

Prepared Statement of the Federal Trade Commission

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Commissioner**

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I. Introduction

Mr. Chairman and members of the Committee, I am pleased to appear before you today to present the testimony of the Federal Trade Commission concerning the important topic of deregulation and competition in the electric power industry, and how deregulation may raise issues of market power. I will also discuss how these issues affect mergers in an industry undergoing deregulation.

The staff of the Commission has in the past commented to the Federal Energy Regulatory Commission ("FERC") on the importance of wholesale competition⁽²⁾ and on the appropriate analytical framework for evaluating mergers.⁽³⁾ The staff also has provided comments to a number of states on the importance of considering the impact of market power as they introduce retail competition in the electric power industry.⁽⁴⁾ To further assist states and localities in examining these issues, on September 13th and 14th of this year, the Commission will hold a public workshop on market power and consumer protection considerations in the electric power industry.

The FTC is a law enforcement agency whose statutory authority covers a broad spectrum of the American economy, including the electric power industry. The Commission enforces, among other statutes, the FTC Act⁽⁵⁾ and the Clayton Act,⁽⁶⁾ sharing with the Department of Justice authority under section 7 of the Clayton Act to prohibit mergers or acquisitions that may "substantially lessen competition or tend to create a monopoly."⁽⁷⁾ In addition, section 5 of the FTC Act prohibits "unfair methods of competition" and "unfair or deceptive acts or practices," thus giving the Commission responsibilities in both the antitrust and consumer protection areas. The Commission also provides advice and guidance to states and other regulatory agencies on competition issues. Moreover, the Commission has experience in applying antitrust principles across many different industries.

The FTC's experience has taught the Commission that competition between market participants will ordinarily provide consumers with the benefits of low prices, good products and services, and innovation. We also think that these benefits should be provided in the electric power industry as a century of regulation gives way to competition. But these

benefits will not be achieved without an in-depth understanding of market power impacts.

There are huge resources at stake in this industry. Total industry revenues are estimated at \$200 billion a year, and total industry capital investment is around \$700 billion, or almost 10% of total U. S. capital investment. If the levels of cost savings and technological improvements in this industry approach those attained in other previously deregulated industries, many consumers likely will be substantially better off in terms of lower prices and increased choices.⁽⁸⁾ But, these potential savings and innovations will not appear automatically. Proper application and enforcement of antitrust principles are necessary to ensure that the benefits of competition reach consumers.

II. Regulatory Background in the Electric Power Industry

To evaluate the impact of market power issues in the electric power industry and to better understand the role of the antitrust agencies in addressing competitive issues in a deregulating industry, it is important to review the unique history of this industry. For most of this century, the electric power industry has been heavily regulated because the industry was perceived to be a natural monopoly. In an effort to minimize costs, the industry was organized as a series of local, vertically integrated monopolies. For the most part, the power company owned the generation, transmission, and distribution systems. Each of these local monopolies had market power, but it was market power that was controlled by federal and state regulatory bodies. Mergers were allowed to take place without regard to market power considerations because regulation prevented market power abuse.

Technical and organizational innovations in the last decade may have made room for competition in the generation and sale of electric power. But, the starting point for competition in the electric power industry is not the level playing field characteristic of a newly developing market. Instead, we are starting with regulated monopolies. Ensuring that consumers receive benefits upon deregulation may be greatly affected by the ability of the energy market to move to an open and competitive stance rather than one dominated by newly unregulated monopolies. How that occurs is largely dependent on the factors present in each case. In some instances, for example, there may be no transition problem because easy entry for competitors at the generation and transmission levels will eliminate most market power. In other instances, however, competitive constraints on existing market power may be only modest at best. In all cases, a recognition of market power issues is critical to achieving the benefits of competition.

While Federal antitrust laws are not a panacea for all competitive concerns, their application can help in this transition to competition by making sure that mergers do not aggravate market power problems or shield incumbent companies from new competition. The antitrust laws can also help by preventing anticompetitive acts and practices such as predation, raising rivals' costs, and discrimination in granting access to essential facilities that might be used to inhibit competition from new entrants or suppliers.

It is important to note, however, that current antitrust laws do not directly address the current conditions in the energy market where market dominance resulting from decades of

regulation are *not* accompanied by the above-described unfair acts and practices. To address these conditions, the Administration proposes to give FERC authority to assess existing market power and remedy it in wholesale power markets. The array of potential remedies would include ordering companies to divest generation assets to several buyers in order to decrease the companies' market dominance. Remedying existing market power in the *retail* segment is more problematic.

