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MERGERS AND ACQUISITIONS: GUIDELINES FOR CONSIDERATION BY STATE PUBLIC UTILITY COMMISSIONS

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PREFACE

This report is the first of a series of reports on utility mergers and acquisitions that will be published by The National Regulatory Research Institute (NRRI) over the next year. Because it was completed in November 1996, it does not cover or describe FERC Order 592, FERC's Policy Statement on Its Merger Policy Under the Federal Power Act, which was issued on December 18, 1996. The next report in this series will deal with that policy statement, as well as issues of federal preemption.

INTRODUCTION

State regulators review and pass judgment on the costs and benefits of mergers and acquisitions as a part of their responsibility to serve the public interest. The most-asked public interest question during their reviews is: Do the benefits to the utility's retail customers outweigh the costs? Obviously, some type of cost-benefit analysis is required to answer this question.

A significant increase in merger and acquisition activity has been observed recently among regulated firms.[1] More mergers and acquisitions call for additional cost-benefit analyses by state regulators. Cost-benefit analyses are time consuming and expensive, and therefore, a precipitous increase in merger and acquisition activity can clog the regulatory process. Consequently, state regulators prefer guidelines that efficiently streamline the review process for mergers and acquisitions.

The purpose of this paper is to suggest several guidelines for the streamlined review of mergers and acquisitions. These guidelines reflect our initial research on this topic. They are applicable only to mergers and acquisitions of vertically integrated electric utilities or combination electric/gas utilities.

PRINCIPAL CONCERNS OF STATE REGULATORS

The principal concerns of state regulators are jurisdictional and economic in nature when it comes to mergers and acquisitions. They do not want to lose regulatory jurisdiction; so they are leery particularly of proposals that involve holding company structures. This corporate structure provides the post-merger firm with opportunities to

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[1] R.J. Pierce, "Antitrust Policy in the New Electricity Industry," *Energy Law Journal* 17 (1996): 29-58. M.J. Hamilton, "Measuring the Merger: Fact, Fiction, and Prediction," *Public Utilities Fortnightly* 134, no. 18 (October 1, 1996): 26-31, 26.

manipulate its jurisdictional cost allocations for the purposes of cost shifting or cross-subsidization. State regulators also are concerned about the effect that a merger or acquisition will have on retail rates.[2] In addition, they are concerned about the effect of a merger or acquisition on economic development and the number of jobs in their state.

STATE JURISDICTION OVER MERGERS AND ACQUISITIONS

State regulators share their jurisdiction over a merger or acquisition with five federal agencies. The Federal Energy Regulatory Commission (FERC) has authority over electric utility mergers when the utility sells electric power for resale in interstate commerce, supplies unbundled transmission service for interstate commerce, or has hydroelectric facilities.[3] The Securities and Exchange Commission's (SEC) can become involved in a merger and acquisition when a holding company gains control of 10 percent or more of the voting securities of another electric utility.[4] The Nuclear Regulatory Commission (NRC) plays a role in the approval process when the proposed merger or acquisition results in the transfer or control of a nuclear license. The Department of Justice (DOJ) and the Federal Trade Commission (FTC) can be involved in the approval process when they suspect anticompetitive effects.

It is worth noting that the FERC has never issued an outright rejection of an electric utility merger request. Instead, it has used its approval authority as a lever for advancing other public policies, such as open transmission access. By placing conditions on a merger or acquisition proposal, state regulators also can make certain

[2] When a merger or acquisition is proposed that involves state jurisdictional utilities in more than one state, each state-specific cost-benefit analysis usually requires that the merger or acquisition provides net benefits to the retail customers in each state.

[3] Section 203 of the Federal Power Act.

[4] Qualified facilities under the Public Utility Regulatory Policies Act of 1978 and exempt wholesale generators under the Energy Policy Act of 1992 are exempt from these limits.

that net benefits will accrue to their retail customers.

FERC'S MERGER GUIDELINES

In *Commonwealth Edison*, the Federal Power Commission (FPC)[5] considered the relationship between regulation and market concentration. It found that the potentially adverse effects on consumers of an increased level of market power are sufficient to establish a change in market concentration as a legitimate public interest issue even when regulation exists.[6] The FPC's focus on consumers is consistent with the mainstream empirically-based antitrust economics of the 1960s, which yielded the fact that higher levels of market concentration correlate with higher prices for the market's goods and services. Therefore, in the course of fulfilling its obligation to promote the public interest, it is not surprising that the FPC would want a proposed merger or acquisition to not raise regulated electricity rates. In fact, the rudimentary economic analysis of *Commonwealth Edison* attempts simply to discover whether the proposed merger or acquisition would result in lower rates for wholesale customers.

