

OCCASIONAL PAPER NO. 6

DEREGULATION OF THE ELECTRIC POWER INDUSTRY:
PERSPECTIVE OF STATE REGULATION

William W. Lindsay
Jerry L. Pfeffer
NPS Energy Management, Inc.
Washington, D.C.

The National Regulatory Research Institute
2130 Neil Avenue
Columbus, Ohio 43210

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FOREWORD

From time to time NRRI publishes reports in the regulatory field that are more in the nature of a journal article. This is our series of Occasional Papers, now numbering six. Often, as is the case here, these are researched and written by regulatory experts not on the staff of NRRI. This allows us to tap a wider source of viewpoints and analyses.

We commissioned Occasional Paper No. 6 to be done in the knowledge that there has been a good deal of recent commentary about possible disintegration of the vertically integrated electric power industry. This report treats the question from the perspective of state commission regulation and is designed to elevate discussion of the issue. Of course the views and opinions presented are those of the authors and do not necessarily reflect those of the NRRI, the National Association of Regulatory Utility Commissioners (NARUC), NARUC member commissions, or The Ohio State University.

Douglas N. Jones
Director
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Columbus, Ohio

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CHAPTER 1

INTRODUCTION

A. Background

Recent changes in public attitudes toward government regulation of private business combined with rising energy costs, the changing economics of electric power supply, and the poor financial condition of many electric utilities, have led to various proposals for restructuring regulation of the electric power industry. Serious interest in structural reform of the regulatory process -- sometimes stated in terms of "deregulation" or creation of "competitive" bulk power markets -- has been expressed by various academicians, industry representatives, and several state and federal regulators. Others have advocated the notion of transferring jurisdiction over selected aspects of utility industry structure and operation from the federal government to state or regional regulatory entities as a means of improving the efficiency and responsiveness of the regulatory process, and as an "alternative" to deregulation.

There has been considerable discussion in recent months of the manner in which continuing state regulation of retail rates may affect the overall workability of these various deregulation or jurisdictional transfer proposals. In this sense, state regulation is seen as a potential "impediment" to the success of deregulation efforts. Less attention has been given, however, to the possible impacts of these proposals on the continuing effectiveness of state regulation following any effort to de-

regulate bulk power sales or to shift responsibility for the regulation of such transactions to the state or regional level.

A clear understanding of the various issues and problems relating to deregulation and jurisdictional transfer will be of value to state utility regulators in weighing alternative policy options and formulating positions on the various proposals that have recently been offered. Certainly, the impact of deregulation of bulk power sales on state utility regulation is one of the most important considerations in the overall evaluation of such proposals. Indeed, recent experience demonstrates that the reaction of state regulators is likely to become a crucial element in any legislative effort seeking to change the focus or structure of the existing regulatory process relating to the electric power industry.

B. The Scope of State Regulation of Electric Utilities

State economic regulation of electric utilities has a much more substantial impact on utility industry structure and operation than federal regulation. In 1981, almost 88 percent of the revenues of investor-owned utilities were derived from retail sales, which are regulated by the states, as compared with 12 percent from federally regulated transactions.*

*U.S. Department of Energy, Statistics of Privately Owned Utilities in the United States, Washington, D.C., 1981.

State commission authority to determine the applicable rates charged by electric utilities to different classes of customers has a substantial impact on industry structure, as well as on corporate planning and facility expansion decisions. Many state commissions also are responsible for designating service area boundaries defining a company's exclusive market area, as well as issuing certificates of public convenience and necessity where required in conjunction with construction of new generating plants and transmission lines.* These two sets of regulatory responsibilities (i.e., determining rates charged to ultimate customers and regulating market entry and facility certification) are addressed to varying degrees in the various proposals for reducing or restructuring economic regulation of electric power industry.

C. Objectives of State Regulation of Electric Utilities

One means of assessing the impact of alternative "deregulation" proposals on state commissions is consideration of the extent to which the traditional objectives of utility regulation can be as effectively achieved under alternative institutional and regulatory arrangements.

Economic regulation of electric and gas utilities has typically been justified on the ground that these industries

*The major exceptions are nuclear plants (licensed by the Nuclear Regulatory Commission) and hydro facilities (licensed by the Federal Energy Regulatory Commission). In some states, facility certification is handled by a separate agency with responsibility for power plant and transmission line siting.

exhibit characteristics of a natural monopoly to such a degree that competition is unworkable and would result in inefficiencies. Regulation is said to be designed to serve as a substitute for competition. The benefits of competition presumably include, among others, prevention of monopoly profits, along with incentives for innovation and efficient production. In the past, however, regulation has tended to concentrate on the first of these objectives, sometimes to the exclusion of others. Thus, the most frequently stated objectives of regulation have often tended to emphasize its "negative" features including:

- o Prevention of monopoly profits and "excessive" rates.
- o Prevention of "excessive" price discrimination across customer classes.
- o Protecting consumers against "inadequate" quality of service.

The effectiveness of the regulatory process has traditionally been judged primarily in terms of its success in achieving these objectives. This view persisted through several decades of declining real electricity prices made possible through scale economies, technological innovation and relatively stable fuel prices. However, the problems confronting the electric utility industry and its regulators have grown in complexity over the past decade, and the role of economic regulation in assuring reliable and adequate supplies of energy at fair prices over the long run has become increasingly recognized. Thus, it has become necessary for regulation to consider the interests of a broader set of constituencies over a longer-term time horizon.

The three objectives listed above reflect primarily a concern for consumer protection and even in that context, a concern viewed from a fairly short-term perspective. They provide little guidance to regulators seeking to balance consumer and investor interests over a longer-term time horizon. For example, an adequate supply of energy over the long term requires that utilities maintain access to capital markets on reasonable terms consistent with both a growing demand for electricity and the need to replace and upgrade existing equipment. At a minimum, this means that regulators must assure investors of a realistic opportunity to earn a fair rate-of-return, while still reflecting a concern for consumer equity.

Finally, in addition to utility consumers and investors, regulators have become increasingly responsive to a broad definition of the "public interest." This has required a further expansion of the objectives of regulation to include:

- o Assuring efficient allocation of scarce natural resources.
- o Protecting environmental quality, health and safety.
- o Promoting innovation and efficiency.
- o Promoting regional economic and social development.

The difficulties encountered by regulators in meeting this increasingly broad, complex and sometimes inconsistent set of objectives have given rise to various proposals seeking a relaxation or elimination of utility regulation and placing greater reliance on competition in bulk power supply.

D. Evolution of the Deregulation Theme in the Context of Electric Power

The concept of "deregulation" of the electric power industry as a means of achieving greater economy and efficiency through competition in bulk power supply has been addressed intensively by academic economists and others over the past several years. In a 1981 paper reviewing the "competition and deregulation literature" of the past decade, Joe Pace concluded that most of the studies on this subject that he examined found "little redeeming value" in utility regulation as an effective surrogate for competition.* Rather, they emphasized significant opportunities for increased levels of competition in bulk power supply. Many advocated vertical disintegration of the utility industry and common carrier status for transmission services as means to this end.

Notwithstanding this consensus in favor of deregulation in the recent academic literature, the concept of deregulating electric power was an issue of largely abstract theoretical interest until the early 1980's when the dual themes of deregulation and competition in the electric utility industry emerged as visible public policy issues. Much of this sudden interest in deregulation is attributable to several factors:

*Joe D. Pace, "Antitrust and the Electric Utility Industry," Paper presented at the Spring 1981 Meeting of the Edison Electric Institute Legal Committee, April 1981.

1. Widespread political support for the general concept of eliminating or relaxing government economic regulation of business. Much of this support is based on the perceived success of regulatory reform and deregulation in such industries as rail, transportation, telecommunications, airlines, trucking, banking and natural gas production.
2. A belief that because of the changing economics and technology of electric power supply, electric utilities no longer constitute "natural monopolies" requiring restrictions on market entry and price regulation.
3. The evolution of a small but growing "deregulated" power supply market resulting from provisions of PURPA exempting cogenerators and other small power producers from most forms of Federal and State regulatory jurisdiction.*
4. Widespread concern over rising energy prices and the intuitive appeal of suggestions that "enhanced competition" (achieved through deregulation) will somehow result in increased economy and efficiency in electric power supply and thereby lower electricity costs.
5. The potential for using "deregulation" as an institutional vehicle to achieve less clearly stated socio-political objectives vis-a-vis the future composition and structure of the industry (i.e., a shift towards renewable and dispersed generating facilities with less reliance on conventional coal and nuclear technology).

While each of these provides a partial explanation for the recent surge of interest in the deregulation issue, their relative significance is very much a function of the constituency represented by the particular deregulation proposal being advocated. Over the past two years, several detailed proposals suggesting varying degrees of deregulation have been forthcoming

*Some would take exception to characterizing the existing market for cogenerated power as "deregulated" since both markets and sales prices are subject to extensive regulatory requirements under PURPA Sections 201 and 210.

from a number of sources, including the academic, regulatory and utility communities.

E. Alternative Models of Electric Utility Deregulation

Alternative deregulation proposals and their impact on state utility regulation can best be examined in the context of the vertically integrated structure of investor-owned electric utilities. While each of the proposals outlined in this study suggests some degree of deregulation of electric power generation, several of the options involve significant modifications in the structure of the industry and thus would significantly affect the regulation of both transmission and distribution functions as well. Most deregulation proposals, however, are limited to bulk power supply and do not advocate parallel deregulation of bulk power transmission and distribution functions because of economic, competitive and political considerations.

There are a number of alternative approaches which have been suggested as the basis for electric power deregulation and jurisdictional transfer. For purposes of this study, however, there are three basic sets of proposals or policy options which will be examined with specific reference to their potential impact on state regulation of electric utilities.* These include:

*For a more detailed examination and assessment of the broader aspects of these proposals, see Edison Electric Institute, Alternative Models of Electric Power Deregulation, Washington, D.C., May 1982. Also see, Paul Joskow and Richard Schmalensee, Deregulation of Electric Power, A Framework for Analysis, MIT Energy Laboratory, September 1982.

1. Comprehensive or "prototype" deregulation schemes which involve total deregulation of bulk power sales and vertical disintegration of industry structure.
2. Partial deregulation proposals, including deregulation of certain types of wholesale power transactions.
3. Transfer of jurisdiction for selected bulk power transactions from the federal to the state and/or regional levels.

F. Potential Impact of Alternative Deregulation Proposals on State Utility Regulation

The first set of proposals noted above (i.e., comprehensive deregulation) would require a radical restructuring of the industry as it exists today with total deregulation of the generation function. The restructured industry under such proposals would consist of a large group of deregulated generating enterprises, a relatively few regional transmission entities or brokers regulated by the Federal Energy Regulatory Commission (FERC) and a large number of local distribution enterprises mostly regulated by state commissions as at present.

The costs of purchased power and the rates charged by local distribution systems will be significantly affected by deregulation of generation while the ability of state commissions to control those costs and rates will be substantially reduced. In addition, while the locus of responsibility for planning an adequate and reliable bulk power supply varies with

the specific deregulation proposal under consideration, in several cases this responsibility is assigned to a (federally regulated) regional power broker or transmission entity. In such cases, the ability of state commissions to influence the nature and timing of utility resource acquisition decisions may be substantially reduced as a result of deregulation.

