Before the United States of America Federal Energy Regulatory Commission

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Market-Based Rates for Public Utilities **Docket No. RM04-7-000**

Comment of the <u>Federal Trade Commission</u>

January 18, 2006

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I. Introduction

The Federal Trade Commission ("FTC") offers this comment to identify and explain the deficiencies in the "historical contestable load analysis" that the Federal Energy Regulatory Commission ("FERC") has been asked to use to evaluate horizontal market power at the generation level.¹ FERC currently uses a four-pronged test to determine whether a generation supplier should be permitted to offer its supply at market (rather than regulated) rates in wholesale electric power markets.² The generation market power prong uses two indicative screens to assess market power: one screen focused on whether the applicant is a pivotal supplier, and the other focused on whether the applicant's market share is above a certain market share threshold.³ FERC should not

¹ Edison Electric Institute ("EEI"), "Post Technical Conference Comments," filed jointly with the Alliance of Energy Suppliers on March 14, 2005, in the Matter of Market-Based Rates for Public Utilities, FERC Docket No. RM04-7-000. The term "contestable load" signifies that suppliers can compete to serve these customers, as opposed to "native load," which consists of customers supplied by a franchised load-serving entity. The use of the term "contestable load" in the current proposal is different from the term as used in industrial organization economics, where contestability focuses on entry conditions. In the Matter of Westar Energy, FERC Docket Nos. ER03-9-002 *et al.*, for example, FERC agreed to consider the contestable load analysis submitted by the applicant as part of a subsequent Section 206 proceeding. Order on Updated Market Power Analysis, Instituting Section 206 Proceeding and Establishing Refund Effective Date, ¶¶ 15-16 (issued Mar. 23, 2005).

² FERC, Order on Rehearing and Modifying Interim Generation Market Power Analysis and Mitigation Policy, In the Matter of AEP Power Marketing, Inc. *et al.*, Docket Nos. ER96-2495-016 *et al.* (issued Apr. 14, 2004). *See also* FTC Comment before FERC, In the Matter of Market-Based Rates for Public Utilities, FERC Docket No. RM04-7-000 (July 16, 2004), *available at* http://www.ftc.gov/os/comments/ferc/v040021.pdf.

³ FERC, Order on Rehearing and Modifying Interim Generation Market Power Analysis and Mitigation Policy, *supra* note 2, at ¶¶ 70-72. "[T]he pivotal supplier analysis focuses on the ability to exercise market

switch to, or rely upon, an historical contestable load analysis, because it is not an economically sound analysis of actual or potential generation market power in wholesale electric power markets.⁴

This comment identifies substantial differences between historical contestable load analysis and the economically sound method of analyzing horizontal market power set forth in the Horizontal Merger Guidelines ("Merger Guidelines") issued by the FTC and the U.S. Department of Justice.⁵ On previous occasions, the FTC has urged FERC to assess market power in a manner that is consistent with economic principles.⁶ In assessing market power in connection with enforcement of the antitrust laws, the FTC typically not only delineates relevant markets and computes market shares and

power unilaterally. Is essentially asks whether the market demand can be met absent the applicant during peak times. . . . If demand cannot be met without some contribution of supply by the applicant, the applicant is pivotal. In markets with very little demand elasticity, a pivotal supplier could extract significant monopoly rents during peak periods because customers have few, in any, alternatives." The applicant's market share "indicates whether a supplier has a dominant position in the market, which is another indication of whether the supplier has unilateral market power and may indicate the presence of the ability to facilitate coordinated interaction with other sellers." *Id.* at \P 72.

⁴ Although FERC specifies analyses that applicants must provide, it invites applicants and interveners to present additional historical evidence if that will provide a more accurate assessment of market power issues. *Id.* at \P 66 & n.59.

⁵ U.S. Dep't of Justice and Fed. Trade Comm'n, Horizontal Merger Guidelines (Apr. 2, 1992; revised, Apr. 8, 1997), *available at* <u>http://www.ftc.gov/bc/docs/horizmer.htm</u>. In a related comment, the American Public Power Association ("APPA") and the Transmission Access Policy Study Group ("TAPS") oppose the use of historical contestable load analysis. Their opposition focuses in part on differences between the proposal and the Merger Guidelines. The APPA/TAPS filing includes an affidavit prepared by Dr. Darren Bush of the University of Houston Law Center (and formerly an economist and attorney in the Antitrust Division of the U.S. Department of Justice). *See*

http://www.tapsgroup.org/sitebuildercontent/sitebuilderfiles/050314_appataps_comments.pdf (Mar. 14, 2005).

