passive ownership arrangement was terminated after several years. Citing to a recent interview with Callum McCarthy, Great Britain's Director of Gas and Electricity Supply, TDU Systems points out that the RECs were "told to divest these interests, and did so." [250]

In contrast, TDU Systems and others ask the Commission not to allow passive ownership in the final rule. [251] TDU Systems say that "the line between passive and

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[248] Sierra Pacific at 12

[249] Enron/APX/Coral Power at 14.

[250] TDU Systems Reply Comments at 22.

[251] See, e.g., APPA, Industrial Consumers and South Carolina Authority.

active ownership is often not a bright line." [252] As an example, it states that in the recent Alliance transco filing, the divesting transmission owners "hold supposedly passive ownership interests in the Transco, but retain the right to pass on a number of different business transactions." [253] TDU Systems assert that if the Commission opens the door to ownership of RTOs by market participants, it will be forced to engage in substantial "conduct policing." Salomon Smith Barney concurs and states that passive ownership "will prove troublesome for both the utilities and FERC" because it creates a "need to constantly police supposedly passive ownership positions to make sure that they remain passive in all respects." [254]

South Carolina Authority echoes this point. It argues that by allowing passive ownership the Commission would be put in the difficult job of determining "how 'passive' a particular 'passive interest' really is." [255] It urges the Commission not to compromise its "bedrock position on independence" because it will lead to "an endless series of extensive battles over ownership structure, corporate bylaws and rules, layered on top of continuing

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[252]TDU Systems at 41.

[253]Entergy at 42.

[254]Salomon Smith Barney Reply Comments at 15.

[255]South Carolina Authority at 21.

allegations of discrimination in the marketplace." [256] It asks "why . . . risk compromising the independence principle?" [257]

Just as several commenters raise capital formation arguments in support of the need to allow some voting interests by market participants, many of these commenters also raise similar arguments in support of allowing passive ownership. [258] In general, they contend that current owners are not likely to sell transmission assets voluntarily to others if selling leads to a large capital gains tax payment. They contend that passive ownership provides a creative way to allow transfer of grid operations to an independent party while reducing the tax burden on current transmission owners.

In contrast, Consumer Groups asserts that there are mechanisms other than passive ownership that would "permit 'divestiture' without tax consequences" and that an important advantage of these other mechanisms is that they would "better assure independence." [259] As one example, Consumer Groups asserts that a vertically integrated utility could spin off its transmission assets to its shareholders. While recognizing that the IRS Code seems to eliminate the favorable tax treatment if the spun-off corporation is sold within two years of the original distribution, Consumer Groups states that this is a

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[256] Id. at 24.

[257] Id.

[258] See, e.g., Entergy and Southern Company.

[259] Consumer Groups Reply Comments at 11.

rebuttable, not an absolute, prohibition and that a recent IRS proposed rule seems to suggest that favorable tax treatment could be retained if the spin-off of transmission assets is done in response to regulatory mandates. South Carolina Authority raises a different argument against regulatory policies to accommodate passive ownership. It asks why the Commission should feel obligated to minimize the federal corporate income tax responsibilities of privately owned utilities.

Several commenters recommend that we accept passive ownership at least as a necessary transition device. For example, Enron/APX/Coral Power state that "there will likely need to be some years of passive ownership by industry participants before the RTOs will have demonstrated their viability as stand-alone transmission businesses that can successfully be taken public." [260] ISO-NE, which favors a single grid company for all of New England, observes that because of "tax and other considerations, current owners of transmission assets may wish to avoid immediate divestiture, and may wish to retain indirect ownership." [261] Salomon Smith Barney predicts that most utilities will want to dispose of passive and minority interests over time. NECPUC, representing the six New England commissions, echoes this point. It states that the Commission may have to accept "[t]ransitional periods in which the ownership interests of market participants are phased out over time." If such transitions are allowed, NECPUC urges us to ensure that they are

[260] Enron/APX/Coral Power at 14.

[261] ISO-NE at 20.

"carefully monitored." [262] TDU Systems, as noted earlier, recommends that passive ownership should be used only as an "extraordinary transition measure" and should be allowed only for a short period of time.

RTO Governing Boards

Many commenters recommend that membership on RTO governing (i.e., decisional) boards be limited to non-stakeholders. [263] For example, the Justice Department urges the Commission to consider barring all market participants from any decision-making role. It says that this approach assures "a clean structural break." [264] If stakeholders are allowed on the governing board, the Justice Department recommends that independents (i.e., non-stakeholders) should constitute a majority of the board's voting members and that the board's voting rules not allow vetoes by any one class of stakeholders. Most commenters who support an independent board recommend that the maximum size of the board not be specified in the final rule but instead be left to the

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[262] NECPUC at 11.

[263] See, e.g., Advisory Committee ISO-NE, APX, Avista, Desert STAR, Industrial Consumers, PJM, Reliant, South Carolina Authority and UtiliCorp. In general, these commenters adopt the convention used in the NOPR that a non-stakeholder is synonymous with a non-market participant. See note 187 in FERC Stats. & Regs. ¶ 32,541 at 33,726.

[264] Justice Department at 4. The Southern Company states that if the Commission requires non-stakeholder boards RTOs that are ISOs, then it must allow transmission owners the right to establish "performance standards" for the RTO and the right to withdraw if the RTO fails to meet these standards. Southern Company at 40-41.

discretion of the participants. Two exceptions are the South Carolina Authority, which recommends that board size be limited to seven to nine directors, and the Midwest Municipals, which suggests that the Commission question any non-stakeholder board that has more than 10 to 15 members.

Other commenters state that a danger of non-stakeholder boards, such as those already approved by the Commission for several ISOs, is that they become isolated and sometimes unresponsive to stakeholder concerns. UtiliCorp, for example, asserts that "one of the most frequently heard criticisms of the ISOs currently in existence is their unresponsiveness and lack of accountability." [265] Several other commenters echo this concern and recommend that an independent board be required to consult formally and informally with advisory committees of stakeholders (i.e., a two-tier form of governance). For example, the Midwest Municipals recommend that RTOs with non-stakeholder boards "be required to have a senior management or advisory committee made up of market participants from each relevant market sector and subordinate, issue oriented committees" similar to those that exist in the PJM, New York and New England ISOs. [266] STDUG recommends that if a non-stakeholder board is formed "it must be accompanied by some

[265] UtiliCorp at 11.

[266] Midwest Municipals at 19.

action forming mechanism that forces the board to listen and consider the concerns of all members or stakeholders in the RTO." [267]

EPSA urges the Commission to pay close attention to the composition and functions of any committee structure that operates underneath a governing board because independent governance "does not stop at the ISO board." [268] It contends that this is necessary for independence because advisory committees of stakeholders will often have de facto decisionmaking power. Dynegy makes specific recommendations for any stakeholder committees that operate below and report to an RTO board. It recommends that such committees be governed by "segment voting"—each industry segment would have a proportional vote; each market participant would have to choose to participate in one market segment; and the votes within a segment would be split among however many entities choose to participate in that segment. It observes that this approach has been adopted or proposed in the PJM, NEPOOL and New York ISOs.

Other commenters urge us not to prohibit stakeholder or hybrid boards consisting of stakeholders and non-stakeholders such as the one that exists in California. Cal ISO, noting that it is the only FERC-jurisdictional ISO with a stakeholder board, states that "[t]he Cal-ISO stakeholder board has worked" and urges us to confirm the acceptability of a stakeholder board in the final rule if the board is structured to ensure that no market

[267] STDUG at 7-8.

[268] EPSA at 15.

participant or class of market participants can control the decisions of the RTO. [269] Dairyland points out that the Commission has encouraged and approved stakeholder boards under the independence principle for ISOs in Order No. 888. [270] Dynegy recommends a hybrid governing board with "disinterested" (i.e., non-stakeholder) members comprising one-third of the board and stakeholder members comprising the remaining two-thirds. [271] However, it observes that mandated stakeholder representation would be "inappropriate" for an RTO that is a for-profit transco. California Board urges us to allow a variety of governance forms including stakeholder boards "until and unless experience shows that one form" is clearly superior to other forms of governance. [272] TXU Electric states that "stakeholder representation is a legitimate form of governance for a

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[269] Cal ISO at 15. Cal ISO points out that this has been achieved through a board of governors in which (1) no one voting class is able to block or veto an action, and (2) no two classes together are able to form a sufficient majority to make decisions, and (3) no entity (including its affiliates and subsidiaries) is able to participate in more than one voting class. See Attachment A-1 of Cal ISO.

