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Staff Report: Competition and Consumer Protection Perspectives on  
Electric Power Regulatory Reform

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This Report represents the views of the staff of the Federal Trade Commission. It does not necessarily represent the views of the Federal Trade Commission or any individual Commissioner.

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### EXECUTIVE SUMMARY

Electric power is the latest -- and largest -- industry in which advances in technology have made extensive regulation obsolete. In particular, it is now possible for customers (e.g., residential consumers and businesses) to select their own electric power supplier, while the transmission and distribution functions of electric power continue to be regulated.

Restructuring the electric power industry raises many competition and consumer protection issues concerning how to obtain lower prices, cost efficiencies, and innovations of a competitive market without creating new inefficiencies or penalizing incumbent utilities. Indeed, the benefits of deregulating the electric power industry may be deferred -- or may not materialize at all -- if existing monopoly utilities are left unchecked to exercise market power in a deregulated marketplace.

The Federal Trade Commission has articulated four principles for effective restructuring of electric power markets to ensure that the benefits of competition flow to consumers. Briefly, these principles include: (1) unburdening markets from substantial and durable horizontal market power; (2) removing incentives for vertically integrated firms to engage in undue discrimination and cross-subsidization; (3) fostering accurate, non-deceptive information disclosure to customers about price and service offerings; and (4) promoting uniform disclosure of the prices and other relevant attributes of offers to customers. (1) This Commission staff report, which stems from the Commission's unique role of studying competition and working with the business community to detect new market trends, suggests an analytical framework that federal and state policymakers may wish to employ to ensure that consumers and businesses benefit from electric power industry restructuring.

After describing briefly the technical advances in the electric power industry that have made restructuring possible (Chapter

The starting point for thinking about regulatory reform of the electric power industry is not the level playing field characteristic of a newly developing market. Instead, vertically integrated, regulated monopolies have controlled the generation, transmission, and distribution of electric power in state-authorized geographic territories. In this context, as regulation is reduced and competition is encouraged, there is a significant potential that these utilities will use their existing market power in generation, transmission and distribution services to deter competition that could benefit consumers. In addition, consumers have not previously had choices of electric power suppliers, and thus consumer protection issues need particular attention.

The Commission has developed four principles that apply to the analysis of competition and consumer protection policies in a deregulated electric power industry. We have used these principles when asked to evaluate state and FERC proposals. The principles also have guided us when we have been requested to review federal restructuring legislation.

**Principle 1: Assessing Horizontal Market Power:** Traditional antitrust analysis recognizes that the benefits of competition are most likely to accrue to consumers when markets operate unburdened by substantial and durable market power. Outside the merger context, concerns with horizontal market power focus on the possibility that one or a few generating firms might obtain and be able to exploit market dominance in areas of the country where transmission congestion occasionally creates restricted geographic markets for electric energy (load pockets).

Current antitrust laws are not designed to address the mere possession of market power or the legitimate acquisition of or increase in market power through lawful regulatory processes. Instead, the antitrust laws are designed to address increases in market power brought about by mergers or unfair methods of competition, such as predation, discrimination, and raising rivals' costs. In light of this possible situation, tools to identify and remedy horizontal market power in generation are critical to increased competition in electric power markets.

**Principle 2: Independence of the Transmission Grid:** Market power at the transmission level is likely to give a

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standardized information that electric service providers would use to inform consumers in their advertising -- similar to what has been done with nutrition labeling on food or energy efficiency labels on appliances -- will help ensure that consumers are not misled or confused. It also would facilitate national marketing of electric power.

## ORGANIZATION OF THE REPORT

This report summarizes various competition and consumer protection principles that are involved with regulatory reform and restructuring of the electric power industry. Discussions of these principles are excerpted from FTC staff comments to state regulatory commissions and to FERC. The staff comments are supplemented and updated with insights gained from the FTC's Public Workshop: Market Power and Consumer Protection Issues Involved with Encouraging Competition in the U.S. Electric Industry (Sept. 13-14, 1999) (Electricity Public Workshop). The intent is to provide policy makers and industry with analytical tools and supporting information on a wide range of competition and consumer protection issues to advance the emergence of effective competition in the electric power industry for the benefit of consumers.

The report is organized in the following manner:

- x Chapter I reviews briefly the technical advances in the electric power industry and the regulatory reforms in other industries or in the electric power industry abroad that precipitated consideration of competition in generation of electric power in the U.S.
- x Chapter II discusses existing horizontal market power issues in electric power generation. This issue has gained importance as dominant generating firms (or concentrated ownership of generation assets) remain in some areas despite open access to wholesale transmission services. High concentrations of generation ownership may allow the exercise of market power even after competition is introduced in wholesale and retail markets.
- x Chapter III discusses how common control of power generation and transmission services holds risks for wholesale competition. Nondiscriminatory access to a utility's transmission facilities facilitates competition among wholesale electric power suppliers because transmission facilities are likely to remain regulated monopolies. Incumbent, vertically integrated firms have an incentive to exercise their market power at the transmission level by (1) discriminating against competing electric power suppliers in providing transmission facility access, and (2) engaging in cross-subsidization in favor of their unregulated power marketing affiliates.
- x Chapter IV reviews various forms of vertical discrimination and cross-subsidization that can occur in transactions between regulated utilities and their unregulated affiliates at the retail level. As states implement retail competition (i.e., allowing customers to choose their electric power supplier), cost shifting and discrimination concerns have arisen concerning activities of a regulated utility that maintains a monopoly over local distribution lines and its unregulated affiliates engaging in competitive lines of business. The FTC staff has been skeptical of the effectiveness of an ongoing behavioral or regulatory approach to resolving these issues.
- x Chapters V and VI analyze issues involved in, and present an analytical approach to, horizontal mergers and vertical/convergence mergers, respectively. With regulatory reform in both wholesale and retail electric markets, incentives to restructure the industry have arisen that may include mergers that threaten to create or perpetuate market power and, thereby, frustrate competition.
- x Chapter VII analyzes particular issues that may affect entry into retail electric power markets, including the pricing of default service. In particular, the chapter discusses how to avoid forms of stranded cost recovery in retail electricity rates that will subsidize or penalize either incumbents or entrants and, thus, discourage entry.

