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PART ONE
COMPETITIVE EFFECTS

I. TYPES OF MERGERS

A. Horizontal merger across same market (e.g., merger of generation)

B. Vertical merger across different market segments (e.g., merger of generation with transmission)

II. COMPETITION ANALYSIS

A. Overview

1. FERC will review the effect of a merger on wholesale competition. FERC applies Market Screen Analysis described in the Merger Policy Statement to review impacts of merger on competition.

2. Some State Commissions evaluate a merger's impacts on competition as one component of the public interest analysis.¹

3. Some states also use FERC's market screen analysis as the starting point for evaluating the impact of the merger on retail competition.²

4. FERC will not review the effect of a merger on retail unless a state has no jurisdiction to do so.³


5. Today the impacts of a potential merger on competition require heightened scrutiny to avoid impeding the emergence of retail competition.4

B. Horizontal Market Power

1. General Concepts

Horizontal market power in generation markets occurs when the merged company owns enough of the generation in a relevant market that it has the ability to influence the price of generation for its own benefit.5

A horizontal merger eliminates competition between competitors far more surely than does any agreement in restraint of trade -- and the elimination of competition may be permanent. Two anticompetitive effects are highlighted: first, the surviving firm may have assembled the instruments of dominance; and second, the other firms, with uncertainty in the market reduced, may more likely engage in collusion. But at the same time, the potential for procompetitive effects may also be advanced by horizontal mergers, including the achievement of otherwise unattainable efficiencies.


The preponderant case for the mergers is that they will improve efficiency. The preponderant case against them is their possible impairment of competition, for two reasons: first, the merging companies are typically actual or potential competitors in some parts of their business, and second, they may be enabled by joining together to deny outside firms a fair opportunity to compete.

A. Kahn, II The Economics of Regulation 282 (1988).

2. Potential Effects of Horizontal Market Power


a. A merger can result in the combined company's dominance over generation or control over transmission which would adversely affect retail competition.  

b. A merger may also reduce inter-fuel competition, i.e., competition between gas and electric in retail markets.

3. Factors Suggesting Horizontal Market Power

a. **Transmission constraints**, both in the form of physical transmission limitations and discriminatory transmission pricing have been repeatedly identified as factors which constrict the size of the geographic markets and thus, increase market concentration within those markets.

   (1) Transmission limitations prevent suppliers from reaching a market, which in turn reduces the size of the market, thereby increasing the market share of incumbents within that market and their ability to exercise market power.

   (2) **Union Electric/Central Illinois**, 1997 FERC LEXIS 1030, *23, 79 F.E.R.C. para. 63,007 (1997) (FERC expressed concern that presence of constraints on the company's system may preclude buyers from purchasing from suppliers who require use of the merged company's system which would make geographic markets smaller).


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6 **See BGE/PEPCO**, 79 F.E.R.C. para. 61,027 (1997) (record submission suggests that merged company will control 100 percent of market for firm energy and 80 percent for non-firm under retail access); **Application of UE for Order Authorizing Merger**, Case No. EM-96-149 (Missouri Pub. Serv. Comm'n 1997) (merged company's market dominance over generation and control over transmission will adversely impact retail competition).

7 **Kansas Power and Light Company**, 127 P.U.R.4th 201 (Kansas SCC 1991) (adverse impacts to competition between gas and electric outweighed by merger savings); **Puget Sound Power**, Docket No. UE 951270 (Washington UTC 1997) (potential for elimination of competition between electric and gas addressed by minimizing the potential for cross subsidies).
(4) Union Electric/Central Illinois, 1997 Ill. PUC LEXIS 28 (Ill. Comm. Comm'n 1997) (key to incorporating transmission limitations into merger analysis is to include each supplier in the relevant market only to the extent of the transmission capability available to them).


(6) Transmission constraints may be physical, i.e., constrained transmission interface or economic, i.e., pancaked rates or discriminatory pricing, which make delivery to a market economically infeasible.\(^8\)

b. Consolidation of control of electric generating facilities that serve the same market is another factor which raises horizontal market power concern because the merged company may gain control over significant resources in the market for a sustained time and withhold output to manipulate prices.\(^9\)

c. The relative size of the merged company to others in the product and geographic market is another indicator of the merged company's ability to indicate horizontal market power as a seller.\(^10\)

d. Barriers to market entry which exist after the merger can increase the merged company's market share and thus, its ability to exercise market

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\(^10\) See Baltimore Gas and Electric/Potomac Electric, 176 P.U.R.4th 316 (Md. Pub. Serv. Comm'n 1997) (intervenor notes that large size of remaining competitor will give it unfair advantages); Wisconsin Electric/Northern States Power, 1997 FERC LEXIS 982, *101 (merger would combine the largest utility in the service area with the largest supplier outside).
power.\textsuperscript{11} Two such barriers to entry are environmental concerns\textsuperscript{12} and regulatory approval requirements.\textsuperscript{13}

C. Vertical Market Power

1. Overview
   a. \textbf{Vertical Market power} over generation markets occurs when the merged company uses its control over one segment of its market to adversely affect competition in generation markets.\textsuperscript{14}
   b. \textbf{Bottlenecks:} Vertical market power is a particularly significant problem when the merging parties control an essential or "bottleneck" resource which can be used to exclude competitors or otherwise gain advantage in other markets.\textsuperscript{15}

2. Factors Suggesting Vertical Market Power
   a. \textbf{Control of transmission} is the one factor consistently identified in merger cases as relevant to an analysis of vertical market power.

\textsuperscript{11} See FERC Merger Policy Statement (discussion of barriers to entry as factor which exacerbate market power post merger).