Among the many issues which need to be examined in assessing proposals for comprehensive deregulation of generation are the following matters specifically related to the scope and extent of state utility regulation:

- 1) The proportion of total costs that would either be deregulated or pass from state regulation to federal regulation under each of the proposals.
- 2) The incentives created for public entities to replace the remaining investor-owned distribution systems.
- 3) The extent to which state commissions could exercise "indirect regulation" over rates charged to distribution utilities by way of power supply contract approvals, and the pros and cons of such "indirect" regulation.
- 4) The effect of deregulation on (retail) rate levels and structures regulated by state commissions.

The second set of proposals considered in the study, (i.e., partial deregulation) suggests that deregulation of generation should be limited in most cases to particular types of wholesale transactions such as intersystem bulk power sales. The notion of "common carrier wheeling" has been proposed as a necessary means of assuring access to the grid and effective competition in such deregulated bulk power markets. Experimen-

tation with deregulation in selected markets has also been suggested in order to test the feasibility of establishing "competitive markets" and to obtain needed information concerning the likely outcomes of more comprehensive deregulation schemes.*

An important problem with regard to proposals for deregulation of wholesale transactions such as intersystem sales is the extent to which they may result in expanded state commission responsibility (and authority) for regulation of at least some of these types of "quasi-deregulated" transactions. In addition to the questions noted above regarding prototype deregulation, additional questions arise as to the extent to which such authority could and should be exercised, and the institutional mechanisms that might be created for this purpose. Among the matters which are addressed in this context are:

- 1) Current rights and prerogatives of state commissions under Parts II and III of the Federal Power Act.
- 2) Changes in state commission responsibilities that would stem from deregulation of specific wholesale transactions.
- 3) Advantages and disadvantages of imposing state commission regulation following federal deregulation.
- 4) Relative merits of alternative institutional mechanisms for state regulation of bulk power transactions.

In the third set of proposals, noted earlier, "partial deregulation" would take the form of a transfer of some wholesale rate jurisdiction from the federal level to the states.

*See, Federal Energy Regulatory Commission, "Bulk Power Market Experiments at the Federal Energy Regulatory Commission," September 1982.

Among the candidates for this type of limited deregulation or jurisdictional transfer are: (1) all-requirements wholesale sales, (2) unit sales where buyer and seller are both located within the same state, and (3) pure generating enterprises. The issues which need to be examined in assessing proposals for transfer of jurisdiction from the federal level to the state include the following:

- 1) What particular classes of sales, if any, now regulated by the FERC would be better regulated at the state level?
- 2) What would be the advantages and disadvantages of state regulation of these sales?
- 3) What problems would such jurisdictional transfers create for the state commissions, utilities, and for wholesale customers?

These issues are examined in greater detail in the subsequent sections of this study.

CHAPTER 2

COMPREHENSIVE DEREGULATION

A. Alternative Models of Comprehensive Deregulation

The comprehensive deregulation model (sometimes referred to as the "prototype model") involves a vertical disintegration of the electric utility industry into its three major functions: generation, transmission and distribution. Under the prototype model, however, only generation would be totally deregulated. Local distribution service would be provided by both investor-owned and publicly owned distribution companies under a system of state regulation essentially similar to that which is now in place. The bulk power transmission function would be performed by regional entities which would own and operate (on a common carrier basis) all bulk power transmission facilities in a given area. These entities would be either publicly owned or privately owned but subject to some form of federal regulation to assure non-discriminatory access and fair pricing. For purposes of this study, we shall consider the implications of several specific proposals for comprehensive or prototype deregulation which have received substantial attention in the literature.*

*The models examined in this study include those by Berry, Cohen and MIT. See William W. Berry, Presentation to Edison Electric Institute's Financial Conference, October 6, 1981; also "Deregulating the Electric Utility Industry," (undated) and "The Case for Competition in the Electric Utility Industry," Public Utilities Fortnightly, Vol. 110, September 16, 1982, pp. 12-20. Matthew Cohen, "Efficiency and Competition in the Electric Power Industry," The Yale Law Journal, Vol. 88, 1979, pp. 1511-1549. Bennett W. Golub, Richard D. Tabors, Roger E. Bohn, Fred C. Schweppe, Deregulation in the Electricity Utility Industry, Massachusetts Institute of Technology Energy Laboratory, MIT Technical Report No. MIT-56-82-0003, January 1982.

While most prototype models contemplate a vertically disintegrated industry structure and divestiture of generating assets by utilities, the essential differences among the specific proposals considered in this study (Berry, Cohen and MIT) relate to the structure and responsibilities of the intermediate transmission entity and its dealings with regulated distribution companies. These regional enterprises, operating in most cases as Regional Power Brokers, would assume the dual role of owning, operating, and maintaining the bulk power transmission system as well as providing a "brokerage function" between independent power producers and regulated distribution utilities.

In the latter role, each Regional Power Broker would purchase bulk power on a competitive (but non-exclusive) basis from unregulated generating companies, and both sell power and provide transmission services to regulated and unregulated distribution utilities which would resell the power to their end-use customers.* In other instances, the Broker would merely provide a transmission service to distribution companies which would negotiate directly with generating companies for their bulk power needs.

(Footnote continued from previous page) For a comprehensive discussion and assessment of the principal issues associated with prototype deregulation, see Proceedings of the MITRE-EEI Conference on Electric Power Deregulation, November 16-17, 1982, Washington, D.C., April 1983.

*Some deregulation advocates have suggested that Regional Power Brokers could be established for this purpose within each of approximately 15-20 "power supply regions" in the U.S. See U.S. Department of Energy, National Power Grid Study, Final Report, Volume II, Washington, D.C., 1980, for a spatial definition of "power supply regions."

In the Cohen version of the prototype model,* the Broker would be responsible for assuring an adequate, reliable least-cost power supply to its constituent distributors. To this end, it would be required to work directly with distributors to estimate future power supply needs, contract for (or otherwise assure) adequate capacity to supply those needs, plan transmission facilities sufficient to transmit the independently generated power and energy to the distribution networks, dispatch the bulk power supply facilities in an efficient and reliable manner and perform such other coordination functions as may be agreed upon (such as coordination of scheduled maintenance of generating capacity, and negotiation of exchange arrangements with other Brokers).

Power would be sold by the Broker on a cost-of-service basis to regulated distribution firms and (possibly) to large industrial users. Rates charged by the Broker would be determined by the wholesale cost of supply with appropriate allowances for transmission costs, energy losses and return-on-investment. Regulated distribution companies would theoretically be guaranteed automatic flow-through of all purchased power costs except where the "prudence" of such purchases is challenged on an ex-post basis. Under this scenario, the role of distribution companies would be largely limited to projecting future power supply needs and maintaining the distribution system.

*Cohen, op. cit.

The rationale for continuing to regulate the prices of local distribution utilities at the state level under the prototype model is based on a widespread belief that such firms still constitute "natural monopolies" where economic considerations dictate the award of exclusive marketing rights within designated service areas. Retail customers within the service areas of a particular utility providing distribution service typically have no alternative source of electricity supply and thus require some form of regulation to protect them from abuse of the utility's monopoly power. Under the standard prototype model, a regulated distribution company would continue (even after deregulation of generation) to have an obligation to serve the electricity demands of all the customers within its service territory, even though it would lack direct control over the generating resources needed to assure its ability to fulfill such an obligation.

In the context of the Cohen Model, the practical means of fulfilling this obligation would be a requirement to solicit and negotiate power supply arrangements with the Regional Power Brokers or (possibly) directly with the deregulated generating companies. These contractual arrangements, as noted above, would be subject to regulatory review only with regard to prudence.

The "Berry Model"* differs from Cohen's approach primarily in that it would assign responsibility for generation

*Berry, op. cit.

planning, bulk power contracting and market coordination primarily to local distributors rather than the Regional Power Broker. Thus, the responsibility of the Power Broker would be limited to transmission planning and construction, operation and maintenance of the high-voltage grid and economic dispatch of the generating resources arranged by the distributors.

A third version of the prototype model, the so-called "MIT Model"* is similar to the Cohen version with two important exceptions. First, the MIT Model does not emphasize long-term contracting of generating capacity by the Power Broker or by distributors. While such contracting would be possible, major emphasis in the MIT Model is placed on a short-term "spot market" for bulk power. Second, the Broker would not engage in central dispatch of the generating resources of the region in a traditional sense. Rather, the Broker would employ advanced computer and communication devices to set prices (on a real time basis) as are needed to call forth the requisite generating capacity needed to meet the combined loads of all the distribution systems in the region. For example, as load increases during typical peak hours, the quoted price communicated to both buyers and sellers would be increased (at perhaps 5-minute intervals), and the independent generators would start up additional (higher variable cost) units whose marginal costs are

*Golub, et al., op. cit.

still below the current sales prices quoted by the Broker. By varying the price with fluctuating load conditions, the MIT Model assumes that the Broker can maintain generation equivalent to load throughout the day. Under this scenario, therefore, there is no need for the Broker to enter into long-term contracts or to engage in "economic dispatch" of regional generating resources. The MIT Model, however, does provide for a limited number of long-term contracts outside the structure of the spot market for those buyers and sellers who prefer the lower risk of predictable (i.e., contractual) prices.

B. Reduction in Costs Subject to State Commission Jurisdiction

The imposition of any of the three prototype deregulation schemes described above would not directly affect the amount of revenues subject to the state commission jurisdiction. State regulators would continue to regulate all rates charged by local distribution utilities to ultimate customers.*

Under each of these schemes, however, there still could be a substantial impact on the ability of state commissions to control costs incurred by jurisdictional utilities. The reason is that under each of the three models, the distribution utilities will either purchase their bulk power from a transmission entity (Cohen and MIT) at prices presumably regulated by the FERC, or from independently owned and unregulated generating enterprises (at arm's-length) with transmission services provided by a

*Except where Regional Power Brokers sell directly to large industrial customers.

transmission entity at regulated prices (Berry). Thus, the scope of electric rate regulation exercised by the state commission would be substantially limited to determinations of the "reasonableness" or "prudence" of the costs of distribution to be added to underlying bulk power supply costs (over which neither the regulator nor the utility exercise any real control).* The burden of demonstrating prudence is likely to be considerably greater under those deregulation models involving contract purchases (e.g., Berry) than those wherein purchases are made in a spot-market (e.g., MIT).

Based on these considerations, a substantial portion of the costs of service to ultimate customers would cease to be subject to review by the state commissions under the prototype model of deregulation. A rough allocation of the total costs of service between distribution and bulk power supply in 1980 is contained in Appendix A. These data show that more than three-fourths of the total cost of providing electric utility service are bulk power supply costs. Under two of the deregulation models, these would either become "arm's length costs" (i.e., theoretically beyond the control of utility management) or costs related to rates regulated by a Federal agency. In either case, they would essentially cease to be subject to state commission review. Under the Berry Model, however, the pricing formulas

*If the state commission found contracts entered into by the distributor to have been in some way imprudent, the scope of authority would presumably be broad enough to allow the commission to protect consumers from the effect of the imprudent behavior.

included in long-term contracts negotiated between the distribution utilities and the generating firms would require extensive state commission surveillance.