[270] "A governance structure that includes fair representation of all types of users would help to ensure that the ISO formulates policies, operates the system, and resolves disputes in a fair and non-discriminatory manner." Order 888, FERC Stats. & Regs. ¶ 31,036 at 31,730-731

[271] Dynegy recommends that five "segments" for the stakeholder representatives: transmission owners, transmission-dependent utilities, marketers, end-users and independent power producers. Dynegy at 42.

[272] California Board at 6.

regional transmission organization" and, in fact, is the required form of governance under the recently enacted Texas electric restructuring statute. [273]

Role of State Agencies

Commenters express a wide range of opinions on the appropriate role of state agencies. The comments fall generally into two categories: the role of state agencies during the developmental stage and the role of state agencies after an RTO begins operating.

Many commenters believe that state commissions and other state agencies should have a major role in RTO development. NARUC argues that state commissions "should fully participate in RTO formation and development." [274] State commissions generally take the position that their involvement is important because the size, scope and functions of an RTO will be critical for the success of their state-by-state retail choice programs. [275] NECPUC notes that it had an important role in shaping the design of the ISO-NE before any formal filing was made at the Commission. Nine Commissions, representing state commissions from the East-Central, Midwest and Southwest regions, gives a specific example of how the Commission should defer to state commissions. They state that if a critical mass of state commissions in their region reach agreement on the appropriate

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[273] TXU Electric at 9.

[274] NARUC at 11.

[275] See, e.g., Illinois Commission.

boundaries for an RTO, then FERC "should provide deference to that collective state determination." [276]

Other commenters outside of the state regulatory community also address the issue of the appropriate role for state commissions. For example, Enron/APX/Coral Power say that state regulators and politicians should play a role in encouraging local transmission owners to join RTOs but "[t]he role of states . . . should extend no further." [277]

Once an RTO becomes operational, Enron/APX/Coral Power argue that state commissions should have no special role and, in fact, the RTO "should be protected from local interference." Their argument for minimizing the role of state agencies is that "no other commercial activity (with the possible exception of telecommunications) is more intrinsically in interstate commerce." Conlon, the former President of the California Public Utilities Commission, expresses a similar view ("local control, although desirable from a states' rights standpoint, should be sacrificed to get interstate control of the entire interconnection.") [278]

On the issue of voting rights for state commissions, Enron/APX/Coral Power argues that it would be inappropriate for any state commission to be a voting member of

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[276]Nine Commissions at 6.

[277]Enron/APX/Coral Power at A-3.

[278]Conlon states that these are his views and are not necessarily the views of any present or former Commissioners or staff of the California PUC.

an RTO. Their rationale is that the state commission would lose its ability to monitor the relationship between the RTO and any entity that may be serving the state's domestic load if it is also a voting member of the RTO board. NECPUC expresses a similar view. While recommending that state commissions have extensive communication with the RTO and its participants, it concludes that state commissions "should not have a vote in the governance of the ISO New England." [279] Arizona Commission says that states should have the right of ex officio membership but that "FERC should not force the states to be voting members." [280] ISO-NE also shares this view. It contends that it would be "awkward" for a state official to serve as a voting director of an RTO for several reasons. First, it could create a conflict between the state official's duties as an RTO board member and his or her regulatory or administrative duties at the state level. ISO-NE argues that many state conflict of interest laws may expressly prohibit such service because of the conflicts it would create. [281] Second, in the case of a multistate RTO, it may difficult for an official from one state to vote for decisions that are good for the residents of all the

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[279] NECPUC at 9.

[280] Arizona Commission at 5.

[281] In contrast, Reliant recommends that "state officials should serve as board members in order to avoid conflicts in future decisions." It appears that Reliant is referring to future decisions of the state agencies. Reliant at 5.

states served by the RTO. Third, the solution of having a board member from each state "could create gridlock or unwieldy boards." [282]

Florida Commission makes a distinction between for-profit and non-profit RTOs. It says that it would be inappropriate for members of a state regulatory body or other state officials to serve on the board of a for-profit transco. However, Florida Commission believes that it may be appropriate for a state commissioner to serve on the board of a non-profit RTO if disputes involving the RTO and other parties do not come before the state commission.

Washington Commission expresses a different view. In its opinion, the role of state commissions should vary depending on the type of board. It recommends that state involvement could be limited to the selection of the non-affiliated board members for a non-stakeholder or hybrid board. In contrast, if there is a stakeholder board, Washington Commission urges that states be granted "voting member status." In the case of a for-profit transco, it urges the Commission to require a formal advisory role for the states.

Section 205 Filing Rights

Many IOUs and public systems oppose the NOPR's proposal to require that RTOs have "exclusive and independent authority to file changes to its transmission tariff with the

[282] ISO-NE at 3.

Commission under section 205 of the Federal Power Act." [283] In contrast, those who support the proposal assert that it is a necessary and logical implication of the Commission's previously stated policy that the "[a]uthority to act unilaterally . . . is a crucial element of a truly independent ISO." [284] SRP recommends that "the need for an RTO to independently administer its own tariff must be balanced against the need for individual transmission owners to maintain control over their ability to recover their revenue requirements and meet their debt service obligations." [285]

Those who oppose the proposal focus on the case of an RTO that is an ISO. Transmission ISO Participants argues that the proposal is bad law and bad policy. Citing the Supreme Court decision in United Gas Pipe Line Co. v. Mobile Gas Service Corp., [286] it asserts that the Commission does not have the legal authority to grant section 205 filing rights to an ISO. It contends that the FPA grants this fundamental right to transmission owners that are public utilities. While a transmission owner may "voluntarily cede" this right to an ISO, the Commission cannot compel a transmission owner, either directly or indirectly, to give up this legal right. Puget Sound argues that the proposal would have the

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[283] See, e.g., AEP, Alliance Companies, CMUA, Duke, Florida Power Corp., LPPC, Metropolitan, Midwest Municipals, Montana-Dakota and Southern Company.

[284] Citing NEPOOL, 79 FERC ¶ 61,974 at 62, 585 (1997). See, e.g., PJM, Cal ISO, Industrial Consumers, Montana Commission, NECPUC and NASUCA.

[285] SRP Reply Comments at 12.

[286] 350 U.S. 332 (1956).

effect of reducing the transmission-owning utility to little more than a "bystander" and could constitute an illegal "taking" under the Fifth Amendment of the U.S. Constitution.

Transmission ISO Participants also claims that the Commission's previous decisions in this area have not been consistent. It asserts that the Commission "required transmission owners to cede their section 205 rights to the ISO in our order approving the PJM ISO." [287] But it points to the fact in a 1997 California ISO order that the Commission seemed to establish a much smaller role for the ISO ("the ISO is responsible for only collecting the revenue requirement.") [288] Furthermore, it notes that in this same order the Commission decided to set all rate design and rate methodology issues in the dockets established for the filings made by the transmission owners, and not in a docket for the transmission tariff filing made by the ISO. [289]

Many commenters also address whether it would be practical to give RTOs FPA section 205 filing rights for transmission rate design and terms and conditions that directly affect access while transmission owners would retain section 205 rights for overall revenue requirements. A number of commenters say that this distinction is unworkable

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[287] Transmission ISO Participants at 20.

[288] Quoting 81 FERC ¶ 61,122 at 61,506 (1997).

[289] However, the California ISO asserts that it has "exclusive and independent" authority "to modify the design of rates for transmission and ancillary services." See Cal ISO at 18.

because the two are inextricably connected (i.e., changes in rate design can have major impacts on revenue collections). [290]

However, other commenters argue that the Commission cannot realistically expect an RTO to be a neutral and unbiased transmission provider unless the RTO has full legal authority to propose changes in its own transmission tariff. [291] PJM states that "its ability to function would be severely hindered" unless it has the ability to unilaterally make tariff filings. It points to several recent instances of emergency filings with us as examples of why it must have its own independent filing authority without getting the prior approval of transmission owners or any other group. It argues that it will not be able to satisfy its responsibility to "provide for safe and reliable operation of the transmission grid and operation of a robust, competitive, and non-discriminatory electricity market" without such authority. [292] However, PJM does state that transmission owners, rather than the RTO, should have the unilateral right to seek changes in the RTO's tariff to address changes in the transmission owners revenue requirements with respect to transmission facilities. [293]

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[290] See, e.g., EEI, Transmission ISO Participants and Southern Company.