- x Chapter VIII identifies and discusses consumer protection issues that have arisen as retail competition is initiated in several states. The benefits of a competitive electricity market will be substantially reduced unless the information presented to consumers through advertising and other means is accurate and non-deceptive.

## FTC INVOLVEMENT

The FTC's involvement with electric power industry regulatory reform, like its involvement in earlier regulatory reform efforts in several industries, stems from its missions to promote competition and consumer protection through law enforcement and advocacy activities.

1. Antitrust Enforcement The FTC has had substantial involvement in the electric power industry through the PacifiCorp/Peabody convergence merger

generator to produce electric power. Alternatively, the turbine blades may be rotated directly by falling water or by wind. Transmission from the generator to local distribution is carried over high voltage transmission lines stretched between the familiar large towers that dot the countryside. The distribution stage occurs once the high-voltage electricity arrives close to the load centers. It begins when transformers step down the voltage to useable levels. The



integrated monopoly to a privatized and vertically unbundled industry committed to gradually opening up competition even at the retail level for both businesses and consumers.

The new U.K. system featured 1) several independent local distribution firms that would serve businesses and consumers, 2) a regional transmission organization (a Gridco<sup>(18)</sup> in this instance to control the transmission grid and manage the dispatch of generation capacity to meet demand, and 3) independent generating firms. A tiered schedule was established for offering retail customers an opportunity to "shop" for their own electricity generator or power merchant (retail wheeling).<sup>(19)</sup> The results for the U.K. of this revolutionary change were generally positive. Prices fell for both large and small customers as efficiencies were realized in generation, transmission, and distribution. Reliability was maintained. New generating investments were attracted. Soon, talk of the successes of the U.K. model spread to the U.S.<sup>(20)</sup>

The main economic drawback in the U.K.'s new system proved to be a market power problem in generation. Initially, generation assets remained highly concentrated. This resulted in the exercise of market power at the generation level. Subsequently, the problem was addressed by requiring that the leading generating firms divest some of their facilities, and by new entry.<sup>(21)</sup>

The first major move toward regulatory reform and restructuring of the U.S. electric power industry was passage of the 1992 Energy Policy Act. It gave FERC authority to order open access to transmission lines and to encourage independent operation of the transmission grid. Shortly thereafter, California became the first state to contemplate retail wheeling. To date, states representing over 50% of the U.S. population have established target dates for initiating retail competition. Most recently, Congress and the Clinton administration have developed legislative proposals on electric power industry regulatory reform and restructuring.

Sections A through C are excerpted from the January 1999 FTC Staff Comment to the Alabama Public Service Commission. These sections discuss how market power can be exercised and suggest using the framework in the DOJ/FTC Horizontal Merger Guidelines to assess existing market power. Section D, excerpted from the May 1998 FTC Staff Comment on the Maine Attorney General's "Interim Report on Market Power in Electricity," discusses the importance of unimpeded entry into electric power markets. Section E, which also is excerpted from the 1999 FTC Staff Comment to the Alabama Public Service Commission, discusses the potential for computer modeling in assessing existing market power.

A. Both Horizontal Market Power and Discriminatory Access to Transmission May Be of Concern in the Electric Power Industry

Both horizontal market power and transmission discrimination concerns can be addressed by ISOs.<sup>(27)</sup> ISOs can be organized to reduce potential horizontal market power by including a broad geographic area with many separate generation firms. By eliminating pancaked transmission rates<sup>(28)</sup> and embracing an enlarged geographic area, ISOs can broaden the effective geographic market and thereby reduce market concentration in generation and consequently the likelihood of generation market power. A broader geographic market will not necessarily solve all the generation market power problems, but it can provide a major step in that direction.

If it is truly independent in its governance and operations, the ISO also eliminates transmission discrimination incentives by removing control of transmission assets from the hands of firms that own generation facilities. In addition, the ISO may have stronger incentives than traditional vertically integrated utilities to address generation market power in load pockets<sup>(29)</sup> that arise during periods of transmission congestion.

markets.<sup>(36)</sup> Further, eased health concerns about high voltage transmission lines may help make expansions of the transmission grid more acceptable to those living and working near these facilities.<sup>(37)</sup>

#### E. [A State] May Wish to Use Computer Simulation Models to Help It Assess Horizontal Market Power and Structural Remedies for Market Power

Recently, computer simulation models of generation and transmission that may facilitate analysis of market power issues have become more widely recognized and tractable.<sup>(38)</sup> Our experience in evaluating the PacifiCorp/Peabody merger evidences the potential usefulness of computer simulation models for the analysis of market power and potential structural remedies.<sup>(39)</sup> For example, by simulating various price increases and their effect on pricing in the relevant market(s), computer models can be used to determine relevant geographic markets in a merger analysis or to ascertain whether an entity is engaging in anticompetitive behavior. Various state regulatory agencies and reliability councils also incorporate computer simulation models in their long-range planning efforts. [A state] may wish to consider making use of such computer simulation models, if it has not already done so, to help it assess existing generation market power and potential structural remedies for such market power.

### III. VERTICAL DISCRIMINATION IN TRANSMISSION ACCESS

FERC recently promulgated rules encouraging the voluntary formation of regional transmission organizations (RTRMi-ed rules Season 4716)

involved to supply and deliver electric power during off-peak periods. Accurate price signals not only will increase the elasticity of demand at the wholesale level, but they can potentially curtail market power and reduce average costs facing all customers.