Under these circumstances, many of the ratemaking policy issues concerning "rate levels" that now dominate utility rate cases at the state level (e.g., tax normalization, inclusion of CWIP in rate base, treatment of plant cancellation losses) would become largely moot.* Most other ratemaking issues (e.g., rate-of-return) would also become much less significant. Conversely, those issues related to rate design and cost allocation among customer classes would continue to be important. Conceivably, state commissions may also have to deal directly with supply allocation and curtailment issues if market forces do not result in sufficiently rapid adjustment of new capacity construction to changes in loads.

C. Effect of Deregulation on Rate Levels

The effect of deregulation on rate levels in the short run depends in large part on the relation between short-run marginal costs and average embedded costs.**

*Except as they relate to distribution plant.

**For a more detailed discussion of potential rate impacts under comprehensive deregulation, see Jerry Pfeffer, "Rate Impacts Under Alternative Models of Electric Power Deregulation," Paper presented at Ninth International Energy Technology Conference, Washington, D.C., February 1982.

In the long run, however, short- and long-run marginal costs should tend to converge. In the absence of excess generating capacity,* the tendency for prices to move towards long-run marginal costs would be accelerated.

In examining the issue of potential price increases in deregulated markets, it is also important to consider the tendency of utility regulation to underprice electricity in relation to both short-run and long-run marginal cost under inflationary conditions such as currently prevail. So long as the overall number of competitors in a given deregulated market is sufficient for workable competition, however, large monopoly profits are unlikely to evolve. This is especially so under current conditions in which the incremental costs of new electric power generation far exceed average embedded costs of plant in service.

The "windfall" problem (i.e., excess profits to owners of deregulated facilities), which arises under a marginal cost pricing environment, could be a serious impediment to implementation of the prototype deregulation scenario. Particular problems might arise, for example, in the context of utilities which currently own large nuclear, hydro and coal-fired power plants.

*In this context, "excess capacity" means the margin in excess of that required to assure reliability of service rather than capacity in excess of that which is warranted on the basis of economic considerations. Consequently, in New England, for example, SRMC may be greater than LRMC while in areas such as ECAR it is likely to be much less.

Under any deregulation scenario which requires divestiture of generating assets to independent power supply entities, owners of such low-cost facilities would derive a major "windfall" (in a marginal cost pricing environment) compared to utilities owning older or less efficient oil- and gas-fired power plants.

Based on the results of one of the few reported analytic efforts to quantify both short-term and long-term price behavior in deregulation and competitive markets, Schuler anticipates relatively modest long-term price effects but considerably greater near-term impacts. In summarizing analytic results derived from a spatial oligopoly model calibrated for upstate New York bulk power markets he observed that:

In all cases [examined], the prices simulated under competition are equal to or higher than regulated prices; however, as in the case of generation, that is partly due to the fact that regulated prices are below the socially optimal level. In general, the deregulated prices would rise in the long-run to the vicinity of replacement costs....

This analysis suggests that in the long-run, with the threat of entry, competitive generation costs would increase only one percent over the regulated levels; but the prices charged by competitive distribution companies would rise ten to fourteen percent. In the short-run, these price increases would be far more severe ranging from 49 to 68 percent for generation companies and fourteen to thirty seven percent for distribution companies.*

*Richard Schuler and Benjamin F. Hobbs, "The Consequences of Alternative Organizations of the Electric Utility Industry," Paper presented at the 1981 Annual Meeting of the American Economic Association, December 30, 1981.

Pace also concludes that price increases resulting from deregulation will likely be constrained to the appropriate (short-term or long-term) marginal cost schedule. For example, Pace cites a possible 50 percent short-term increase over current wholesale prices in the case of a region with excess generating capacity which meets load by dispatching additional oil-fired units.*

Plummer is much less sanguine concerning the effects of market forces in restraining price increases in totally deregulated markets. He cites the possibility of marginal cost prices (at the busbar) rising as much as 300-400 percent over present (average cost-based) prices in areas of the country with particularly efficient generation.**

It is difficult to predict the demand elasticity effects of price increases of this magnitude, let alone the social consequences or, indeed, the political consequences with respect to the deregulation program itself. The upcoming debate on gas deregulation may be instructive in this regard. Additional insights will be gained by examining trends in local telephone

*Joe Pace, "Antitrust and the Electric Utility Industry," op. cit., p. 19.

**James Plummer, "Scenarios for Deregulation of Electric Utilities," Paper Presented at Annual Meeting of International Association of Energy Economists, November, 1981., p. 5.

service rates and usage patterns following implementation of the AT&T consent decree.

In summary, projecting the level of prices under deregulation is a highly speculative exercise. Prices, in general, are likely to increase sharply in the short-term and move toward longer-run marginal costs over a more extended period. The precise outcome appears to be dependent on:

- (1) the proportion of overall bulk power supplies deregulated under a particular scenario;
- (2) competitive conditions in specific deregulated bulk power markets;
- (3) the existing capacity mix and reserve situation in a particular region; and
- (4) the treatment of the transmission and distribution functions under deregulation.

D. Potential for Indirect Regulation by State Commissions

It has been suggested that under deregulation, no independent generating enterprise would build a new plant without a guaranteed market providing reasonable assurance of cost recovery when the plant becomes operational.* Some have taken this to mean that new plants will not be built unless the potential supplier first obtains a long-term (take-or-pay) contract from a transmission entity or a distributor. If the contract is with the regional transmission entity (as in the Cohen Model),

*See, for example, Irwin Stelzer, "Electric Utilities - Next Stop for Deregulators?" Regulation, July/August 1982, pp. 29-35.

it would be subject to surveillance by the FERC; if it is with the distribution utility (as in the Berry Model), it would be subject to review by a state commission.

The prudence of any arrangement negotiated by a distributor could presumably be considered in any proceeding involving the rates to be charged by the distributor. Under the circumstances, a distributor would be likely to seek informal or formal review of the contract by the state commission before a final agreement is signed. In any event, in negotiating such a contract, the distributor would consider the policies of the state commission that has authority ultimately to decide on the distributor's prudence. Thus, under the Berry Model, the state commission could indirectly exercise significant regulatory influence over contractual terms and conditions, and by so doing, could exercise surveillance over the bulk power supply planning of the distributor.

Under the other two deregulation models, (i.e., Cohen and MIT) the ability of state commissions to exercise control over bulk power supply planning is likely to be much reduced, if not eliminated altogether. In both cases, the transmission entity sells to distributors at prices regulated by the FERC or some other federal or regional regulatory agency. Under the doctrine established in the Narragansett case,* state commissions could

*Narragansett Electric Company vs. Edward F. Burke, et al., 119 R.I. 559, 381 A. 2nd 1358 (1977).

not adjust the regulated prices paid by distributors for bulk power in fixing the rates to be charged by such distributors. Under the Cohen Model, the state commissions could intervene with the FERC and raise prudency issues relating to contracts between the transmission entity and the generating companies. Under the MIT Model, however, opportunities for such interventions are likely to be limited because most power obtained by the transmitter would be purchased in the spot-market at competitive prices.

E. Effects of Deregulation on State Commission
Responsibility for Adequacy and Reliability of
Service

Virtually all deregulation advocates recognize the need to assure the utility industry's basic "obligation to serve" as part of any deregulation scenario. Although MIT & Cohen assume that the regional transmission entity will always have adequate supplies available, any form of comprehensive deregulation must ultimately assign the "responsibility" to assure adequate and reliable service to the local distribution entity. What most deregulation advocates fail to address, however, are the mechanisms through which (regulated) distribution utilities will meet this obligation to serve in the absence of their own generating facilities or an assured flow of revenues to finance purchased power -- especially if the latter requires that the distributor enter into long-term take-or-pay

contracts.* In a similar context, there is no assurance that the state regulators will be able to exercise the needed degree of oversight over independent suppliers or power brokers to assure that they are able to meet their contractual obligations to regulated distribution utilities.

A perceived obligation to provide adequate, reliable service to present and future customers is the primary reason why utilities engage in capacity expansion, even during periods where economic conditions are such that an unregulated firm would choose not to expand. Under deregulation, these problems could be further exacerbated in the absence of mechanisms for assuring the financial integrity of the distribution utility. Even though all of the comprehensive models would seek to assure the flow-through of purchased power costs, the political via-

*Recent events in the natural gas area have contributed to even greater skepticism as to the "value" of long-term take-or-pay contracts with regulated distributors as the basis for financing new generating facilities under prototype deregulation. For a more detailed discussion of financial issues surrounding prototype deregulation, see Leonard S. Hyman, "An Exploration into the Financial Circumstances of a Massive Disintegration of the Electric Utility as a Means to Introduce Deregulation of the Electric Utility Industry," Paper presented at the MITRE Conference on Electric Utility Deregulation, Bethesda, Maryland, November 17, 1982.

bility of such a guarantee is questionable for reasons noted earlier.*

In this context, the financial integrity of the distribution utility and its capability of meeting service obligations is considerably more uncertain than it would be under the partial deregulation models discussed in Section III. Long-term supply contracts needed to assure adequate and reliable service probably could not be negotiated with independent suppliers in the absence of such guaranteed (purchased power) cost recovery. Even then, state regulators would still be limited in the degree of oversight they could exercise in the area of power supply adequacy. For example, state regulators may seek to require distribution utilities to diversify their sources of power supply across multiple suppliers to insure against service interruptions related to failure of a particular project. While increasing supply reliability, such assurances might result in higher costs because of the inability of the purchasing entity to maximize scale economies through long-term contracts. This problem would not arise under the MIT Model since the power broker would be simultaneously buying and selling from multiple sources at any point in time.

*Pace succinctly characterized the "bleak" outlook for local distributors under prototype deregulation when he noted that:

"unless one assumes that vertical disintegration would be accompanied by a frontal lobotomy performed on all state regulators, aimed at replacing their political sense with financial sense, the prospect for creating a viable separate distribution business [under deregulation] seems dim." Pace, op. cit.

F. The Impact of Comprehensive Deregulation on the Balance Between Regulated vs. Publicly Owned Distribution Systems

It has been suggested that deregulation could result in extensive replacement of privately owned distribution utilities by municipally owned or cooperatively owned systems. If so, state commission control over the prices charged for electricity at retail could be further reduced.

The effect of deregulation on public ownership depends in part on whether the scope of deregulation of utility generation is to include the generating capacity of the large federal and state systems that are of considerable significance in several portions of the country.* If such capacity is included, this could mean that generating capacity of the federal systems such as TVA and Bonneville would have to be sold to independent enterprises, or that the output from such capacity would have to be sold to a regional generating entity. Under this scenario, publicly owned distribution systems would have to purchase bulk power at the same prices as those paid by privately owned utilities rather than at the subsidized rates some currently enjoy. Thus, for a great many municipal and cooperative systems, the

*None of the proponents of comprehensive deregulation has specifically addressed the treatment to be accorded to public power systems. Publicly owned systems are currently projected to own nearly one-third of new generating capacity scheduled to be constructed in the U.S. through 1990. See Joe Pace, "Tax Losses Associated with Construction of Generating Plants by Government-Owned Utilities," NERA Working Paper, March 1981.

cost of purchased power could be expected to rise substantially. Conceivably, this could lead to some loss of customers and possibly a transfer of service franchises from public systems to private systems.