[291] See, e.g., Cal ISO, PJM ISO, Industrial Customers, Montana Commission, NECPUC and NASUCA.

[292] PJM at 53.

[293] PJM at 54. The California, New York and New England ISOs agree with PJM (continued...)

Oneok, a power marketer, states that an RTO needs its own section 205 filing authority because it would not be able to reach a consensus and act quickly if it must get the prior approval of all stakeholders. However, Oneok suggests an alternative to what was proposed in the NOPR. It recommends a two-tier approach to transmission tariff filings. Under this proposal, "transmission-owning utilities would be free to file changes to their rates (or rate structures) at any time" to their single customer, the RTO. [294] The RTO would then be free to "repackage" the transmission capacity and services that it purchased under these separate transmission owner tariffs in its own RTO transmission tariff filed under section 205. Oneok states that there are precedents for this approach in prior Commission practices.

Commission Conclusion

The Basic Independence Principle

In the NOPR, we repeated our earlier statement that "the principle of independence is the bedrock upon which the ISO must be built "and emphasized that this principle must apply to all RTOs, whether they are ISOs, transcos or variants of the two. We also stated that "[a]n RTO needs to be independent in both reality and perception." We reaffirm both principles in the Final Rule.

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[293](...continued)
on this point.

[294]Oneok at 8.

In applying these principles in the context of ISOs, we have stressed the importance of a decisionmaking process that is independent of control by any market participant or class of participants. This, in turn, required that we pay considerable attention to governance (e.g., voting shares and voting rules). Because ISOs are typically non-profit and non-share corporations, we generally did not have to consider the effect of ownership interests on the independence of the ISO. This will change with the emergence of for-profit RTOs, such as transcos, that have ownership interests. For these types of RTOs, we will have to examine how ownership of the RTO by market participants could affect the independence of its decisionmaking process.

Who Is a Market Participant?

The overall purpose of the independence standard in the Final Rule is to ensure that an RTO will provide transmission service and operate the grid in a non-discriminatory manner. Equal access requires RTOs to be independent. Implementation of this standard then requires answering the question: independence from whom? Our logic in the NOPR, which we have adopted in the Final Rule, is to define a group of entities, referred to as market participants, whose economic or commercial interests are likely to be affected by an RTO's decisions and actions.

Commenters provided many helpful comments on the definition of market participant that was proposed in the NOPR. As noted in the summary, the commenters generally fall into two broad categories: those who argue that the NOPR definition is too

broad and those that argue that it is too narrow. We find that these views were not always inconsistent since the commenters were often discussing different aspects of the definition. After a careful review of the comments, we conclude that it is necessary to change the definition of a market participant that was proposed in the NOPR. The revised definition at section 35.34(b) is:

> (2) Market participant means:
> (i) Any entity that, either directly or through an affiliate, sells or brokers electric energy, or provides transmission or ancillary services to the Regional Transmission Organization, unless the Commission finds that the entity does not have economic or commercial interests that would be significantly affected by the Regional Transmission Organization's actions or decisions; and
> (ii) Any other entity that the Commission finds has economic or commercial interests that would be significantly affected by the Regional Transmission Organization's actions or decisions.
> (3) Affiliate means the definition given in section 2(a)(11) of the Public Utility Holding Company Act (15 U.S.C. 79b(a)(11)).

Before discussing how this definition is different from the NOPR definition, it is useful to consider why a definition of market participant is needed in the first place. It is the Commission's view that an RTO must be independent of any entity whose economic or commercial interests could be significantly affected by the RTO's actions or decisions. Without such independence, it will be difficult for an RTO to act in a non-discriminatory manner. Therefore, the definition focuses on those entities whose economic and commercial interests can be significantly affected by the RTO's behavior. However, it should be emphasized that the definition of a market participant is simply a starting point

for implementing the independence standard. The definition is used as a reference point for establishing limits on ownership (i.e., an RTO's ownership of market participants and market participants' ownership of an RTO) and standards for independent decisionmaking or governance. As discussed below, the fact that a particular participant is defined as a market participant does not preclude it from having any active or passive ownership interest in an RTO.

We agree with many commenters that the NOPR definition was too broad in defining a market participant to be "any entity that buys or sells electric energy in the RTO's region or in any neighboring region that might also be affected by the RTO's actions." As several commenters pointed out, a literal reading of this definition would make market participants of every residential, commercial, industrial and wholesale electric customer in the RTO region and some neighboring regions. This is clearly too encompassing and was not our intent. We therefore are narrowing the definition of a market participant in the Final Rule to include those who sell or broker electric energy but not those who buy electric energy.

We recognize, however, that there may be circumstances where buyers of electric energy could buy a controlling interest in a for-profit RTO and manipulate its access and curtailment decisions to their advantage. Such an outcome would clearly be inconsistent with the independence standard. Therefore, as a backstop, we are adding paragraph (b) to the definition ("any other entity that the Commission finds has economic or commercial

interests that would be significantly affected by the RTO's actions or decisions"). The addition of this paragraph allows us, on a case-by-case basis, to consider whether particular buyers of electric energy (or any other entity) could manipulate an RTO's decisions to the disadvantage of other RTO customers.

We are also dropping the phrase "in the RTO's region or in any neighboring region that might also be affected by the RTO's actions." Given the high degree of integration within the Eastern and Western Interconnections, the growth of transactions involving buyers and sellers separated by hundreds of miles and the participation of energy concerns in multiple markets, we conclude that it would be virtually impossible to apply a geographically delineated standard. However, we will consider requests for waivers from entities in other Interconnections who can demonstrate that their economic or commercial interests would not be significantly affected by the RTO's actions or decisions.

We are also making one other change to the NOPR definition to expand its scope. Paragraph (a) expands the NOPR definition by including entities that provide transmission or ancillary services to an RTO. We believe that it would compromise an RTO's independence if one or more transmission owners could influence the RTO's decisions to the detriment of other market participants. Therefore, it is appropriate to include providers of transmission service as market participants. [295] With regard to the creation of RTOs

[295] It is conceivable that RTO A might provide transmission service to a

(continued...)

that are transcos, we have developed policies on the level of ownership that market participants may possess, as discussed below, in order to ensure that the operating decisions of the RTO are truly independent and non-discriminatory.

We believe that it is necessary to include ancillary service providers as market participants since the RTO is the supplier of last resort for ancillary services. As a consequence, the RTO is likely to have considerable discretion in defining the types and quantities of ancillary services needed and how they will be procured (e.g., market design). An RTO's decisions in any of these dimensions can have major economic effect on one or more providers of such services. Therefore, we define these entities as market participants to ensure that they are not in a position to influence the RTO's decisions to their own advantage.

Several other commenters urged us to include distribution entities as market participants. At present, most distribution entities provide a bundled service. The bundled service includes the sale of electric energy as well as the delivery of this electric energy over local distribution facilities. Since these traditional distribution entities are selling electric energy, they would be considered market participants under the definition.

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[295](...continued)
neighboring RTO B. In such a situation, RTO A would be considered a market participant. RTO A might also acquire ownership interests in RTO B as a first step towards consolidation of the two RTOs. We would anticipate granting a waiver to RTO A from the market participant definition and any associated ownership restrictions if we had reason to believe that the waiver could lead to a larger and more effective RTO.

However, several commenters pointed out that a new type of distribution entity is likely to emerge with the spread of retail competition. This type of distribution entity would simply transmit electric energy over distribution facilities for others and would not sell electricity.

The issue is whether this type of pure distribution entity should be considered a market participant. Several commenters pointed to the danger of allowing one or two distribution entities to control an RTO. Their concern is that these distribution entities could use their control over the RTO to favor their distribution facilities over the facilities of non-affiliated distribution entities when the RTO has to choose among competing requests for transmission service or alternative curtailment actions. Other commenters minimize this risk and argue that distribution entities should be allowed to own RTOs because there are economies in having a single entity provide total delivery service (i.e., transmit electric energy at high and low voltages). The Commission does not wish to create impediments to the efficient integration of transmission and distribution facilities. Therefore, we will not include pure distribution entities in paragraph (a) of the market participant definition. However, if we are presented with evidence that a distribution entity is able to influence an RTO's actions or decisions to the disadvantage of other users, we may find such a distribution entity to be a market participant under paragraph (b) of the definition. Paragraph (a) of the revised definition defines all sellers of electric energy, whether retail or wholesale, as market participants. Several commenters urge us to

exclude retail providers of last resort from the definition. These are entities that are required by state commissions or state law to be backup suppliers to retail customers who choose not to switch suppliers in a state-mandated retail competition program. We have decided to include such entities in the market participant definition because they are sellers of electric energy. However, the obligations and responsibilities of such entities are still being developed on a state-by-state basis. As a consequence, even though such entities may be generically referred to as "suppliers of last resort," their responsibilities and incentives may vary widely. The Commission believes that certain factors, (e.g., an entity's sole electric sales are made to satisfy a state requirement and it does not compete for retail load) would support a finding that the entity is not a market participant.