Section B, which is excerpted from the August 1999 Staff Comment to FERC on Regional Transmission Organizations, discusses the importance of ensuring that an RTO is independent from owners of electric power suppliers.(42)

Recent technological developments favoring the commercial viability of very small-scale generation units (microturbines and fuel cells), termed "distributed generation" or "DG," have added to concerns about discrimination in transmission access and have extended the policy discussion to distribution as well as transmission. DG may represent an emerging close substitute for transmission and distribution services because, as a form of generation, it can be located at, or very close to, load centers. If so, owners of transmission, distribution, and existing (but more distant) generation are likely to have incentives to impede the entry and spread of DG. DG is likely to be most economically viable, at least initially, as a method for customers to reduce peak-load demand on the power grid and improve reliability while continuing to be connected to the grid. Consequently, the most likely avenue for impeding the spread of this new technology is discrimination in connecting DG units to the transmission and distribution system. To the extent that DG connections to the grid are denied, delayed, or made more costly, incumbent transmission, distribution, and generation owners may realize greater profits while consumers may face higher prices and lower

[F]unctional unbundling . . . stops short of structural separation and thus leaves in place the anticompetitive opportunities and the monitoring and enforcement difficulties that are inherent in vertical integration between regulated and unregulated markets. Electric utilities that own or control transmission facilities would be required to offer an open-access tariff to other parties and to take transmission services for their own wholesale purchases or sales under that same tariff. Thus, the rules would require the utility to charge itself the same price, under the same terms, that it charges others for the same transmission service. . . . [R]etaining integrated ownership and control of transmission and generation services . . . could leave the integrated utilities with the incentive and opportunity to find ways to evade regulatory constraints. One way could be to manipulate the sensitivity of short-run transmission services to the risk of delay and uncertainty, which is inherent for this non-storable product. A transmission owner may be able to favor its own generating plants materially with subtle delays or complications in the transmission approval process.

Rules mandating open access and comparable treatment would be particularly difficult to monitor and enforce in this industry, because, to succeed, the rules must constrain transmission owners to ignore their economic interests. Ensuring that the services and prices the integrated utility provides to and charges its competitors are equivalent to what it provides to and charges itself could require virtually transaction-by-transaction regulatory oversight. Monitoring and enforcing compliance with regulations against discrimination may be particularly difficult when quality of service is time sensitive, as it is in electric power. Because 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. Hemming in transmission owners' behavior, although perhaps possible in theory, will be difficult to maintain in practice. Successfully containing their behavior at one time and place may provide little assurance of containing it later or elsewhere.

Complete divestiture would resolve the competition problem better than regulation of behavior. Complete separation of both ownership and control can provide the best assurance against the anticompetitive incentives and capabilities of combined operations. Divestiture also avoids the expense and intrusiveness -- and perhaps futility -- of monitoring and controlling a firm's day-to-day b -0.002 Tw 0.23( )13(and )13(c)-3(o0 Tw 11.86)24(pens)/ 004 Tc -0.002 Tw4hor. Com o04 1(e)13(m









#### A. Initial Assessment of Vertical Efficiencies

[A state commission] may wish to assess whether significant existing or prospective economies of vertical integration will be lost if it allows incumbent utilities to establish affiliates to offer unregulated services. Such an assessment

Agency can verify by reasonable means the likelihood and magnitude of each asserted efficiency, how and when each would be achieved (and any costs of doing so), how each would enhance the merged firm's ability and incentive to compete, and why each would be merger-specific. Efficiency claims will not be considered if they are vague or speculative or otherwise cannot be verified by reasonable means.

'Cognizable efficiencies' are merger-specific efficiencies that have been verified and do not arise from anticompetitive reductions in output or service. Cognizable efficiencies are assessed net of costs produced by the merger or incurred in achieving those efficiencies.

The Agency will not challenge a merger if cognizable efficiencies are of a character and magnitude such that the merger is not likely to be anticompetitive in any relevant market. To make the requisite determination, the Agency considers whether cognizable efficiencies likely would be sufficient to reverse the merger's potential to harm consumers in the relevant market, e.g., by preventing price increases in that market...(65)

[A state commission] may wish to use this efficiency analysis analytical framework in making the preliminary assessment of whether to require vertical separation between a public utility and its unregulated affiliates.

In addition, the framework may be applicable as well in assessing the efficiency benefits of a particular joint activity between the public utility and its unregulated affiliate(s).(66) Given widespread evidence of continued vertical

D. Benefits and Costs of Allowing Unregulated Affiliates to Use the Parent, Regulated Distribution Firm's Logo

[A state commission] may wish to compare the benefits and costs of allowing affiliates of regulated distribution firms to use the corporate logo of the distribution firm.(73) One benefit of such use may be to reduce prices in the competitive markets served by affiliates. With access to the parent company's logo, the affiliate is likely to have lower marketing costs that may be passed along to consumers in a competitive market.(74) The lower prices of the affiliate

as a whole.(75) If consumers' perceptions of the implications of an affiliate's use of the parent utility's logo are accurate,(76) a second prospective benefit may be reduced search costs for consumers.

consumers and cross-subsidization.



individual investigation, FERC may wish to obtain each where appropriate and cost-effective. Sources used in our merger investigations often include, for example, the following:

- x internal documents of the merging parties (including, for example, planning and marketing documents; merger assessments; evaluations of current and projected technology; cost, quality, and reliability comparisons of firms and their individual production facilities; and joint venture documentation);
- x third-party documents, including documents from industry trade associations;
- x depositions of party and third-party executives and consultants;
- x history of previous antitrust cases (including collusion cases involving the same companies or the same industry);
- x financial analysts' reports;
- x employee notes concerning contacts with competitors;
- x consultants' reports on competitive conditions in the industry;
- x documents and interviews with executives of failed entrants, prospective entrants, and fringe firms;
- x filings about competitive conditions made with other government agencies;
- x documents and interviews with suppliers; and
- x documents and interviews with a variety of customers. . . .