\textsuperscript{13} \textbf{Wisconsin Electric/Northern States Power,} 79 F.E.R.C. para. 61,158 (1997).


company will have vertical market power due to control over transmission interface).

c. IES Utilities, 1997 FERC LEXIS 1361, *84-85, 80 F.E.R.C. para. 63,001 (1997) ("Applicants will have priority access to constrained interface capability and will be in a position to deprive other suppliers access to the transmission capability [into the market].").

d. Union Electric Company, 176 P.U.R.4th 201 (Mo. Pub. Serv. Comm'n 1997) (most significant was the potential for vertical market power based on the merged company's control of the transmission system).

e. Southern California Edison/San Diego Gas and Electric, 122 P.U.R.4th 225 (Cal. Pub. Util. Comm'n 1991) ("in the vertical analysis, we have determined that due to its control over network transmission...the merged utility will be in a dominant position, capable of forcing the Resale Cities to purchase power from it and of distorting prices in the bulk power markets...").

3. Potential Effects of Vertical Market Power

a. By controlling transmission, the merged company can

   (1) manipulate transmission to exclude other parties from access to the market.\(^{16}\)

   (2) arrange generation dispatch to its advantage and distort pricing in power markets.\(^{17}\)

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b. Leveraging, where a company conditions sale for a desired good or service on purchase of another not desired by the buyer.\textsuperscript{18}

c. Discriminatory planning and deployment of transmission resources.\textsuperscript{19}

D. Summary of FERC Market Screen Analysis

1. Define the Relevant Product Markets

Three product markets identified in the Merger Policy Statement include nonfirm energy, short-term capacity and long-term capacity.

2. Define the Geographic Markets

a. The Merger Policy Statement advises that geographic markets be defined in such a way that accounts for relative generation costs, transmission prices and transmission limitations.

b. Note: If the merging companies do not own facilities or sell relevant product in the same geographic market there can be no increase in horizontal market power and the Merger Policy Statement does not require further analysis under the market screen.\textsuperscript{20}

3. Measure the Merger's Impact on Market Concentration

a. Concentration statistics are calculated and compared with the market thresholds to determine the changes in the Herfindahl-Hirschmann Index (HHI).

b. If post-merger HHI is below 1000, regardless of change in HHI, the merger is unlikely to have adverse competitive effects.


\textsuperscript{20} Long Island Lighting Company, 80 F.E.R.C. para. 61,035 (1997) (no horizontal market power concerns presented when one of the merging companies did not own or control generation at the time of the merger).
c. If post-merger HHI ranges from 1000 to 1800 and change in HHI is greater than 100, the merger potentially raises competitive concerns.

d. If post-merger HHI exceeds 1800 and the change in the HHI exceeds 50, the merger potentially raises significant competitive concerns.

e. If the change in the HHI exceeds 100, it is presumed that the merger is likely to create or enhance market power.

4. **Draw Conclusions**

a. If an adequately supported market screen analysis shows that the merger would not significantly increase concentration and there are no interventions raising genuine issues of material fact that cannot be resolved on the basis of the written record, the Commission will not set the merger for hearing.

b. The Commission will set for hearing the competitive effects of merger proposals if (a) they fail the screen analysis; (b) there are problems concerning assumptions or data used in screen analysis or (c) factors external to the screen put the analysis in doubt.

**E. Mitigation of Anticompetitive Effects of a Merger**

1. **Overview**

   Where a merger fails the market screen analysis and has anticompetitive effects, there are a variety of conditions which could be imposed to solve competitive problems with a merger, including formation of an ISO, divestiture of assets, elimination of transmission constraints, efficient regional transmission pricing and offering open season to allow merging utilities customers to escape from contracts.

2. **Independent System Operator**

   a. **Benefits**

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(1) ISO can address vertical market power by ensuring transmission expansion or preventing strategic manipulation of generation dispatch.\textsuperscript{22}

(2) An ISO can deal with horizontal market power concerns such as the ability to control prices through control of generation resources, provided that the ISO has the ability to control the dispatch or prices paid to generators.\textsuperscript{23}

(3) An ISO can also address the problem of pancaked rates which can constrict geographic markets by limiting suppliers ability to access markets.

b. Drawbacks

ISO must have sufficient authority and control over dispatch and transmission pricing or else it will not be adequate to address market power issues. In Wisconsin Electric/Northern States Power, 79 F.E.R.C. para. 61,158 (1997), the FERC rejected the proposed merger in part due to its adverse impacts on competition and the inability of the proposed settlement ISO to mitigate market power.

1. Generation Divestiture

a. Benefit: Divestiture prevents companies from exercising control over generation.\textsuperscript{24}

b. Drawbacks


(1) First, it has been suggested that divestiture is most effective in addressing market power in highly concentrated markets. Where are only a few generating units in the market area, divesting those units to just a few owners may not mitigate the market power problem.\(^{25}\)

(2) Generation divestiture may not be effective in bringing new suppliers to compete in the market.\(^{26}\)

(3) The viability of the divestiture option as a means of resolving the market power problem depends on the type and operating costs of capacity divested and the present market role of the entities which would acquire the generation assets.\(^{27}\)

2. **Transmission Expansion to Eliminate Transmission Constraints**

   a. **Benefit**: Elimination of constraints on available transmission capability can prevent competitors from participating in a market. Thus, the elimination of transmission constraints, such as through enlarging transmission capacity, has been identified as a measure for mitigating this type of market power.\(^{28}\)

   b. **Drawbacks**

      (1) Transmission expansion can be a lengthy, protracted process; utilities must obtain approvals for expansion from state and local authorities under applicable law.\(^{29}\)


(2) Where constraints on other systems are a problem, applicants would also be required to seek transmission expansion on those systems as well.
PART TWO
COST-BENEFIT ANALYSIS AND COST ALLOCATION

I. COST-BENEFIT ANALYSIS

A. Merger Costs

1. Types of Merger Costs

   a. Transaction Costs and Transition Costs

      (1) "Transaction costs" are the costs of bringing the merging entities into agreement and obtaining approval for the merger. These costs may include legal, regulatory and investment banking fees.  