To the extent that public distribution systems retain their current rights to tax and financing advantages, they will maintain a distinct competitive edge over private systems. These advantages, however, have not proven in the past to have been nearly as significant as the preference they enjoy in the purchase of federal hydropower. Preference in obtaining permits and licenses for new hydropower resources has also been of some significance. It will be of much greater significance, however, if extended to include preference in cases involving relicensing of existing hydro projects.* For these reasons, it should not be anticipated that deregulation would necessarily lead to greater public ownership of electric power distribution systems, assuming that no special treatment is accorded to public power under deregulation. Indeed, under these circumstances, some movement toward greater private ownership of distribution systems is possible in some parts of the country.

If public power receives some sort of preferential treatment as part of a deregulation program, deregulation might lead

*The highly controversial issue of applying municipal preference in relicensing was addressed by FERC in the Commission's "Bountiful" declaratory order (Opinion No. 88, June 27, 1980) where it was held that "preference" could be used as a "tie-breaker" in such proceedings. The issue is ultimately one that may have to be resolved by the Supreme Court.

toward greater public ownership. If, for example, TVA were permitted to retain ownership of its existing generating capacity, then under the Berry Model, municipal distributors in Tennessee could continue to contract for that power. The only difference would be that TVA transmission facilities would now be owned by a regional transmission entity that would transmit the power under a cost-based rate structure. Under these circumstances, the costs and prices of the public distributors would be largely unaffected. Consequently, to the extent that deregulation resulted in higher prices for power purchased by privately owned distributors, some loss of load and franchises to public systems is quite conceivable.

At present, only 16 state commissions have some authority to regulate the rates charged by municipal systems and 25 states have such authority over cooperative systems.* Federal power agencies, such as TVA and Bonneville Power Administration are totally exempt from state regulation. Thus, to the extent that deregulation of generation leads to any increase in public ownership of generating resources, it would also tend to result in deregulation of rates charged to ultimate customers by local distribution systems.** This can have serious consequences,

*U.S. Department of Energy, National Power Grid Study, Volume I, Washington, D.C., 1980.

**It should be noted that public-owned systems are often characterized as "self-regulated" in that rates are generally approved by a locally elected municipal council.

especially for customers located outside the boundaries of the municipality that operates the distribution system. The extent to which this might in turn lead to increased public demand for regulation of publicly owned systems is difficult to gauge.

CHAPTER 3

DEREGULATION OF WHOLESALE POWER TRANSACTIONS

A. Characteristics of the (Wholesale) Bulk Power Market

Bulk power transactions include both sales of electricity at wholesale for resale to ultimate customers and transmission of electricity on behalf of other system (wheeling service). As shown in Table 1, such transactions constitute a significant and growing share of total transactions in electric power supply in the U. S. They include a variety of transactions between suppliers of bulk power including unit power sales, short, intermediate and long-term power sales, economy energy, emergency energy, maintenance energy, all-requirements firm service and wheeling services.

The jurisdiction of the Federal Energy Regulatory Commission over electric power transactions is generally limited to rates for transmission and sales at wholesale for resale in interstate commerce by investor-owned utilities. In 1978, about 31 percent of total transactions by investor-owned utilities (on a kilowatt-hour basis) could be characterized as bulk power sales. While practically all bulk power transactions are in interstate commerce, the limitation of FERC jurisdiction to investor-owned utilities is much more significant.* In 1978,

*The only exceptions are those transactions involving utilities of the ERCOT group in Texas. Although an agreement has been reached to construct two d.c. interconnections between ERCOT utilities and members of the Southwest Power Pool, the ERCOT utilities will not thereby become jurisdictional "public utilities" under Parts II and III of the Federal Power Act.

TABLE 1

Transactions in Electric Power Supply Markets
in 1963 and 1978
(Billions of Kilowatt-Hours)

	1978		1963	
	<u>Total</u>	<u>Percent</u>	<u>Total</u>	<u>Percent</u>
Sales to Ultimate Consumers	1,987	61.4	802	73.2
Sales for Resale	750	23.2	205	18.7
Transmission Delivered	139	4.3	29	2.7
Interchange Out*	358	11.1	59	5.4

*Includes inadvertent energy

Source: Federal Power Commission, Statistics of Privately Owned Electric Utilities in the United States, selected years;
Federal Power Commission, Statistics of Publicly Owned Electric Utilities in the United States, selected years;
Rural Electrification Administration, Annual Statistical Report of Rural Electric Borrowers, selected years.

over 40 percent of bulk power transactions (on a kilowatt-hour basis) represented energy transmission or sales for resale by the public and cooperatively owned sectors of the industry wherein the FERC has very little jurisdiction.

B. Recent Proposals for Deregulation of Wholesale Transactions

While deregulation of wholesale power transactions can take several forms, for purposes of this study it will generally refer to proposals seeking exemption of such transactions from the requirements of Sections 205 and 206 of the Federal Power Act.* Implementation of such proposals would therefore require federal legislation, providing both for such an exemption and detailed definitions of the specific characteristics of the services to be exempted. An alternative would be a blanket exemption of all jurisdictional transactions from Sections 205 and 206 of the Act, with exceptions such as all-requirements wholesale sales (i.e., where a purchaser's total supply is obtained from the seller) where lack of competition might preclude deregulation.

In either case, the result would be that for the particular set of transactions deregulated, the FERC would no longer have authority to suspend or modify rate changes, or even to require the filing of rate schedules. While the FERC might

*Presumably, this would also include the elimination of any FERC authority to set rates for intersystem bulk power transaction ordered under Sections 202(b), 207, and 210-212 of the Federal Power Act.

retain some limited authority to order interconnections and sale or exchange of energy under Sections 202(b), 207 or 210-212 of the Federal Power Act, this authority would be of limited effectiveness, insofar as deregulated transactions are concerned, in the absence of any authority to control the rates charged for such transactions.*

Proposals for deregulation of intersystem bulk power transactions such as considered in this section are considerably less radical than the so-called "prototype" deregulation models discussed earlier which contemplate vertical separation of the industry's generation, transmission and distribution functions as part of the deregulation process. The proposals considered herein, (i.e., deregulation of wholesale sales) would not involve any divestiture of utility assets or creation of any new regional generation or transmission entities.

C. The Role of State Commission Regulation under the Federal Power Act

In order to understand the impact of deregulation of wholesale power transactions on state commission regulation, it is necessary to have some appreciation of the manner in which the Federal Power Act deals with state regulation. The legislative history of the Federal Power Act evidences a concern on the part of Congress that state commissions should be given a special role in matters subject to the jurisdiction of the Federal

*The extent to which elimination of federal authority to regulate bulk power rates may result in any expansion of state authority to regulate such intersystem transactions is explored in Section D.

Energy Regulatory Commission. The authority of the Commission, according to Section 201 of the Act, is "to extend only to those matters which are not subject to regulation by the State."*

At several points in the Federal Power Act, Congress provides explicitly that the state commission (and in some cases the governor) of each state is to be given notice in writing of specific matters before the Commission. For example, Section 202(a)** provides that before taking actions authorized by that Section, "...the Commission shall give notice to the State Commission of each state...and shall afford each State Commission reasonable opportunity to present its views and reconstructions, and shall receive and consider such views and recommendations."*** Other sections of the Act providing explicitly for notification of state commissions include Section 202(b) regarding involuntary interconnections, Section 203 relating to mergers, property dispositions and security acquisitions, Section 207 relating to complaints of inadequate interstate service, Section 210(b)(1) relating to interconnections, Section 211 relating to transmission service, and Section 302(b) relating to depreciation rates.

*49 Stat. 847; 16 U.S.C. 824(a).

**Administration of this section of the Act dealing with voluntary coordination was vested in the Secretary of Energy by the Department of Energy Reorganization Act of 1978.

***49 Stat. 848; 16 U.S.C., 824a(a).

Similarly, in several Sections, the Act explicitly provides for the filing of applications or complaints by state commissions. Under Section 202(a), for example, applications for orders directing a public utility to interconnect its facilities with those of another utility may be filed only by a "person engaged in transmission or sale of electric energy" or by a state commission. Investigations initiated under Section 206(b) may be initiated by the Commission on its own motion "or upon the request of the state commission." Complaints that the interstate service provided by a public utility is "inadequate" may only be filed under Section 207 by a state commission. Under Section 210(a)(2), any state regulatory authority may apply for an order requiring involuntary interconnection or any action that may be necessary to make a physical interconnection effective. The Act also specifically provides for filing of complaints by state commissions, among others, under Section 306, regarding any alleged violation of the Federal Power Act.

Section 204 of the Act establishes the authority of the Commission to regulate issuance of securities by public utilities. It states explicitly, however, that, "the provisions of this section shall not extend to a public utility organized and operating in a state under the laws of which its security issues are regulated by a state commission."*

*49 Stat. 851; U.S.C. 842C(f).

Section 209 deals specifically with relationships between the Commission and the state commissions. It authorizes the Commission to create joint federal-state hearing boards and to refer any matters arising under Part II of the Act to such boards. The boards are to be composed of an equal number of members from each state affected by such matters (unless a state waives such rights). Such members are to be appointed by the Commission from persons nominated by the state commission or by the governor of each state. Section 209 also authorizes the Commission (1) to confer with any state commission regarding a number of important regulatory matters including rate structures, costs and accounts of utilities subject to both the jurisdiction of such state commission and of the Commission, (2) to hold joint hearings with any state commission, and (3) to make available to state commissions both information that may be of assistance in state regulation of public utilities and such expert witnesses as may be requested by the state and as the Commission can provide without compromising the efficient conduct of its own affairs.

The Public Utility Regulatory Policies Act of 1978 (PURPA), in addition to amending the Federal Power Act, contained (in Section 210) provisions designed to encourage the development of cogeneration and small power production facilities. The Commission was directed to prescribe rules requiring electric utilities to offer to sell electric energy to qualifying facilities on equitable terms and to purchase electric energy

from such facilities at prices related to their avoided costs. These rules were to be prescribed after consultation with state regulatory agencies, among others. More important, each state regulatory authority is charged with the responsibility for implementing the rules for each electric utility for which it has ratemaking authority.

Finally, in adopting PURPA, Congress recognized (in Section 205(a)) that in some cases, state authorities may take actions which inhibit intersystem coordination efforts designed to achieve the most economic utilization of facilities and resources. It therefore authorized the Commission, after notice and opportunity for hearing, to exempt electric utilities from any state law, rule or regulation which prohibits or prevents the voluntary coordination of electric utilities. The power to grant such exemption was, however, strictly limited. The Commission has not yet sought to take any action under this authority since the enactment of PURPA.