Because the FPC and its successor, the FERC, regulated the wholesale market for electricity according to cost-of-service principles, the economic analysis of *Commonwealth Edison* quickly was pulled to a new focal point of expected cost savings.[7] The basis of cost-of-service regulation is that the regulated utility's cost increases and decreases are reflected in the utility's rates and charges. Accordingly, the proposed merger's or acquisition's expected cost savings should flow through to consumers.

Since the merger of PacifiCorp and Utah Power and Light, the FERC has used cost savings and the removal of vertical constraints on competition as the bases for its approval of a proposed merger or acquisition. Specifically, the FERC required that a

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[5] Predecessor to the FERC.

[6] *Commonwealth Edison Co.*, 36 F.P.C., 927, 941 (1966).

[7] J. S. Moot, "The Changing Focus of Electric Utility Merger Proceedings," *Energy Law Journal* 15 (1994): 1.

proposed merger or acquisition would produce (expected) cost savings and the post-merger or post-acquisition firm would provide its competitors with equal access to its transmission lines.[8] However, this *quid pro quo* is no longer necessary because the FERC's Order 888 requires open transmission access for wholesale customers. The FERC appears to be using the proposed *Primergy* merger to develop a new *quid pro quo*. The proposed order by the Administrative Law Judge in this case sets the utility's acceptance of an independent system operator (ISO) as a condition of the FERC's approval.[9]

DOJ/FTC MERGER GUIDELINES

The DOJ/FTC Guidelines for horizontal mergers and acquisitions are meant to help implement Section 7 of the Clayton Act by identifying proposed mergers or acquisitions that are likely to have adverse consequences on the competitiveness of the relevant market and consumers within this market.[10] The Guidelines require the identification of the relevant product/geographic market and the calculation of the Herfindal-Hirschman Index (HHI) for that market before and after the proposed merger.[11] The market's product boundaries are determined by taking the services offered by the merging firms, hypothesizing a small but significant price increase for

[8] *PacifiCorp and PC/UP&L Merging Corp.*, 45 F.E.R.C., 61,095 (1988).

[9] An ISO goes beyond the comparability and open access requirements of FERC Order 888: an ISO takes over the operation and control of the merged utility's transmission system.

[10] Amended section 7 of the Clayton Act, 38 Stat 731 (1950). Section 7 is the preventative portion of antitrust enforcement. Its primary policy objective is the avoidance of market structures that significantly increase the possibility of successful overt or tacit collusion, as well as the prevention of significant market power or monopolization.

[11] A great deal of subjectivity is embedded in the identification of market boundaries. Fortunately, the direction of the resulting biases is easily determined. Anyone who favors a particular merger or acquisition is likely to identify broad product and geographic market boundaries, while those who oppose it are likely to identify narrow product and geographic market boundaries.

each service (usually about 5 percent) and then estimating the number of buyers that would shift to substitute services.[12] If a relatively large number of buyers switch to a specific substitute service or a group of substitute services, then this service or the group of services is included in the product market.[13] This procedure is applied again and again to different substitutable services until the point is reached where relatively few consumers are willing to shift to the substitute. The product market's geographic boundaries are determined by matching groups of firms with groups of customers. In principle, national, regional, or local boundaries encircle the group of customers that a group of firms will serve after a small, but significant price increase. Of course, price is not the only factor that affects these boundaries. Transmission constraints also affect the geographic boundaries of electricity markets.

With the identification of the market's product and geographic boundaries in hand, the HHI is used to measure the level of market concentration. The HHI is calculated by squaring the market shares of each competitor, expressed as percentages, and adding them up. For example, in a market of five competitors, where each of them has an equal market share, the HHI is computed by squaring 20 percent five times and then adding these squares together; that is, the HHI = 400 + 400 + 400 + 400 + 400 = 2000. Larger HHIs indicate a more concentrated market.[14]

Specific values of the HHI determine the DOJ's and FTC's response to a particular merger or acquisition proposal. A post-merger HHI of less than 1000 is highly unlikely to be challenged by either federal agency regardless of the difference between

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[12] An electricity market might include wholesale and retail services that are available on-peak and off-peak. Obvious substitutes are retail off-peak electricity for retail on-peak electricity, as well as wholesale off-peak sales for on-peak wholesale sales.

[13] If the price of residential gas space heating increases by 5 percent and a substantial number of gas users switch to residential electric space heating, then both of these services are in the same product market.

