

**Before the
UNITED STATES DEPARTMENT OF ENERGY**

Interstate Electric Transmission System)	Notice of Inquiry
Electric Reliability Issues)	

**Comment of the Staff of the
Bureau of Economics and of Policy Planning
of the Federal Trade Commission¹**

January 4, 2001

* This comment represents the views of the staff of the Bureau of Economics and of Policy Planning of the Federal Trade Commission. They are not necessarily the views of the Federal Trade Commission or any individual Commissioner.

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I. INTRODUCTION AND SUMMARY

The staff of the Bureau of Economics and of Policy Planning of the Federal Trade Commission (FTC) submits this comment to the United States Department of Energy (DOE) concerning its proposal to initiate a rulemaking before the Federal Energy Regulatory Commission (FERC) to impose mandatory electric reliability standards.² DOE seeks comments on this proposal and on the broader policy issues addressing electric power reliability.

The FTC is an independent administrative agency responsible for maintaining competition and safeguarding the interests of consumers. The staff of the FTC often analyzes regulatory or legislative proposals that may affect competition or the efficiency of the economy.³ In the course of this work, as well as in antitrust research, investigation, and litigation, the staff applies established principles and recent developments in economic theory and empirical analysis to

¹ This comment represents the views of the staff of the Bureau of Economics and of Policy Planning of the Federal Trade Commission. They are not necessarily the views of the Federal Trade Commission or any individual Commissioner. Inquiries regarding this comment should be directed to John C. Hilke (303-844-3565 or jhilke@ftc.gov).

² 65 *Fed. Reg.* 69753 (Nov. 20, 2000) (Notice).

³ *See, e.g.*, Letter of the Federal Trade Commission to House Commerce Committee Chairman Thomas Bliley, Analysis of H.R. 2944 (Jan. 14, 2000) (Bliley Letter).

competition issues.

The FTC has a longstanding interest in regulation and competition in energy markets, including proposals to reform regulation of the electric power and natural gas industries. The staff has submitted numerous comments concerning these issues at both the federal and state levels,⁴ and the FTC has reviewed proposed mergers involving electric power and natural gas utility companies.

DOE is concerned that the existing voluntary, self-regulatory approach to electric power reliability, which is administered by the North American Electric Reliability Council (NERC), is at risk as competition intensifies under a variety of federal and state regulatory reforms. As DOE correctly observes, the existing system depends upon voluntary cooperation among parties whose economic incentives are increasingly diverse.⁵ DOE is considering initiating a rulemaking at FERC that could have the effect of making the NERC's reliability rules mandatory. The contemplated rulemaking could change compliance with NERC rules from voluntary to

⁴ The staff of the FTC has commented to FERC on electric power regulation, for example, in Docket Nos. EL00-95-000 et al. (San Diego Gas & Electric Company and California regulatory issues more generally); Docket No. RM99-2-000 (regional transmission organizations) (Aug. 16, 1999) (FTC RTO Comment); Docket No. EL99-57-000 (Entergy transco proposal) (May 27, 1999); and Docket No. RM98-4-000 (Sept. 11, 1998). The staff of the FTC also has submitted comments to numerous state agencies regarding electric power industry restructuring that have been compiled in an FTC Staff Report: Competition and Consumer Protection Perspectives on Electric Power Regulatory Reform (July 2000). The FTC staff comments and report are available at: <<http://www.ftc.gov/be/advofile.htm>>.

⁵ Notice at 69753. We agree with DOE that concerns about declining compliance with reliability rules and potential anticompetitive use of reliability rules by market participants are sufficient to warrant increased government oversight of the process of developing and enforcing reliability rules. We note that concern about reliability rules appears in part to reflect a lack of supplier contractual liability for customer damages caused by outages and other forms of quality deterioration.

mandatory by relying on existing FERC regulatory authority.⁶

We believe that efforts to address reliability, without considering competition aspects of the economic performance of the electric power industry, may not be successful given the technological and market conditions that link these issues. The need to instantaneously and continuously match supply and demand in electric power markets causes extraordinary interdependence between competition and reliability issues. Instead of limiting its concerns to reliability, DOE may wish to broaden its potential proposal to include consideration of the competition elements of comprehensive regulatory reform, similar to the set of issues FERC has identified in its recent order seeking to remedy deficiencies in wholesale power markets in California.⁷ Indeed, any mandatory reliability system that is inflexible and does not address competition concerns could be more problematic than the current, self-regulatory regime.