It is evident from this brief review of the legislative history of the Act that Congress has consistently recognized the interrelationships between the responsibilities of the state commissions and those of the FERC. Essentially, Congress has defined and delineated rather narrowly the scope of authority of the FERC in its regulation of the electric power industry. Within that narrow province, it has provided the states with special rights to receive notice of various kinds of applications and proposed actions, special (and in some cases exclu-

sive) rights to file applications or complaints, opportunities for cooperation and joint action and responsibility for implementing FERC-prescribed rules relating to the special problems of cogeneration and small power production. In the aggregate, these provisions appear to provide the states with ample opportunity to protect the interests of customers of utilities subject to their jurisdiction. The FERC is strictly precluded from exercising any direct regulation of retail rates. The state commissions are given full rights to participate as a party in any proceeding affecting consumers of electricity in their states. Substantial latitude for cooperation and joint action is provided where circumstances warrant.

Thus far, few state commissions have taken full advantage of the prerogatives provided to them by the Federal Power Act; nor has the FERC taken full advantage of opportunities for cooperation and joint action with the state commissions.* With a few notable exceptions, the state commissions have not been major participants in wholesale rate cases before the FERC. State participation in coordination-type cases has been largely limited to cases in which the interests of two or more states were at odds in a "zero sum" dispute. Examples of such proceedings include (1) the dispute between the states of Minnesota and

*As noted in Section IV, the failure of the states and the FERC to fully exploit existing opportunities for regional and federal-state coordination under the Federal Power Act is one of the principal reasons cited by utilities in opposition to proposals for new legislation to "facilitate" such coordination.

North Dakota on one side, and Wisconsin on the other concerning the allocation of the losses from the cancellation of Tyrone Nuclear Power Plant, and (2) the dispute among the states served by subsidiaries of the American Electric Power Company (AEP) concerning the manner in which its power pooling agreement would allocate costs among the AEP subsidiaries.

Thus far, state commissions have brought only two complaints before the FERC under Section 207 regarding inadequate interstate service; neither of these was successful. In most of the recent cases of state intervention in FERC proceedings, it has been an agency of state government other than the PUC that has intervened. In several cases, it has been the Attorney General of the state; in others, it has been the public advocate or state consumer agency representatives.

D. Changes in State Commission Roles that Would Result from Deregulation of Wholesale Transactions

Under the long-established structure of utility rate regulation most wholesale transactions, i.e., transmission or sale of electricity for resale by "public utilities," are subject to the jurisdiction of the FERC.* Deregulation of whole-

*Both the Courts and Congress have traditionally adhered to a "mechanical" test under which "wholesale" rates are subject to federal jurisdiction and "retail" rates are subject to state jurisdiction. Under this test, a wholesale transaction between two utilities in the same state would still be viewed generally as a transaction in interstate commerce and subject to federal jurisdiction on the ground that interconnections across state lines result in a commingling of intrastate and interstate generation. This wholesale/retail distinction (which predates the Federal Power Act) has been relaxed in a recent Court decision noted below.

sale transactions at the Federal level could create a "regulatory gap" inviting the states to extend their authority unless such action were specifically precluded.

State commissions, as noted earlier, currently have the right to file complaints under several sections of the Federal Power Act and to intervene and participate in proceedings before the FERC. However, once the FERC fixes or approves the rates, terms and conditions of service proposed by a utility, the state commission has no right to calculate the cost of retail services using costs of purchased power other than those incurred by the utility under the FERC-regulated rates.*

Efforts by several states to deny recovery of FERC approved (wholesale) purchased power costs have been uniformly disapproved by the state courts. In the previously noted Narragansett Case, the Rhode Island Supreme Court rejected an effort by the Rhode Island Commission to modify a FERC-approved wholesale rate in determining the cost of service for retail ratemaking purposes.** A similar situation arose in the early 1980's when the Minnesota, North Dakota and South Dakota Commissions refused to allow the pass-through of FERC approved cancellation costs for the Tyrone Nuclear Plant by means of an inter-

*They do have the right, of course, to appeal FERC decisions in the Federal courts. Indeed, this action has been taken in a number of cases.

**Narragansett Electric Co. vs. Burke, 381 A. 2d 1359 (R.I. 1977); 435 U.S. 972 (1979).

change agreement.* Courts in Minnesota and North Dakota have reversed the commissions in those states. While the South Dakota Supreme Court affirmed the commission in that state, it did not reach the question of federal preemption. Meanwhile, the FERC order allowing Tyrone cost recovery was affirmed by a U.S. Court of Appeals.**

Most recently, the Pennsylvania Public Utilities Commission (PUC) refused to allow, as operating expenses, charges incurred by Pike County Light & Power Co., a full-requirements subsidiary of Orange & Rockland Utilities, Inc. (O&R) under a FERC wholesale rate on the ground that the purchasing utility was imprudent in entering into the purchased power agreement.*** In the course of the rate case, the PUC instigated, on its own motion, an investigation of "[t]he reasonableness of Pike's relationship with and power purchases from" O&R, and the "availability of alternative sources of power." The Commission's decision included a finding that Pike had acted imprudently in its power purchases, and required a downward adjustment to purchased power expenses. While recognizing that it had no "power to find that a FERC tariff is unreasonable," the PUC maintained that it was "within our power to determine the reasonableness of

*Northern States Power Co. vs. Minnesota P.U.C., File No. 452088 (Minnesota District Court, 2d. Judicial District, 8/3/82); Northern States Power Co. vs. Hagen, 314 N.W. 2d 32 (N.D. 1981); In Re Northern States Power Co., Civ. 82-6 (South Dakota Circuit Court, 6th Judicial Circuit, 10/28/82).

**South Dakota PUC vs. FERC, U.S. Court of Appeals (8th Circuit), No. 82-1276, October 19, 1982.

***Pike County Light & Power Co., Final Order, Investigation of Purchased Power Arrangements, Pennsylvania PUC, October 1, 1982, Docket No. R-821857.

expenses incurred by Pike." The PUC rejected Pike's contention that the power supply expenses were reasonable as a matter of law, since they were paid pursuant to a FERC regulated tariff, reasoning that "[merely] because FERC has established a rate for power sold by O&R to its subsidiary...does not preclude [the subsidiary] from seeking power from other sources." The PUC identified no preferred alternative source of power, quoting a party's statement that "'a definite future rate alternative can only be established when Pike actually decides to wheel and deal.'"

The allocation of regulatory responsibility outlined above would change materially under various alternative models of deregulation of wholesale transactions. Three such possible models are described below together with their effects on the scope of state commission regulation. These models include (1) deregulation of pure generating enterprises, (2) deregulation of intrastate power pools, and (3) deregulation of all wholesale transactions except for all-requirements service and wheeling.

1. Pure Generating Enterprises

Deregulation of pure generating enterprises* would require an amendment to the Federal Power Act exempting

*For a more detailed discussion of this proposal, see Edison Electric Institute, Preliminary Assessment of Proposals for Deregulation of Pure Generating Enterprises, December 1982.

from "public utility" status any electric power generating enterprise that does not own or operate transmission facilities.* The effect of such action on the scope of regulatory authority exercised by state commissions could depend on whether the legislation also explicitly precluded state regulation of rates charged by pure generating enterprises. If state regulation were not thereby precluded, the jurisdiction of state commissions might expand to include at least some of the rates charged by such enterprises.

The Maine Yankee nuclear project provides a useful example of the results of eliminating FERC jurisdiction over pure generating firms. While located entirely in Maine, it is owned by (and sells power to) utilities located in several other New England states. Since such wholesale sales to out-of-state utilities are "sales in interstate commerce," they probably would not be subject to regulation by the Maine Public Utilities Commission (in the absence of specific language in the deregula-

*This would effectively exempt pure generating enterprises from Parts II and III of the Federal Power Act since facilities used in local distribution are already exempt. Duke Power Company vs. Federal Power Commission, 401 F 2nd 930 (1968).

tion statute providing such regulatory authority).^{*} However, it is likely that the Maine PUC could regulate sales to other utilities located in Maine.

Proponents of deregulation of pure generating enterprises generally argue that if the proposal is to be effective, the states must be prohibited from asserting rate jurisdiction

*State efforts to regulate interstate wholesale transactions were rejected by the U.S. Supreme Court in the Attleboro Case, Public Utilities Commission of Rhode Island vs. Attleboro Steam and Electric Company, 273 U.S. 83, 1935. In that case, the Court extended a wholesale/retail test previously established in the natural gas area to limit the scope of permissible state regulation of electric rates under the Commerce clause. The Court held that efforts by the Rhode Island PUC to regulate the rates at which Naragansett Electric Lighting Company -- a Rhode Island utility -- could sell power at wholesale to a Massachusetts distributor was a "direct" burden on interstate commerce. In doing so, the Court rejected assertions by the PUC that such regulation was necessary to "facilitate" regulation of the Company's retail sales to (in state) Rhode Island customers. The Federal Power Act of 1935 was enacted in response to the regulatory gap created by the Attleboro decision. The act maintained the wholesale/retail distinction established in Attleboro as the statutory line dividing federal and state jurisdiction.

In a recent decision, however, the Court has indicated that it will rely less on such "mechanical" or formalistic" distinctions such as Attleboro and place greater emphasis on what it refers to as a "balance of interests test" which seeks to examine "the nature of state regulation involved, the objective of the state and the effect of regulation upon the national interest in the Commerce..." In this context, the Court upheld efforts by the Arkansas PSC to regulate rates charged by an Arkansas G&T Cooperative to its members as serving a "legitimate local public interest" and whole effect on interstate commerce were only incidental." (Arkansas Electric Coop. vs. Arkansas Public Service Commission, U.S. Supreme Court Decision No. 81-731, May 16, 1983).

following the elimination of federal regulation.* Otherwise, the incentive for independent suppliers to initiate such projects would be substantially reduced.

Prohibiting state commissions from exercising jurisdiction over rates charged by pure generating enterprises would not, however, prevent them from reviewing the unregulated price paid by a regulated distribution utility to pure generating enterprises in the course of fixing the retail rates of the utility. The arrangements negotiated between the purchasing utility and the seller would presumably be viewed as an arm's-length transaction. While direct rate regulation of such sales would be eliminated, state commissions would remain free to subject rates for the power purchases to a prudence test similar to that which is applied to other utility arm's-length purchases.

If the pure generating enterprise were a subsidiary of the purchasing utility, the degree of protection otherwise afforded by an arm's-length transaction would be compromised by the opportunity for "self-dealing" in a transaction between affiliates. Under these circumstances, state commissions could still exercise indirect but effective regulatory supervision by retaining the authority to review the rates paid by the jurisdictional utility to its affiliated suppliers in the course of fixing the retail rates of the jurisdictional utility.

*Edison Electric Institute, Deregulation of Pure Generating Enterprises, op. cit., p.4.

Why might indirect state regulation of generating affiliates be considered superior to direct Federal regulation? The explanation lies mainly in the fact that it would allow the establishment of affiliated generating enterprises without surrender by the state commission of the ability to protect consumers within their state.