#### C. Alignment with the Horizontal Merger Guidelines Framework of Analysis

We have identified seven aspects of electricity merger analysis covered by the Notice that FERC may wish to consider from this perspective. On the basis of our experience, each of these aspects may be significant in determining the prospective effects of a merger on competition and consumers. Accordingly, FERC may wish to revise both its information-gathering procedures and the types of information it gathers in screening mergers to



ensure that a rate cap effectively reduces the exercise of market power, FERC may wish to consider requiring adjustments in such rate caps over time to reflect anticipated changes in costs due to technological and organizational advances.<sup>(100)</sup> We note that the rate caps adopted in the electricity reforms in the U.K. included a downward adjustment to account for technical progress.<sup>(101)</sup> As an alternative, FERC may wish to establish a lower fixed rate cap initially, to create an expected stream of income equivalent to the technological adjustment approach.

(5) Entry and Efficiency Considerations in Merger Screening Analysis<sup>(102)</sup> -- The Horizontal Merger Guidelines include consideration of entry conditions and efficiencies,<sup>(103)</sup> and such factors sometimes reveal that market share concentration statistics overstate the degree of competitive concern associated with a proposed merger. For example, consideration of entry conditions may become more important in markets for electric power as costs for smaller-scale generation facilities, with shorter construction periods and fewer siting problems, fall relative to those of large-scale generation facilities. We have in some instances extended our merger screening analysis to include evidence of likely, timely, and sufficient entry and substantial, verifiable, merger-specific, and cognizable efficiencies. FERC may wish to consider explicitly allowing its merger screening process to include these elements as well.

(6) Product Differentiation -- Although electricity is homogeneous in a physical sense, it is subject to differentiation as a product or service. Such differentiation is likely to increase over time as suppliers pursue incentives to respond to variations in customers' demands for electricity.<sup>(104)</sup> For example, as retail competition is introduced in various



(1) Variations in Underlying Parameters for Geographic Market Analysis -- The Notice recognizes that applicants may face choices among sources and methods for calculating pre-merger prices in the destination markets that are relevant to FERC's proposed horizontal and vertical merger screens.(110) This discretion can affect the values of the parties' pre-

Peabody Coal Company, the FTC publishe

next several years on whether to install scrubbers to comply with environmental regulations and will implicitly be looking to its coal supplier for cost relief.

PacifiCorp's roughly 9,000 megawatts of generating capacity, Navajo's 2,250 megawatts of generating capacity, and Mohave's 1,580 megawatts of generating capacity represent a comparatively small share of the 138,000 megawatts of generating capacity in the WSCC. In a market with numerous competitors such as electricity generation in the WSCC, one might assume if coal costs at two plants such as Navajo and Mohave were to increase and their generation consequently declined, other plants would simply increase output and there would be no effect on the market-clearing price. However, there is substantial evidence that manipulating fuel cost at Navajo could have a significant effect on the market price for wholesale electricity.

A Peabody document recognizes that if Navajo were to go to full capacity utilization during off-peak hours, it would produce 1,200 megawatts of additional power, depressing electricity prices. Also, computer modeling using programs well-accepted in the industry shows that manipulating prices at Navajo would have an effect on wholesale electricity prices in the WSCC.(113)

How can participation of suppliers comprising only a small fraction of capacity affect the market price for electric power? The answer lies in the way in which power plants are dispatched. Power plants tend to have very flat cost functions until they reach their capacity. Thus, power plants tend to operate at maximum capacity if they can economically do so at the prevailing price. Otherwise, they tend to be idled. Consequently, most of the power plants generating electricity, at any particular time period, have almost no ability to expand output and offset anticompetitive behavior. Given these circumstances, the power plants that could defeat anticompetitive behavior here would be those power plants with excess capacity that could produce and deliver to the areas served by Navajo and Mohave electricity at the same cost (or slightly above) Navajo's or Mohave's. The evidence indicates that there are no such power plants here.

During periods of low electricity demand in the WSCC (e.g., nighttime hours during the spring), electricity demand is met using some hydroelectric capacity, nuclear power plants, and some coal-fired power plants. Gas-fired power plants tend to be idled during these periods. Since coal-fired power plants are the last plants to be dispatched during these time periods, the market price of electricity during these periods is determined by the price at which the last-dispatched coal-fired power plant supplies electricity. Since periods of low electricity demand represent a substantial portion of the year and since fuel costs at Navajo and Mohave affect market price during these times, higher fuel prices at Navajo and Mohave can cause significant harm to consumers. Indeed, to give a rough sense of how this acquisition could increase concentration in markets for wholesale electricity during off-peak hours, a hypothetical merger of PacifiCorp's electric plants with Mohave and Navajo would make the market for coal-fired electricity in the WSCC highly concentrated and give PacifiCorp a 35% share, a level at which, under the Merger Guidelines, could lead to unilateral anticompetitive effects.

Cost manipulation at Navajo and Mohave could affect electricity prices in the WSCC not only during those off-peak hours when Navajo and Mohave are the marginal, price-setting plants, but also during a broader period of time. As noted above, power plants are dispatched in large part based on their variable cost, which in turn is largely determined by their fuel costs. This dispatch order can be thought of as a supply curve for electricity. Given this supply curve, if the fuel price at one power plant increases, then this power plant is removed from its current position in the supply curve and placed in a position further along the supply curve. This reorders the supply curve as higher priced plants are dispatched earlier along the affected section of the supply curve. This leads to higher prices every time electricity demand in a particular period intersects the affected section of the supply curve. Higher fuel prices at Navajo and Mohave could have a significant effect on price along a significant portion of the supply curve. If either plant were forced to close down, its removal would affect price at all points above the plant on the supply curve.

## B. Abuse of Proprietary Information

Power plant operators currently compete to supply electricity in informal wholesale markets characterized by bilateral contracts. In some states (e.g., California), power plant operators will soon compete in formal auctions to supply electricity. In all of these situations, power plant operators buy and sell both directly and through "power marketing" affiliates that have been expressly created to compete in the deregulating wholesale market for electric power.

Competition in the wholesale electricity market could be adversely affected by this acquisition throughout the United States because PacifiCorp may gain access, through Peabody's coal contracts and coal supply relationships, to highly sensitive data on competitors' costs and to real-time information relating to operating conditions of competing generators of electrical power.