[14] A monopolized market has an HHI of 10,000, while a perfectly competitive market has an HHI that approaches 0.

the pre-merger and post-merger HHIs. This policy provides a safe harbor for mergers and acquisitions in markets that are not concentrated.[15] A DOJ or FTC challenge is unlikely when the difference between the pre- and post-merger HHIs is less than 50, regardless of the magnitude of the post-merger HHI. This policy suggests little concern over a small change in market concentration. The DOJ or FTC is likely to issue a challenge when the post-merger HHI is between 1000 and 1800 and the difference between the pre- and post-merger HHIs is greater than 100. The DOJ or FTC also is likely to challenge the proposed merger or acquisition when the post-merger HHI is over 1800 and the difference between the pre- and post-merger HHIs is greater than 100.

In one instance, the likelihood of a DOJ or FTC challenge to a proposed merger or acquisition rests on the interpretation of nonmarket share factors. The analysis of nonmarket share factors takes over the preapproval process when the post-merger HHI is above 1800 and the difference between the pre- and post-merger HHIs is between 50 to 100. These factors include the degree of market entry barriers, the adequacy of irreplaceable raw material, the level of excess capacity in the market, the degree of product homogeneity, marketing and sales methods, and whether any of the firms proposing a merger or acquisition qualifies as a failing company.

A CURRENT PROPOSAL FOR MARKET POWER GUIDELINES

Paul Joskow proposed guidelines to identify dangerous levels of unilateral or collective market power.[16] Unilateral market power exists when a single firm, acting independently of all other firms in the market, can successfully implement and profitably maintain increases in the prices of wholesale electric power. Collective market power

[15] An HHI of 1000 would be reached if there were ten equally sized firms in the market.

[16] P.L. Joskow, “Appendix A: Horizontal Market Power in Wholesale Power Markets,” mimeo. August 1995.

exists when a group of firms, acting in concert either through overt or tacit collusion, can
implement and maintain price increases that improve their joint and individual profitability. Consequently, both types of market power adversely affect the economic welfare of consumers.

Unlike the DOJ/FTC Merger Guidelines, Joskow uses an HHI of 2500 as a trigger for a detailed examination of the utility's market power.[17] This value for the HHI is consistent with Joskow's fourth rule of thumb for acceptable and unacceptable market power in the context of allowing market forces to set the prices for generation services.[18] This rule says that four equally sized generation firms represent a balanced generation market.[19] The HHI for a balanced generation market is exactly 2500.

Joskow's market power guidelines are designed to apply to firms that are perceived to be at "low risk" of exercising unilateral or collective market power against consumers. His first guideline is that an HHI that is less than or equal to 2500 indicates a "low risk" with respect to the exercise of collective market power.[20] His practical justification for using an HHI of 2500 as a triggering device is that the DOJ used it in its report that reviewed the deregulation of oil pipelines.[21] Joskow's guideline for unilateral market power contains two steps:[22] (1) the regulated firm is deemed to be at "low risk"

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[17] Ibid., 4-8.

[18] P.L. Joskow, "Market Power: Friend or Foe?" in Working Papers of the Harvard Electricity Policy Group (Cambridge, MA: Kennedy School of Government, Harvard University, 1995).

[19] Rule 1 says that two generation companies are not sufficient to ensure the competitiveness of the generation market. Rule 2 says that ten generation companies are ample to ensure the market's competitiveness. Rule 3 says that five unequally sized generation firms are sufficient to ensure competitiveness.

[20] Joskow, "Horizontal Market Power," 7-8.

[21] *Oil Pipeline Deregulation*, Report of the U.S., Department of Justice (Washington, D.C.: U.S. DOJ, May 1986), 23-32.

[22] Joskow, "Horizontal Market Power," 8.

of exercising unilateral market power when its market share is less than or equal to 35 percent, and (2) the HHI for the market is less than or equal to 2500. If the market share of the regulated firm is less than 20 percent, then this firm is deemed to be at "low risk" of exercising unilateral market power against consumers, regardless of the HHI for the market.

However, it is important to note that Joskow's market power guidelines are designed for the review of market-based electricity rates by regulated firms.[23] Consequently, Joskow's intent is to create safe harbors for incumbent utilities that individually and collectively appear to be low risks with respect to imposing monopolistic or unduly discriminatory prices on all classes of consumers.[24] When applying his guidelines gives support to a detailed analysis of market power, Joskow believes that the first step in the analysis is to analyze the significance and duration of a suspected market power problem.[25] His position is that the detailed analysis should proceed only when the suspected problem is significant for a sufficiently long duration of time.