Anticompetitive conduct would be a predicate for antitrust enforcement against retail market power, while the local distribution monopolies may be able to exercise their power to the detriment of consumers without having to engage in clearly anticompetitive behavior. At present, all proposed energy reform efforts would leave states with substantial regulatory responsibilities for local energy distribution. Yet, regulating retail competition will entail reviewing the distribution and marketing of electric power across state lines in regional markets. It is unlikely that states will be well-suited to protect competition in these markets.

The Federal antitrust agencies, working in consultation with FERC, can significantly contribute to an assessment of existing market power in the following ways. First, the analytical methods and principles that we use to analyze mergers and unfair methods of competition are equally applicable to an existing market power problem in a wholesale or retail electric market. Second, the remedies applied to merger and non-merger cases can also be applied to alleviate existing market power. In sum, concerns about existing market power in this formerly monopolistic industry are appropriate. The Federal antitrust agencies can contribute to ensuring that newly deregulated energy markets are open and competitive. The Commission looks forward to working in consultation with FERC, along with the Department of Justice, to address market power issues.

III. Some Specific Concerns

Economic theory and experience with other industries tell us that the transition from regulated monopolies to competition is not an automatic process - doing it right requires actively promoting competition and guarding against practices that stifle competition. For several reasons, the previous accumulation and potential abuse of market power may blunt the competitive potential of deregulatory efforts.

To begin, industry participants have become used to a regulatory environment. As a result, some may attempt to protect or duplicate many of the comfortable aspects of that environment. Where they are accustomed to being a local monopoly and using the regulatory process to bar or disadvantage new entry, industry members may attempt to use monopolistic or cartel behavior (such as information-sharing) to protect their entrenched positions after deregulation. A monopolist will not ordinarily welcome new entry, and issues of access or structural realignment designed to promote access will have to be considered with those incentives in mind.

Second, the transition from regulation to competition is never instantaneous or complete. Market participants may find themselves subject to inconsistent requirements. Some participants may become subject to market forces while others remain regulated, or different

participants may be subject to different regulatory rules. It may be inefficient and unfair to have different regulatory rules apply to direct competitors. In the electric power industry, for example, potential anticompetitive behavior may be monitored by FERC, state public utility commissions, or the Federal antitrust agencies, depending on the pace and mix of deregulatory efforts. In a deregulatory environment, it is important to provide consistent competitive analysis and review.

Third, regulatory bodies may have policy goals other than competition that warrant consideration in the transition to a competitive environment. In the electric power industry, for example, universal lifeline service⁽⁹⁾ at low cost is an important public policy goal. Another important policy goal in the electric power industry is environmental protection. These considerations usually fall outside the scope of traditional antitrust analysis. Accordingly, some continuing regulation or other special provisions may be needed to ensure that other policy goals are taken into account.

Fourth, removing entry and capital expenditure controls from an industry subject to a long period of regulation will unleash pent-up demand for corporate restructuring. Resulting consolidations may be procompetitive or competitively neutral, or they may instead be an illegal attempt to acquire market power.

These four conditions imply that the antitrust laws will have to be applied flexibly to address the issues that arise in transitional, or formerly regulated, industries. Regulatory regimes are usually established in response to some market failure, perceived or actual, that makes market forces inadequate to protect consumers and promote efficiency. Even if a consensus exists that the existing regulatory schemes are unresponsive or ineffective, or that technology obviates the need for regulation, the impact of regulation on the industry structure, incentives, and expectations require that the antitrust agencies be especially sensitive in applying antitrust rules while market forces gain primacy.

Applying the antitrust rules with special care may not, however, mean a "hands off" approach. The consumer and efficiency gains from deregulation could be jeopardized without appropriate antitrust enforcement during and after deregulation. The goal is to see regulation replaced with competition, not with collusion or dominant firm behavior. Here, the antitrust laws' flexibility is a major advantage. Antitrust jurisprudence unfolds on a case-by-case approach, constantly adapting to new information and new experiences. Where, as here, the deregulated world will be significantly different from the experience of most industry participants, it is difficult to know in advance what types of oversight will work best. This condition suggests that fixing government oversight policy in concrete at an early stage could be counterproductive. Accordingly, flexible antitrust enforcement may be particularly important.