⁶ See, e.g., Comment of the Federal Trade Commission, FERC Docket No. RM04-7 (July 16, 2004), available at <u>http://www.ftc.gov/os/comments/ferc/v040021.pdf</u>. The FTC stated repeatedly that consumers benefit when markets operate unburdened by substantial and durable market power. *See, e.g.*, Letter of the Federal Trade Commission to Thomas E. Bliley, Chairman, House Committee on Commerce, on H.R. 2944, The Electricity Competition and Reliability Act (Jan. 14, 2000), *available at* <u>http://www.ftc.gov/be/v000002.htm</u>. These comments do not take any position on whether and when rate regulation might be desirable; rather, the comments discuss how to use economically sound principles to implement Congress' statutory directives to FERC.

concentration but also evaluates whether market conditions are such that a seller, or group of sellers, would be likely to exercise market power. In addition to assessing market power, FERC may wish to take into account the potential costs, including distortions in investment incentives that may result from price regulation in deciding applications for market-based pricing authority.

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The FTC is an independent agency of the federal government responsible for maintaining competition and safeguarding the interests of consumers through enforcement of the antitrust and consumer protection laws and through competition policy research and advocacy. In the electric power industry, the FTC often analyzes regulatory or legislative proposals that may affect competition or the efficiency of resource allocation and reviews proposed mergers involving electric and gas utility companies. In the course of this work, as well as in antitrust and consumer protection research, investigation, and litigation, the FTC applies established legal and economic principles and recent developments in economic theory and empirical analysis to competition issues. As part of its competition advocacy program, the FTC has released two staff reports on electric power industry restructuring issues at the wholesale and retail levels.⁷ In addition, the FTC and its staff have filed numerous competition advocacy

⁷ FTC Staff Report: Competition and Consumer Protection Perspectives on Electric Power Regulatory Reform (July 2000), available at <u>http://www.ftc.gov/be/v000009.htm</u> (compiling previous comments that the FTC staff provided to various state and federal agencies); FTC Staff Report: Competition and Consumer Protection Perspectives on Electric Power Regulatory Reform, Focus on Retail Competition (Sept. 2001), available at <u>http://www.ftc.gov/reports/elec/electricityreport.pdf</u>.

comments on electricity restructuring efforts with FERC and the states. The FTC staff also contributes to competition filings with international competition organizations.⁸

II. Description of Historical Contestable Load Analysis

The historical contestable load analysis proposal compares total wholesale load seeking competitive supply alternatives to the total competitive generation resources that are available to serve those loads during the test period. For the wholesale supplier seeking market-based rates, its available competitive generation consists of its total generation minus its load obligations (which consist primarily of obligations to serve native load).⁹ According to the proposal, if available competitive generation resources are twice as large as the load seeking supply in the test period, and if the applicant can demonstrate that competitive generation resources are not "unduly concentrated," then the applicant is deemed not to have supplier market power and the applicant should be granted market-based rate authority. It is not clear why the proposal uses "twice as large" as the standard, nor does the proposal specify what "unduly concentrated" means in terms of the Herfindahl-Hirschman Index ("HHI") or other market share concentration measures.¹⁰

This proposal has some intuitive appeal because it includes elements that wholesale customers are likely to consider when evaluating prospects to obtain wholesale

⁸ The FTC and the Department of Justice participate as delegates from the United States in a number of international organizations, such as the Organization for Economic Cooperation and Development. As part of this process, the FTC staff contributes to the United States' "country reports" on competition topics. When requested by the Department of State, the FTC staff also contributes to U.S. comments on proposed regulatory reforms in other nations.

⁹ As noted in note 1, *supra*, native load is the quantity required to provide electric power to the utility's retail customers.

