UNITED STATES OF AMERICA
FEDERAL TRADE COMMISSION
WASHINGTON, D.C. 20580

Before the
United States of America
Federal Energy Regulatory Commission

Investigation of Terms and Conditions of Public Utility Market-Based Rate Authorization; Order Establishing Refund Effective Date and Proposing to Revise Market-Based Rate Authorization

Docket No. EL01-118-000

Comment of the Staff of the Bureau of Economics and the Office of the General Counsel of the Federal Trade Commission(2)

January 7, 2002

I. Introduction and Summary

The staff of the Bureau of Economics and the Office of the General Counsel of the Federal Trade Commission (FTC) appreciates this opportunity to present its views concerning the Federal Energy Regulatory Commission's (FERC) proposal to revise market-based rate tariffs and authorizations. Under the proposal, authorization to charge market-based rates for electric energy and ancillary services at wholesale in interstate commerce would be conditioned on a seller not engaging in anticompetitive behavior or the exercise of market power. Violation of this provision would constitute a violation of the tariff or rate schedule on file. FERC proposes to address such violations through refunds or other remedies.

The FTC is an independent administrative agency responsible for maintaining competition and safeguarding the interests of consumers. Staff of the FTC often analyzes regulatory or legislative proposals for the electric industry that may affect competition or the efficiency of the economy in addition to its review of proposed mergers involving electric and gas utility companies. 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 competition issues. The Commission has issued two Staff Reports (July 2000 and September 2001) on electric power market restructuring issues at the wholesale and retail levels. The July 2000 FTC Staff Report established a policy framework for increased competition in wholesale and retail electric power markets.(3) The September 2001 FTC Staff Report reviewed those features of state retail competition plans that have provided benefits to consumers and those that have not. It also provided recommendations as to whether states had sufficient authority to implement successful retail competition programs.(4)

In our view, before allowing public utilities the ability to sell electric energy and ancillary services at market-based prices, structural conditions should be in place to support effective competition in wholesale electric markets. A structural approach is preferable to the use of behavioral rules to guard against the exercise of market power. Structural remedies are often superior because they directly address the incentives and ability to exercise market power and because, once they are in place, they allow suppliers to gain more directly from meeting various customer

preferences. Moreover, behavioral remedies, such as reverting to regulated rates, may distort investment decisions and create other inefficiencies.

Nonetheless, if behavioral rules are used to attempt to remedy exercises of market power, we agree that FERC should clarify the conditions under which a supplier exercises its market-based rate authority in a manner that produces unjust and unreasonable rates.(5) Clarification is likely to reduce regulatory risk in wholesale electric power markets, thereby increasing the ability of suppliers and customers to project wholesale prices and to make efficient consumption and investment decisions.

We concur with FERC's conceptual description of some practices (namely withholding of capacity, both physically and economically) that are likely to represent the exercise of market power. We caution, however, that the proposed behavioral standard retains significant ambiguities that may make its application unworkable or inconsistent with economic efficiency. These difficulties, even with a clarified behavioral standard, reinforce our view that establishing initial structural conditions (such as easing entry conditions, eliminating transmission grid bottlenecks, or restructuring the ownership of generation) that support effective competition is likely to be a better route before public utilities are authorized (or reauthorized) to price supplies at market-based rates.

II. Structural Conditions Conducive to Competition Are Likely to Be the Most Effective Assurance of Competitive Market-Based Rates

A fundamental problem in addressing existing or prospective market power through behavioral rules is that this approach does not change the underlying incentives to exercise market power. By addressing directly suppliers' incentives to withhold supply (and thereby increase prices), FERC may obtain greater certainty that suppliers will not have incentives to exercise any market power they may have. Further, a structural approach is less likely to result in suppliers exercising market power through some unanticipated form that will create new regulatory risk and require further revisions in the pricing rules. In our experience, structural remedies, such as easing entry conditions, eliminating transmission grid bottlenecks, or restructuring the ownership of generation, warrant careful consideration exactly because they directly reduce incentives to withhold capacity.(6) FERC's recent emphasis on seeking nondiscriminatory, open access transmission through a structural RTO approach is consistent with our emphasis on giving increased weight to structural remedies. Given this experience and the potential ambiguities in ascertaining the exercise of market power, FERC may wish to compare the cost/benefit relationships associated with its proposed behavioral and structural approaches to determine which will result in the greater increase of net benefits to consumers.