Undeniably, Joskow's market power guidelines apply to situations that are substantially different from mergers and acquisitions. A merger or acquisition is more difficult to reverse than a grant of authority for market-based pricing. Consequently, it can be argued that his guidelines can be more lenient than the DOJ/FTC guidelines for merger and acquisition proposals.

MERGER AND ACQUISITION GUIDELINES FOR STATE COMMISSIONS

[23] Ibid., 4-7.

[24] Ibid., 19.

[25] Ibid.

When a merger or acquisition results in a more concentrated market, chances are that the state of this market has become less competitive. Still, increased market concentration is not a sufficient reason to stop a proposed merger or acquisition. It is not certain that a post-merger or post-acquisition firm can profitably increase the prices of its goods and services. Furthermore, there always is the possibility that the proposed merger or acquisition is the only way to realize specific types of cost savings. These uncertainties indicate that state regulators should have guidelines for a streamlined review of merger and acquisition proposals.

Guideline 1: Timing rules and minimum filing requirements assist in defining product and geographic markets.

A proper analysis of a merger or acquisition rests on the proper definition of the product/ geographic markets. State regulators need to be involved in the selection of data for this purpose. Therefore, a focused effort should be begun to develop minimum filing requirements (MFRs) for defining product and geographic markets. The MFRs should include data on own-price and cross-price elasticities, transmission costs and constraints, responsiveness of electricity prices to demand and supply shocks, the attributes of power pooling or multilateral coordination agreements, and the characteristics of open access regimes. The MFRs could be supplemented with timing rules that determine the beginning date for the review of a merger or acquisition proposal.

Guideline 2: Subjectivity is an unavoidable part of defining a product market.

Wholesale and retail electricity services come in a variety of forms. Electricity may be firm or nonfirm. It may be differentiated by time-of-day or the season of the year. It can be purchased on demand from a published tariff, or it may be purchased subject to contract. The contracts may be long term or short term. These different "types" of electricity can be substituted for each other. Beside the substitution of different types of electricity, nonelectricity products can be substituted for electricity products. For example, natural gas, coal, oil, and wood can be substitutes for electricity in some end uses. The definition of a product market consists of drawing the line that separates acceptable from unacceptable substitutes. This line is seldom bright and clear.

Guideline 3: The terms and conditions of contracts for capacity and contracts for energy play vital roles in defining a product market.

Contracts are written for firm and nonfirm energy transactions and for short-term and long-term generation capacity. Some contracts have "capability clauses" guaranteeing that the supplier has capacity available to meet the terms and conditions of the contract. Although these different contracts exist because each one has a specific purpose, they can be substituted for each other. It is relatively easy to substitute firm and nonfirm energy contracts. It also is relatively easy to substitute a short-term capacity contract for a short-term energy transaction when there is excess capacity in the area.[26] A long-term capacity contract can be a substitute for building new generation facilities. However, it is not easy to substitute a long-term capacity contract for nonfirm energy sales.

Guideline 4: Capacity clauses and native load requirements play vital roles in determining the size (not the boundaries) of a product market for retail customers.

[26] Ibid., 21.

Native load customers often have first call on the utility's generating facilities that produce the cheapest energy at any particular point in time. A capacity clause prevents
the utility from selling capacity twice at the same point in time. These market and regulatory institutions make it clear that the utility can only put "residual" energy and capacity on the market. As a result, they determine the amounts of energy and capacity that the utility can sell in competition with nonaffiliated suppliers.

Guideline 5: Transmission constraints play a vital role in identifying geographic boundaries for a market; however, these constraints also are a source of instability in these boundaries. Consequently, state regulators need to examine the effects of transmission constraints, their duration, and their location very carefully before they decide on geographic boundaries.

There always are threshold levels of transmission costs that make it uneconomic for the transmission company to extend transmission services to generation or distribution companies. Similarly, there always are threshold levels of transmission prices that make it uneconomic for a retail customer to buy generation services. Therefore, these threshold costs and prices impose geographic boundaries on wholesale and retail markets. Transmission constraints also prevent electricity from reaching buyers. As a result, they also impose geographic boundaries on wholesale and retail competition. However, the geographic boundaries imposed by transmission constraints are unstable because transmission constraints can come and go. This instability is the reason why Joskow recommends against using mechanical rules for identifying geographic boundaries. In particular, he does not recommend relying on power pools, regional transmission groups, reliability councils, or regional transmission grids for this purpose.[27]

[27] Ibid., 5.