¹⁰ The elements of the proposed analysis are described in the historic contestable load analysis "Preparation Guidelines."

supply. These considerations – all of which are relevant – include the amount of available generation in an area, the amount of demand in the area not covered by native load obligations, and the amount of transmission transfer capability available to bring in electric power from other areas.

The basic problem with the proposal, however, is that historical contestable load analysis is not a reliable test of market power. The historical contestable load proposal fails to include a number of potentially important considerations in its framework for assessing horizontal market power, and the elements that it does include are not considered in an economically sound manner.¹¹ In sum, the proposal does not represent an analytical advance over existing techniques to evaluate horizontal market power, and it falls far short of the economically sound framework for market power analysis presented in the Merger Guidelines.

III. Evaluation of Historical Contestable Load Analysis as a Method to Assess Generation Horizontal Market Power

This section discusses four problems with the historical contestable load proposal and contrasts it with a market power analysis conducted under the Merger Guidelines framework.¹²

1. *The Role of Price in Market Delineation*. The proposed historical contestable load analysis ignores the critical role of price to delineate economically meaningful product and geographic markets to assess market power.¹³ For example, market

¹¹ In addition, the proposal does not provide for any sensitivity analysis that would establish the robustness of the results of historic contestable load analysis.

¹² Aspects of these points are raised in the affidavit of Dr. Darren Bush that was filed as an attachment to the comment of the APPA and TAPS, *supra* note 5.

¹³ Comments of the American Antitrust Institute, FERC Docket No. RM04-7-000 (filed Mar. 14, 2005), *available at* <u>http://www.antitrustinstitute.org/recent2/392.pdf</u>.

delineation under the Merger Guidelines examines whether it would be profitable for a hypothetical monopolist in the proposed market to "impose at least a small but significant and nontransitory increase in price."¹⁴ A chief reason why a price increase might not be profitable is that buyers could turn to suppliers outside of this proposed market who could undercut the price increase. In such a case, these close substitute products would be added to broaden the initial proposed market. One would continue to add the closest substitute products or services to the market until a hypothetical monopolist could profitably impose a small but significant nontransitory price increase.

Because the historical contestable load proposal does not include a price threshold in the assessment of available supply, it erroneously treats all suppliers as though they would be willing to operate their generators at capacity even if their variable costs for relevant outputs exceeded prevailing prices.¹⁵ It also disregards the fact that product and

¹⁴ Merger Guidelines, § 1.0. Customers' responses to price changes are a key determinant of the profitability of restricting supply (raising prices above the competitive level). Also, differences in generation capacity portfolios give rise to different incentives to raise prices above competitive levels in organized spot markets. Suppliers often have a range of generating units: base-load, mid-merit, and peaking units. Base-load generators usually are dispatched any time that they are operable, either because they have the lowest variable costs or because they cannot be turned on and off quickly and thus are left online (*e.g.*, nuclear plants). In contrast, peaking generators usually operate only during peak demand periods and can be brought online very quickly, although their variable costs are too high to warrant operation during off-peak periods.

A supplier with inframarginal units, such as base-load or mid-merit, may have strong incentives to withhold its peaking units from the market during periods of increased demand so as to raise the marketclearing price that all of its inframarginal units receive. A utility is more likely than any other suppliers in the market to have inframarginal units, and thus is likely to have greater incentives than other suppliers to withhold capacity. If independent generation firms are not as large and do not have individual generators at the margin, the utility may also have a greater ability to exercise market power by reducing its output.

The United Kingdom electricity regulator examined these incentives when it investigated whether the two dominant generators in the U.K. were exercising market power in the early 1990s. The regulator determined that divestiture of some mid-merit generators – rather than divestiture of a portion of generation capacity of all types – would be sufficient and more effective because the localized competitive problems centered on the generators owned by the dominant suppliers in the mid-merit segment of the generation supply curve. FTC Staff Report, *Competition and Consumer Protection Perspectives on Electric Power Regulatory Reform, supra* note 7, Ch. I.