NEPCO et al. point to the problem of incumbent utilities that have tried to divest themselves of generating assets but have not yet succeeded. They say that this is likely to be a particular problem for utilities that own minority interests in nuclear plants since it is currently difficult to sell such interests. NEPCO et al. request that they not be automatically deemed a market participant because of these ownership interests. Once again, we will entertain requests for exemption. For example, we would be willing to give an exemption if the current owner could clearly demonstrate that it has transferred to non-affiliated entities both the marketing rights and any profits resulting from the sale of electric energy associated with its ownership interest. Any compensation that the market

participant receives from the non-affiliated entity should not be tied to profits on specific sales made by this entity.

RTO Economic Interests in Market Participants and Energy Markets

We reaffirm the NOPR proposal that the RTO, its employees and any non-stakeholder directors must not have any financial interests in market participants. As noted in the NOPR, our focus will be on current financial interests. Since this principle raises a number of specific issues, especially with respect to pension rights and benefits, we will continue our current policy of implementing this principle on a case-by-case basis.

Several commenters argued that the NOPR's treatment of financial independence was too narrowly drawn. For example, Dynegy, pointing to the example of ISOs, argues that while ISOs "may ostensibly be independent of market participants--they are not independent of the market itself." [296] The participation of RTOs in the market stems from certain obligations that we require of any RTO: it is the supplier of last resort for required ancillary services and it must attempt to procure such services efficiently in competitive markets. These two requirements mean that most RTOs will be operators of bilateral and spot markets in ancillary services as well as buyers in these same markets. In addition, they will be resellers of any ancillary services that they purchase.

[296] Dynegy at 35.

It is our intention that RTOs perform functions that make the transmission infrastructure operate efficiently, not that they take actions in ways that skew competitive outcomes in the market. Nevertheless we acknowledge that RTO operations may have that effect. Moreover, the two requirements may lead to an outcome that an RTO is not indifferent to whether the prices are high or low. Given this possible conflict, we will require that all RTOs must propose an objective monitoring plan to assess whether the RTOs involvement in these markets favors its own economic interests over those of its customers or members. [297]

Passive Ownership Interests in the RTO

As we have emphasized, the Commission wishes to give industry participants every reasonable opportunity to create RTOs through their own voluntary actions. However, we also recognize that mere exhortations that the industry participants should volunteer to create independent transmission entities will not ensure a truly open and reliable grid in the reasonably foreseeable future. The Commission must take actions to ensure that the stand-alone transmission business is financially attractive and viable. We must also provide a high degree of regulatory certainty and not foreclose viable options for creating and developing RTOs. To provide more certainty, the Final Rule provides guidance on

[297] This is discussed more fully under Market Monitoring. See infra section III.E.6.

our future policies for establishing revenues, incentives and performance-based regulation for proposed RTOs. [298]

We also recognize that the voluntary creation of RTOs requires that current owners of transmission assets must be willing to transfer operational control of these assets to RTOs or to divest their interests in their entirety. Therefore, it is important that we provide current transmission owners with flexibility in deciding how they will relinquish ownership or control of their transmission facilities to an RTO. Numerous commenters, ranging from IOUs to state commissions to marketers, urge the Commission not to make RTO policy in a vacuum. In particular, they stress that the Commission needs to understand that there are many existing legal and tax disincentives to the outright sale of such assets to an RTO. [299]

Among these potential impediments, commenters identify the federal capital gains tax most frequently. There was agreement among many commenters that it would be unrealistic for the Commission to expect current transmission owners to sell their transmission facilities to an RTO if the sale becomes a taxable event that triggers a large capital gains tax. Therefore, they urge the Commission to accommodate financing and ownership arrangements that facilitate the creation of for-profit RTOs while minimizing

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[298] See infra section 111.G.

[299] See EEI, Southern Company, United Illuminating, Enron/APX/Coral Power, ISO-NE, NECPUC, Salomon Smith Barney and Konoglie/Ford/Fleishman.

the tax burden on current transmission owners who are willing to take actions that would promote the Commission's RTO policies. Many commenters argue that the Commission could significantly accelerate RTO development if we were to allow current transmission owners to retain a passive ownership interest in new RTOs. Several commenters contend that if the Commission fails to accommodate such arrangements, this initiative will be unproductive because our policies would be effectively biased against the creation of for-profit transmission companies that seek RTO status. They assert that such an outcome would be inconsistent with the statement in the NOPR that the Commission wishes to encourage all types of RTOs, whether they are transcos, ISOs or combinations of the two. [300]

In response to these comments, we reaffirm that it is the Commission's policy to encourage all types of RTOs. In light of our evolving experience with the workability of certain RTO models, it would be inappropriate for us to mandate a single RTO model of ownership and operation. While the dominant approach to date has been ISOs, we are receptive to alternative approaches that can provide evidence of the legitimacy of various models of ownership and operation. Because the institutions which we propose to sanction pursuant to this Final Rule will be so influential in operating the Nation's infrastructure over a period of time, the Commission resolves to implement its

[300] FERC Stats. & Regs. ¶ 32,541 at 33,726.

independence criteria with an open mind and, to the extent practicable, with flexibility. At this juncture, we therefore propose to remove unnecessary impediments to the creation of transmission companies by allowing market participants to maintain passive ownership interests in RTOs.

We reaffirm our belief that "[a]n RTO must be independent in both reality and perception." [301] This same conclusion was also reached by the DOE Reliability Task Force and the NERC Reliability Panel, two widely respected industry groups comprised of representatives from all sectors of the industry. The DOE Reliability Task Force concluded that regional reliability entities must be "truly independent of commercial interests so that their reliability actions are—and are seen to be—unbiased and untainted." The Electric Reliability Panel concluded that "[t]o dispel suspicions that the system operator favors one participant over another . . . the operator must be independent of market participants." [302]

The Commission concludes that an RTO will not be successful unless all market participants believe that the RTO will operate the grid and provide transmission service to

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[301] As discussed below, this overriding consideration is also relevant to active voting interests.

[302] See U.S. Department of Energy, Maintaining Reliability in a Competitive U.S. Electricity Industry: Final Report of the Task Force on Electric System Reliability, at xv (September 29, 1998); North American Reliability Council, Electric Reliability Panel, Reliable Power: Renewing the North American Electric Reliability Oversight System at 17 (Dec. 22, 1997)

all grid users on a non-discriminatory basis. It is clear that the perception of a broad cross-section of commenters is that passive ownership may interfere with the independent operation of RTOs. [303] In the view of many commenters, passive ownership is only a subtle mechanism to allow existing transmission owners to continue to control use of transmission assets and ultimately deny equal access to competitors. Therefore, we must provide assurances to all market participants that any passive ownership interest is truly passive and will in no way interfere with the independent operation and decisionmaking of the RTO. It is important to require a system of independent compliance auditing to ensure that passive ownership arrangements remain passive over time and to provide assurances to other market participants that the RTO is truly independent. [304]

Those who support the policy of allowing market participants to have passive ownership in RTOs point to the fact that the Commission has accepted many instances of passive ownership in the past. Typically, these arrangements have involved the sale and leaseback of generating units in which a jurisdictional public utility will sell a generating unit to a bank, insurance company or other financial institution. The financial institution

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[303] See, e.g., Consumer Groups, South Carolina Authority, TDU Systems, Industrial Customers , APPA, Los Angeles, NASUCA, Arkansas Cities and Wolverine Cooperative.