      (2) "Transition" costs are the costs incurred to implement the consolidation. These costs include employee relocation, early retirement and payments to departing executives.

   b. Acquisition Premium

      (1) A special form of transaction cost is the acquisition premium. State commissions define an "acquisition premium" as the amount by which the purchase price for the asset exceeds its net book value.


31 See Cincinnati Gas and Electric, Case No. 95-656 (Ohio PUC 1996) (recovery of cost of early retirement program denied since costs found offset by savings).

32 See, e.g., Guidelines and Standards for Acquisitions and Mergers of Utilities, 155 P.U.R.4th 320 (Massachusetts DPU 1994) (defining acquisition premium as the difference between purchase price to acquire plant and net depreciated cost to previous owner). See also Northeast Utilities/PSNH, 114 P.U.R.4th 385 (NH Pub. Util. Comm’n 1990) (acquisition premium ordinarily represents payment for utility assets in excess of book value but represented difference between bankruptcy settlement amount and book
c.  Other Costs

(1)  Pension Funds

Pension fund values may exceed the present value of future benefit obligations, especially in light of the behavior of the stock market in recent years. Under such circumstances, the pension expense charged to customers could be reduced or even eliminated for a time. However, if these excess values go to shareholders, customers are likely to pay higher rates because pension expenses in the remaining monopoly sector will be higher.

(2)  Deferred Taxes

(a)  Before 1986, deferred tax liability was being accrued based on the applicable statutory corporate tax rate of 46%, but in 1986 the corporate tax rate became 34%. Because of this 12% decline in the corporate tax rate, the deferred federal tax liability balances at the end of 1986 were in excess of the real liability for years after 1986. **Instead of refunding the money immediately, Congress required that it be paid back over the life of the assets giving rise to the deferred liability, thereby creating a long term loan from customers to utilities.** On disposition of assets to which the excess accrual amounts apply, it is necessary to be sure that the customers are in fact repaid the remaining balance.

(b)  The portion of deferred tax balances (net of SFAS-109 balances) which have been fully funded by ratepayers could migrate to the balance sheet of the reorganized unregulated entity and the utility then could no longer use those balances as an offset to rate base in the calculation of revenue requirements and ultimately rates charged by the utility.

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2. Principles Governing Customer Responsibility for Costs

Regulators are usually confronted with various proposals for addressing merger related costs. Proposals may include denial of recovery of the acquisition premium and transactional costs or allowance of recovery only to the extent offset by savings. The following four principles have been applied in analyzing merger proposals.

(1) Recovery of merger costs may be limited to the extent they are the least cost means of obtaining public interest benefits.

(2) In calculating the net benefits available to the customers, all costs should be netted against the benefits. Costs should include those which are difficult to quantify, such a reduced potential for customer choice.

(3) In computing benefits, only those benefits guaranteed by the merging companies should be counted. Otherwise the ratepayer becomes a guarantor.

(4) To show that the cost-benefit ratio is advantageous for the customer, the applicants should be required to demonstrate that they have reviewed other alternatives (such as strategic alliances, jointly owned service companies, outsourcing and stand alone reductions) and that the merger is the least-cost alternative. As Alfred Kahn states in The Economics of Regulation:33

The corollary question is to what extent the benefits can be achieved without full financial consolidation and with a lesser menace to competition, or to what extent, if the consolidation is permitted, the competitive opportunities of outsiders can be safeguarded.

3. Examples of the Application of the Principles

a. Denial of Recovery for Acquisition Premium and Other Transaction Costs

(1) Some state commissions deny recovery of the acquisition premium and other merger related transaction costs in rates, either with little explanation or on grounds that anticipated savings are not sufficient to offset the expected acquisition premium. In the Entergy merger case, both the Louisiana and Texas commissions denied recovery of an acquisition premium for GSU stock in the amount of $3.00 per share. Although the Louisiana commission noted that the acquisition premium was substantial, neither that commission nor the Texas Commission gave an explanation for denial of recovery of the acquisition premium.

(2) Some commissions tie recovery of an acquisition premium and merger costs to savings. In some instances, this has resulted in a denial of recovery of the acquisition premium.

(3) According to some, the acquisition premium represents a windfall to the investors of the recipient utility. They have presumably received an adequate return on their investment and have recovered an appropriate part of the investment itself through depreciation. For the customers of that utility to pay rates set to encompass a premium to the investors, the argument goes, is analogous to tenants in a building being surcharged by a new owner to pay off an acquisition premium to their past landlord. Such an arrangement could be justified if the merger offers customers unique benefits substantially in excess of the premium and that the merger could not take place in the absence of the premium.


b. Recovery of Acquisition Premium To the Extent Offset By Savings

(1) In some instances, tying recovery of the acquisition premium to savings or merger benefits has allowed for some limited recovery of the acquisition premium.

(2) In its Guidelines for Mergers of Utilities, the Massachusetts Department of Public Utilities endorsed recovery of the acquisition premium on a case by case basis with reference to savings and benefits resulting from the merger. The Guidelines provide that a company proposing a merger, with or without an acquisition premium, must show that the costs of the transaction are accompanied by benefits that warrant their allowance. The Massachusetts regulators said that if a company could demonstrate that denial of recovery of the acquisition premium would prevent consummation of a merger that would otherwise serve the public interest, then it would consider recovery of an acquisition premium.