The principal example of a proposed pure generating enterprise (owned by regulated utilities) that failed to gain acceptance was Empire State Power Resources, Inc. (ESPRI), proposed by New York State utilities in the mid-1970's.* ESPRI was a proposed new corporate entity in New York whose role would have been to construct, own and operate all new baseload generating facilities in the state. The proposal was ultimately rejected in large part because the New York Public Service Commission (NYPSC) was reluctant to allow the transfer of all regulatory authority over a growing proportion of the state's installed electric generating capacity to the FERC. It is reasonable to suppose that if generating affiliates had been exempt from FERC jurisdiction (and therefore subject to indirect state jurisdiction), the NYPSC might have accepted the ESPRI proposal. Under this scenario, the NYPSC would have retained the ability to protect state consumers, while enabling them to obtain the

*New York State Public Service Commission, Case No. 26793 (1975).

financial and scale economy benefits of the proposed generating enterprise.

2. Intrastate Power Pools

Eliminating FERC regulation of intrastate power pooling or coordination agreements would presumably allow state commissions to regulate such transactions (absent specific statutory language to the contrary).^{*} Whether jurisdictional considerations might then influence the geographic scope of coordination agreements is, however, an open question.

There is ample precedent to suggest that decisions relating to the most cost-effective configuration of coordination agreements could be skewed in favor of limiting participation to utilities operating within a single state to avoid FERC jurisdiction. Indeed, this was the case for many years in the context of coordination agreements among utilities in Michigan and Texas. Thus, while deregulation of intrastate pools might provide the states with an opportunity to exercise oversight of intrastate sales, the outcome may be the loss of scale economies and inefficiencies in the structure of coordination agreements. Among the 12 corporately unaffiliated power pools and 5 holding

^{*}See Section IV for a discussion of recent proposals relating to jurisdictional transfer.

company pools identified in the FERC Pooling Study, shown in Table 2, only six could be construed as intrastate pools (New York, Michigan, Wisconsin, California and the two Texas Pools). These six pools accounted for less than 18 percent of the nation's installed capacity in 1980.*

There are, nevertheless, arguments for state control of intrastate pools. Not the least of these is the fact that the state regulatory agency is in a much better position to monitor the joint planning and operation functions of the pool, as well as the relationship among the rates, terms and conditions contained in the pooling agreement and the retail rates and service regulated by the state. The ability of the state to exercise the monitoring function indirectly through the authority of the FERC is necessarily somewhat constrained. This is a matter calling for further consideration, including consideration of whether opportunities for joint state-federal cooperative action can be further exploited.

3. All Wholesale Power Transactions except
All-Requirements Service

A more radical proposal has been the suggestion that FERC regulation of all wholesale power transactions (except

*Federal Energy Regulatory Commission, Power Pooling in the United States, Washington, D.C., December 1981, p. 9.

TABLE 2

Major Formal Power Pools in the United States

<u>Region</u>	<u>Generating Capability Summer 1979* (Megawatts)</u>
NORTHEAST REGION	
New England Power Pool (NEPOOL)	21,294
New York Power Pool (NYPP)	29,742
Pennsylvania-New Jersey-Maryland Interconnection (PJM)	44,891
SOUTHEAST REGION	
Southern Company System (SOCO) (Holding Company)	23,909
ECAR REGION	
Allegheny Power System, Inc. (APS) (Holding Company)	6,822
American Electric Power System (AEP) (Holding Company)	20,123
Central Area Power Coordination Group (CAPCO)	15,147
Michigan Electric Coordinated System (MECS)	15,791
MAIN-MARCA REGION	
Illinois-Missouri Pool (IL-MO)	13,480
Mid-Continent Area Power Pool (MAPP)	24,527
Wisconsin Power Pool (WPP)	3,681
SPP REGION	
Middle South Utilities, Inc. (MSU) (Holding Company)	12,177
Missouri-Kansas Pool (MOKAN)	8,879
ERCOT REGION	
Texas Municipal Power Pool (TMPP)	1,457
Texas Utilities Company (TUCO) (Holding Company)	17,336
WESTERN REGION	
California Power Pool (CPP)	28,870
Pacific Northwest Coordination Agreement (PNCA)	32,292
TOTAL - Corporately Unaffiliated Pools	240,502
TOTAL - Holding Company Pools	80,367
Installed Capability - Contiguous United States	546,662

all-requirements service) be eliminated.* The concern here is the effect that such proposals might have on the ability of state commissions to continue to fulfill their responsibilities to regulate the retail rates charged to ultimate consumers.

A threshold issue is the extent to which the states may be able to directly regulate intersystem transactions in the absence of federal regulation. The decision of the U.S. Supreme Court in the Arkansas Electric Cooperative Case** provides reasons to believe that the constitutional bar to such regulation that may have been contained in the Attleboro Case has now been relaxed. It now seems likely that in the absence of Federal regulation, at least some transactions between utilities that are within the same state would be subject to state regulation. It is not at all clear, however, how far the Court would go in applying the "balance of interests test" to permit state regulation of transactions between electric utilities.

In any case, state commissions would no longer be precluded from reviewing wholesale rates in the course of fixing retail rates as they currently are where the wholesale rates are regulated by the FERC. As a practical matter, therefore, state

*For a discussion of this proposal, see, Edison Electric Institute, Preliminary Assessment of Proposals for Deregulation of Intersystem Bulk Power Transactions, December 1982.

**Arkansas Electric Cooperative vs. Arkansas Public Service Commission, *infra*.

commissions would be able to (at least) indirectly regulate rates for intersystem purchases (in the absence of specific federal legislation precluding such action).

To better understand this outcome, consider the case of Utility X in State A seeking to purchase a portion of the capacity in a generating unit owned by Utility Y in State B. Utility X could theoretically enter into a contract with Utility Y at a certain price without consulting its state commission. It would be unlikely to do so, however, if there is any reason to believe the commission in State A might subsequently find the purchase to have been imprudent. Similarly, the commission in State B may not be able to directly regulate the price at which Utility Y sells the power. But again, Utility Y takes a risk if it fails to take into account (in negotiating the transaction) the potential for a finding of imprudence on the part of the relevant state commission. The basis of such a finding of imprudence could include the fact that the price was insufficient to recover full costs, or that the power could have been sold at a higher price elsewhere, or that the power from this unit should have been retained for sale to in-state retail customers. The ability of states to make findings such as these and to fix retail rates that reflect such findings, while not constituting direct regulation of the wholesale sales, would surely be taken into account by any utility negotiating such a transaction.

Finally, Utility X may be so situated that Utility Y is able to extract a monopoly price even though the sale is still the best option available to Utility X.* Thus, there is no imprudence on the part of Utility X, and yet its customers will be subject to "excessive" rates. Only a continuing federal regulatory role in such interstate transactions is likely to be able to prevent this kind of outcome. Of course, if there is workable competition in the region at the bulk power supply level, the ability of sellers to extract monopoly prices for power sold across state borders is limited or eliminated. The extent of competition in bulk power supply varies considerably from one area to another based on such factors as the number of bulk power suppliers, the number and capacity of interconnections and the availability of "excess" generating capacity.

In summary, state commissions in a deregulated wholesale market would probably be capable of protecting consumers against excessive rates charged by supplying utilities within the state, but would be limited in the degree of protection they could afford to local utilities for purchases from utilities outside the state. That is, they could not protect the customers of local utilities from excessive rates charged by utilities out-

*The state commission regulating Utility Y is concerned that Y's sales price not be set so low that its costs are not recovered; it is less likely to be concerned, however, if the prices charged by Utility Y to a utility in another state are in excess of costs.

side the state if the latter could exercise monopoly power as a result of limited competition.* Thus, the workability and effectiveness of competition in a given region would be a major factor in the impact of deregulation of wholesale transactions on state commission regulation of retail rates.

*A case in which the out-of-state utility was a member of the same holding company group would be an exception.

CHAPTER 4

JURISDICTIONAL TRANSFERS

A. The Scope of State Versus Federal Authority over Wholesale Electric Rate Matters

Under the Federal Power Act of 1935, the FPC (now the FERC) was given authority to regulate most wholesale electric rates (i.e., sales for resale in interstate commerce), including those related to power pooling and other intersystem arrangements, as well as rates for transmission services.

The intent of Congress in assigning "wholesale" rate authority to the federal regulators has been debated periodically since the enactment of the Federal Power Act. As discussed earlier in this paper, Congress clearly went to great lengths to assure state commissions an opportunity to participate in FPC proceedings on interstate matters affecting their jurisdictions. At issue, however, has been the degree to which the essentially intrastate transactions of investor-owned utilities whose interconnections simultaneously allowed them to transmit and receive power across state lines were to be subject to federal rather than state jurisdiction.

On one side of the issue were numerous references in the hearings and Committee Reports which preceded the enactment of Parts II and III of the Act to the multistate structure of the utility industry and the necessity for Federal regulation of the price at which electric energy is sold at wholesale in interstate commerce. For example, a Senate Committee report noted that even in 1935, "local operating units [of utility systems

and holding companies] have been tied together into a vast interstate system" [and] were entirely beyond the reach of the states either legally or practically."* Proponents of an expansive view of federal jurisdiction have argued that system interconnections and the "free-flow" of power among all systems connected to the grid mooted the "interstate-intrastate" distinction and thus made essentially all major investor-owned utility systems jurisdictional.

On the other side of the issue have been those taking the view that the Congress had meant to very narrowly define the notion of jurisdictional sales to transactions that were clearly interstate in nature. For example, the Senate Commerce Committee, in reporting the Federal Power Act, declared that it was "the policy of Congress to extend [Federal] regulation to those matters which cannot be regulated by the States and to assist the States in the exercise of their regulatory powers, but not to impair or diminish the powers of any State commission." (emphasis added).**

Similar support for the narrow view of the scope of federal jurisdiction may be found in the House Committee Report which stated that, "[the Act] takes no authority from [any]

*Senate Report No. 621, 74th Congress, 1st Session, 1935.

**Ibid.

State Commission...Probably, no bill in recent years has so recognized the responsibilities of State regulatory commissions as does Title II [of the Federal Power Act].**

The precise scope of federal authority in relation to particular types of wholesale transactions (i.e., all-requirements sales) remained in doubt until the Supreme Court decided the Colton Case in 1965.** In that proceeding, the Court affirmed

*House Committee Report on the Federal Power Act, 74th Congress, 1st Session, 1935.

**Federal Power Commission vs. Southern California Edison Company, 376 U.S. 205. Southern California Edison Co. was and is an "intrastate" electric utility in the sense that its entire load is located within California. It owned and operated a number of steam and hydroelectric generating stations within the State, but in addition purchased some energy generated outside the state. The company sold energy at wholesale to the city of Colton's municipal electric system. While the California Public Utilities Commission had exercised jurisdiction over such sales for many years, Colton in 1958 requested the FPC to assert jurisdiction over the rate charged by Southern California Edison.

The FPC concluded that it had jurisdiction to regulate these rates because some of the out-of-state energy in the company's system could have reached Colton. The case was appealed to the U.S. Court of Appeals for the Ninth Circuit, which rejected the simple mechanical test followed by the FPC of making its jurisdiction hinge on whether the sale was wholesale or retail.