[304] The auditing requirements of this Rule represent one approach to addressing our concern that it may otherwise be difficult to assess the ongoing independence of passive ownership arrangements. We expect that parties will include in any rehearing requests their views on this approach, in general, and the particular auditing requirements that we have adopted.

will then lease back the generating unit to the jurisdictional utility. Even though the financial institution is the owner of record, we have generally concluded that it is a passive owner without any real operational control and, therefore, is not a jurisdictional public utility under the FPA. [305]

There are, however, several considerations that distinguish these earlier passive arrangements from the ones that are being contemplated for RTOs. First, the passive ownership arrangements for RTOs (e.g., two-tier LLCs, synthetic leases and leveraged partnerships) may be complicated and multi-layered. Even those commenters who urge that we accept passive ownership as a necessary transition mechanism admit that such arrangements "will prove troublesome for both utilities and FERC" because they create the "need to constantly police supposedly passive ownership positions to make sure that they remain passive in all respects." [306]

Second, unlike financial institutions, the passive owners will typically own other assets (e.g., generating assets) that could reap major economic benefits if an RTO's decisions can be influenced to their advantage. Therefore, unlike financial institutions, the passive owners in RTOs may have a direct economic incentive to influence the RTO's operating and investment decisions to favor other economic interests.

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[305] See Pacific Power and Light Co., 3 FERC ¶ 61,119 (1978); Baltimore Refuse Energy Systems Co., Wheelabrator Millbury, Inc., 40 FERC ¶ 61,366 (1987).

[306] Salomon Smith Barney Reply Comments at 15.

In response to a request for a declaratory order from Entergy Services, Inc., the Commission found that passive ownership of a transmission entity by a generating entity or other market participant could meet the Commission's ISO standards relating to governance and independence if it were properly designed. Because Entergy's proposal was incomplete, the Commission provided some limited guidance related to: board selection and removal, potential issues about the board's fiduciary duties, attraction of capital and issues about the transmission entity contracting with member companies. In this rule we provide further guidance which we believe will help RTO applicants who may be considering some form of passive ownership structure.

Based on these considerations, the Commission's policy on proposals for passive ownership of RTOs by market participants will have three key elements:

(1) Passive ownership proposals will be reviewed on a case-by-case basis. The Commission will approve a proposal only if we are satisfied that the passive owners have relinquished control over operational, investment and other decisions to ensure that the RTO will treat all users of the grid—passive owners and others—on an equal basis in all matters. The burden of proof is on the RTO to demonstrate that control of the RTO is "truly independent" and that the RTO has a decisionmaking process that is independent of control by the passive owners.

(2) The Commission requires any RTO with passive ownership interests approved by the Commission to undertake an obligation and propose processes for an

independent compliance audit to ensure the independence of its decisionmaking process from the passive owners. The first independence audit will be required two years after initial approval of the RTO and every three years thereafter. The independence compliance audit must be submitted to the Commission in a public document without any requirement for approval by the RTO board. [307]

(3) The Commission will take appropriate action if it finds evidence of abuses.

We will now discuss implementation of these elements. The first element of our policy is that any RTO that wishes approval for passive ownership above the limits set for active ownership must demonstrate in its application that the passive owners will relinquish effective control over operational and investment decisions. Specifically, the RTO must demonstrate that the proposed arrangement has been designed to ensure that it can treat all users of the grid—passive owners and others—on an equal basis in the provision of non-discriminatory transmission service.

It will be difficult for the Commission to make an assessment of whether a particular passive arrangement achieves true independence in decisionmaking for the RTO board and its management unless an RTO provides complete information about the rights that passive owners have reserved for themselves both as owners of the RTO and as providers of facilities and services to the RTO. In judging any proposal, our overriding

[307] See supra note 304.

concern is that the arrangements provide a high degree of assurance that those who are not passive owners will have equal access to the services provided by the RTO.

To assure ourselves that this standard is satisfied, the Commission will need information on the following issues: fiduciary responsibilities of the RTO board and management to passive owners; ability of the RTO to raise capital independently of its passive owners; ability of the RTO to make investment and financing decisions independently of its passive owners; the extent of control by passive owners over board selection and removal; the extent of control by passive owners over transmission rates, terms and conditions; control of passive owners over issuance of new membership interests and/or equity; services that will be provided by the passive owners or their employees to the RTO; and the extent of access of passive owners to information not available to other market participants. [308] An RTO application seeking approval for passive ownership should provide any other relevant information that will allow the Commission to assess whether passive owners have reserved rights for themselves that are

[308] For example, this could include information on the market behavior of one or more non-affiliate market participants acquired through a market monitoring program and information on the RTO's proposed investment and operational plans, except where the Commission has approved it as necessary to protect the passive owner's capital investment.

superior to those of other market participants and if such rights constitute control over the RTO. [309]

The second element requires a mechanism for assuring ourselves and market participants that any passive ownership arrangement remains passive over time. The Commission will require the RTO to notify us immediately of any changes in the underlying agreements or facts that occur after the initial filing. The Commission has relied on a similar system of self-monitoring in cases in which we have approved market-based rates. Specifically, we have required that any public utility that receives market-based pricing must notify us of any factual changes that call into question whether it should be allowed to continue to charge market-based rates. [310]

We will also require a system of independent compliance auditing. The auditing must be performed by individuals or organizations that are not affiliated with the RTO or its owners. The purpose of the auditing would be to ensure that what is passive on paper is passive in reality throughout the transition period. In particular, auditors would assess whether the passive owners have retained rights or privileges in their role as owners or

[309] We note that many of these same concerns also apply to RTOs that allow market participants to have ownership interests in voting securities.

[310] When there is a change in the factual circumstances that were the basis for the Commission's approval of market-based pricing, we require that a public utility notify us immediately of this change or at the next update of their market power analysis. This update occurs once every three years. With respect to passive ownership, we will require that the passive owner must notify us immediately of any change in governance in ownership or governance that takes place after our initial approval.

providers of services that would put non-owner participants at a competitive disadvantage. The audits would cover the RTO's actions and decisions with respect to operations and investments. In order for this to be a credible auditing system, the auditors should have clear authority to obtain any information or data necessary to perform their audits and they should have the right to report any findings and recommendations to the Commission without prior approval of the RTO or any of its owners/members. An initial audit must be performed two years after our approval of the passive ownership arrangements and every three years thereafter. [311] If there is evidence of abuse or we are unable to determine if the ownership interests continue to be passive, the Commission will not hesitate to order appropriate remedial action, including possible termination of passive ownership interests.

We understand that passive ownership arrangements are likely to take many forms and that the Commission has not had much experience in examining these types of arrangements in the context of RTOs. We encourage market participants to investigate the options available for passive ownership to identify those types of arrangements that will provide the greatest assurance of independence. For example, we note that the SEC's Rule 250.7(d) establishes criteria under which entities may have ownership interests that do not trigger SEC jurisdiction under PUHCA. The criteria under Rule 250.7(d) are that: (1) the entity owns the facility as a company, a trustee or holder of a beneficial interest under a

[311] See supra note 304.

trust; (2) the facility is leased under a net lease directly to a public utility company and such facility is to be employed by the lessee in its operations; (3) the company is otherwise primarily engaged in business other than that of a public utility; (4) the terms of the lease have been approved by the regulatory authority having jurisdiction over the lessee; (5) the lease extends for an initial term of not less than 15 years; and (6) the rent reserved under the lease shall not include any amount based, directly or indirectly, on revenues or income of the lessee public utility. While it is unclear whether these exact criteria can be applied to the passive ownership arrangements that may be involved in the formation of an RTO or whether they would address the particular independence issues raised in this Rule, we believe that it would be acceptable for market participants to develop passive ownership arrangements that are purely financial. A passive ownership arrangement that is demonstrated to be purely financial could be relieved of the auditing requirement in this Rule.

Active Ownership Interests in the RTO

We now turn to a discussion of active as opposed to passive ownership. Most commenters used the term "active" ownership interests to refer to ownership of voting securities that give the owner the ability to influence or control an RTO's operating and investment decisions. We adopt this definition for purposes of our discussion and will use the terms "active" and "voting" interchangeably.

Several commenters who were strong proponents of allowing high or unlimited voting interests by market participants argue that in the NOPR the Commission was wrong to focus on any particular ownership percentage. Instead, they contend that what really matters is "actual control over the day to day affairs of the system, not some arbitrary ownership percent ownership test." [312] We agree that the independence of an RTO ultimately depends on who makes the decisions. [313] But control of decisionmaking ultimately depends on who votes and how many votes each party has.

Consequently, we do not think that the Commission can ignore market participants' ownership of voting interests in the RTO. [314] To do so would require us to presume that even though a market participant has the legal right to vote for its own commercial interests, it will choose to vote for the public interest (or the general interests of all market participants). Therefore, we conclude that ownership of voting interests does matter and

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[312] CTA at 4.

[313] However, independence does not automatically guarantee that an RTO will be effective in providing non-discriminatory access to the grid. Independence must also be combined with adequate operational and legal authority in order for the RTO to provide non-discriminatory access.