(3) The Kansas commission has limited recovery of the acquisition premium to the level of savings to be achieved by the merger. In Kansas Power & Light Co., the Kansas Commission approved the merger on the condition that recovery of the $388 million acquisition premium would be limited to $312 million -- which represented the level of reasonably anticipated merger savings as determined by the Kansas Commission. The Kansas Commission explained that its decision would ensure that "ratepayer benefits [...] not be jeopardized for the sake of ensuring that utilities are able to recover the acquisition premium they agreed to pay to win the bid for the acquired utility."
(4) **Tying recovery of merger costs to benefits may be an acceptable approach, provided that as a start, the merger was the least cost alternative to achieving the benefits provided.** The Oklahoma commission has applied the "least cost alternative" principle to recovery of an acquisition premium. In *Oklahoma Gas & Electric Co.*,\(^{39}\) the Oklahoma commission determined that Oklahoma Gas and Electric's acquisition of Mustang Fuel was the least cost alternative available. Even so, the Oklahoma commission only passed on half of the acquisition premium to ratepayers, finding that shareholders and ratepayers received equal benefits from the company's acquisition and thus, should share equally in the costs.\(^{40}\)

c. **View Recovery of Costs In Same Manner As Other Utility Investments**

Another option for addressing recovery of the acquisition premium and other merger costs is to apply the principles applicable to recovery of other types of utility investment. The typical utility non-merger investment is included in rate base to the extent that it is prudent and/or the least cost means of achieving a necessary benefit. In a merger proceeding, one benefit is cost reduction. Therefore, the acquisition premium should only be included in rate base to the extent that the merger represents the least cost alternative available for achieving the savings proposed as part of the merger.

d. **Deferral of Consideration of Recovery of Acquisition Premium and Costs Until Rate Case**

(1) Some commissions defer consideration of recovery of the acquisition premium and other merger costs to subsequent rate cases. In *Central Illinois Public Service Co.*,\(^{41}\) the merger applicants had proposed that over the first ten years following the merger, initially estimated merger-related savings, net of the costs to achieve, transaction costs and merger premium, be shared


\(^{40}\) Id.

equally between the shareholders and ratepayers. All additional merger-related savings during the first ten years and all merger-related savings after that would go entirely to the customers.

(2) The Illinois commission concluded that the applicants' proposed merger cost recovery and savings sharing plan should not be approved in the merger proceeding but instead deferred to a general rate proceeding in which all the elements of the utility's cost of service would be examined. The commission directed Central Illinois to file a rate case no later than twelve months after the merger to include in the filing a proposal for reflecting in rates the effect of the merger, including cost savings, cost of the merger, transaction costs and merger premium.

(3) The public interest finding necessary for merger approval may well require consideration of rate impacts. Although the concept of using a rate case to generate data on merger costs and savings is sensible, rate review should either be consolidated with the merger proceeding or alternatively, the merger should be conditioned on a minimum acceptable result as to rates and refunds.

e. Exposure and Offset of Hidden Costs

In reviewing the merger, commissions may require applicants to identify those costs, such as deferred tax balances and surpluses pension funds, which are may otherwise become benefits to shareholders. This way commissions may ensure that customers are not deprived of the benefit of these assets because of the merger.

B. Savings and Other Benefits

Savings asserted by merger applicants have included: administrative/general savings, labor savings, fuel savings, O&M savings, savings from coordination efficiencies, savings from construction deferral and savings from bulk purchases and other economies of scale.
1. Applicable Principles

   a. Merger applicants may be required to quantify savings with the degree of specificity required in a rate proceeding, or to accept rate reductions based on their assertions of savings. Generalized projections of savings often are not sufficient to enable commissions to make the required public interest findings regarding the impact of the merger.

   b. Merger applicants may be required to quantify savings both in the short term (three to five years) and long term (ten years).\(^\text{42}\)

   c. Commissions can ensure that claimed savings derive from the merger itself. This enable regulators to be sure that companies are not rewarded through the merger proceeding for achieving savings which could have been attained through efficient management or voluntary efforts to coordinate operations. Thus, it is important for commissions to compare and continue to track pre- and post- merger levels of savings.\(^\text{43}\)

2. Options

   a. Rate Freeze

      (1) Some merger applicants propose a rate freeze, as a proposed means of returning merger savings to ratepayers.\(^\text{44}\)

      (2) A rate freeze can be inconsistent with the principles outlined above, because it relies on generalized assumptions that rates will...
increase in the future and thus, consumers will benefit from a freeze.\textsuperscript{45}

(a) The Maryland commission cured this defect in the merged company's proposed freeze by reviewing the reasonableness of each applicant's rates and reducing revenue requirements and rates prior to implementing the requested rate freeze. The Maryland commission also implemented a shared savings mechanism along with the rate freeze to return savings to ratepayers.\textsuperscript{46}

(b) Similarly, the Michigan Commission approved a settlement agreement under which the merged company would implement a rate reduction based on merger savings to be realized over the four-year period following the merger.\textsuperscript{47}

(3) A rate freeze may also permit companies to achieve excessive earnings. For instance, the Idaho Commission realized that the Company's proposed five-year rate freeze could result in the Company's actual earnings exceeding its authorized rate of return during the rate freeze period. Accordingly, the Idaho commission imposed an earnings cap.\textsuperscript{48}

b. Hold Harmless Clause

(1) Another device similar to a rate freeze is a "hold harmless" clause which state commissions have used to ensure that ratepayers do not incur increases in post-merger rates above the level of what

\textsuperscript{45} See, e.g., Puget Sound Power and Light, Slip. Op., Docket No. UE-951270 (Wash. Util. & Trans. Comm'n 1997) (finding that five year period of rate stability will provide benefit to customers in light of past history of increasing rates, but also notes that Company's estimates are generalized).