The Supreme Court, nevertheless, reversed the Court of Appeals, thereby upholding the FPC's "wholesale-retail" standard. Probably the most quoted phrase of the Supreme Court decision has been to the effect that Congress meant to draw "a bright line easily ascertained, between State and Federal jurisdiction, making unnecessary such case-by-case analysis."

federal jurisdiction over wholesale sales that occur entirely within the borders of a single state but where a portion of the energy sold may be generated in one state and consumed in another. This decision resulted in proposals to either restrict the scope of FPC authority over what were characterized as "pure intrastate transactions" or to shift such authority to the state Commissions.

B. Early Proposals for Jurisdictional Transfer

In response to the Supreme Court decision in the Colton Case, the Holland-Smathers Bill,* introduced in 1965, would have exempted entirely from FPC jurisdiction about 25 percent of the investor-owned companies that were then considered "public utilities" under the Federal Power Act. It also would have essentially eliminated FPC regulation of wholesale sales to municipal and cooperative systems as well as to those (intra-state) systems exempted from "public utility" status. The net effect of this legislation would have been to transfer a large portion of the FPC's jurisdiction over wholesale all-requirements electric rates from the FPC to the state commissions.

*S. 218, Eighty-Ninth Congress, First Session, "Exemption of Certain Public Utilities from Federal Power Commission Jurisdiction."

Advocates of exemption cited the natural gas situation wherein Congress exempted most intrastate gas pipelines from FPC jurisdiction.** Strong opposition by a coalition of wholesale customers, the FPC and the Justice Department ultimately succeeded, however, in blocking enactment of the jurisdictional transfer proposals contained in Holland-Smathers. The bill was considered at length but was not reported out of Committee.*

Similar transfers of jurisdiction over all-requirements wholesale sales to the state regulatory commissions have been suggested from time to time since Holland-Smathers.*** The matter was addressed in a 1980 report by the chairman of the FERC required by Section 207(b) of the Public Utilities Regula-

*A more limited version of this legislation (S. 1365) was introduced in 1967, but again failed to achieve sufficient support for enactment.

**In 1954, the Congress considered the collorary situation in the case of federal regulation of natural gas pipelines. As a result, the Congress passed the so-called "Hinshaw Amendment" (68 Stat. 36 (1954); 15 U.S.C., sec. 717(c)), which reaffirmed state jurisdiction over the transmission and sale of natural gas, which had been received within or at the boundary of a state and ultimately consumed within that state.

***See, for example, Charles B. Curtis, remarks at the Utility Regulatory Conference sponsored by Public Utilities Reports, Inc., October 5, 1978. Also Herbert B. Cohn, "The Regulation of Wholesale Electric Power," Public Utilities Fortnightly, March 1, 1979, pp. 54-57.

tory Policies Act of 1978.* In that report, the arguments on both sides of the jurisdictional transfer issue are summarized, but no recommendation is made. The arguments noted in favor of transferring wholesale rate jurisdiction to the states include the following:

- (1) Dual regulation is wasteful of time, effort and resources and creates anti-competitive price discrimination.
- (2) State regulatory commissions would be at least as effective as federal regulators.
- (3) Wholesale (all-requirement) rate regulation is a matter best handled at the state rather than federal level by virtue of the local nature of the issues addressed.
- (4) Jurisdiction over wholesale electric rates is too broad to be properly regulated by a single agency.

The report outlined the following arguments against such a transfer of jurisdiction:

- (1) Wholesale regulation involves difficult issues relating to the maintenance and encouragement of competition. In such specialized matters, federal regulators are much more likely to be sensitive and knowledgeable than their state counterparts.
- (2) Such jurisdiction is necessary to enable the federal commission to assemble and maintain an expert staff so that it can perform its other regulatory responsibilities and promote national interests through innovative regulation.
- (3) Wholesale customers cannot get fair treatment from retail-oriented state commissions that are "overly influenced by" parochial (i.e. local) considerations.

*Charles B. Curtis, Decisional Delay in Wholesale Rate Increase Cases: Causes, Consequences and Possible Remedies, Federal Energy Regulatory Commission, Washington, 1980, pp. 105-110.

- (4) Concentration of regulatory jurisdiction in a federal agency enables wholesale customers to take advantage of a Washington-based legal and technical consulting community oriented toward customer interests. This support structure would not survive if customers had to litigate wholesale rate issues in 50 state jurisdictions.
- (5) The delay in the present system of federal regulation can be substantially reduced through various procedural changes, or if these are inadequate, by creation of a new federal agency that would concentrate on electric matters.

C. Regional Regulation Proposals

The issue of jurisdictional transfer of FERC wholesale rate authority to the state commissions emerged most recently in the much broader context of a resolution adopted by the National Governors Association (NGA) supporting greater regional coordination and consolidation of electric utility regulation.* As distinct from the Holland-Smathers approach, which was narrowly defined in terms of all-requirements wholesale transactions, the NGA Regional Regulation proposals extend across the full range of FERC's wholesale rate authority.

Among the principal "findings" of the NGA policy resolution the following:

While the electric supply system has become increasingly multistate in nature...primary regulatory responsibilities have been retained by the states [but the effectiveness thereof] has been limited by the boundaries of state regulatory jurisdiction and [through preemption] by federal regulatory agencies.**

*National Governors Association, Committee on Energy and Environment, Statement of Proposed Changes in Policy, Annual Mid-Winter Meeting, February 28, 1983, pp 15-21.

**Ibid., pp. 16-17.

The resolution adopted by the NGA recommended changes in three areas: (1) regional power planning and regulation; (2) "sorting out" of federal and state regulatory responsibilities; and (3) "benefit-sharing approaches" to ratemaking. These measures in NGA's view would "reduce multistate regulatory conflicts" and increase the opportunity for regulation which "insures system reliability at the lowest possible long-term cost."*

Among a series of NGA recommendations in the area of "Regional Power Planning and Regulation" is the notion of "permissive federal legislation allowing states to enter voluntarily into multistate agreements for regional power planning and/or regional regulation...including the authority to set regional standards for ratemaking...and set wholesale and retail rates."** Such regional agreements in NGA's view will likely be "evolutionary in nature," beginning with coordinated power supply planning efforts and ultimately developing into more extensive agreements possibly including ratemaking authority. The NGA resolution also uses the expression "sorting out of federal/state regulatory roles" to describe a series of propo-

*Ibid., pp. 16-17.

**Ibid., pp. 17-19.

sals for increasing state and regional electric regulatory authority while substantially reducing the authority of the Federal Energy Regulatory Commission under the Federal Power Act. In particular, NGA suggests:*

- (1) FERC jurisdiction over intrastate wholesale transactions should be shifted to individual states or to regional regulatory bodies at the option of the state or states involved; and
- (2) FERC jurisdiction over interstate wholesale transactions should be shifted to regional regulatory bodies where they exist and desire such authority.

The Executive Committee of the National Association of Regulatory Utility Commissioners (NARUC) recently voted to endorse the NGA resolution dealing with regional regulation. The concept of consolidating federal and state ratemaking jurisdiction in a new regional regulatory entity is also advocated in a recent article by NARUC President Larry Wallace.** He suggests that the electric utility industry be restructured along roughly the same regional lines as the regional electric reliability councils. Wallace cites several advantages for a new regional system of "regulatory entities [more] accountable to state governments" including:

- o "One-stop" regulation for both retail and wholesale rate matters.

*Ibid., pp. 19-20.

**Larry Wallace, "Reregulation of the Electric Utility Industry," Public Utilities Fortnightly, November 25, 1982, pp. 13-15.

- o Eliminating obstacles to multistate (joint venture) power supply projects.
 - o More coherent response to regional (energy) emergencies.
 - o Less litigation and increased emphasis on negotiation and settlement.
 - o Eliminating electric regulatory burdens on the FERC [thereby allowing it to focus on natural gas issues].
 - o Increasing the quality of staff and the level of funding available for utility regulation [through pooling of resources at the regional level].
- D. Assessment of Jurisdictional Transfer Proposals

There appears to be a widespread consensus that the public interest is served by retaining some federal role in the regulation of intersystem bulk power sales where the buyer and seller are in different states or regions. Conversely, from a public policy perspective, it is more difficult to perceive a clear federal interest in the regulation of wholesale (all-requirements) transactions where both buyer and seller are located in the same state.* Indeed, it is difficult to per-

*Under Sections 201 and 210 of PURPA, Congress has delegated ratemaking authority to state commissions for intrastate wholesale transactions involving cogeneration and small power production, albeit under guidelines established by the FERC. Thus, even if complete jurisdictional transfer of all-requirements wholesale rates to the states is unacceptable, there may be partial steps such as delegation of FERC authority to regulate such sales under FERC-prescribed guidelines, which may have a better chance of achieving a consensus.

ceive any public interest in federal (as distinct from state) regulation of such rates that would not be equally applicable to all other types of electric rate regulation.* While some wholesale power purchasers are also competitors of the supplying utilities, it is not evident that such "competition" (or problems related thereto) necessarily creates a federal interest or requires federal regulation to assure that the public interest is served.**

A similar absence of federal interest can be argued with regard to the regulation of power pools and other coordination agreements (e.g., brokerage) operating exclusively on an intra-state basis (e.g., New York State Power Pool or the Florida Coordinating Group). In this case, however, the risk of suboptimization is considerably greater if pooling arrangements were deliberately structured (or restructured) to operate solely within a single state to avoid federal regulation. The structure of utilities in the ERCOT System (Texas) which until recently avoided physical interconnection across state borders

*Federal regulation of all electric rates might be supported on grounds of need for uniformity, to promote national energy policy or for other policy reasons. The point here is that the case for singling out wholesale all-requirements rates for special treatment is difficult to support.

**The rate sections of the Federal Power Act do not include explicit references to "competition." The issue of competition has emerged in the interpretation of the "public interest" in the context of the antitrust statutes (i.e., Sherman Act) and relevant provisions of the Atomic Energy Act.

to maintain their non-jurisdictional status is illustrative of this problem.

E. Views of the Major Constituencies on Jurisdictional Transfer Proposals

In the past, most state commissions and several investor-owned utilities have supported transfer of intrastate wholesale rate jurisdiction to the states while wholesale customer groups have generally opposed the concept. The fact that there is not universal agreement among the members of any of these groups is not surprising, however, in view of the fact that transfer of jurisdiction would have both advantages and disadvantages for each group.

Consider, for example, the effect of a jurisdictional transfer on state commissions. Shifting regulation of wholesale rates to the state level could mean additional staff and resource requirements, greater burdens on the state commissions and potentially increased regulatory delay. The latter derives in part from the fact that a whole set of new issues may have to be faced, including antitrust, price-squeeze and other wholesale/retail discrimination problems, together with the whole range of rate level and rate design issues involved in the wholesale business.

A principal concern of investor-owned utilities in regard to any proposals related to jurisdictional transfer is that their retail rate filings are decided as rapidly as possible. Any delay in state commission approval of proposed retail rate

increases (as a result of problems arising from relatively insignificant but time-consuming wholesale rate matters) would be quite disadvantageous to the utility. Furthermore, under federal regulation a utility can begin collecting increased revenues from its wholesale customers after a maximum suspension of 5 months (and often as little as one day). If these rates were regulated by a state commission, the periods of maximum suspension could be considerably longer.