Although the decision about how to proceed has potentially substantial economic consequences for consumers, we will not comment on the method and scope of regulatory reform, but will state that strong antitrust oversight of the industry will and should remain vital no matter what course of deregulation is chosen.

IV. Market Power Issues

As previously stated, no matter how deregulation proceeds, market power issues must be addressed if the benefits are to accrue to consumers. Two kinds of market power are of antitrust concern as we move to retail electric competition. The first is horizontal market power, permitting prices to be raised above competitive levels for an extended period, and the second is vertical market power, that could be exercised through discriminatory access to transmission, which today largely remains a monopoly.⁽¹⁰⁾

A. Horizontal Market Power

Horizontal market power in this context refers to the ability of one or more electric generating or retailing firms to raise prices above competitive levels for an extended period of time without a significant loss of market share. Horizontal market power results in higher prices, inefficient allocations of scarce resources, and distortions of consumer choices. Concerns about horizontal market power in generation during deregulation have been heightened by the pioneering British deregulatory experience, as well as experience with the initial efforts in the United States. Following the implementation of electric industry restructuring in the United Kingdom, researchers determined that the two private generating firms that dominated the industry were exercising market power.⁽¹¹⁾ These findings prompted subsequent orders for divestiture of generation capacity. Very recent evidence from the initial deregulatory efforts in California indicates that market power problems in electricity generation exist there as well.⁽¹²⁾

B. Vertical Market Power

In addition to horizontal market power, effective antitrust oversight will require close examination of the incentives and ability of vertically integrated transmission monopolists, whose rate of return is regulated, to evade the regulatory constraint in order to earn a higher profit. Their participation in an unregulated market may give them the means to do so, either by discriminating against their competitors in the unregulated market or by shifting costs between the regulated and unregulated markets.⁽¹³⁾

It is important to note that the vertical relationships in the electric power industry are different from those in almost all others. The important question raised by this industry structure is how to ensure that the benefits of new competition occurring in power generation actually reach the consumer. A key to effective competition is to provide independent generators open access⁽¹⁴⁾ to vertically integrated transmission and distribution systems so that lower prices in generation are passed on to consumers. The problem is that a vertically integrated transmission monopolist ordinarily would have an incentive to discriminate against independent generators. As a result, consumers might be deprived of the benefits of an independent generator's lower costs. While one solution could be requiring vertically integrated companies to be split up so that transmission entities would not be controlled by generating companies, large scale forced divestiture could prove costly in terms of complex legal liability issues for existing contracts and the sacrifice of potentially important economies of scope and vertical integration.⁽¹⁵⁾ Consequently, the method chosen

by both the states and FERC to assure open access and efficient pricing in the transmission and distribution grids is to require that products be unbundled and to require that the pricing decisions of the vertically integrated firms be transparent.⁽¹⁶⁾

Two methods of unbundling currently are being used by regulators in the electric power industry. For wholesale sales of interstate transmission of electricity, FERC requires "functional" unbundling, whereby it orders a utility to grant open access to its transmission grid and charge the same prices to independent generators that it charges internally to its own generator plants. FERC, however, has initiated a rulemaking proceeding to determine whether to go beyond only requiring open access to monopolists' transmission facilities in light of "indications that continued discrimination in the provision of transmission by vertically integrated utilities may . . . be impeding fully competitive electricity markets."⁽¹⁷⁾ In fact, numerous independent producers and large industrial users have alleged discriminatory conduct in the operation of transmission facilities.⁽¹⁸⁾

A number of states, on the other hand, have opted for "operational" unbundling.⁽¹⁹⁾ To date, this has taken the form of an entity independent of the utility operating the transmission and distribution grids to ensure open access and transparent pricing, although the monopolist retains ownership of the physical assets. The operational unbundling plan may work to preserve economies of vertical integration, internalize loop flow externalities (caused by the fact that electricity does not follow a contract path, but rather the path of least resistance), and assure transparent investment signals for potential investors⁽²⁰⁾ while eliminating the strategic opportunities of the monopolist⁽²¹⁾ to favor subtly its own generating capacity.⁽²²⁾

C. Mergers

As previously noted, the final market power issue concerns mergers. For example, mergers between generating firms may create market power that could be exercised by withholding capacity in order to drive up rates, or mergers at the retail level, between electric utilities or between electric utilities and independent retail marketers, could harm existing or potential competition. Following deregulation, horizontal mergers are more likely than vertical mergers in the electric power industry, given the current high level of vertical integration.