\textsuperscript{46} BGE/PEPCO, Case no. 8725 (Md. Pub. Serv. Comm'n 1997).


they would have been had the company remained a stand alone entity.\footnote{See, e.g., Southwestern Pub. Serv. Co., Case No. 2678 (N.M. Pub. Util. Comm'n 1996) (customers held harmless from higher base-line O&M expense following first five years of merger); Washington Water Power Co., 164 P.U.R.4th 270 (Idaho Pub. Util. Comm'n 1995) (merger stipulation contains provision holding ratepayers harmless from adverse rate impacts; merger withdrawn).} A hold harmless clause is different from a rate freeze in that the merged company can still increase rates soon after the merger so long as those increases are not more than what they would have been had the company remained a stand alone entity.\footnote{See, e.g., PSI Energy Inc., 173 P.U.R.4th 393 (Indiana Util. Reg. Comm'n 1996) (approving rate increase three years after merger; increase did not violate hold harmless provision since merger-related costs were not the basis for rate increase).}

(2) While a hold harmless clause may shield ratepayers from adverse impacts, it does not bring merger savings to the customers.

c. **Rate Refunds, Credits and Reduction**

(1) Several commissions have ordered rate refunds, credits or reductions so as to return merger benefits more quickly to ratepayers.

(2) As a condition of merger approval, the Kansas Commission ordered rate refunds totaling $32 million, to be issued in three installments, during the rate moratorium period following the merger.\footnote{KPL/KGE, 127 P.U.R.4th 201 (Kan. State Corp. Comm'n 1991). See also Wisconsin Electric Power, 168 P.U.R.4th 168 (Mich. Pub. Serv. Comm'n 1996) (noting that utility agreed, as a condition of the merger, to reduce rates immediately during the four year period following the merger); Southwest Public Service, Case No. 2678 (N.M. Pub. Util. Comm'n 1996) (requiring $1.2 million annual credit to ratepayers through fuel adjustment clause, to prevent company from delaying rate filing and retaining merger savings).}

(3) Although immediate refunds or credits enable ratepayers to obtain merger benefits, there may be several obstacles.
(a) The commission might not have the legal authority to order rate reductions as part of a merger case.

(b) Absent the cost allocations which would be generated as part of a cost of service study, a commission might need to allocate benefits on an ad hoc basis.\(^{52}\)

(c) These obstacles may be surmountable if the commission has legal authority to consolidate the merger proceeding with a rate case.

d. Performance-Based Rates

(1) A commission might consider using the merger process to implement a performance-based rate system to return merger benefits to ratepayers and penalize the company for inefficient management, declining service quality or benefits promised through the merger but never achieved. The Massachusetts commission reviewed comments advocating a performance-based rate option in its proceeding to develop guidelines for evaluating mergers and found that a PBR system warranted further consideration.\(^{53}\)

e. Tracking Devices

(1) To determine whether promised savings have materialized, some commissions have conditioned mergers on development of tracking devices to monitor post-merger savings. Tracking mechanisms also assist in determining the savings to be shared between customers and shareholders.

(2) Commissions typically specify that adequate tracking mechanisms must be limited to those savings resulting from the merger and not

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\(^{52}\) See, e.g., Kansas Power and Light, 127 P.U.R.4th 201 (Kan. State Corp. Comm'n 1991) (relying on usage and number of customers as allocation factors for refunds since no exact basis for allocation had been developed).

those which would have otherwise been achieved had the companies remained stand alone.\textsuperscript{54}

II. COST ALLOCATION PROBLEMS

A. In General

The parties to a merger are different companies. There are differences in reserve ratios, capacity mix, fuel costs and employment levels, to name a few. These differences mean that the customers of one company have had a different "cost history" than the customers of the other company. Merging the two companies requires careful attention to cost allocation issues.

B. Allocation Principles Articulated by Commissions

1. Post-merger rates should be no higher with the merged company than they would have been \textbf{if the merger did not take place}.\textsuperscript{55}

2. The merged company \textbf{must bear the risk} that it will not recover all of its costs due to inconsistencies between state cost allocation methodologies.\textsuperscript{56}

3. The combined company must allow \textbf{access to its books and records} in all jurisdictions and maintain an audit trail to guard against potential over recovery.


\textsuperscript{56} \textit{See, e.g.}, Utah Power and Light, 45 F.E.R.C. 61,095 (1988) (applicant assumes risk of seven jurisdictional states adopting inconsistent cost allocation schemes).
4. Timing of Regulatory Allocation: Some states have chosen to defer allocation issues until the merged company is able to document cost causation through a new cost of service presentation.57

C. Allocation of Special Risks

1. In General

   a. Where the merging companies face significantly different risks, special allocation rules may be necessary. Significant risk differences can flow from differences in strandable investment, nuclear generation or hazardous waste experience. The customers of the less risky utility will not want to bear the risks borne by the customers of the other utility, without compensating benefits. Here are some alternative approaches.

   (1) The increased risk can be counted as a cost to the customers who are asked to bear it. If they are in a different jurisdiction than those of the other partner, the allocation of benefits would reflect this increased cost.

   (2) The commission with jurisdiction over the less risky company can attempt to prohibit the allocation to it of any cost associated with the risk incurred by the other company.