A coal supplier is able to obtain competitively-sensitive information about the day-to-day operation of the power plant it supplies, including when the plant is experiencing downtime and when it is facing transmission bottlenecks. In addition, because coal costs comprise 90% of a coal-fired power plant's variable cost of generating electricity, a coal supplier will know cost information sufficient to predict the price the power plant will likely bid.

Peabody is a significant supplier of coal to coal-fired plants, supplying 27% of the coal that goes to such plants in the WSCC and 15% of the coal going to such plants in the United States. Many of Peabody's coal supply contracts have no protection against the transfer of such competitively-sensitive information, since they were executed prior to regulatory reform and before purchasers under these contracts had reason to be concerned about the competitive sensitivity of the information that could be revealed to competitors through such contracts or through the day-to-day relationship between the coal supplier and customer. Consequently, by acquiring Peabody, PacifiCorp will gain an invaluable window on real-time information relating to operating conditions and production plans at many of the approximately 150 power plants supplied by Peabody. By enabling PacifiCorp to predict supply shifts and consequent price movements in the market, this information gives PacifiCorp a significant competitive advantage in power marketing.

PacifiCorp will be able to trade on that information at the expense of other traders of wholesale electricity. Expected profits for both incumbents and prospective entrants will be lower if PacifiCorp possesses inside information regarding competitors' costs, supply conditions, and future operating plans. Consequently, as a result of PacifiCorp's perceived information advantage regarding electricity supply and costs, competitive entry in power marketing will be discouraged, and existing power marketing companies may defer greater investments in such enterprises and perhaps even exit, making the market for wholesale electricity operate less efficiently.

## VII. PARTICULAR RETAIL COMPETITION ENTRY CONSIDERATIONS

During the FTC Electricity Public Workshop, presenters emphasized several recent developments in the electric power industry that may affect entry by electric power suppliers into retail electricity markets.<sup>(114)</sup> The first of these competition issues is supplier-of-last-resort or default service provision. This issue arises when some consumers intentionally or inadvertently fail to choose a new electric power supplier when retail competition begins. In such states, "default" customers are assigned to the generation or merchant affiliate of the existing distribution franchise holder (i.e., the incumbent utility). Other states have been concerned that assignment of default customers to the incumbent utility may preserve or enhance the incumbent's market power and be a barrier to entry for new electric power suppliers. These states have developed a system in which supply for this load is subject to competitive bidding among all potential market participants. In addition, other issues have arisen, such as whether the default supplier should provide power generated from the least expensive resources or should employ "green" resources.

Another competition issue identified by presenters is the price of default service. The default service price is often termed the "shopping credit" (or avoided cost) that consumers no longer owe the incumbent utility if they elect to seek an alternative electric power supplier. The shopping credit is usually equal to the unbundled rate for generation services plus costs for related billing and marketing services that the incumbent utility will no longer incur on behalf of the departing customer. The level of the shopping credit becomes complicated if the state has authorized the incumbent utility to recover stranded generation costs because all customers, regardless of whether they select a







The FTC anticipates that, as electric power markets become competitive, the agency will focus closely on two areas of consumer protection. The first is the policing of electric service providers' advertising claims, particularly claims about the price and environmental attributes of the power being sold. The second is the policing of unfair or deceptive business practices related to supplying and billing for electricity services.

Section A discusses advertising claims in a deregulated electric power market and is adapted from the FTC's testimony in May 1999 before the Committee on Commerce, Subcommittee on Energy and Power, United States House of Representatives. Subsections 1 and 2 discuss two specific issues (advertising claims and substantiation) related to advertising claims. They are introduced separately, and each is excerpted from various FTC staff comments.

Section B discusses why uniform disclosure of terms, prices and relevant attributes of electric power will help ensure that consumers are able to make well-informed choices and thereby reap the benefits of competition. The text is excerpted from the May 2000 FTC Staff Comment to the West Virginia Public Service Commission.

Section C discusses types of unfair business practices that may be used in a competitive electric power market. The discussion also is adapted from the FTC's testimony in May 1999 before the Committee on Commerce, Subcommittee on Energy and Power, United States House of Representatives.

## A. Advertising Claims

In a competitive retail electricity market, electricity service providers are likely to make a broad range of advertising claims, including claims about the nature of the service provided, the company selling the electricity, and the price for the service. We have already seen the use of environmental advertising in those states that have opened their markets to retail competition. Many consumers are interested in the environmental qualities of the electric power they buy, and some consumers are willing to pay a premium for "environmentally friendly" electric power. There is, however, a potential for abuse of environmental claims because of the premium price, and because consumers cannot verify any of these advertising claims themselves.

The types of environmental claims already appearing in electricity ads include:

- x claims about the level of emissions of a product ("20% lower than average" or "doesn't pollute the air or water");
- x the sources it is produced from ("nuclear free" or "all solar");
- x overall effect on the environment ("help prevent global warming" or "reduce acid rain" or "green power");  
or
- x the activities of the company selling it ("we support environmental organizations" or "10% of profits go to rainforest preservation").

All of the FTC's general principles about advertising will apply to these kinds of claims; that is, advertising claims must be truthful and they must be substantiated with appropriate evidence at the time they are made. Under FTC case law, deception occurs "if, first, there is a representation, omission, or practice that, second, is likely to mislead consumers acting reasonably under the circumstances, and third, the representation, omission, or practice is material."<sup>(129)</sup> It also is deceptive to omit "material information, the disclosure of which is necessary to prevent [a] claim, practice, or sale from being misleading."<sup>(130)</sup> Express claims, or deliberately made implied claims, used to induce the purchase of or payment for a particular product or service, are presumed to be material.<sup>(131)</sup>

The FTC, in enforcing the statutory prohibition on unfair or deceptive acts or practices, requires that advertisers possess a reasonable basis for all objective claims about their products, express or implied. What constitutes a reasonable basis can vary, depending on several factors: the type of product, the type of claim, the benefits if the



claim is true, the consequences if the claim is false, the ease and expense of developing substantiation, and the level of substantiation exp