The responses of most investor-owned companies to specific jurisdictional transfer proposals typically reflects their individual experience under state regulation. While there is some measure of support for the concept of shifting the focus of regulatory oversight of certain planning decisions to the regional level (e.g., the need for power), there is considerable skepticism that even such limited efforts can ever be achieved without simply creating "another layer of regulation." There is also a general concern with regard to "reopening" the Federal Power Act to enact even limited changes regarding wholesale rate authority.

A utility's response to recent proposals for regional regulation of both retail and wholesale rates was outlined in a recent article by two senior executives of the nation's largest investor-owned utility.* This utility serves retail customers

*Joseph Dowd and John Burton, "Deregulation Is Not an Answer for Electric Utilities," Public Utilities Fortnightly, September 16, 1982, pp. 21-28.

in seven states, as well as a large number of wholesale customers subject to FERC jurisdiction. Thus, in theory, one would expect that it would have much to gain through consolidation of all wholesale and retail rate matters within a single regulatory agency. While the authors acknowledge some of the theoretical advantages of such a jurisdictional transfer, they clearly have substantial concerns regarding the practical limitations of the regional regulation concept, reflecting a perspective which is shared by representatives of other investor-owned companies.

They note that:

Regional regulation would make no sense at all if it meant simply addition of another layer of regulation to existing regulation by the state commissions and the FERC.

Obviously, regional regulation would have certain attractions if it could be substituted for state commission regulation of retail rates and FERC regulation of wholesale rates within the regional area. In this supposition, there would be but one regulatory authority for the entire region, presumably comprising several states, which would have jurisdiction over all the rates of all utilities regulated by the regional body. This presumably would entail for each such utility or integrated utility system within the region a single rate base, a single set of rates throughout the region for each customer class, a single rate-of-return, and single rates cases -- all of which would represent a very considerable convenience for a utility system operating at present in more than one jurisdiction.

The question is, however, whether regional regulation is achievable as a practical matter. We do not think it is, principally because we do not believe that states and the FERC would be willing to relinquish to a regional body their present respective jurisdictions over electric utility rates.*

*Ibid.

Publicly owned and cooperative utilities, which together constitute the great majority of wholesale customers, have consistently opposed transfer of any wholesale rate jurisdiction to the states partly because of FERC's greater sensitivity to competitive issues in wholesale rate case determinations. However, as distinct from the investor-owned companies, they would view the substantially shorter suspensions generally fixed by the FERC as a disadvantage of FERC regulation. Furthermore, current FERC ratemaking policy includes comprehensive inter-period tax normalization, future test years, automatic fuel adjustment clauses, relatively high rates-of-return (compared with rates granted by many state commissions) and some inclusion of CWIP in rate base. Such policies are generally considered to be more favorable to the seller (principally investor-owned systems) than to the purchaser. It is unclear whether the above cited factors (some of relatively recent vintage) would affect wholesale customers' historical opposition to transferring rate jurisdiction to the states.*

*The American Public Power Association has recently reaffirmed its traditional opposition to jurisdictional transfer in the context of the previously referenced NGA proposals. (Electric Utility Week, March 15, 1983).

CHAPTER 5
CONCLUSIONS

Concern over the effectiveness of regulation as a substitute for competition in the electric power industry has led to various proposals for restructuring of regulation including several options dealing with partial deregulation of the industry. Each of these proposals would have substantial impacts on the authority and responsibility of state regulatory commissions to control rates charged by electric utilities.

In this paper, we have examined three sets of proposals: (1) comprehensive deregulation of generation, (2) deregulation of selected wholesale power transactions, and (3) jurisdictional transfers. The discussion, in each case, has concentrated on the effect of the proposed changes on the authority and responsibility of state commissions.

Comprehensive deregulation of generation and vertical disintegration of industry structure will substantially reduce the ability of state commissions to control rates. This is particularly true of those models in which bulk power supply responsibility is essentially shifted from the vertically integrated utility to independent regional transmission entities or power brokers. Where responsibility for assuring adequate supplies remains with the distribution utility and is carried out primarily by way of long-term bulk power supply contracts with unregulated suppliers, the principal function of the state com-

missions would be reduced to reviewing the prudence of those long-term arrangements. In both cases, however, the state commission will continue to regulate the retail rates of the distribution utilities albeit with a substantially reduced level of control over the utility's total costs of power supply. Most of the costs constituting the basis of rates charged to end-use customers will either be regulated by a federal agency (and therefore not subject to state review) or embedded in long-term arm's-length contracts with unregulated suppliers. While state commissions may thus find that their effective control is largely limited to rate design matters (rather than rate level determination), the retail ratepayers may very well continue to hold the commissions politically responsible and accountable for both. Based on a variety of technical and economic considerations, however, there is very little likelihood that any of the comprehensive deregulation proposals considered in this paper will develop sufficient political support for enactment in the foreseeable future.

Deregulation of wholesale power transactions may increase the authority and responsibility of state commissions with respect to some such transactions. In other cases, however, it may result in a narrowing of state authority or possibly even creation of a "regulatory gap" wherein some transactions would be totally exempted from federal or state jurisdiction.

Although FERC has principal responsibility for wholesale rate regulation, the Federal Power Act does provide a variety of opportunities for state-federal coordination and cooperation in

the adjudication of wholesale electric rate matters. With a few exceptions noted in the paper, there has been very limited use of these authorities either by state commissions or FERC. Where states have attempted to encroach on FERC authority, the Courts have generally rejected state efforts to expand their jurisdiction (except in one recent case where state oversight of certain wholesale rates was viewed as essential to the exercise of its retail rate authority and was thus allowed as not imposing an unreasonable burden on interstate commerce).

The concept of deregulation of wholesale transactions could include such measures as (1) deregulation of pure generating enterprises, (2) deregulation of intrastate power pools or (3) deregulation of all sales for resale (except for all-requirements, service and wheeling).

The deregulation of pure generating enterprises would appear to be feasible only if the states were precluded from exercising rate jurisdiction following elimination of federal jurisdiction. Otherwise, the incentive to create such enterprises would be substantially reduced. Historically, the states and wholesale customers have opposed any utility restructuring which would either shift rate jurisdiction to FERC or totally eliminate regulatory oversight of wholesale sales. However, if a proposal were structured in such a way that the states were still free to review the prudence of (arm's length) purchases from generating affiliates or independent power suppliers, some of this opposition could be overcome.

Proposals for deregulation of intrastate power pools or transfer of rate jurisdiction over intrastate pools to the relevant state commissions is based on the notion that the states are a more suitable forum for adjudication of intrastate pooling issues. The problem with such proposals, however, is the likelihood that such action could create a bias against interstate pooling or brokerage arrangements in cases where the latter would be more efficient than coordination agreements defined relative to state political boundaries.

The most radical proposals relating to wholesale deregulation examined in this paper are suggestions that FERC regulation of all wholesale power transactions (except all-requirements service) be eliminated. The major concern here is the effect that elimination of federal jurisdiction might have on the ability of state commissions to continue to fulfill their responsibilities to regulate the retail rates charged to ultimate consumers (i.e., the extent to which the states may be able to directly regulate intersystem transactions in the absence of federal regulation).

State commissions in a deregulated wholesale market would probably be capable of protecting consumers against excessive rates charged by supplying utilities within the state, but would be limited in the degree of protection they could afford to local utilities for purchases from utilities outside the state. That is, they could not protect the customers of local utilities from excessive rates charged by utilities outside the state if

the latter could exercise monopoly power as a result of limited competition. Thus, the workability and effectiveness of competition in a given region becomes a major factor in assessing the impact of deregulation of wholesale transactions on state commission regulation of retail rates. The experiments with competitive markets such as contemplated by FERC may provide additional insight concerning this issue.

Until recently, there was no clearly identifiable constituency supporting either regional regulation or jurisdictional transfer proposals. The recent action by the National Governors Association (NGA) endorsing the idea of shifting selected federal wholesale rate authorities to the states creates at least the potential for legislative action in this area.

From a state perspective, a shifting of some FERC regulatory authority to the states has the potential to both ease the caseload of the FERC and bring the regulation of all intrastate bulk power transactions "closer to the governed." It could also provide for more uniform regulation of utility revenues derived from intrastate wholesale power transactions with revenues derived from retail sales. Investor-owned utilities may support the notion of "regulatory consolidation," but have expressed legitimate concerns that political considerations will result in an increase -- rather than a reduction -- in regulatory oversight if jurisdictional transfer proposals are enacted in the form proposed by the NGA. This is based on the difficulty of

assuring a parallel and binding transfer of state regulatory jurisdiction to a regional body under the discretionary approach to regional regulation advocated by the NGA.

In addition to strong opposition from wholesale customers and some investor-owned utilities, state commissions may also be concerned about the work load and budgetary implications of jurisdictional transfer and problems created by assuming jurisdiction over antitrust disputes and other complex wholesale ratemaking issues. Thus, the near-term outlook for such proposals remains uncertain, notwithstanding recent NARUC support for the NGA proposals. While such a proposed restructuring may be attractive in theory, the risks associated with creating new layers of regulation may offset the potential benefits of shifting authority to newly created regional regulatory entities.

Perhaps the most likely outcome of the recent focus on regional regulation and jurisdictional transfer is a greater awareness of the opportunities provided under existing law for federal-state or state-to-state regulatory coordination. Indeed, even if no progress is made on the broader issue of restructuring regulatory authority, such enhanced regulatory coordination itself would be a highly useful outcome of the current debate and perhaps set the stage for future progress in this area.

APPENDIX

Calculation of Revenues of Investor-Owned Utilities
that Remain Subject to State Commission Jurisdiction
Under Prototype Deregulation, 1980
(000)

Plant in Service:

Distribution	\$ 60,822
General*	<u>5,473</u>
Sub-Total Distribution and General Plant	\$ 66,295
Less: Depreciation (21.3%)**	<u>14,120</u>
Depreciated Distribution and General Plant	\$ 52,175

Return (10.5% of \$52,175)	5,478
Distribution Expenses (O&M)	2,959
Customer Accounting Expenses	1,590
Customer Service and Information	295
Sales	28
Administrative & General (50%***)	2,218
Depreciation and Amortization (2.3% x Gross Distribution Plant)	1,525
Taxes and Other Income Taxes (33%****)	1,934
Income Taxes (33%)	<u>1,448</u>
Cost of Distribution Service	\$ 17,475

Revenue from Sales to Ultimate Customers	\$ 76,362
Less: Cost of Distribution Service	<u>17,475</u>
Revenues derived from other than Distribution Service	\$ 58,887

Non distribution-related costs as a percent of total revenues =

$$(\$58,887/\$76,362) = 77.1\%$$

Appendix (cont.)

Footnotes:

*This represents total General Plant. A more precise calculation would assign some of this to the generation and transmission functions.

**Ratio of Depreciation Reserve to Total Plant in Service.

***Labor Ratio.

****Gross Plant Ratio.

Source: U.S. Department of Energy, Energy Information Administration, Statistics of Privately Owned Electric Utility in the United States: 1980 Annual Classes A and B Companies, Washington, D.C., 1981.