57 See, e.g., Kansas City Power and Light/KGE, 127 P.U.R.4th 201 (Kansas Corp. Comm'n 1991) (company will complete cost of service studying first power merger rate case to allocate cost savings and acquisition premium among jurisdictions and customer classes); PacifiCorp/UP&L, 96 P.U.R.4th 371 (Mont. Pub. Serv. Comm'n 1988) (fact that regulatory problems might arise from lack of clarity concerning post-merger jurisdictional cost allocations not grounds for prohibiting merger since post-merger allocation methodology, when developed, will be subject to Commission review); Pacificorp, 95 P.U.R.4th 96 (Ore. Pub. Serv. Comm'n 1988) (no reason to delay merger due to absence of interjurisdictional allocation method in light of company's agreement to assume costs not fully allocated); Utah Power and Light, 90 P.U.R.4th 482 (Wyo. Pub. Serv. Comm'n 1988) (interjurisdictional allocation issues deferred to future), Kansas City Power & Light Co., 127 P.U.R.4th 201 (Kansas Corp. Comm'n 1991) (allocation of merger savings and acquisition premium among jurisdictions to be done in post-merger rate case); Kansas Power & Light Co., 126 P.U.R.4th 385 (Mo. Pub. Serv. Comm'n 1991) (cost allocation study to be prepared within five years after merger for allocation of costs and savings in different jurisdictions); Cincinnati Gas and Electric, 64 F.E.R.C. para. 61,237 (1993) (applicants will allocate costs and benefits among jurisdictions through application of general principles of allocation to be developed and filed in subsequent Section 205 rate proceeding).
2. **Example: Holding Company Diversification**

A merger may increase opportunities for cross-subsidy by giving rise to a holding company and/or enlargement of unregulated affiliates for competitive activity. Because state commissions may lack jurisdiction over these unregulated entities, cross-subsidy between regulated and unregulated activity could occur.\(^{58}\) Regulatory options are described next.

a. **Separation and Standards of Conduct**

(1) In *BGE/PEPCO*,\(^ {59}\) the Maryland commission required the merged company to report unregulated utility activities as they take place and develop a cost allocation methodology to prevent discrimination in favor of non-utility operations. Further, the commission subjected the merged company to standards of conduct, including financial separation of natural gas brokering services from regulated activities and separation of operational employees of the unregulated subsidiary from regulated utility operational staff. The commission concluded that these conditions were necessary to protect the merged company's monopoly customers from subsidizing competitive activities. The commission, however, rejected proposals for establishment of two separate service companies for regulated and unregulated activity.\(^ {60}\)

(2) The D.C. commission also approved the merger applicants' Stipulation, under which the merged company agreed to allocate costs between gas and electric operations and to file reports on allocation of merger savings between gas and electric. The commission required that the allocation methodology not cause one fuel type (electricity or gas) to be advantaged over another.

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The Washington commission asserted its interest in minimizing cost shifting and resolving other parties' concerns that the merged company might use its dual fuel capability in an anti-competitive manner.61

b. Allocation of Benefits to Customers

(1) To the extent that unregulated activities provide benefits for current utility customers but also are aimed at maintaining market share in any market likely to be competitive in the future, commissions can consider allocating these costs between customers and the utility.

(2) One approach is to require applicants to account for all of their subsidiaries' activities within the last five years, including:

(a) how the costs of common plant and expenses have been allocated,

(b) how financing for subsidiaries has been accomplished and

(c) how transactions between utility and non-regulated subsidiary was financed and how each party booked the transaction.

c. Regulation of Transactions

(1) A long history of regulatory problems involving the relationship between captive customers and competitive customers exists in the telephone industry.62 Remedies have included:

(a) prohibitions and limitations on such transactions;

(b) requirements for prior approval of such transactions;

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62 See, e.g., M. Cooper, "Divestiture Plus Eight: The Record Of Bell Company Abuses Since the Break-up of AT&T" (1991); M. Cooper, "Milking the Monopoly: Excess Earnings and Diversification of the Baby Bells since Divestiture" (1994).
(c) requirements for competitive bidding;

(d) cost disallowances; and

(e) requirements to price sales from regulated to unregulated functions at the higher of the fully allocated book cost or market.

(2) Similarly, purchases by the regulated function from the unregulated functions should be priced at the lower of fully allocated book cost (i.e., the book cost which the utility would have incurred to perform the function itself) or market.

3. Example: Allocation of nuclear power plant risk.

III. RELATIONSHIP BETWEEN MERGER CASE AND RATE CASE

A. Principles

1. Often the regulator's task of reviewing a merger will be facilitated by a simultaneous rate case. First, an applicant's rate data as a stand-alone entity can be used to evaluate the reasonableness of proposed rate freezes or other treatments of savings.\(^{63}\)

2. Second, customer class and inter-jurisdiction cost allocation methodologies can be derived through a rate process.\(^{64}\)

3. Third, a rate proceeding can facilitate more expeditious return of savings to customers or shareholders in the form of refunds or higher authorized return, respectively.


\(^{64}\) See, e.g., Kansas Power and Light, 127 P.U.R.4th 201 (Kan. State Corp. Comm'n 1991) (directing parties to develop cost of service allocation methodology in subsequent rate proceeding).

27
B. Timing Options

1. Require a Rate Filing as Part of a Merger Application

   Such a filing requirement puts applicants on notice that they must prepare rate case quality data as part of a merger proposal. It precludes arguments to the effect that the merger will be delayed by a rate case.

2. Require Rate Filing With Specified Reduction

   To link rates to merger proceedings after the merger proposal has been filed, the Commission can indicate the expected rate reduction during or at the conclusion of the merger proceeding and can order a rate proceeding to allocate the benefits. The merger approval order can be conditioned on the company's filing a rate case which includes a minimum rate reduction.

3. Determine Appropriate Rates After the Merger Is Approved But Prior to Its Going Into Effect

   a. The merger order can condition final approval of the merger on the completion of a rate case. Under this scenario, applicants would not merge until post-merger rates were set and would be aware of the financial impact of the merger prior to finalizing the merger. To increase applicants' certainty during the interim period, the merger order could establish key principles concerning post-merger rates. Examples of principles include:

      (1) treatment of any acquisition premium

      (2) development of inter-jurisdictional allocation formula

      (3) "sharing" of cost reductions and assignment of risk of cost reductions not achieved

   b. The rate case would then review tariffs which reflect these principles.