In the event that DOE elects to restrict its proposal to reliability concerns, it may wish to explicitly recognize that competition policy instruments are likely to have such substantial impact on reliability that they should be included in the flexible array of reliability policy instruments considered by FERC (and state regulators). Finally, DOE may wish to consider whether, and under what circumstances, the formation of regional transmission organizations (RTOs) subsumes the present proposal.

⁶ Notice at 69753-54. This comment does not address whether and to what extent FERC has statutory authority to implement these reform efforts.

⁷ San Diego Gas & Electric Company, et al., Order Directing Remedies for California Wholesale Electric Markets, FERC Docket Nos. EL00-95-000 et al. (Dec. 15, 2000) (California Wholesale Markets Order). We have no reservations about including FERC-administered mandatory reliability rules in a broader effort to implement comprehensive regulatory reform of the electric power industry. See Biley Letter, *supra* n. 3, at 13.

II. DOE MAY WISH TO BROADEN THE REGULATORY REFORM ELEMENTS COVERED IN THE POTENTIAL FERC RULEMAKING

One of the most significant lessons of the past decade of reform in the electric power industry is that reliability and competition aspects of industry performance are linked very closely. This is due in large part to the technological aspects of the industry. The need to instantaneously and continuously match supply and demand in electric power markets causes extraordinary interdependence between competition and reliability issues in the industry. The importance of this linkage is well illustrated by recent events in California, documented in the reports of the FERC staff and the California Independent System Operator (ISO) market monitoring committee.⁸ The reports indicate that flaws in market rules, protracted entry delays, and lack of price signals on the demand side of the market are all major contributors to both the reliability problems and the high prices experienced in California.

Given the linkage between reliability and competition problems in California and the breadth of FERC's handling of these issues, DOE may wish to broaden its proposals to at least include the same scope of issues that FERC encompassed in the California Wholesale Markets Order. For example, FERC has ordered substantial changes affecting wholesale market design

⁸ Staff Report to the Federal Energy Regulatory Commission on Western Markets and Causes of the Summer 2000 Price Abnormalities (Nov. 1, 2000); Market Surveillance Committee of the California Independent System Operator, "An Analysis of the June 2000 Price Spikes in the California ISO's Energy and Ancillary Services Markets" (Sept. 6, 2000). For example, although costs of supplying power are typically far higher in peak demand periods, most customers pay the same price in peak and off-peak periods. This pricing system provides little incentive to shift demand to off-peak periods or to invest in onsite generation to relieve the peak demand on the grid that poses the greatest risk of power disruptions and other reliability problems.

and governance of the ISO and the power exchange.⁹ In addition, FERC identified several critical market reforms affecting reliability that are within the jurisdiction of the states, including entry conditions (siting of generation and transmission) and pricing information available to customers (metering and rate design).¹⁰

The linkages between reliability and competition issues are likely to be just as strong in areas of the country outside of California because the technologies that largely determine these relationships are the same nationwide.¹¹ Consequently, authority necessary to address reliability and competition problems in California is also likely to be necessary and appropriate to address reliability concerns in other areas.

III. IF DOE ELECTS TO FOCUS PRIMARILY ON RELIABILITY, IT MAY WISH TO BROADEN ITS RELIABILITY REMEDIES TO INCLUDE THOSE THAT HAVE TRADITIONALLY BEEN ASSOCIATED WITH COMPETITION POLICY

Because NERC has traditionally addressed reliability policy without regard for competition policy, there may be a tendency to try to continue to address reliability concerns

⁹ The remedial steps ordered by FERC include: (1) eliminating the requirement that California's largest investor-owned utilities sell all the electric power they generate and purchase all the electric power they sell at retail through the California Power Exchange (PX); (2) providing guidance to market participants as to a benchmark for assessing prices of long-term electric supply contracts; (3) reducing underscheduling of load and generation; (4) providing for market monitoring and price mitigation; (5) replacing the stakeholder boards of the ISO and PX with independent boards; and (6) filing generation interconnection standards.