III. If FERC Decides to Move Forward With Behavioral Rules, Its Proposed Definition of the Exercise of Market Power Is Reasonable Conceptually, but, Ambiguities in Its Application May Make It Unworkable

FERC proposes to define anticompetitive behavior or the exercise of market power to include behavior that raises the market price through physical or economic withholding of supplies.(7) It defines physical withholding as failure of a supplier to offer its output to the market during periods when the market price exceeds the supplier's full incremental costs. Economic withholding is defined as offering output to the market at a price that is above both the supplier's full incremental costs and the market price. FERC also includes under the definition of withholding, efforts by a supplier to erect barriers to entry that limit or prevent others from offering supplies to the market or that raise the costs of other suppliers.(8)

We support clarification of the actions that FERC considers to be anticompetitive behavior or the exercise of market power. Clarification is beneficial because it reduces regulatory risk for both suppliers and customers. In a situation in which suppliers with market-based rate authority are found to be charging prices that are above just and reasonable levels (and, therefore, subject to potential refunds), unclear rules create regulatory risk for both suppliers and customers because both face less certainty about the level of final prices. Regulatory uncertainty about projected

prices may distort the investment decisions of both suppliers and customers. Clarifying standards for granting market-based rates and the exercise of that authority is likely to improve market performance by reducing regulatory risk, thus providing increased certainty about investment incentives for suppliers and customers. To the extent that FERC continues to apply behavioral rules against the exercise of market power, we encourage FERC's efforts to clarify and increase the accuracy of the behavioral criteria it uses in granting market-based rate authority

In general, FERC has identified appropriate and reasonable definitions of the exercise of market power in the electric power context. The implementation of these definitions, however, raise potential issues that may be difficult to overcome from an antitrust enforcement perspective and an economic efficiency perspective. We discuss the antitrust issues first, followed by the economic efficiency issues, with the expectation that there may well be others.(9) Our main concern is that these ambiguities may be pervasive and difficult to clarify further in a manner consistent with efficiency and quick resolution at reasonable cost.(10) Indeed, antitrust has generally had difficulty defining costs and the appropriate cost-price relationship.(11) If the ambiguities in defining, identifying, and remedying behaviorally the exercise of market power through references to costs, as described below, become sufficiently great, the proposed rule may be unworkable.

FERC's definition of anticompetitive behavior and the exercise of market power embodies a "duty to deal" in that a supplier is required to offer supply under certain conditions. This is generally not the case under the antitrust laws. Courts have found that, under the Sherman Act, firms generally have the right to deal with -- and not to deal with -- whomever they choose,(12) although the right to refuse to deal with others has been qualified in the case of a monopolist in certain circumstances.(13) Courts generally have not found a duty to deal where the decision not to deal is made unilaterally by the seller to enhance its own profitability. Thus, when a supplier is charging a monopoly-based price, it may be exercising market power, but it is not engaging in anticompetitive behavior. Because antitrust will generally not impose a duty to deal on a supplier that is exercising market power, FERC may want to look beyond antitrust concepts to determine whether a supplier is charging unjust and unreasonable rates.(14)

From an economic efficiency perspective, the primary cause of ambiguities relates to the extent to which the proposed rules recognize a supplier's opportunity cost.(15) For two broad categories of generators, hydro facilities and generators operating under emission constraints, the opportunity cost concern about the rule is front and center. Both of these types of generators are likely to be unable to sell into the market in some later periods if they supply the market at present because either the water will have left the reservoir or the emissions cap has been reached for the time period. A regulatory rule that requires each of these generators to sell electricity into the market as soon as price exceeds incremental costs will deprive the market of this supply later when such supply could be more valuable. Application of the rule to these units is likely to be inefficient and to increase price volatility. In some markets, these two categories of generators represent a substantial portion of capacity and supply decisions about when to run these units may significantly affect prices.