4. Determine Rates After Merger Goes Into Effect

   The merger approval order could make existing rates "interim rates subject to refund." This technique, if statutorily available in the jurisdiction, allows the Commission to take the time necessary to set revenue requirements and rate
design effective as of the date of merger without violating the prohibition against retroactive rate making. This option results in some delay in consumers receiving merger benefits. They do not forego these benefits, however, and the calculation is potentially more accurate.

IV. QUALITY OF SERVICE

A. Overview

1. Because merger applicants often plan to downsize and implement other cost-cutting measures, participants in merger proceedings frequently raise concerns about post-merger quality of service.\(^{65}\)

2. Commissions can take steps to monitor post-merger quality of service and ensure that it remains comparable to pre-merger levels. Experience developed in the context of performance based ratemaking is useful in this context. Options for achieving this goal are discussed next.

B. Program for Quality of Service Measurement

1. In approving the merger of Puget Sound Power and Light and Washington Natural Gas, the Washington UTC adopted the Applicants' stipulation which provided that the merged company would implement a detailed service quality program including a Customer Service Guarantee and Service Quality Index (SQI).\(^{66}\)

2. The SQI established baseline performance levels for three broad categories of performance reflecting key aspects of customer service quality: **customer satisfaction**, **service reliability** and **safety and business office performance**. Most significantly, the SQI would put the merged company at risk for up to $7.5


million in penalties if service quality deteriorates significantly below still-to-be determined benchmarks. The SQI does not allow for performance better than baseline in one area to offset substandard performance in another area because each item measured is important in and of itself.

C. Penalties for Service Below Baseline Standards

1. The SQI implemented in Puget Sound established penalties for the merged company's failure to meet baseline performance standards, but did not create rewards for performance exceeding the baseline. The justification for a penalty-only approach makes sense recommended because the purpose of the SQI is simply to maintain the level of service quality where it is already adequate and assure improved service quality where inadequate.

2. Moreover, the experience in the telecommunications industry has shown that incentive programs for ensuring adequate service quality have been unsuccessful in preventing service quality deterioration.

D. Monitoring Based on Utility Reports

Some state commissions have chosen to continue to monitor quality of service post-merger. In Washington Water Power, the Idaho commission accepted the applicants' stipulation to provide documentation, i.e., outage reports and customer complaints, to the commission showing that customer service had not deteriorated. Likewise, the Maryland commission stated that it would "monitor carefully customer observations concerning the quality of service provided by [the merged company]."67

E. Hold Harmless Provision

1. Alternatively, commissions could place the risk of reduced quality entirely upon the merged company through implementation of a "hold harmless" condition on the merger. Such a provision would indicate that to the extent quality of service is impaired after the merger, any costs that the merged company incurs to restore quality of service to pre-merger levels will not be recovered from ratepayers.

2. While a hold harmless provision would help guarantee continued quality of service, it might also be difficult to demonstrate harm or enforce the provisions absent some

corresponding provision under which a commission could monitor quality of service and collect data on quality of service pre- and post-merger.

V. EFFECTS ON THE ENVIRONMENT

A. Overview

1. As part of a public interest analysis, regulators may consider a merger's impacts on the environment. The potential environmental effects of a merger can be grouped into two general categories:

   a. effects of changes in physical operations and physical plant

   b. effects on the competitive market

2. Some of these impacts are more easily measured than others, some are necessarily speculative, and some may be present in some mergers but absent in others. Mitigation options include --

   a. retiring older plants,

   b. reducing plant emission rates,

   c. selecting new resources with low environmental impacts,

   d. investing in conservation efforts, and

   e. causing equivalent reductions in other sectors.

B. Potential Impacts Caused by Modified Operations and Changes in Physical Plant

1. Dispatch Changes

   Changes in generation plant dispatch might cause environmental impacts. Even if the merger results in no net effects, or in net environmental improvements, there may be negative effects in some regions. The potential for change is greater if economic dispatch is not already tightly coordinated over the geographic territory represented by the merger.
2. **Merger-Enhanced Access to New Markets**

   A merger might provide some plants **enhanced access to markets outside of the combined service territory**, resulting in increased generation from those plants. If increased access to markets results in increased operations, there may be environmental impacts.

   Enhanced access to markets may arise if the merger results in **lower transmission costs, lower marketing costs**, or lower overall costs due to efficiencies gained through the merger.

3. **Other Possible Effects Related to Physical Plant**

   Combining the operations of the two utilities might reduce total capacity requirements, thereby deferring the need to add capacity. This effect could have positive environmental effects, if the type of generation added would have had adverse environmental effects.

   If the merger resulted in the need for new transmission lines or other capital investments, there could be environmental impacts. The construction of a transmission line, by itself, might have negative effects; but those effects could be outweighed by the positive effects of eliminating or deferring the need for more generation capacity or by allowing the substitution of efficient for inefficient plants.

   Finally, a merger might improve the ability to mitigate any existing environmental hazards.

C. **Effects on Competitive Markets**

1. **Might the Merger Deter New Entrants Who Might Offer Environmentally-Differentiated Services?**

   a. Experience with retail competition pilot projects provides some evidence that environment-related products and services may be an important means for a new entrant to gain a marketing advantage. For example, in a survey conducted of participants in the New Hampshire retail competition pilot program, 20% said that the environment was the reason why they switched suppliers.\(^{68}\)

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\(^{68}\) *Public Utilities Fortnightly*, p. 46, March 15, 1997.
b. Of the nine competing supply options offered to residential consumers in the Massachusetts Electric pilot program, four had an environmental component. Environmental offerings included rebates for energy-efficient products, retirement of sulfur dioxide emission allowances, and sales of power from existing renewable resources.