¹⁰ California Wholesale Markets Order, *supra* n. 7, at 8.

¹¹ *See, e.g.*, Letter of Industrial Energy Users - Ohio Coalition of Midwest Transmission Customers, et al. to the Honorable James J. Hoecker, Chairman, Federal Energy Regulatory Commission (Dec. 12, 2000) (detailing competition and reliability problems in the Midwest).

primarily through the rules and remedies used by NERC. NERC's approach to reliability was developed in an era when markets were primarily served by vertically integrated and fully regulated monopolies. Its rules are based on a command and control approach. DOE may wish to avoid this narrow approach because it may create significant risks and impose costs that could be avoided by recognizing that traditional competition policy instruments often serve reliability policy goals as well.

One risk of addressing reliability concerns exclusively through traditional command and control remedies is that this may lead to selection of competitively inefficient policies that harm consumers. For example, NERC relies extensively on transmission loading relief (TLR) orders. If an electric transmission line is about to be overloaded, NERC rules require cancellation or reduction of transmission transactions using that line, without regard to whose electric power demand will not be met as a result.¹² A TLR order may create reliability problems elsewhere by forcing curtailment of supply arrangements that are only slightly related to the transmission congestion addressed by the TLR order.¹³

A second risk is that remedies selected from the array of available NERC rules may aggravate longer-run reliability and competition problems in electric power markets. The TLR order process is one potential example. To the extent that TLR orders increase the cost and risk

¹² Rajesh Rajaraman and Fernando L. Alvarado, "Inefficiencies of NERC's Transmission Loading Relief Procedures," 11 *Electricity J.* 47 (Oct. 1998). The TLR could induce localized voltage irregularities or a blackout in a distant area if it reduces imports of electric power into that area and the area is already utilizing all available local generation. *See also* Henry Fayne, "June's Jolt: A Utility's Perspective," 11 *Electricity J.* 14 (Oct. 1998); Sam Randazzo, "Summer's Revolting Developments: A Consumer's Perspective," 11 *Electricity J.* 21 (Oct. 1998).

¹³ TLR rules provide that transactions contributing as little as five percent to an overload may be curtailed. Rajaraman et al., *supra* n, 12, at 53.

of trading electric power across geographic regions, excessive reliance on TLR orders rather than on market-based remedies may reduce incentives to build new generation plants in low-cost areas and to transmit that power into distant load centers. This, in turn, may increase longer-term electric power prices for consumers, both directly through higher costs and indirectly through reduced competition. Another example may be NERC policies requiring disclosure by marketers to vertically integrated transmission owners of the buyers and sellers in transmission agreements that a marketer facilitates.¹⁴ These policies may enhance the ability of vertically integrated transmission owners to discriminate against marketers.

Rather than potentially constraining FERC to a narrow, traditional array of reliability rules and remedies used by NERC, DOE may wish to encourage FERC to review a broader range of policy options than those NERC has used, including those traditionally regarded as competition policies. Examples might include improved entry conditions (siting),¹⁵ integrating treatment of native load with other transmission transactions in assessing transmission congestion,¹⁶ utilizing

¹⁴ NERC's Market Interface Committee observes: "... reliability organizations prefer detailed transaction information well in advance of the transaction start to allow full evaluation of the reliability impacts. Market participants, on the other hand, prefer to schedule an energy transaction at the last practical moment to maximize efficiency as information on demand, generation availability and price, and transmission congestion becomes known." <<http://www.nerc.com/committees/mic.html>>.

¹⁵ "New Linda Breathitt Tells Her Views," *Restructuring Today* (Dec. 7, 2000): "There could likely come a point when the shortage of . . . transmission capacity becomes not just a state issue, but a national and interstate commerce issue. . . ."