[314] In response to EEI's request for a clarification, we clarify that we are referring only to corporate or shareholder ownership in the RTO itself and not to ownership of transmission facilities under the RTO's operational control. The fact that such facilities are owned by market participants would not be a concern unless the owners retain legal rights and operational responsibilities that make it difficult for an RTO to provide non-discriminatory transmission service to other market participants.

we cannot remain agnostic about the ownership of voting interests in an RTO by individual market participants, their affiliates or classes of market participants. [315]

a. Active Ownership by Individual Market Participants and Affiliates

A number of transmission customers argue that the cleanest solution would be an "absolute prohibition" on ownership of voting interests by any market participant [316] We agree that this would produce a high level of certainty that an RTO is truly independent and anything less than an absolute prohibition introduces some risk. However, if our goal is to encourage the voluntary creation of RTOs, we have to accept that current owners may not relinquish ownership or control of their transmission assets unless it is in their economic interests to do so. In order to create a viable, for-profit, regional transco, at least some current transmission owners must be willing to sell their transmission assets to a new transmission company. Many commenters point out that this voluntary action is not likely to happen if the current owners anticipate large capital gains taxes as a consequence

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[315] This is not the first time that we have emphasized the importance of voting rights. In various cases dealing with voting shares and voting rules for ISOs, we required that proposed arrangements be reformed to assure that no individual market participant or class of market participants could dominate the decisions of stakeholder committees that advised the ISO's board. See New England Power Pool, 88 FERC ¶ 61,079 (1999); Central Hudson Gas and Electric Corp., et al., 88 FERC ¶ 61,229 (1999).

[316] See, e.g., APPA, Consumer Groups and South Carolina Authority.

of the sale. The solution, according to many commenters, is to allow current owners to retain some voting interests, some non-voting (i.e., passive) interests or both.

As with passive ownership, the Commission must balance two conflicting goals: the need to assure that any RTO will be truly independent; and of not creating disincentives for transmission owners to voluntarily relinquish ownership or control of their transmission assets. Against the backdrop of these two goals, the specific question that confronts us is how much ownership of active voting interests in RTOs should be allowed for market participants.

Several investor-owned utilities urged us to allow current transmission owners to retain as much as 100 percent voting interest in new for-profit transcos. They argue that we allow 100 percent ownership combined with codes of conduct in the natural gas industry and there is no reason why this model should not also apply to a restructured electricity industry. We disagree with this recommendation. The two industries, while similar in some respects, also differ significantly in the degree of vertical integration. The electricity industry is starting with a much higher level of vertical integration. As we noted in our NOPR discussion of the complaints filed since the issuance of Order No. 888, it is difficult to monitor compliance with codes of conduct when there is substantial vertical integration (i.e., those who own generation and also own transmission). [317]

[317] FERC Stats. & Regs. ¶ 32,541 at 33,704-14.

Moreover, it is a very intrusive form of regulation and ultimately requires us to be "chasing after conduct." If such regulation is to be effective, we have to be concerned with internal corporate organization and "who spoke to whom in the company cafeteria." [318] This is not light-handed regulation. Therefore, we see little value in replicating this model in the new world of RTOs.

It would be equally unworkable to adopt the recommendations of some transmission customers that we should allow no ownership of RTOs by market participants from the outset. While this is a clean solution and greatly reduces the need to monitor for discriminatory behavior, it also reduces the likelihood that many current transmission owners will voluntarily relinquish ownership or control of their transmission facilities. As a consequence, it is likely to produce significant delays in the creation of RTOs that can support more competitive markets that would benefit consumers. Therefore, the Commission has concluded that it is in the public interest to permit some ownership of RTOs by market participants for a transition period. Within five years of RTO approval, however, active ownership by market participants must end unless the RTO seeks, and the Commission approves, an extension. Any request for extension, including a request occasioned by changed circumstances, must demonstrate that the

[318] Id. at 33,714.

extension is consistent with the independence standard of this rule and is otherwise in the public interest.

For the transition period, the Commission will establish a safe harbor of five percent for active ownership interests by market participants. We will allow any market participant to own up to five percent of an RTO's outstanding voting securities without the need for case-by-case review by the Commission. An active ownership interest at five percent or lower will be construed as not providing the owner with control.

The Commission will carefully evaluate, on a case-by-case basis, proposals that involve an ownership percentage higher than five percent. In deciding whether to allow active ownership interests that exceed five percent, we will look at various factors including the voting interests held by other class members (i.e., other market participants with similar economic interests), the amount of passive ownership held by market participants, the degree of dispersion of voting interests among other market participants and the general public, and the rights retained by the owners as suppliers of facilities and services to the RTO. While there is no prohibition on RTO proposals that involve higher ownership percentages, it would heighten the concerns identified above and would require justification by the applicants to overcome these concerns.

We note that other Federal regulatory agencies have chosen to use a five percent value in similar situations. The SEC employs a five percent value in deciding when one

entity is an affiliate of another under PUHCA. [319] The SEC also requires that any person who becomes a direct or indirect owner of more than five percent of any class of stock of a company must file a public statement with the SEC. In commenting on this latter requirement, the FCC observed that its purpose is "to ensure that investors are alerted to potential changes in control . . . which confer on their holders the potential for influence or control." [320] Less than two months ago, the FCC established a five-percent "voting share benchmark" for assessing ownership interests in companies that are cable TV operators. In justifying its decision to stay with a five-percent value, the FCC noted that "[t]here is a body of more recent academic evidence that tends to confirm our earlier conclusions, demonstrating that interest holders of [five percent] can likely exert considerable influence on a company's management and operational decisions." [321] The FCC concluded that "ownership percentages starting at [five] percent can influence management polices." [322]

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[319] See 15 U.S.C. 79b (a) (11).

[320] Federal Communications Commission, In the Matter of Implementation of the Cable Television Consumer Protection and Competition Act 1999; Implementation of Cable Act Reform Provisions of the Telecommunications Act of 1996; Review of the Commission's Cable Attribution Rules, FCC LEXIS 5243, *53 (October 20, 1999) citing Securities and Exchange Commission v. Savoy Industries, Inc., 587 F.2d 1149 (D.C. Cir. 1978), cert. denied, 440 U.S. 913 (1979).

[321] Id.

[322] Id.

We recognize that this Commission has used higher percentages in other contexts. For example, in determining whether a company is an affiliate of a natural gas pipeline or an electric utility, we have applied a rebuttable presumption of control only when a utility or pipeline owns ten percent or more of the company's voting stock. As a general matter, since the success of RTOs will depend on both the perception and reality of independence, the Commission believes that caution requires us to allow only very limited voting interests by market participants. The Commission believes that a lower percentage is necessary in this instance because we allow other market participants with similar economic interests (i.e., members of the same class) to have voting interests. Therefore, we believe that it is appropriate to impose a lower cap to reduce the risk that owners with similar outside economic interests may create a voting bloc. If, after our initial approval, we find evidence that control over the RTO is being exercised by an individual market participant or a class of market participants, we will not hesitate to take appropriate action, including ordering one or more entities to divest their ownership interests in the RTO.

The Commission recognizes that there are risks associated with allowing market participants to have any active ownership interests in an RTO. Even with a five percent active ownership interest, there is a risk that one or more market participants will be able to influence the RTO's decisionmaking process to the disadvantage of other market participants. Consequently, the RTO may fail to be an entity in which "the control of

transmission operation is cleanly separated from power market participants." [323] Accordingly, we will require that all market participants divest themselves of any active ownership interests no later than five years after our approval of the RTO. We will consider requests for extensions to this "sunsetting" requirement on a case-by-case basis. Any request for extension, including a request occasioned by changed circumstances, will be granted if the requester demonstrates that the extension is consistent with the independence standard of this Rule and is otherwise in the public interest. We will also require that any RTO that proposes active ownership by a market participant must adopt a system of independent compliance auditing to ensure that the active voting interests held by an individual market participant or classes of market participants do not convey decisionmaking control.

b. Active Ownership by Classes of Market Participants

In the NOPR, we stated that "[a]n RTO must have a decisionmaking process that is independent of control of any market participant or class of participants." [324] While we suggested a safe harbor of one percent ownership in voting securities by an individual market participant and its affiliates, we did not propose any specific cap on ownership of voting securities by a class of participants. Based on a review of the comments received,

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[323] FERC Stats. & Regs. ¶ 32,541 at 33,718.