Guideline 6: The FERC's concept of a destination market is a useful tool for defining geographic markets for wholesale services and retail services under retail competition; however, state regulators should use the exclusive franchise area as building blocks to determine the geographic market for retail services in the absence of retail competition.

The FERC's destination market is a promising way to define geographic markets for retail services when there is retail competition.[28] It is natural under retail competition to identify the geographically dispersed suppliers that a retail customer or a group of retail customers could turn to when there are small but significant increases in the prices of retail services. However, a destination market is useless when retail competition is not present. A retail customer cannot turn to anyone other than its host utility. Consequently, the exclusive franchise area is the only reasonable concept for determining geographic boundaries for retail services that are not subject to the pressures of retail competition.

Guideline 7: A narrowly identified geographic/product market helps to ensure that native load customers and future direct access retail customers are not harmed by the merger or acquisition.

Market concentration is likely to be higher among narrowly defined geographic/ product markets than among loosely defined markets. A high level of market concentration suggests that the regulatory reviews of mergers and acquisitions

[28] The geographic boundaries for a destination market are determined by looking at the geographically dispersed suppliers that the wholesale customer or group of wholesale customers, whichever the case may be, could reasonably and feasibly turn to for electric power supplies, if wholesale prices were to increase by small but significant amounts.

proposals are likely to be more detailed because a high level of market concentration is typically associated with a high level of market power. Detailed analysis of a merger or acquisition proposal provides state regulators with an opportunity to closely examine the effects of the proposal on the utility's costs and the rates paid by native load customers and direct-access retail customers.

Guideline 8: Market shares and the HHI need to be interpreted in the context of the regulations and contracts that characterize the post-merger geographic/product markets.

The belief is that market shares and the HHI are imperfect measures of the intensity of competition within unregulated product/geographic markets.[29] Their imperfection is magnified for regulated services because the interpretation of these statistics is muddled by regulations and contracts that affect the availability of wholesale and retail electricity services. Joskow's solution for this problem is to conjoin market
shares and the HHI with specific information that pertains to specific contracts and specific regulations before regulators reach a decision as to whether the proposed merger or acquisition should be subject to a more detailed analysis.[30]

Guideline 9: Market shares and HHIs should play minor roles in the preliminary analysis of a utility merger or acquisition proposal.

[29] "Antitrust analysts view measures of concentration as no more that presumptive indicators that a particular market structure or proposed consolidation is, or is not, worthy of detailed analysis," Pierce, "Antitrust Policy," 43. ". . .[t]he analysis of market power generally relies primarily on. . .indirect indicia of market power [that are used] to draw inferences about the likely importance of. . .interactions between [oligopolistic] suppliers and how they [these interactions] affect market performance. . .given available but generally imperfect information on [the firms'] demand and costs parameters, [the] firm[s']. . . structure, behavior, and performance, and [the market's structure, behavior, and performance.] Joskow, "Horizontal Market Power," 4.

[30] Joskow, "Horizontal Market Power," 6.

Market power tests using market shares or HHIs are designed to identify potentially dangerous levels of market concentration. These tests are most useful when the proposed merger or acquisition causes the geographic/product market to crossover from “light” to “heavy” concentration. However, the current wholesale and retail electricity markets are not lightly concentrated. Many times, these markets are monopolies. Sometimes, they have the structure of a dominant firm and a competitive fringe. Consequently, market shares and HHIs are often of limited use to state regulators when they review a merger or acquisition proposal.

Guideline 10: The rebuttable presumption for merger and acquisition activity among two or more firms in the competitive fringe of the wholesale or retail markets should be that the merger or acquisition improves the competitiveness of the market.

Merger or acquisition activity among two or more firms in the competitive fringe[31] often helps to ensure the economic survival of both firms. The belief is that the post-merger firm is in a better position to compete with the dominant firm[32] even though the dominant firm continues to control the new firm’s production costs after the merger or acquisition.[33]

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[31] It has become commonplace in antitrust practice to refer to the dominant firm/competitive fringe model. This model envisions a marketplace as being populated by a single firm that strongly influences the economic behavior of the other firms in the marketplace. This firm is typically large and often controls bottleneck facilities or essential services. The remaining firms in this market are usually small and tend to be affected by the pricing and production decisions of the largest firm. These small firms are grouped together and called the “competitive fringe.”

[32] See footnote 31 above.

[33] For example, a commonly encountered cause of the market dominance that exists for a vertically integrated utility is its ownership and control of transmission facilities. These facilities are used to produce the access services that are essential to the economic well-being of fringe competitors. This particular cause of market dominance in the electricity industry does not disappear until either transmission facilities are owned or transmission facilities are controlled by others.