1. Analytical Model

The FTC's merger analysis is not industry specific; it is designed to apply across all industries. Nonetheless, the electric power industry, like all industries, has certain unique features that would require that the analysis be applied in a flexible manner. Using the analysis described in the Horizontal Merger Guidelines, jointly developed by the Commission and the Department of Justice,⁽²³⁾ the enforcement agencies assess whether the proposed transaction would harm consumers of any relevant product or service through increased prices, lower quantity, quality or service levels, or reduced technological innovation.

Defining the relevant product and geographic markets is the first step in determining where any potential anticompetitive effects will be felt. A relevant product market is one in which

many consumers of the product would not switch to an alternative product if the price of the first product were increased by a small but significant amount.⁽²⁴⁾ Similarly, a relevant geographic market comprises the locations of all of the alternative suppliers to which customers would likely turn if prices of the relevant product rose by a small but significant amount.

In many industries, the more distinctive and important inquiry concerns the relevant product market, where the consumers' substitutes are determined. In the electric power industry, both product and geographic markets may prove difficult to define with absolute precision. Within the overall electricity market, discrete electricity product markets will need to be defined, taking into account, among other things, time, reliability, and interruptibility. The more difficult issue in this industry may be defining the relevant geographic market. As open access to the transmission and distribution grids becomes the norm, consumers will be able to turn to ever more distant sources of electricity. The geographic market is unlikely to be national in scope, but may include parts of Canada or Mexico during some periods. But establishing the relevant markets may be more complicated because the elements of defining the product market also change the scope of the geographic market.⁽²⁵⁾

Once markets have been determined, the participants and their market shares must be identified. A market that is divided evenly among many participants will rarely have the potential for abuse of market power.⁽²⁶⁾ The Merger Guidelines use a measure of market share distribution called the Herfindahl-Hirschman Index to determine the relative concentration of firms in the industry. In this industry, as in others, antitrust analysis goes significantly beyond the mere calculation of market shares. Certain economic characteristics may make this industry susceptible to cartel behavior at a level of concentration different from the point at which we would otherwise be concerned. A careful and thorough analysis of each transaction must therefore be undertaken once the relevant markets and market shares have been determined. If experience suggests that this industry is particularly subject to cartel behavior, or that mergers indirectly promote cartel behavior, then threshold levels of concern indicated by market shares may need to be adjusted.

Entry and efficiencies are factors that are given considerable emphasis in the Guidelines. If entry into a market is easy, post-merger market participants likely will be unable profitably to increase prices above the pre-merger level. Entry analysis in the electric power industry poses a number of difficulties. The size of an efficient generating plant has decreased significantly but it still may take longer than the Guidelines benchmark of two years to enter at that level. Siting and environmental problems may complicate and delay entry at any level. Excess capacity and the decommissioning costs of nuclear power plants are important factors to consider. The ease of entry in this industry may vary from case to case as relevant markets change. For instance, available sites for new building may be more abundant in some areas than in others, making entry quicker and less costly.

The potential for anticompetitive effects does not end the inquiry in a typical merger investigation. Where the potential for anticompetitive effects is a close question, the potential efficiencies generated by the merger must be considered. Cognizable efficiencies may include economies of scale, integration of production facilities, plant specialization,

and lower transportation costs.

The antitrust agencies have long considered efficiencies as relevant to the exercise of their prosecutorial discretion when deciding whether to challenge a transaction. In a close case, an agency may refrain from challenging a merger if it appears that the merger would generate substantial efficiencies. After a series of Commission hearings on Competition Policy in the New High-Tech, Global Marketplace indicated concern with how the antitrust agencies consider efficiencies in evaluating mergers, the Commission and the Department of Justice published a revised efficiency section for the Guidelines.⁽²⁷⁾

Efficiencies may have particular significance for the electric power industry. In an industry that has been pervasively regulated for many years, efficiencies are likely to play an enhanced role in motivating restructuring after deregulation. Where capital mobility was once circumscribed by regulators, firms will now be able to pursue the most efficient, market-determined structure.⁽²⁸⁾