¹⁵ The historical contestable load proposal generally leaves market delineation up to the discretion of the applicant rather than specifying a sound economic method for such analysis. The proposal calls for the

geographic markets vary by time of day – thus, each generating unit is not in each relevant market. For example, an evaluation of the relevant market based on the Merger Guidelines would not include peaking units with high marginal costs of generating energy in the relevant market for energy during off-peak hours, when the competitive price of energy would be below the marginal cost of these peaking units.¹⁶

2. *Contractual and Legal Restrictions*. The historical contestable load proposal disregards important contractual and legal restrictions on available generators and on the generators from which electricity customers are allowed to buy if faced with an anticompetitive price increase. This disregard can result in the improper inclusion within the relevant markets of generating units that customers could not turn to in the face of a small but significant and nontransitory price increase by an applicant for market-based rates. Including firms in the market that are not actually available to customers may result in a downward bias in market concentration calculations¹⁷ and can lead to underestimation of market power concerns. In contrast, the market delineation approach

applicant to select whatever geographic and product markets it prefers. Given an applicant's incentives to show that it does not possess market power, the proposal's discretionary approach to market definition is unreliable.

¹⁶ FERC's market share screen suffers from a similar weakness by including all available generators in all periods of time in calculating available capacity.

¹⁷ FERC's market share screen also may yield inaccurate market share calculations. The delineation of product and geographic markets has to be accurate in order for market share calculations to be meaningful. By designating control areas as relevant geographic markets, the market delineation approach used in FERC's market share screen emphasizes administrative convenience over economic accuracy. For example, FERC may define the geographic market as a control area even though the market would include additional control areas or parts of control areas if one conducted the analysis pursuant to the methodology of the Merger Guidelines. Conversely, FERC may define the geographic markets as an entire regional transmission organization ("RTO") footprint despite the fact that transmission constraints within the RTO are likely to result in smaller, separate geographic markets during some periods of time – *i.e.*, temporal product markets – under a Merger Guidelines approach. As a result, the market shares of applicants as measured by FERC may be biased or arbitrary. As a remedy for this problem, we recommend that FERC improve the accuracy of market delineation by using a Merger Guidelines approach or, failing that, accept share calculations based on administratively convenient market delineations only if the market shares are not sensitive to a range of alternative geographic market definitions.

prescribed by the Merger Guidelines¹⁸ takes into account contractual and legal restrictions. For example, the PJM RTO¹⁹ restricts exports of power when reserve margins within PJM are low. If the PJM RTO declares a supply emergency within PJM, generators within PJM are obligated to curtail wholesale power sales to customers outside of PJM.²⁰ During peak demand periods in PJM, the proposal would assume that exports from PJM are available, when in fact they would not be.

Another example of relevant legal restrictions is state renewable fuel generation ("green power") requirements. Wholesale customers subject to state renewable resource generation requirements are legally obligated to procure a portion of their electricity supply from renewable generation sources. If this requirement is a binding constraint on

¹⁸ Electric demand and supply conditions at any one point in time are largely independent of those in other periods. Hence, "[i]n the current wholesale electricity market, short periods of time (*e.g.*, hour or one-half hour periods) often represent distinct product markets because electricity demand cannot easily be shifted from one time period to another and because electricity cannot easily be stored in large quantities." FTC, Analysis of Proposed Consent Order to Aid Public Comment, *PacifiCorp et al.*, FTC File No. 971 0091 (Feb. 18, 1998), *available at* <u>http://www.ftc.gov/os/1998/02/9710091.ana.htm</u>. This means that an assessment of market shares based on uncommitted capacity at the peak demand period will entail reducing the applicant's total capacity in the period by its native load obligation in that same period. *See* Section IV of FTC comment to FERC in the Matter of Information Requirements for Available Transfer Capability, FERC Docket No. RM05-17-000 (Aug. 22, 2005), *available at* <u>http://www.ftc.gov/os/2005/08/050823availtranscapab.pdf</u>. The view that native load obligations should be

<u>http://www.ftc.gov/os/2005/08/050823availtranscapab.pdf</u>. The view that native load obligations should be averaged over a longer period for this calculation is therefore misplaced.

¹⁹ PJM is the regional transmission organization that originally included Pennsylvania, New Jersey, Maryland, Delaware, and the District of Columbia. PJM subsequently expanded to the South and West to approximately three times its original size in terms of generation capacity and geographic scope.