Guideline 11: The rebuttable presumption for merger or acquisition activity among the dominant firm and members of the competitive fringe should be that it is anticompetitive; consequently, every merger proposal of this type would be subject to a detailed analysis of its consequences on competition, innovation, customer choice, costs, and prices.

Merger or acquisition activity among the dominant firm and firms in the competitive fringe makes it less likely that a meaningful competitor will ever surface in the geographic/product market. Consequently, state public utility commissions have an obligation to look very closely at mergers and acquisitions that involve the dominant firm in either wholesale or retail markets.

Guideline 12: Retail market shares and HHIs are irrelevant to the review of a merger or acquisition proposal that involves two or more utilities with exclusive franchise areas.

The outcome of merger or acquisition activity among two or more regulated utilities with exclusive franchises is a post-merger utility that serves multiple exclusive franchises. The post-merger utility serves more customers, has a larger load, operates in a larger geographic area, and has the potential to develop more electricity services. However, two things do not change for the post-merger utility: the HHI for the retail market continues to be 10,000, and the retail market share continues to be 100 percent. Consequently, retail market shares and HHIs do not provide any meaningful information about the potentially anticompetitive effects of the proposed merger or acquisition.

Guideline 13: The potentially anticompetitive effects of "excess capacity and energy" should be a focal point for the review of a merger or acquisition proposal that is submitted by two or more utilities with exclusive franchise areas.[34]

Merger or acquisition activity among two or more firms with exclusive franchises has the capability to negatively affect potential competitors. Although the pre-merger firms might not have any capacity or energy that can be designated as residual, "excess capacity" and "excess energy" may characterize the post-merger firm.[35] These excesses might arise because of the post-merger integration of generation and transmission facilities. The new configuration of facilities may allow the post-merger firm to free up generation and transmission facilities that previously were used to serve native load and honor its long-term contractual commitments. Excess capacity and energy are threats to potential competitors because the post-merger firm can set prices for residual electricity and power that are sufficiently low to act as entry barriers.

[34] Guideline 13 is not in opposition to Joskow's proposal that existing capacity that is used to serve new load should be excluded from the calculation of the post-merger firm's market power over its customers. We have just demonstrated in Guideline 12 why the market power over retail customers due to market concentration does not change as a result of the merger. However, guideline 13 is in opposition to Joskow's position that the post-merger or post-acquisition firm does not possess any market power attributable to its existing capacity when the marginal (operating) cost of the existing capacity is greater than the long-run costs of entry. See Ibid., 31. It appears that Joskow's focus on consumers precludes him from looking at whether there is an institution characterizing the wholesale electric power market that prevents the post-merger or post-acquisition firm from pricing its existing marginal capacity (and marginal energy) at levels that are below the new firm's relevant short-run marginal cost. It is not unreasonable for a post-merger or post-acquisition firm to want to set "below-cost" prices for existing marginal capacity and energy when it fears that a potential entrant, initially competing for new load, will eventually begin to challenge the existing load of the post-merger or post-acquisition firm.

[35] Excess capacity and energy is capacity and energy that is not committed to the service of native load or long-term contracts. They represent that capacity and energy that are available to serve new load. However, they also represent the capacity and energy that are not suitable for the service of existing load. If the capacity and energy in question are suitable for the service of existing load, they would have been dispatched.

Guideline 14: Post-merger cost savings should be a focal point for the review of a merger or acquisition proposal that involves two or more utilities with exclusive franchise areas.

Cost savings and other synergies are important reasons why two monopolistic utilities would be involved in merger or acquisition activity. Employee reductions, productivity increases, economies of scale and improved least-cost dispatch are sources of these savings. However, there are not any competitive pressures on the post-merger firm to pass through cost savings in the form of lower wholesale or retail rates. Instead, stockholders and utility management are likely to be the beneficiaries of these cost savings.

Guideline 15: Cost savings for a proposed merger or acquisition involving two or more utilities with exclusive franchises should be sustainable and achievable only through the consolidation of firms.

Robust wholesale markets and emerging retail competition imply that many of the cost savings and other synergies that previously were achievable only through a merger or acquisition can be secured by other means. For example, the outsourcing of the billing function holds the potential to generate more savings for each pre-merger utility than the cost savings for the post-merger firm that are obtained by merging and paring down two separate billing departments. Similarly, the outsourcing of the meter-reading function has the potential to generate more cost savings for each pre-merger firm than the consolidation of two groups of meter readers. Open access holds the potential for each pre-merger firm to attain economies-of-scale-like reductions in average costs because they have a larger geographic area over which to sell their residual energy and power. Therefore, state regulators should examine alternative means to achieve cost savings that are attributed to the proposed merger or acquisition.[36]

Guideline 16: Specific procedures for passing through cost savings to native load retail customers should be developed when the post-merger firm does not have to contend with the pressures of retail competition.