2. Convergence Mergers

One particular type of vertical merger that may cause antitrust concern in a deregulated electric power industry is a convergence merger between a power generator and a supplier of fuel, such as a supplier of natural gas or coal. The Commission has recently investigated two such mergers and in both cases found potential anticompetitive effects, including raising rivals' costs and abuse of competitively sensitive information.⁽²⁹⁾

A competitive concern in a convergence merger could arise if a generating company acquires market power over the supply of fuel to its generating competitors or potential competitors. Such an acquisition could enable the generating company to raise its rivals' input costs or restrict their supplies and put them at a competitive disadvantage. In turn, the now-vertically integrated generating company could either raise the price of its electricity output or sell more of its own output since its competitors now have higher costs. Thus, convergence mergers can distort the market in two ways: customers can be forced to pay higher prices, which can distort consumer choices, and the acquiring company can favor its own generating facilities while other, more efficient plants may stand idle.

A second anticompetitive possibility is that the acquisition may give the generating company access to proprietary information about its competitors' costs. Since fuel costs are a substantial portion of generating costs, knowledge of competitors' fuel costs could give the firm an advantage in bidding situations. With access to this type of information, the firm could increase its price with confidence that it is still likely to win the bidding.

The Commission's *PacifiCorp* case contained potential threats to competition both from raising rivals' costs and from abuse of proprietary information. The investigation concerned PacifiCorp's proposed acquisition of The Energy Group PLC (TEG) and its subsidiary, Peabody Coal. PacifiCorp provides retail electric service in seven western states. Peabody produces 15 percent of the coal mined in the United States, and owned the Kayenta and Black Mesa mines located on the Navajo Indian Reservation in Arizona. The mines are the

sole source of supply for the Navajo power plant in Page, Arizona and the Mohave power plant in Laughlin, Nevada. A post-acquisition PacifiCorp would have had both the incentive and the ability to raise the price of coal to its competitors, Navajo and Mohave. Both the Navajo and the Mohave plants have substantial off-peak excess capacity which is used to supply other utility companies in the Southwestern states. Raising fuel costs to these plants would put upward price pressure on electricity over a wide regional area.

The acquisition also would have given PacifiCorp access to proprietary information about its competitors. Through Peabody's coal supply relationships, PacifiCorp could have learned highly sensitive data about competitors' costs and generator operating conditions. Peabody provided coal to approximately 150 power plants in the Western states, many of them competitors of PacifiCorp. The order settling the complaint would have required PacifiCorp to divest the Kayenta and Black Mesa mines and to establish a firewall that would have forbidden Peabody from disclosing certain non-public information to PacifiCorp.

In a second convergence merger, the Commission filed a complaint against CMS Energy Corporation's (CMS) proposed acquisition of two natural gas pipelines from subsidiaries of Duke Energy. CMS is a combination electric and gas utility and a CMS subsidiary provides natural gas to residential and industrial consumers in Michigan. In addition, it also owns and operates the only intra-state natural gas transmission system through which consumers can buy natural gas from other suppliers, either for their own use, or to use to produce electricity. As a pipeline customer, CMS has had an incentive to maintain competitive access into its system. But after the acquisition of the pipelines, CMS would have the incentive to restrict the other pipelines' access to its system in order to support price increases on its own pipelines. The order settling this case requires CMS to give shippers two options if they cannot deliver gas into its service area because the available interconnection capacity is less than actual capacity. CMS is required to accept gas at another pipeline delivery point at no additional cost if the shipper can deliver it there; otherwise CMS must loan gas from its own supply to the shipper in an amount equal to the volume of gas that could not be transferred through any of CMS's interconnection points. The order also requires CMS to post to an electronic bulletin board information which will let shippers know whether actual capacity is less than current capacity at non-CMS interconnects.⁽³⁰⁾

V. Conclusion

Deregulation in a number of industries has proven to be beneficial to many consumers and the competitive process. The deregulated industries generally exhibit lower prices, increased quality and quantity of goods and services, and heightened innovation. The electric power industry is currently experiencing substantial deregulation. While it is unclear whether that process will be driven by the states or by the Federal government, the outcome in either case should be that market forces will have an effect on firms long accustomed to the slower pace and shelter of regulated life.