In our view, the opportunity cost problem is unlikely to be limited to hydro plants and plants with emission constraints. Rather, the issue arises more generally. As an example, consider the task of determining whether a generator is experiencing "mechanical problems" that justify not supplying the market during a particular time period. One source of ambiguity in such a determination is the relationship between past and future operation of a generating unit. Typically, intensive use of equipment in one period of time reduces its prospective reliability in another period of time. From a customer perspective, optimal use of a generator might reasonably consist of highly likely operation in periods of extremely high demand made possible by reducing output during less extreme demand conditions. Acting in accord with this perspective, a generator might well withhold supply even during some peak demand periods to increase the certainty that it will not have a mechanical failure during some anticipated period of even higher demand. Under these circumstances, judging whether a plant is being anticompetitively withheld may rest on the reasonableness of the firm's projections of future demand spikes.(16) Basing penalties on the "accuracy" of a firm's projections of unknown circumstances may present substantial investigatory challenges, especially within abbreviated deadlines for discovery.

Another ambiguity in applying the proposed rules involves determining whether the price offered by a supplier is above the market price (assuming the offered price is also above the firm's full incremental costs). After the fact, such a determination is likely to be straightforward (if a mechanism for determining the market clearing price in each period exists), but a comparison between the offered price and the actual market clearing price may not distinguish between bids that constitute intentional withholding and bids that result in unintentional withholding. In a market context in which many small suppliers are all paid the market clearing price (which implies that differences in bids that exceed incremental costs, but are accepted, do not affect the revenues received by a generator), there is little incentive for suppliers to bid above incremental costs.(17) Markets that nominally provide a single price to all dispatched suppliers, however, may not function this way due to other market rules.(18) Where markets have a pay-as-bid aspect, suppliers have strong incentives to bid at a level just below the anticipated market clearing price. But the market clearing price is unknown ex ante -- therefore it is likely that some suppliers will unintentionally overestimate the market clearing price and bid accordingly.

Unless FERC can assure itself that there are no aspects of the market that function on a pay-as-bid basis, it may not be possible to separate intentional from unintentional withholding on the basis of a bid by a low-cost supplier that is above the actual market-clearing price without judging the reasonableness of the firm's projection of the market clearing price. And, the market-clearing price is inherently unknown before the fact, so that mistakes in estimating this price are inevitable.

We note that this example is described from the perspective of a supplier whose overestimate of the market-clearing price in a market with pay-as-bid aspects was not intentional. Alternatively, however, systematic overestimates of the market clearing price could be used intentionally by a supplier to mask its anticompetitive withholding. Separating systematic, intentional overestimation of the market clearing price from true errors in such estimates is likely to present a significant investigative challenge. Moreover, costs of evading behavioral rules also can add substantially to total costs for customers. In particular, exercising market power in this context could create incentives to evade detection up to a point that the costs of evading detection have completely eroded the profits from exercising market power.(19)

V. Conclusion

FERC proposes to clarify the conditions that it will require for granting and renewing authority to charge market-based rates. We recommend consideration of structural requirements in preference to behavioral rules in granting market-based rates. If FERC determines to continue application of behavioral rules against market power, we encourage clarification of the standards because it is likely to improve efficiency by reducing regulatory risk faced at present by both suppliers and customers. As it undertakes reevaluation of the basis for granting market-based rates, FERC may wish to recognize that ambiguities are likely to remain in the behavioral definition of what constitutes an exercise of market power. Because behavioral rules such as prohibitions against the exercise of market power do not directly alter incentives to exercise market power and may lead to costly efforts to evade the regulations or to exercise market power through other means, FERC may wish to give greater weight to structural remedies that directly reduce incentives to withhold capacity physically or economically even if it continues to apply behavioral rules.

Respectfully submitted,

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Endnotes:

1. See endnote 2.

2. This comment represents the views of the staff of the Bureau of Economics of the Federal Trade Commission and the staff of the General Counsel's Office of Policy Studies. They are not necessarily the views of the Federal Trade Commission or any individual Commissioner. The Commission has, however, voted to authorize the staff to submit these comments. Inquiries regarding this comment should be directed to John C. Hilke, Economist and Electricity Project Coordinator in the Bureau of Economics (801-524-4440 or jhilke@ftc.gov) or Michael Wroblewski, Assistant General Counsel for Policy Studies (202-326-2155 or mwroblewski@ftc.gov).