On net, it appears that applying a broad interpretation to the term "clean" could result in unnecessary limitations on advertising claims and could deprive consumers of a shorthand way of recognizing certain environmental information about electricity products. Given the use of the term "clean" in everyday speech and in other energy advertising contexts - such as the long-

There is a justifiable concern regarding the effects on consumers and competition of unrestricted use by unregulated affiliates of the logo of the regulated distribution firm. Harm to consumers and competition may occur if elements of the reputation of the regulated firm are not applicable to the unregulated affiliate, but consumers believe that they are applicable when the unregulated affiliate uses the parent utility's logo.(136) For example, an element of a parent firm's reputation might be the credibility of its pledges of high-quality service that are backed by the parent's financial stability as a government-franchised monopoly. If a consumer imputed this same credibility to an affiliate's promises of high-quality service because of its use of the parent' logo, when in fact the affiliate did not have access to the revenues of the monopoly franchise, the consumer could be injured if the affiliate was unable to fulfill its promises in the way the consumer expected.(137) Under such circumstances, the use of the logo by the unregulated affiliate could harm consumers and harm competition in much the same way as deceptive advertising.

Thus, when considering the effect of an affiliate's use of the logo of the parent utility, the FTC would consider the impression consumers will have about the relationship between the utility and the affiliate and whether that impression would be likely to affect purchase decisions. If use of the utility's logo implies to consumers that the relationship between the utility and the affiliate is different from what it really is -- [regarding] an attribute that consumers care about -- such use of the logo could be considered deceptive.

## 2. Substantiation

The Commission's substantiation doctrine requires that advertisers have a reasonable basis for any objective claim at

The Draft Guidelines raise the issue of sellers' representations about the nature of electricity transmission and distribution from generator to customer over the power grid. As discussed above, it is impossible to determine whether electricity used by a particular customer came directly from that customer's supplier or to identify the precise sources of the electrons used by the customer. Therefore, misrepresenting the means of transmission or distribution of electricity to a consumer can simply be prohibited without the need for substantiation rules. Absent any claims about the transmission or distribution system, however, it should not generally be considered deceptive to make claims regarding fuel source, emission, or other environmental attributes. At the same time, affirmative disclosures that the consumer's home will not receive the electricity from the source(s) the seller advertises are probably not necessary to prevent deception.

b. Disclosures for Claims M2(he ns)-3(ed Ced Ced Ced)b-3(et)-3(r )1(t)12(C0ona wm [(c)-3(l)-1(ao66er)4( t)2(he )13(





complaint [in 1999]. In addition, the Commission has been active in taking law enforcement actions targeting billing practices associated with cramming.

Several contributing factors lead us to believe that cramming also may become a problem in deregulated electricity

3. Arkansas Public Service Commission, Docket No. 00-048-





electric cooperatives, many of which provide only distribution services. Although most of the municipal utilities and cooperatives serve small towns or rural areas, some supply large urban centers. The largest of these serves the Los Angeles area. Some states, New York, for example, also own generation facilities.

17. The California PUC's 1994 "Proposed Policy Decision Adopting a Preferred Industry Structure" (California PUC Docket No. R.94-04-031 and I.94-04-032) was developed in large part with reference to the U.K.'s regulatory reforms. See Kenneth W. Costello and Robert J. Granieri, *The Outlook for a Restructured U.S. Electric Industry: Lessons from Deregulation*, 10 *Elect. J.* 81-91 (May 1997) for a more recent review of the implications for the U.S. of reforms in the U.K.'s electric power and gas industries.

18. Gridco - a private, for-profit independent system operator that owns the transmission lines in its region.

19. Retail Wheeling -- policy allowing businesses and consumers to purchase electricity from generators or power merchants other than the vertically integrated utility that had been assigned as the regulated monopoly for the service territory in which the customer is located. The last stage of retail competition in the U.K., individual households, began in 1998. International Energy Agency, *Energy Policies of IEA Countries, Section II (United Kingdom)* (1998) <<http://www.iea.org/pubs/reviews/files/enpol98/05e-rv98.htm>>.

20. Regulatory reforms in the electric power industry in New Zealand, Norway, and Chile have also been viewed as successful. The International Energy Agency's review of New Zealand reported increased efficiency, lower costs, and enhanced consumer choice and service as a result of reforms. In 1998, the government announced plans to move forward with splitting up the predominant government-owned generating entity to increase generation competition. International Energy Agency, *Energy Policies of IEA Countries, Section II (New Zealand)* (1998) <<http://www.iea.org/pubs/reviews/files/enpol98/07b-rv98.htm>>. Significant gains in operating efficiencies have occurred in Argentina due to regulatory reforms in the electric power industry. Omar Chisari, Antonio Estache, and Carlos Romero, *The Distribution of Gains from Utility Privatization and Regulation in Argentina*, 12 *Public Policy for the Private Sector* 33 (Dec. 1997).

21. The U.K. restructured its electrical system in March 1990. See Richard J. Green and David M. Newberry, *Competition in the British Electricity Spot Market*, 100 *J. Pol. Econ.* 929 (1992), Catherine D. Wolfram, *Measuring Duopoly Power in the British Electricity Spot Market*, 89 *Am. Econ. R.* 805 (1999) for a discussion of the extensive data and detailed statistical analyses used to establish the nature and extent of market power in the U.K.'s system. In  
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24. See, e.g., "Petition for a Ru

36. Computer capabilities now allow calculations of transmission congestion effects on a much more detailed level. Such improvements permit transmission pricing to move away from the historical contract path approach, which does not account for loop flows and causes suboptimal utilization of the transmission grid. Paul L. Joskow, Restructuring, Competition and Regulatory Reform in the U.S. Electricity Sector, 11 J. Econ. Pers. 119-38 (1997).