The potential for consumer savings and increased choice is enormous, but it is certainly not guaranteed. As our recent cases demonstrate, vigilant antitrust enforcement is an essential

component of a market economy, especially in the formative years after the regulatory grasp is loosened. In particular, strong merger enforcement is necessary to ensure that the inevitable restructuring does not result in the accumulation and abuse of private market power. The Commission stands ready to meet its enforcement responsibilities to protect the consumer gains that should follow the introduction of market forces to the electric power industry.

Endnotes:

1. This written statement represents the views of the Federal Trade Commission. My oral presentation and response to questions are my own, and do not necessarily represent the views of the Commission or any other Commissioner.
2. *See* Comment of the Staff of the Bureau of Economics, Federal Trade Commission, "Promoting Wholesale Competition Through Open Access Non-discriminatory Transmission Services by Public Utilities, Recovery of Stranded Costs by Public Utilities and Transmitting Utilities," Dkt. No. RM96-6-000 9(Aug. 7, 1995) ("BE/FERC I").
3. *See* Comment of the Staff of the Bureau of Economics, Federal Trade Commission, "Inquiry Concerning Commission's Merger Policy Under the Federal Power Act," Dkt. Nos. RM95-8-000 and RM94-7-001 (May 7, 1996) ("BE/FERC II"); "Revised Filing Requirements," Dkt. No. RM98-4-000 (Sept. 11, 1998).
4. For the Commission's most recent state comment, *see* Comment of the Staff of the Bureau of Economics of the Federal Trade Commission Before the Alabama Public Service Commission, Dkt. No. 26427, Restructuring in the Electricity Utility Industry (Jan. 8, 1999). Other recent comments have been submitted to the Louisiana Public Service Commission, Dkt. No. U-21453 (affiliate transactions) (Oct. 30, 1998); the Public Utility Commission of Nevada, PUCN Dkt. No. 97-5034 (affiliate transactions) (Sept. 22, 1998); the Mississippi Public Service Commission, Dkt. No. 96-UA-389 (Transco proposal) (Aug. 28, 1998).
5. 15 U.S.C. § § 41-58.
6. 15 U.S.C. § § 12-27.
7. 15 U.S.C. § 18.
8. *See* R. Crandall and J. Ellig, *Economic Deregulation and Customer Choice: Lessons for the Electric Industry*, Center for Market Processes at 2-3 (1996) (within 10 years of substantial deregulation, prices in the natural gas, long distance telecommunications, airlines, trucking, and railroad industries decreased between 25 and 50 percent while quality of service improved). Of course, these benefits were not spread evenly among all consumers, and some previously subsidized service may have been negatively affected.
9. In the electric power and telephone industries, regulatory agencies require providers to offer basic, low-cost service that may be subsidized by consumers who purchase additional services.
10. As previously noted, in addition to already-existing market power, market power can be accumulated through merger.
11. Green, R. J. and Newbery, D., "Competition in the British Electricity Spot Market," 100 *J. Pol. Econ.* 929 (1995). *See also* Alex Henney, "The Mega-NOPR: A Brit Crosses the Pond to Explain What's Happening at FERC," *Pub. Utils. Fort.*, July 1, 1995 at 29; "U.K.'s National Power, Powergen Must Sell Off Up to 6000

MW, Lower Rates," Elec. Util. Wk., Feb. 21, 1994.

12. The Market Monitoring Committee of the California Power Exchange, Second Report on Market Issues in the California Power Exchange Energy Markets, at 67 (March 9, 1999) ("there is evidence that some generators were successfully exercising their market power during high-demand hours").

13. See Brennan, T., "Why Regulated Firms Should Be Kept Out of Unregulated Markets: Understanding the Divestiture in United States v. AT&T," 32 Antitrust Bull. 741 (1987), and "Cross Subsidization and Cost Misallocation by Regulated Monopolists," 2 J. Reg. Econ. 37 (1990).

14. Open access refers to the principle that a monopoly owner of transmission or distribution assets must make them available to independent generators at price and service levels equal to those provided to its owned generators. FERC has focused on behavioral rules for open access and on developing mandatory common information sources concerning supply and transmission conditions. See BE/FERC I at 15-16.

15. More than 34 utilities have followed, or are following, a path of voluntary divestiture in order to compete more effectively in the deregulated climate. See FERC Notice of Proposed Rulemaking, "Regional Transmission Organizations," RM99-2-000, Slip Op. at 19 (May 13, 1999) ("FERC NOPR").