[324] Id. at 33,727.

we have concluded that a policy on ownership by classes of market participants is necessary to ensure the independence of the RTO. Thus, we will review RTO proposals with respect to class ownership, considering potentially relevant factors such as voting interests held by other market participants or classes of market participants, the degree of passive ownership by market participants, the degree of dispersion of voting interests, and the rights retained by the owners as suppliers of facilities and services to the RTO. We recognize that this is a fact-specific determination that will require the Commission to evaluate, on a case-by-case basis, proposals that involve ownership by more than one market participant. We will adopt a benchmark of 15 percent class ownership. Our willingness to allow ownership by a class of participants that exceeds fifteen percent will depend on the particular circumstances of the filing (e.g., the presence of offsetting voting interests by another class of market participants with competing economic or commercial interests or proposals to sunset active ownership). [325] Moreover, intervenors may also advance arguments that a 15 percent class ownership is inappropriate under certain factual circumstances.

Comments on this issue reflect widely divergent views. SRP criticizes the NOPR for failing to recognize that "[a]n interest may be considered de minimis when viewed in isolation, could still result in effective control when aggregated for a group with common

[325] See Alliance Companies, supra note 48.

interests." SRP contends that while the Commission explicitly recognized the importance of classes in the NOPR, we failed to do anything about it. In contrast, FP&L and others argue that there is no need for any ownership caps for a group of market participants since they will often have conflicting interests. EEI echoes this point by observing that any "coalitions" are likely to be "fragile, short-lived and unlikely to result in a serious threat to the independence of the RTO." [326] It also contends that it will be difficult to keep track of ownership interests and to categorize market participants into specific groups with "alleged common interests." Therefore, while EEI proposes a ten- percent cap on ownership interests in voting securities by individual market participants, it recommends that there be no cap on the ownership interests of any group of participants.

In several ISO orders, we rejected proposed governance arrangements because we concluded that the voting weights and rules given to classes or sectors of participants would allow transmission owners to dominate the decisionmaking process. [327] We believe that the concerns that motivated these orders also hold true with respect to ownership of RTOs. It would make little sense to establish a policy on ownership by individual market participants and their affiliates while allowing five or six generators or marketers to group together to force an RTO to adopt a policy that favors their interests.

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[326] EEI Reply Comments at 21.

[327] See New England Power Pool, 88 FERC ¶ 61,079 (1999); Central Hudson Gas and Electric Corp., et al., 88 FERC ¶ 61,229 (1999).

The Commission is unpersuaded by the assertions that similarly situated market participants will not have a "nexus of interests." While we recognize, for example, that individual generators may actively compete against each other for specific sales, this does not imply that there is a total absence of common economic interests among generators relative to marketers or distributors. If we were to accept this argument, it would require us to ignore the fact that the Commission routinely receives joint pleadings from non-affiliated parties with similar economic interests. Similarly, over the last two years, we have frequently observed various non-affiliated entities within ISOs voting as a bloc on issues where they have similar economic interests (e.g., existing generators voting against new generators who seek lower interconnection charges when they connect to the grid).

There is a second reason why we believe it is necessary to review class or sector ownership of voting securities in RTOs. With ISOs, we have allowed sector or class representation on the advisory and technical committees that are charged with giving advice or making recommendations to non-stakeholder governing boards. We have accepted these arrangements even though the votes of some classes exceed 20 percent because all other classes are represented and have roughly equal voting power. Thus, independence is achieved through a diffusion of voting power among all the affected classes. While this arrangement may work for ISOs that are typically non-profit and non-share corporations, we do not think it is viable option for RTOs that have ownership shares that must be purchased. In particular, we cannot assume that all affected classes of

market participants will have the financial resources to purchase ownership interests that would guarantee them a vote at the table. Therefore, we cannot presume that there will be a balance of voting power as was the case for the ISOs. In the absence of such countervailing voting blocs, we believe that it is necessary to establish lower limits on the amount of voting shares that can be owned by members of any one class of market participants.

Based on our experience to date, we do not think it is impractical to define classes of market participants with similar economic interests. This has been routinely done as part of the governance design in every one of the ISOs that we have approved. The Commission will not establish categories of classes in this Final Rule. Instead, we will allow each RTO to propose the classes that it believes are relevant to its region. However, we are inclined to define such classes broadly to avoid bypassing the class cap through narrowly defined classes.

In addition, we will require independent compliance auditing to ensure that market participants that have ownership interests will not use these ownership interests to put other non-owner market participants at a competitive disadvantage. [328]

The auditing should be performed by individuals or organizations that are not affiliated with the owners or RTO. The auditors would have clear authority to obtain any

[328] See supra note 304.

information or data necessary to perform their audits, and they would have the right to report any findings and recommendations to the Commission without prior approval of the RTO or any of its owners/members. An initial audit should be performed two years after our approval of the RTO. This will be the only audit required for active ownership unless the RTO or the active owners request and receive approval for an extension of active ownership interests beyond five years. If such an extension is granted, then follow-up compliance audits must be performed at three year intervals, beginning with a three-year audit filed along with any request for extension.

As we discussed above with respect to passive ownership, applicants will have a continuing obligation to inform the Commission of any changed circumstances regarding active ownership. Moreover, the Commission would expect auditing for compliance with the individual and class caps established at the time of RTO approval. Where feasible, the auditors would rely on publicly available information on ownership interests (e.g., SEC data sources). Where such information is not publicly available (e.g., individual ownership interests of less than five percent), the auditors should have the authority to obtain this information from market participants and their affiliates. Any market participant that wishes to have an ownership interest in an RTO must agree to provide this information to the auditor or the Commission upon request. We would expect that market participants will comply with both the individual and class caps at all times. If the auditor

finds that either cap has been violated, it must notify the Commission and the affected owners immediately and also recommend a remedy.

Since the caps do not guarantee a lack of control, the Commission expects that the auditors will also look for evidence of control over RTO decisionmaking at lower levels of ownership. These audit reports would be closely reviewed by the Commission and if there is evidence of abuse or unwillingness to cooperate with the auditors, the Commission will not hesitate to order owners to divest themselves of their active ownership interests.

RTO Governing Boards

Many commenters urge us to impose specific, detailed requirements on RTO governance. Commenters make recommendations on many different aspects of governance: the desirability of stakeholder, non-stakeholder or hybrid boards, the size of boards, the relationship between non-stakeholder boards and stakeholder advisory groups, the number of classes for stakeholder boards, the appropriate voting entitlements for individual classes on a stakeholder board; and optimal voting rules. Most of the recommendations seemed to be targeted for RTOs that are ISOs. In the Final Rule, we have decided not to impose any specific requirements on RTO governing boards other than the general requirement that they must satisfy the overall principle that their decisionmaking process should be independent of any market participant or class of

participants. We have opted not to impose more detailed governance requirements for three reasons.

First, we anticipate that RTOs will take many different forms that reflect the needs and different starting points of each region. We expect to see proposals from ISOs, transcos and hybrids. It is unlikely that a single approach to governance will work for the different types of RTOs that are likely to emerge. At this early stage, it would be counterproductive to impose a "one size fits all" approach to governance when RTOs may differ significantly in structure and patterns of ownership.

Second, our experience to date has been largely limited to reviewing governance proposals of ISOs that operate but do not own transmission facilities. A governance model that works for an ISO may not be appropriate for transcos or other types of for-profit transmission enterprises.

Third, even among the ISOs, there are different models of governance. As we noted in the NOPR, the dominant governance model (PJM, New England, New York and the Midwest) for ISOs is a two-tier form of governance. The top tier consists of a non-stakeholder board, while the lower tier consists of advisory committees of stakeholders that may recommend options to the non-stakeholder board. Generally, the top tier has the final decisionmaking authority. [329] In contrast, California, employs a decisionmaking

[329] One exception is the New York ISO where decisionmaking is explicitly shared (continued...)

board for its ISO that consists of both stakeholders and non-stakeholders representatives. And we note that the recently passed Texas restructuring law would require a pure stakeholder governing board for the ERCOT ISO. Given the variety of governance forms that exist or are proposed for ISOs and the limited experience with these different approaches, the Commission believes that it is premature to conclude that one form of governance is clearly superior to all other forms in every situation.