¹⁶ Although FERC orders generally apply broadly to all energy sales involving interstate commerce, FERC's open access regime instituted in Order No. 888 does not apply to transmission by traditional vertically integrated utilities to accommodate "native" load. FERC Order No. 888, 61 Fed. Reg. 21540, 21552 (May 10, 1996). Power marketers estimate that as a result, less than 20% of interstate electric power transmission is regulated under open access rules. Order No. 2000 stemmed in part from concern over the limited applicability of Order No.

pricing to curtail demand during peak demand periods, and limiting the application of rules allowing one control area to arbitrarily curtail exports of electric power to another area.¹⁷ Access to a broader range of policy options may allow FERC to use policy instruments that are more efficient and effective in addressing reliability concerns and that pose fewer risks of frustrating other policy concerns in the electric power industry.

IV. RTOS MAY SUBSUME NERC FUNCTIONS

One question about DOE's potential proposal for mandatory NERC rules is whether it is necessary given FERC's ongoing RTO-formation process.¹⁸ Responsibility for reliability is already prominent on the list of minimum characteristics and functions for which an RTO is responsible.¹⁹ Unlike NERC's rules, RTO reliability rules will be mandatory for market

888. "Petition for a Rulemaking on Electric Power Industry Structure and Commercial Practices and Motion to Clarify and Reconsider Certain Open-Access Commercial Practices," filed with FERC by Altra Energy Technologies, Inc. and others on March 25, 1998.

¹⁷ For example, during the recent periods of high prices and reliability problems primarily affecting the states in the Midwest, PJM (the neighboring independent system operator) curtailed sales of power from PJM-based generators to wholesale customers in the Midwest. Joseph E. Bowring and Robert E. Gramlich, "The Role of Capacity Obligations in a Restructured Pennsylvania-New Jersey-Maryland Electricity Market," 13 *Electricity J.* 57 (Nov. 2000).

¹⁸ FERC Order No. 2000, *Regional Transmission Organizations* (Dec. 17, 1999). Public utilities that are already members of an existing ISO (such as the California ISO) are required to file a plan with FERC by January 15, 2001, to convert their ISO to an RTO that meets the requirements set forth in Order No. 2000.

¹⁹ An RTO would enhance reliability by (1) operating the system for a large region, (2) ensuring coordination during system emergencies and restorations, (3) conducting comprehensive and objective reliability studies, (4) coordinating generation and transmission outage schedules, and (5) sharing ancillary services responsibilities. In addition, the RTO characteristics of Operational Authority and Short-run Reliability and the RTO functions of Congestion Management, Parallel Path Flow, Ancillary Services, and Planning and Expansion all relate

participants in the area served by the RTO. Because the RTO minimum characteristics and functions adopted by FERC are likely to result in RTOs' having a broad perspective and a broad set of policies to address reliability issues, DOE's effort in this proceeding may be redundant.²⁰ Instead, DOE may wish to encourage FERC to recognize that its decisions about the geographic scope of RTOs will materially affect the importance of retaining an additional layer of reliability organizations. To the extent that RTOs are implemented in all areas of the country and have large geographic scope (or that FERC causes RTOs to coordinate their policies and rates that affect reliability within each of the three transmission Interconnects), the need for a separate reliability organization with mandatory rules may be greatly reduced or eliminated.

V. CONCLUSION

We support DOE's proposal that FERC examine in more detail whether its existing authority extends to ensuring that reliability rules are observed by all market participants. In addition, DOE may wish to propose that FERC review more broadly its authority to implement both reliability and competition elements. If DOE elects to focus primarily on reliability, it may wish to explicitly recognize that remedies traditionally viewed as competition remedies affect reliability to such an extent that they should be included in the array of remedies considered to address reliability concerns. By taking a broader perspective on reliability policies, DOE and

directly to system reliability. FERC Notice of Proposed Rulemaking, Regional Transmission Organizations (May 13, 2000) at 140-55, 162-95.

²⁰ If DOE believes FERC has authority to make reliability rules mandatory, DOE may wish to consider whether FERC has authority to mandate the formation of RTOs as a remedy for reliability concerns.

FERC may avoid focusing on less efficient policy instruments for addressing reliability problems and may avoid aggravating longer-term reliability and competition problems in electric power markets. DOE may also wish to review the potential redundancy between FERC's RTO process and mandatory reliability rules through an organization like NERC.

Respectfully submitted,

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