The post-merger utility is not likely to pass through any cost savings to native retail customers when its market is not subject to retail competition. Instead, the post-merger utility is likely to retain its cost savings for battles in the competitive wholesale markets. Additionally, the directors and management of the post-merger utility are likely to feel an obligation to pass some of these cost savings through to stockholders as compensation for the higher risks associated with competitive wholesale markets. Therefore, state regulators have to take an active and formal role to ensure that some cost savings are passed on to native load retail customers when retail competition is not part of the relevant market.

Guideline 17: The proposed merger or acquisition should not improve the profitability of anticompetitive activity.

An unavoidable outcome of any merger or acquisition is an increase in market concentration with an attendant expansion of market power by the post-merger firm. In recognition of this fact, a merger or acquisition should be prohibited when it enhances the profitability of restricting output to wholesale or retail customers. Additionally, a

[36] Pierce, "Antitrust Policy," 54.

merger or acquisition should not be approved when it increases opportunities for the post-merger firm to collude, explicitly or tacitly, with its competitors.

Guideline 18: Regulators might require a *quid pro quo* as an effective means to increase the competitiveness of the generation market and restrict the abuse of market power in the transmission market.

The approval of a merger or acquisition proposal can be tied to the creation of an ISO. This *quid pro quo* helps to protect against the leveraging of monopoly power from the transmission market to the generation market by the vertically-integrated post-merger firm. The approval of the merger or acquisition can be tied to the pre-merger divestiture of the post-merger firm's generation facilities.

Guideline 19: The decision to tie the approval of a merger or acquisition to the divestiture of generation plant should depend on whether there is a strategic opportunity to exercise market power over Poolcos or mandatory power exchanges.

The Poolco's or mandatory power exchange's required level of generation is determined by the amount of power that is needed to equate the supply of power with the demand for power. The spot price for electric power depends on the economic dispatch of the generation facilities that are made available to the Poolco or mandatory power exchange. The generation facilities available to the Poolco or mandatory power exchange are established by the bids that are submitted by the generation companies. The market power acquired by the post-merger firm holds the potential for that firm, unilaterally or in concert with other firms, to fix these bids through the control of the "last-bid" generation facilities.[37] The post-merger firm obtains a supranormal profit by bidding higher prices on these generation units than it would have bid if it could not fix the marginal price.

STREAMLINED REVIEW OF MERGERS AND ACQUISITIONS

The streamlined review of merger or acquisition proposals occurs before the detailed analysis of cost savings or the potentially anticompetitive effects of these proposals.[38] This timing forces a commission to search for a dominant noncost reason that motivates the proposed merger or acquisition. This search leads a commission to economic survival, which serves as the foundation for four reasonable rebuttable presumptions for selected classes of mergers and acquisitions.

The first rebuttable presumption is that merger or acquisition activity among two or more fringe competitors does not significantly increase unilateral or collective market power. The second rebuttable presumption is that merger and acquisition activity involving utilities with exclusive franchise areas does not significantly increase the likelihood of anticompetitive behavior when the merger or acquisition does not create excess energy or excess power. The third rebuttable presumption is that merger or

[37] The fundamental belief underlying independent competitive bids is that each bidder always submits its lowest cost bid when each bidder is unconcerned about the bids made by its competitors. This belief ensures that the competitive bids submitted to the Poolco are well-behaved in the sense that there do not exist excessively large gaps in the generation costs that are associated with the submitted bids. Therefore, the competitive bid for the last-bid block of electric power that is accepted by the Poolco should be slightly higher than the competitive bid for the immediately preceding block of electric power. Specific generation facilities are associated with the last block of electric power that is accepted by the Poolco for economic dispatch. The facilities are denoted as the last-bid facilities. If the firms that make competitive bids for consideration by the Poolco can collude in some fashion, then the cost of the last-bid block of power can be excessive because it is supplied from residual generation facilities that are too costly in relation to the availability of other residual facilities.