²⁰ "The [PJM] Office of the Interconnection shall curtail deliveries to an External Market Buyer if necessary to maintain appropriate reserve levels for a Control Zone as defined in the PJM Manuals, or to avoid shedding load in such Control Zone." PJM Interconnection, Third Revised Rate Schedule FERC No. 24, Section1.10.6 (Apr. 30, 2004), *available at*

http://www.pjm.com/documents/downloads/agreements/oa.pdf. In June 1998, PJM repeatedly declared generation emergencies and cut off exports (5,300 mw on one day). The 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), *available at* http://www.ferc.gov/legal/maj-ord-reg/land-docs/mastback.pdf, discusses these declarations and the likely effects on wholesale pricing in other areas.

customers (that is, customers buy only as much green power as is required), then "green power" is likely to be a separate relevant product market.²¹

3. *Transmission Discrimination Affects Market Delineation*. The historical contestable load proposal ignores the potential for the transmission operator to prevent customers from switching away from the generation units it owns. It assumes that transmission discrimination is absent despite potential incentives to use transmission discrimination to reduce competition.²²

Further, the transmission operator has incentives to select periods for historical contestable load analysis in which it did not discriminate and had no incentives to do so. There may be other periods, however, in which it did discriminate, and therefore was able to exercise market power. Consequently, the historical contestable load analysis could disregard important and common changes in market conditions. Interactions between generation market power and transmission market power that follow changes in supply²³

²¹ For example, Maine has a requirement that 30 percent of each utility's supply come from renewable energy sources. Other states have adopted renewable requirements or are considering doing so. The FTC staff previously observed that Maine's renewable requirement could raise market power concerns regarding the subset of generators that qualify as renewable energy generators. Comment of the Staff of the Bureau of Economics before the Maine Department of the Attorney General and the Maine Public Utilities Commission regarding "The Interim Report on Market Power in Electricity" (May 29, 1998), *available at* http://www.ftc.gov/be/v980011.htm.

²² FERC has described in detail how transmission discrimination disrupts the operation of wholesale electricity markets. *See Regional Transmission Organizations*, Order No. 2000 (Dec. 20, 1999), *available at* <u>http://www.ferc.gov/industries/electric/indus-act/rto/iss-2000/order-2000/2000.pdf</u>.

²³ Supply conditions are part of the analysis in the Merger Guidelines' assessment of (a) suppliers in the market and (b) entry conditions. Merger Guidelines §§ 1.3 and 3, respectively. The proposal does not address entry conditions. Additional demand conditions are taken into account in the analysis of potential adverse competitive effects in § 2 of the Merger Guidelines.

and demand conditions are potentially important and are not considered by the historic contestable load analysis.²⁴

4. *Transmission Constraints Affect Market Delineation*. The proposal's treatment of transmission constraints is inconsistent with economically sound market delineation. The proposal identifies the relevant geographic market independent of the location of some of the suppliers to which customers likely would turn in the event of a price increase. By contrast, a properly delineated market contains all of the sources of supply to which customers likely would turn to in order to undermine an anticompetitive price increase imposed by one or more suppliers. Whether a customer is likely to turn to a particular alternative supplier depends on the risk that such supplier will not be able to deliver the product. This analysis is not – as the proposal suggests – a separate step to be completed after the geographic market has been delineated. Rather, it is an integral component of defining an appropriate geographic market.

IV. Conclusion

The historical contestable load proposal suffers from substantial defects. These defects involve conceptual and measurement techniques that are at odds with the sound economic framework for horizontal market power analysis set forth in the Merger Guidelines. Accordingly, the FTC recommends that FERC reject use of a contestable load in assessing generation market power.

²⁴ FERC Order No. 2004 consists of behavioral rules seeking to address concerns about strategic use of transmission discrimination by vertically integrated utilities to reduce wholesale competition facing affiliated generators. *See* Comment of the Federal Trade Commission before FERC in the Matter of Market-Based Rates for Public Utilities, *supra* note 2, § II.B; Comment of the Electric Power Supply Association before FERC in the Matter of Standards of Conduct for Transmission Providers, Docket No. RM01-10-000 (2002), *available at* http://www.epsa.org/forms/uploadFiles/afflconductcomments6-28.pdf.