3. FTC Staff Report: Competition and Consumer Protection Perspectives on Electric Power Regulatory Reform (Jul. 2000) http://www.ftc.gov/be/v000009.htm [FTC July 2000 Staff Report]. This report compiles previous comments that FTC Staff had provided to various state and federal agencies. For example, FTC Staff has commented to FERC on electric power regulation in Docket No. RM99-2-000 (regional transmission organizations) (Aug. 16, 1999); Docket EL99-57-000 (Entergy transco proposal) (May 27, 1999); Docket RM98-4-000 (Sept. 11, 1998) (merger filing guidelines); Docket No. PL98-5-000 (May 1, 1998) (ISO Policy); Docket Nos. ER97-237-000 and ER97-1079-000 (New England ISO) (Feb. 6, 1998); Docket No. RM96-6-000 (merger policy) (May 7, 1996); Docket Nos. RM95-8-000 and RM94-7-001 (open access) (Aug. 7, 1995). The FTC staff comments are available at: http://www.ftc.gov/be/advofile.htm.

4. FTC Staff Report: Competition and Consumer Protection Perspectives on Electric Power Regulatory Reform, Focus on Retail Competition (Sep. 2001) http://www.ftc.gov/reports/index.htm [FTC September 2001 Staff Report].

5. The discussion occurs within the context of FERC's authority to regulate rates and its decision to seek some of the benefits of competition in wholesale electric power markets by granting authority to charge market based-rates within a zone of allowed price levels and practices. This contrasts with antitrust law enforcement which focuses on changes in market power associated with mergers and assesses existing market power primarily as part of evaluating whether certain activities (usually those of leading firms) are anticompetitive. The exercise of market power, outside the context of an anticompetitive merger or of potentially unfair acts and practices, is not illegal under the existing antitrust laws. *See* Prepared Statement of the Federal Trade Commission, Committee on the Judiciary United States House of Representatives (Jul. 28, 1999) http://www.ftc.gov/os/1999/07/electricityHR.htm.

6. For a further discussion of the importance of structural remedies in the electric industry, see FTC July 2000 Staff Report, *supra* n 2, Chaps. II and III. For example, the Staff Report recognizes that monitoring and enforcing compliance with behavioral rules that attempt to guard against discrimination may be particularly difficult when quality of service is time sensitive, as it is in the electric industry. Because electric power is sold on an hourly basis, market dynamics - and thus the incentive and ability to exploit market power - can shift over the course of each day, making it virtually impossible to intervene before conditions have changed. Id. at 16.

7. Presumably this action will be profitable because a supplier is unlikely to increase price if the reduction in sales of the product would be large enough to offset the expected gains from the increase in price. See Section 1, Market Definition, Measurement and Concentration, United States Department of Justice and Federal Trade Commission, Horizontal Merger Guidelines, issued Apr. 2, 1992, *revised* Apr. 8, 1997.

8. These generators may or may not own or control transmission. For the purposes of this discussion, the exercise of market power is restricted to horizontal market power of one or more generators. The discussion does not consider the exercise of market power that stems from anticompetitive discrimination by a transmission owner or operator that

may favor its own affiliated generation capacity. The discussion also does not consider the potential interaction between the exercise of horizontal market power and anticompetitive discrimination in transmission access.

9. Another likely ambiguity involves defining full incremental costs on a real-time basis, through an administrative proceeding that is consistent with economic efficiency. Issues such as startup costs, minimum load levels, and variability in fuel supply contracts are among the significant issues. As reported in the September 2001 FTC Staff Report, the states have experienced difficulties in defining a supplier's full incremental costs and, thus, have adopted differing definitions. An additional, more general problem with the use of full incremental costs could occur if pricing at such cost fails to cover fixed costs. If FERC's definition of market power had the effect of preventing suppliers from covering fixed costs, entry incentives would be reduced and net exit would occur.

10. In antitrust law enforcement, determination that firms have exercised market power can be highly complex and involve lengthy investigations. *See, e.g.*, the description of the FTC shared monopoly case against Kellogg et al, in F.M. Scherer and David Ross, Industrial Market Structure and Economic Performance, Boston: Houghton Mifflin, 464-66 (1990).