[38] To assess the correctness of approving a merger or acquisition on the strength of cost saving, it is necessary to analyze entry conditions, the market's price response to demand and supply shocks, and various other things.

acquisition activity involving a dominant firm and fringe competitors does substantially increase unilateral and collective market power. The fourth rebuttable presumption is that merger or acquisition activity involving utilities with exclusive franchise areas significantly increases the likelihood of anticompetitive behavior when the merger or acquisition creates excess energy or excess power.

The first two rebuttable presumptions imply the approval of a merger or acquisition proposal unless the parties opposing the merger or acquisitions can establish a reasonable doubt that the pertinent presumption is incorrect. The third and fourth rebuttable presumptions imply that a merger or acquisition proposal will not be approved unless the parties submitting the proposal can prove the incorrectness of the presumption.

The economic survival of a dominant firm is never in question; whereas, the economic survival of fringe competitors is always in question. Meanwhile, there are instances where the economic survival of utilities with exclusive franchise areas is in question. The set of rebuttable presumptions deals with each of these situations:

- Merger or acquisition activity involving a dominant firm is presumed to be inappropriate.
- Merger or acquisition activity among fringe competitors is presumed to be appropriate.
- Merger or acquisition activity involving utilities with exclusive franchises is presumed to be appropriate when it does not create excess capacity or excess energy that the new utility can use to keep potential competitors out of their franchised areas.
- Finally, any merger or acquisition activity involving utilities with exclusive franchise areas is presumed to be inappropriate when this activity creates excess capacity or excess energy.

These presumptions allow state regulators to factor in their role of promoting economic development as they seek to streamline their review of merger and acquisition proposals. On the one hand, the economic survival of fringe competitors provides a weak incentive for the dominant firm to keep its rates and costs down, while it retains jobs and tax revenue within the state. On the other hand, merger and acquisition activity involving a dominant firm and fringe competitors reduces even further the weak incentive for the dominant firm to hold down its rates and costs. Lastly, mergers and acquisitions of utilities by other utilities can increase competition and lower costs and rates when they do not create excess energy or power.

This set of rebuttable presumptions also has other desirable characteristics. First, they do not vary on a case-by-case basis. Second, they point to the need for state regulators to trade off economic survival against the potentially anticompetitive effects of more market concentration. Third, they point directly to the careful analysis of the level and structure of cost savings when economic survival is not an issue. Finally, they allow state regulators to trade off cost efficiencies against the potentially anticompetitive effects of market concentration when market dominance or excess energy exist. Therefore, this set of presumptions preserves competition as the primary focus when state regulators review merger and acquisition proposals.

CONCLUSIONS

Market shares and HHIs are not efficient means for streamlining the state regulator's review of the merger and acquisition proposals that are submitted by regulated electric power utilities. The market for wholesale power is not national, and its regional dimensions vary over the year and with growth in the demand for electricity. Even after open transmission access is fully developed and deployed, transmission constraints set regional or even smaller limits on the geographic scope of any wholesale product market. The constriction of the wholesale markets due to transmission constraints serves to increase the probability that the pertinent HHIs exceed 1800 or even 2500. Because competition is less developed in the retail markets, HHIs are probably even higher in the retail markets than those that will be calculated for wholesale markets. Therefore, state regulators need to look elsewhere for a means to streamline a review of a merger or acquisition proposal.

Clearly, it is inappropriate to streamline the review of the cost savings that are alleged to accompany a merger or acquisition in the electricity industry. Cost savings are the most often used justification for merger and acquisition activity in the electricity industry because market concentration is relatively high and competitive pressures are relatively low. Therefore, the perennial issue has been whether the alleged cost savings are large enough to allow the merger or acquisition to go forward.

Another reason why it is inappropriate to streamline the review of cost savings is the substantial disagreement over the kinds of cost savings that should be considered by state regulators during the review process. There are current and future cost savings that come from a variety of sources. On the one hand, they result from the post-merger realization of economies of scale, scope, and coordination. However, it is difficult to estimate the magnitude of these savings. On the other hand, cost savings are created by the post-merger operation of the facilities that are used to produce electricity. They are realized after a merger-induced shift of the demand for electricity into off-peak hours, by lower costs associated with the economic dispatch of the post-merger facilities, and by the ability of the larger post-merger firm to tolerate smaller reserve margins. However, these cost savings can be obtained without resorting to a merger or acquisition when a Poolco exists.

"Competition first, cost savings second" is fundamental to the protection of the public interest. Mergers and acquisitions can create excess capacity and energy, which are means for improperly thwarting the entry of firms into electricity markets. Mergers and acquisition activity also can create new firms with "deeper pockets" that can be
used to prevent market entry. Finally, mergers and acquisitions can create transmission constraints, which in turn generate subareas of market power.