37. Martha S. Linet, Elizabeth Hatch, Ruth Kleinerman, et al., Residential Exposure to Magnetic Fields and Acute Lymphoblastic Leukemia in Children, 337 N. Eng. J. Med. 3-14 (1997). This National Cancer Institute study does not "support the theory that residential magnetic fields cause childhood leukemia, particularly at the levels found in most homes." The NCI study was done with the aim of overcoming some of the problems of earlier studies and providing

In our view the most effective step which we can promote to resolve the vertical market power issues focuses on the operation of the transmission assets which are currently owned by utilities in California. While some hav

57. As a remedy for an anticompetitive merger, the FTC sometimes requires parties to divest competitively overlapping assets or divisions to an existing or newly-created entity. Many of the considerations mentioned above are examined to determine whether the acquiring entity will operate those assets or divisions competitively and independently of the merged firm.

58. If FERC elects to allow generators to have a voting interest, it may wish to consider establishing a cap on the aggregate voting interest of generators and a prohibition on voting pools of generators.

59. For example, cases have been brought charging firm A with inducing firm B to discriminate against a firm that competes with firm A. See, e.g., *Monsanto Co. v. Spray-Rite Service Corp*, 465 U.S. 574 (1984) (a challenge to a manufacturer's termination of a discounting distributor initiated by requests of rival distributors); and the FTC's recent matter *Toys "R" Us, Inc.*, Dkt. No. 9278 (1998) (respondent pressured manufacturers to limit supplies to growing competitors) (appealed to the U.S. Court of Appeals for the Seventh Circuit). Another source of concern occurs if a powerful member of an industry association has the capacity to use the association as an instrument to injure competition or promote collusion. Recognizing these dangers, the Supreme Court held in *Allied Tube & Conduit Corporation v. Indian Head, Inc.*, 486 U.S. 492 (1988), that manipulating an industry association's standard-setting process was subject to antitrust challenge, even though no association rules were violated. According to the Court, "the hope of procompetitive benefits [from the standard-setting process] depends upon the existence of safeguards sufficient to prevent the standard-setting process from being biased by members with economic interests in restraining competition." *Id.* at 509. Since, absent appropriate safeguards, comparable manipulation of an RTO's independent decision making process may be possible, FERC may wish to consider requiring that RTOs and market participants adopt internal procedures to prevent the exercise of inappropriate influence.

60. "Competition by Utilities in Energy Conservation and Home Appliance Markets,"

Statement of Timothy J. Muris, Director of the FTC Bureau of Competition, Senate Committee on Small Business (Nov. 3, 1983).

Commission Public Workshop: Market Power and Consumer Protection Issues Involved with Encouraging Competition in the U.S. Electric Industry (Sept. 14, 1997) 9-0-0 14.781g( ET74( of) /CS1 cs 0.48 re f\*00.72 <</MCID 3 >>BDC 1 scn

67. Much of this evidence is reviewed in the Notice of Public Rulemaking on Regional Transmission Organizations issued by the Federal Energy Regulatory Commission in Docket RM99-2-000 on May 13, 1999.

68. Substantiality may refer to the magnitude, duration, or operational significance of the transaction, or a combination of these and other factors.

69. Although the discussion has been developed in the context of proposed rather than existing transactions, the same framework of analysis can be applied in instances where a transaction is already taking place between a regulated utility and its unregulated affiliate. Note that where this analysis results in the termination of an existing transaction with the unregulated affiliate, efficiencies that are not specific to the transaction are unlikely to be lost to the regulated utility or to society because these efficiencies can be regained through alternative transactions with unaffiliated firms that are less threatening to competition.

70. For example, Phoenix, Arizona has implemented a system of competitive bidding in which outside contractors compete against government departments for contracts to provide various city services. Before a city agency can submit a bid, however, the Office of the Comptroller, which is an independent entity, must certify that the bid is realistic. John C. Hilke, *Competition in Government-Financed Services* 16, 67-68 (1992). The city continues to save substantially through this bidding process. (Communication with Lera Riley, Assistant Public Works Director, City of Phoenix, Oct. 1998.)

71. For example, Public Utilities Commission on Nevada, "Proposed Regulations Governing Affiliates of Distribution Companies," Sec. 22 (Sept. 1998).

72. Edison Electric Institute, 4 Retail Wheeling & Restructuring Report 65 (March 1998).

73. Initial evidence from the Pennsylvania retail competition experiment suggest that consumers may rely on the use of the logo to select an electricity provider. Customers reportedly disproportionately favored an affiliate that used the logo of its parent distribution utility relative to an affiliate of the same parent firm that did not use the logo. *Energy Daily* (June 23, 1998).

74. The incremental (marginal) cost of marketing to additional customers is likely to be lower if consumers are already familiar with the logo employed in the marketing effort, since little effort will be required to establish familiarity.

75. If the competing firms do not respond with lower prices, the affiliate likely will gain market share. If so, the average price in the market will be lower, even if competitors do not reduce their prices when the affiliate lowers prices, because of its lower marginal costs.

76.

80. Private parties may submit such evidence from privately funded research. [A state commission], however, should be wary of testing performed on behalf of special interests, and should take steps to ensure that the results represent useful indications of likely consumer impressions and behavior.

81. Payments to the regulated distribution firm for use of its logo could reduce prices for distribution services by substituting for revenues what the firm otherwise would be authorized by [a state commission] to collect through distribution charges.

82. In some situations, firms may sell the right to use a logo to independent entities, contingent upon conditions and restrictions placed on use of the logo.

83. The Maine Public Utilities Commission has established rules requiring affiliates to pay the incumbent utility for use of the goodwill reflected in the utility's name. The payment is determined according to how soon the utility succeeds in earning its authorized return on equity. Maine Public Utilities Commission, Docket No. 98-077 (July 7, 1998). The rules provide a three-year initial payment period followed by a reassessment with an additional three years of payments if necessary to bring down the value of the goodwill asset to zero. Corporate Goodwill, Public Utilities Fortnightly 16 (Oct. 15, 1998).