c. A new retail marketing firm, ReGen Technologies, was recently formed to tap demand for environmentally-beneficial services in Massachusetts. The company plans to facilitate the development of new renewable generation projects using technologies such as wind and solar. If offering services beneficial to the environment turns out to be an important means of gaining entry into the retail market (particularly the residential market), and of retaining and increasing market share, a merger that deters retail competition may also deter competition from sources that will produce environmental benefits and increase environmental awareness. A merged utility that faces little competition from companies marketing environmentally-enhanced services may have little incentive to enhancing its own product environmentally.

d. Under effective retail competition, some suppliers will probably offer both power and demand-reduction services. These suppliers may deploy advanced technology to provide such services as real-time pricing for centrally-interrupted heating, air conditioning and appliances during peak rate periods.

e. How important these various marketing techniques may be in actually producing significant environmental benefits is not yet clear. For example, of the environmental offerings in the New England pilot programs, many -- such as donations to environmental groups and "shares" of existing renewable resources that caused no change in the resources dispatched -- did not directly result in benefits to the environment. In many cases, claims were misleading.

f. Even a very competitive retail power market is unlikely to lower the environmental impacts of the electric sector dramatically. The residential sector, which accounts for only about a third of total demand, is likely to be the only sector where environmental appeals will be effective\(^{69}\), and

\(^{69}\) However, certain larger customers such as universities, churches, governments and some nonprofit organizations are likely also to serve clienteles interested in nonpolluting electricity.
many consumers will not actually pay more for environmentally benign power even if they express a willingness to do so in opinion polls.

g. Nonetheless, even if a competitive retail market produces only modest gains for the environment, those gains are still real. Therefore, if a merger is likely to diminish retail competition, options to mitigate the loss of environmental services should be considered. These include:

(1) Increase traditional DSM and renewable resource requirements on the merged company;

(2) Adopt either a charge or a standard to support energy efficiency services, renewable resource development and the development of cleaner technology.

(3) Adopt uniform disclosure requirements under which all suppliers disclose the sources of fuel and emissions associated with their power portfolios, and verify the information through a government agency or regulated ISO.

(4) Make available on equal terms to all competitors (including the incumbent utility) complete customer lists and usage information for customers who consent to provide it, so that competitors offering energy efficiency services can target suitable consumers. Require the competitive side of the merged utility to be a separate affiliate.

2. What is the Merger's Effect on the Ability of Retail Customers to Aggregate Their Loads?

a. Where a few generation competitors in a regional dominate firm and nonfirm power markets, buyers' groups may find it difficult to find suppliers for specific services. Such buyers' groups may be more likely to seek supplies with lower environmental impacts. Large groups of consumers (through their aggregation agent) may develop the sophistication, bargaining power, and resources to obtain electricity from sources with reduced environmental impacts at reasonable prices.
b. Furthermore, there is some evidence that groups of consumers are more likely to make collective decisions to "purchase green" than individual consumers would. 

c. Possible means of mitigating the effect of mergers on buyers groups include:

(1) allowing municipalities to act as aggregation agents for their residents without arbitrary size restrictions;

(2) facilitating the ability of membership groups to act as aggregation agents for their members;

(3) requiring the merged utility to offer a package of environmentally-enhanced services on reasonable terms; and

(4) designating willing local governments as the "default" provider of electric service, rather than the distribution utility.

3. What Might be the Merger's Effect on Interfuel Competition, and What Might be the Implications for the Efficient Use of Fuel?

Although there is no single answer to the question of which is better for the environment, direct use of natural gas or the use of electricity, the direct use of gas, as compared with the use of system-average electricity, is likely to have significant environmental benefits. On the other hand, if a new plant is deferred as a result of fuel-switching to direct gas, and that plant is a high-efficiency gas plant, then the environmental impact of electricity could be lower.

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70 For example, when Oregon's Salem Electric conducted an informal poll of its customers, over 75% supported paying more for renewables, and 28% preferred to pay collectively as a community -- only 2% preferred the "individual choice" approach (the rest did not specify). The utility subsequently acted on that preference by contracting to acquire wind power equivalent to 17% of its total load (Salem Electric survey results, 1995).
4. Will the Merged Company Have a Competitive Advantage or Disadvantage Due to Differentials in Environmental Standards?

Vintaging features in federal environmental law can create competitive advantages in generation markets.

a. For example, the Clean Air Act Amendments of 1977 required all new sources of pollution to install the "Best Available Control Technology" to keep pollution levels as low as technically and economically feasible. This standard does not apply to pre-1977 power plants, which were exempted based on the assumption that they would be retired at the end of their projected lives. These plants are not being retired as anticipated because owners have been able to extend their lives at a competitive cost. This is due in part to the fact that new plants are subject to more stringent and costly pollution control requirements.

b. Because the owners of pre-1977 plants are more likely to be the incumbent utilities than new generation entrants, this unearned economic advantage creates an additional market entry barrier benefitting the incumbent (merged) utility. The advantage would exist without a merger, but could be increased by a merger if the merger results in increased dispatch of the merged company’s pre-1977 plants.

c. One mitigation option is to require the merged utility to bring all older plants up to the same standards that new plants must meet.

5. Will the Merged Company Have Differential Access to Emissions Allowances, Relative to Its Competitors?

a. Owners of existing power plants received sulfur dioxide emission allowances under the acid rain provisions of the 1990 Clean Air Act Amendments. Competitors building new plants must purchase emission allowances to cover all of their SO2 emissions. Though the cost of emission allowances is relatively low currently, it is a cost that competitors face that the incumbent utility does not. If joint dispatch frees up emission allowances, it could allow the merged company to increase generation from dirtier plants for off-system sales without purchasing additional allowances.

b. A mitigation option would be to work with local pollution control agencies in adopting an emission cap for each pollutant at levels that would occur
under the merged system assuming no increase in off-system sales.

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