16. See FERC Order 888, Dkt. RM95-8-000.

17. FERC NOPR, slip op. at 6.

18. See, e.g., "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. Aside from the question of compliance with FERC Order 888, there is a question about the breadth of its application. While FERC orders generally apply broadly to all energy sales involving interstate commerce, Order 888 does not apply to transmission by traditional vertically integrated utilities to accommodate "native" load. Transmission to accommodate native load accounts for a large portion of total transmission. Order No. 888, 61 Fed. Reg. at 21552.

19. See BE/FERC I at 3.

20. Operation of a transmission system by an independent system operator should assist investors in distinguishing between high transmission prices caused by physical bottlenecks at peak demand periods and high prices caused by the exercise of transmission market power. A potential downside to ISO operation is that ISOs, because they are non-profit entities, may lack the incentive to perform efficiently and responsively unless methods to provide such incentives are specifically incorporated into the ISO structure.

21. Because supply and demand for electricity are so time-sensitive, even the slightest delay in transmission can have serious impact on the reliability of any generator. A regulatory agency might find it very difficult to implement functional unbundling because of the difficulty of monitoring the numerous individual transactions nationwide to prevent degradations of contracts between independent generators and wholesale purchasers. See BE/FERC I at 5-9.

22. A third possibility considered by some states that avoids the problem of lack of profit incentive in ISOs is to create a "Transco," a for-profit, independent transmission company that would operate the transmission grid, and would be subject to nondiscrimination rules. In comments to the state of Mississippi, *supra* n.4, staff noted that Transcos may present particularly difficult governance questions, are likely to be biased against remedies to transmission congestion that involve new generation, and may not provide greater operating efficiencies than ISOs.

23. U.S. Department of Justice and Federal Trade Commission, Horizontal Merger Guidelines, 4 Trade Reg.

Rep. (CCH) ¶ 13,104 (Apr. 2, 1992), *as amended*, April 8, 1997. FERC announced that it would follow the principles in the Guidelines in its own analysis of utility consolidations. *See Inquiry Concerning the Commission's Merger Policy under the Federal Power Act*, RM96-6-000, 61 Fed. Reg. 68,595 (Dec. 18, 1996).

24. Specifically, the markets are defined by asking whether a hypothetical monopolist could raise prices by a "small but significant and nontransitory" amount, such that not enough buyers would switch to alternatives to make the price increases unprofitable. If the price increases would not be profitable, the relevant market is too narrowly defined. *See Merger Guidelines § 1.11.*

25. Electricity cannot be stored in any measurable quantities; it must be generated as it is consumed. Also, demand varies substantially not only seasonally but by time of day. Thus, the substitute sellers of electricity to any given consumer may be a number of firms offering subtly different products. Some consumers may want guaranteed reliability, while others may opt for interruptible power at lower prices. Some consumers may choose to defer power consumption to off-peak hours in return for lower prices. Each of these consumer decisions affects the definition of the relevant product market and may affect the number of potential suppliers in that market.

26. Other things being equal, an acquiring firm will find it more difficult to engage in anticompetitive conduct, either unilaterally or in conjunction with others, in an unconcentrated than in a concentrated market. *See Merger Guidelines § 2.0.*

27. Department of Justice and Federal Trade Commission, Revised Section 4 of the Horizontal Merger Guidelines (Apr. 8, 1997).

28. For instance, independent generators that have acted as maverick firms may be able to acquire additional capacity quickly, thus enhancing their ability and incentive to lower prices. Firms with an inefficient mix of generating plants for their markets (e. g., more low cost coal fired plants and fewer flexible natural gas fired plants in a market with highly volatile time of day demand peaks) may be able to adjust their capacity to the demand.

29. *See CMS Energy Corp.*, C-3877 (consent order) (June 2, 1999); *PacifiCorp*, FTC File No. 971 0091 (consent agreement accepted for public comment, Feb. 17, 1998). The proposed consent order in *PacifiCorp* was withdrawn when the acquisition was abandoned.

30. An additional potential anticompetitive effect of a convergence merger could occur if a regulated firm acquired market power over an unregulated input. If this occurred, a vertically integrated utility might be able to evade rate regulation at the retail distribution level. The retail rate may still be controlled through cost of service regulation, but the input costs at the generating level could be inflated and passed on to consumers at the retail level. For instance, a vertically integrated utility might attempt to increase its return at the regulated retail level by inflating its payments for its owned, but unregulated, electricity.