84. See, e.g., *FTC v. Cardinal Health*, *FTC v. McKesson Corp.*, Civil Action Nos. 98-595 and 98-596, slip op. at 62 (D.D.C. July 31, 1998) (noting that "[t]he FTC at trial showed, through Defendants' own internal documents and public statements, that they perceived that the excess capacity currently in the marketplace was the primary factor fueling so-called 'irrational' pricing").

85. Notice, 63 Fed. Reg. at 20344.

86. Horizontal Merger Guidelines, Sections 1.11 and 1.21.

87. If a monopoly price is used as the starting point for the "small but significant and nontransitory" increase by the hypothetical monopolist, the market is likely to be drawn broadly and, as a result, mergers that would reinforce pre-merger market power may be permitted.

88. Notice, 63 Fed. Reg. at 20347.

[REDACTED] systems that cool water in off-peak demand periods to use for cooling during peak demand periods, also can provide limited opportunities to store electricity. To date, these storage methods are of relatively minor significance in most areas.

90. While geographic and product market analysis is typically conducted under the Horizontal Merger Guidelines using a hypothetical five percent price increase, this analytical convenience does not indicate a "tolerance level" (Horizontal Merger Guidelines, Section 1.0) for merger-related price increases that are smaller, but more likely. At the

[REDACTED] in1(l)-1r, Shi3(l)13s(s)-3(y)1 [(B)4(



93. Horizontal Merger Guidelines, Section 4, note 36. Efficiencies in different markets are inextricably linked if "a partial divestiture or other remedy could not feasibly eliminate the anticompetitive effect in the relevant market without sacrificing the efficiencies in the other market(s)."

94.

105. For example, some states are considering requirements that a portion of electricity supplies come from facilities that use renewable sources of energy for generation. Where such legal requirements are in place, lower-cost electricity produced from non-renewable fuel sources may not be a close substitute for higher-cost electricity produced from renewable fuel sources.

106. FTC staff Comment to the Maine Department of the Attorney General and Public Utilities Commission (May 29, 1998).

107. Horizontal Merger Guidelines, Section 2.21.

108. Notice, 63 Fed. Reg. at 20343, 20349.

109. Horizontal Merger Guidelines, nn. 6 & 20 and Section 2.21. Indeed, the FTC has brought cases that focus on these other performance measures when a transaction may significantly affect these aspects of economic performance. See, e.g., *Boston Scientific Corp.*, 119 F.T.C. 549 (1995). An early suppression of technology case was *United States v. Automobile Mfrs. Ass'n*, 307 F. Supp. 617 (C.D. Cal. 1969). For a discussion of FTC and DOJ cases regarding technological competition, see FTC staff report, *Anticipating the 21st Century: Competition Policy in the New High-Tech, Global Marketplace*, Ch. 7 (1996).

110. For example, if a substantially higher percentage of the merging parties' sales occurs in a particular season, while other firms' sales are more evenly distributed across the seasons, the parties may report data from a "typical month" that leads to a high estimate of sales by competing firms and a low estimate of their own sales. In these hypothetical circumstances, the merging parties' approach would minimize the reported effects of the proposed merger on market share statistics.

111. Under the delivered price test currently used by FERC, the scope of relevant geographic markets depends (other things equal) upon which value is nominated as the appropriate pre-merger price. Relevant suppliers would then include all suppliers that, given their costs of generation and transmission, can deliver power to a specific destination market at no more than 105 percent of the pre-merger price in that market. Consequently, a high estimate of the pre-merger price would generally support a broader and less concentrated geographic market; alternatively, a low estimate of the pre-merger price might support a conclusion that the merging parties do not compete in that relevant market.

112. The FTC did not issue a final order in this case because PacifiCorp withdrew from the merger <[www.ftc.gov/opa/9807/petapp39.98.htm](http://www.ftc.gov/opa/9807/petapp39.98.htm)>.

113. At current electricity prices, Mohave operates at full capacity. Hence Mohave is currently an infra-marginal

117. This discussi



142. It may make a difference to consumers if the environmental benefits associated with the power they are buying will be enjoyed in a remote geographical area rather than in the region where they live. If advertising implied a geographical scope that was different from the scope of the tagging system, the existing guidelines prohibiting misrepresentation or overstatement of environmental benefits would cover them. This problem could also be solved by limiting the geographical area over which tags can be traded.

143. FTC Green Guides, 16 C.F.R. § 260.7(e).

144. The chilling effect on numerical or percentage claims could have economic consequences for the electricity market's development as well. If the claim by a company that wishes to advertise its wind power is limited by the strict need to produce the claimed amount of wind power, then the company will be less likely to be able to obtain an adequate return on the investment that it made. Thus, there will be less incentive for companies to invest in environmentally superior technologies that happen to have variable production potential, a result contrary to most states' goals of encouraging such development.

145. "Information Disclosure for Electricity Sales: Consumer Preferences from Focus Groups," Regulatory Assistance Project (Mar. 19, 1997) <<http://www.rapmaine.org>>.

146. The National Association of Attorneys General (NAAG) adopted a resolution in March 1997 supporting "the establishment of appropriate and adequate consumer safeguards [in] . . . the restructured retail electricity marketplace," including uniform disclosures in plain language of "price, duration of contract, quantities, and other material

154. For example, some contract terms may be more suitable for required disclosure in a contract document, whereas in advertising, it may be advisable to require that only the one or two most important terms be disclosed.

155. *FTC v. FutureNet*, No. 98-1113GHK (AIJx) (C.D. Cal. 1998).

156. 15 U.S.C. § 1601 et seq.

157. 15 U.S.C. § 1691 et seq. The TILA and ECOA are implemented by Regulation Z, 12 C.F.R. § 226, and Regulation B, 12 C.F.R. § 202, respectively. Although the Federal Reserve Board promulgates these regulations, the Commission enforces these requirements for most non-bank entities around the nation. See Section 108(c) of the TILA, 15 U.S.C. § 1607(c) and Section 704(c) of the ECOA, 15 U.S.C. § 1691c(c).