Therefore, we will not mandate detailed governance requirements for RTO boards. Instead, the approach that we adopt in the Final Rule is that any RTO governance proposals, whether from an ISO, transco or a hybrid arrangement, will be judged on a case-by-case basis against the overarching standard that its decisionmaking process must be independent of individual market participants and classes of market participants. [330]

While we are not imposing any other specific requirements, the Commission believes that it is appropriate to give some general guidance based on the governance arrangements that we have reviewed to date. Where there is a governing board with

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[329](...continued)
by a non-stakeholder Board of Directors and stakeholder Management Committee. Modification of the ISO tariffs under the FPA requires approval of the ISO Board and the Management Committee. If they fail to agree on a modification, either the Board or the Management Committee may make a filing under FPA section 206. See Central Hudson Gas & Electric Corp., et al., 88 FERC ¶ 61,138 (1999).

[330]We will require every ISO to submit an audit of the independence of its governance process two years after its approval as an RTO.

classes of market participants, we would expect that no one class would be allowed to veto a decision reached by the rest of the board and that no two classes could force through a decision that is opposed by the rest of the board. Where there is a non-stakeholder board, we believe that it is important that this board not become isolated. Both formal and informal mechanisms must exist to ensure that stakeholders can convey their concerns to the non-stakeholder board. Where there are stakeholder committees that advise or share authority with a non-stakeholder board, it is important that there be balanced representation on the stakeholder committees so no one class dominates its recommendations or its decisions.

We note that this general guidance is based on our experience with governance proposals of ISOs. The Commission recognizes that these observations may not be completely relevant for an RTO that intends to operate as a for-profit transmission company. Nevertheless, we emphasize that the common element for all types of RTOs must be that they satisfy the threshold principle that their decisionmaking should be independent of market participants.

Role of State Agencies

We do not impose any specific requirements on the role of state agencies in RTOs. Such specificity would be counterproductive in light of the variation in the legal responsibilities of state commissions and RTO design across regions. However, we agree

with NARUC that state commissions "should fully participate in RTO formation and development." When we undertake our collaborative efforts with the industry after issuance of the Final Rule, we encourage state commissions and other state agencies to play a key role in this effort. State involvement is important for several reasons, especially where RTOs are a critical element of the retail choice programs of many states. State commissions are in a unique position to assess whether a particular RTO design will help or hinder their efforts to promote retail competition.

Once an RTO becomes operational, it appears that most states believe that it would be inappropriate for a state official, whether a state commission representative or some other state employee, to serve as a voting member of an RTO board. We note that NECPUC, representing the six New England state commissions, was joined by most other state commissions and commenters from other sectors of the industry in recommending that state officials should not be voting members of any RTO governing body. ISO-NE presents three reasons why it would be problematic for a state official to serve as a voting member of an RTO governing board. First, it would create a conflict between the state official's duties as an RTO board member and his or her regulatory or legal responsibilities at the state level. Second, in the case of a multi-state RTO, it would be difficult for an official of one state to represent the interests of others states if the state interests are in

conflict. Third, the solution of allowing each state to have its own voting member on the RTO board could lead to large and unwieldy boards for multi-state RTOs.

While most commenters agreed that state officials should not serve as voting members of RTO boards, most of these same commenters were comfortable with allowing state officials to serve as ex officio members. It was thought that state officials would be better informed in making their own decisions if they could closely observe the considerations and constraints that were weighed by the RTO in making its decisions. It was thought that the ability of state officials to observe the RTO's decisionmaking process would be especially useful if the RTO had to recommend one or more expansions to the existing grid.

While we see considerable merit in the arguments that state officials should not be voting members of an RTO governing board (and note that most state commissions share this view), the Commission is not imposing such a prohibition. Since RTOs do not yet exist, it would be premature to conclude that state officials should not participate as voting members of RTO boards. There may be special circumstances in some regions that would make it in the public interest to give voting rights to one or more state government representatives. Therefore, we will be willing to entertain such proposals and perhaps revisit the issue after we gain more experience.

Section 205 Filing Rights

In the NOPR, we proposed that the RTO must have exclusive and independent authority to file changes in its transmission tariff under section 205 of the Federal Power Act. This proposal triggered hundreds of pages of comments. Upon consideration of the comments received, as discussed below, we will modify our proposal, in part, to make clear that transmission owners who do not also operate their transmission facilities retain certain section 205 rights.

Most commenters on this issue fall into two categories. Those who oppose the proposal in the NOPR argue that it is bad law and bad policy. They contend that the Commission does not have the legal authority to grant section 205 rights over their transmission facilities to some other entity. While a transmission owner may voluntarily cede this right to an RTO, they argue that the Commission cannot compel a transmission owner, either directly or indirectly, to give up this legal right. Many transmission owners, representing IOUs, public and cooperative systems, argue that the transfer of this right to an RTO would increase their risk of recovering revenues to which they are lawfully entitled. On the other hand, those who support the proposal argue that it is a necessary and logical implication of our previously stated policy that the "[a]uthority to act unilaterally . . . is a crucial element of a truly independent transmission provider." [331] They contend that an RTO will not be able to function as an independent and neutral

[331] New England Power Pool, 79 FERC ¶ 61,374 at 62,585 (1997).

transmission provider if it has to seek the approval of transmission owners or other market participants every time it wishes to modify its tariff. They point to numerous tariff changes that the various ISOs have had to make as real world evidence of their need to move quickly and make filings at the Commission when they encounter a tariff problem that needs to be corrected.

Based on the comments received, we reaffirm our determination that RTOs, in order to ensure their independence from market participants, must have the independent and exclusive right to make section 205 filings that apply to the rates, terms and conditions of transmission services over the facilities operated by the RTO. This determination, however, is subject to several important clarifications discussed below.

We recognize that for some RTOs (in particular, ISOs), both the transmission owners and the RTO will be public utilities with respect to the same transmission facilities, [332] i.e., one or more entities will own the facilities and a different entity will operate the facilities and actually sell the transmission provided by the facilities, and that this presents a somewhat unusual situation insofar as sections 205 and 206 of the FPA are concerned. The FPA does not explicitly address who has filing authority or responsibility in this circumstance. We conclude that while the RTO must have independent and exclusive authority to propose changes in the rates, terms and conditions of transmission

[332] Under FPA section 201(e), a public utility is any person who owns or operates jurisdictional facilities.

service provided over the facilities it operates, it also is reasonable for the transmission owners to retain certain independent section 205 filing rights with respect to the level of the revenue requirement that the transmission owners receive from the RTO and that the RTO, in turn, will collect from the transmission customers through its rates. We therefore clarify that a transmission owner must have independent authority to set the level of its portion of the revenue requirement to be collected by the RTO. [333]

Importantly, we further clarify that we expect the authorities of the transmission owners and the RTO to be exercised as follows. The transmission owners may make section 205 filings to establish the payments that the RTO will make to the transmission owners for the use of the transmission facilities that are under the control of the RTO; the RTO, in turn, will make section 205 filings to recover from transmission customers the cost of the payments it makes to transmission owners as well as its own costs, and propose any other changes in the rates, terms and conditions of service to transmission customers. Thus, the transmission owners may have on file a tariff that assures their recovery of transmission revenues from the RTO and, while they may be affecting the level of the RTO's revenue requirement, they will not be permitted to make section 205 filings for

[333]Of course, a transmission owner may voluntarily agree to relinquish this right during the RTO negotiation process or subsequently.

RTO services to transmission customers and will not interfere with the independence of the RTO to file proposed changes to the open access tariff. [334]

We believe this division of filing rights reflects a reasonable interpretation of the FPA as applied to these circumstances, and that it appropriately balances the need to ensure the independence of the RTO with the need to provide transmission owners the opportunity to recover revenues. To avoid unnecessary disputes and coordinate the interaction of these independent section 205 filings, we will require the RTO and the transmission owners to give prior notice to each other of any planned section 205 filings. Further, we strongly encourage transmission owners and RTOs to resolve rate issues prior to the filing of proposed rate changes.

We recognize that the division of filing rights described above may not be the only way to accommodate the concerns raised. Accordingly, the Commission will entertain other approaches as long as they ensure the independent authority of the RTO to seek changes in rates, terms or conditions of transmission service and the ability of transmission owners to protect the level of the revenue needed to recover the costs of their

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[334] We note that some existing ISOs have adopted an approach where the transmission owners' revenue requirement is filed with the Commission in a separate transmission rate filing (e.g., California ISO), while others incorporate the revenue requirement of the transmission owners, as changed from time to time, in the ISO's tariff. In either case, only the ISO is authorized to make filings that change the tariff sheets in the ISO's tariff.

transmission facilities. The Commission will require RTOs to provide a detailed description of the process to allow us to assess its fairness and workability.