11. *See generally* Phillip E. Areeda and Herbert Hovencamp, Antitrust Law: An Analysis of Antitrust Principles and Their Application § 720 (2d ed. 2000).

12. *United States v. Colgate & Co.*, 250 U.S. 300, 307 (1919).

13. A partial list of cases in which the courts have circumscribed refusal to deal behavior include instances where a monopolist attempts to create or protect its monopoly in a single product or geographic market: a monopolist refuses to deal with customers or suppliers that deal with its competitors, *Lorain Journal Co. v. United States*, 342 U.S. 143 (1951); refuses to participate in a joint venture with a competitor, *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585 (1985); refuses to license technology to a competitor. *E.I. du Pont de Nemours & Co.*, 96 F.T.C. 653 (1980); or the classic case in which there is a refusal to supply bottleneck facilities, *Otter Tail Power Co. v. United States*, 410 U.S. 366 (1973). All of these acts involve conduct that encompasses more than just charging a monopoly-based, profit-maximizing price. For a general discussion of the case law on refusals to deal, see Kenneth L. Glazer and Abbott B. Lipsky, Jr., "Unilateral Refusals to Deal Under Section 2 of the Sherman Act," 63 *Antitrust L. J.* 749 (Spring 1995).

14. In most market contexts, there is no legal prohibition against a supplier exiting the market by destroying a facility or abandoning it. In such circumstances, it may appear inconsistent to prohibit a temporary withdrawal of that same capacity, which is likely to exert less upward pressure on prices than would permanent withdrawal. Accordingly, to the extent that the proposed duty stems from a regulatory model in which utilities have an "obligation to serve" all demand at a regulated price, FERC may wish to evaluate the reasonableness of its application to independent generators who did not invest in capacity at the insistence of state regulators.

15. There is a more fundamental problem in much of the country because there is no mechanism that establishes a single market price. In these areas, application of any rule that relates a generator's price offers to a market-clearing price appears to be inoperable. In the remaining discussion, we assume that a spot market mechanism is in place that allows identification of a single market-clearing price in each period of time for a given location and that the rule does not apply to prices resulting from bilateral contract negotiations. Such prices are not publically verifiable or easily obtainable.

16. We assume in the example that the generator makes no effort to conceal the purpose of the withholding by falsely claiming a mechanical failure at present, but rather insists that it shut down now to reduce the likelihood of a future mechanical problem. We note that the process of evaluating claims of mechanical failures may be time consuming, costly, invasive, and disruptive. It could also give rise to incentives to create or allow real mechanical failures.

17. See Alfred E. Kahn, Peter C. Cramton, Robert H. Porter, Richard D. Tabors, "Blue Ribbon Panel Report: Pricing in the California Power Exchange Electricity Market: Should California Switch from Uniform Pricing to Pay-as-Bid Pricing?" (Jan. 23, 2001).

18. See, e.g., Scott Harvey, William W. Hogan, "Issues in the Analysis of Market Power in California," working paper of Oct. 27, 2000 http://www.whogan.com (describing the implications of the ISO's "rational buyer" approach to securing ancillary service and the means of selecting generators to provide real-time intra-zonal congestion management). See also Market Surveillance Committee of the California Independent System Operator, Frank A. Wolak, Chairman, "Report on Redesign of California Real-Time Energy and Ancillary Services Markets (Oct. 18, 1999).

19. In providing estimates of the social costs of market power, some analysts include wealth transfers (as well as the dead weight loss), in part because firms have incentives to spend up to that value to defend the exercise of market power. (For discussion, see, e.g., F.M. Scherer and David Ross, Industrial Market Structure and Economic Performance, Ch. 18 (Boston, Houghton Mifflin Company, 1990).) Total effects of higher prices include two components, namely, wealth transfers from customers to the supplier(s) exercising market power, and dead weight loss, which stems from distortions of economic choices caused by the exercise of market power. Neither suppliers nor customers benefit from dead weight loss. From this perspective, regulatory evasion is a component of the costs of defending the exercise of market power.