D.P.U. 95-30

Investigation by the Department of Public Utilities on its own motion into electric industry restructuring.

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EXECUTIVE SUMMARY

On February 10, 1995, the Department of Public Utilities ("Department") issued a Notice of Inquiry and Order Seeking Comments on Electric Industry Restructuring ("NOI") in D.P.U. 95-30, in order to investigate a restructuring of the electric utility industry in Massachusetts. The move from a regulated industry to a competitive industry usually leads to greater efficiencies and lower prices, with more and better choices for consumers. Where government regulation is relied on to promote these ends, regulation can at best attempt to approximate the results of fully competitive markets. Where changes in an industry can be introduced that permit greater reliance on competitive market forces, the need for government regulation must be reassessed. The electric industry has entered just such an era of change. Accordingly, the Department opened this inquiry to investigate and determine (1) how a restructuring of the electric industry in Massachusetts would promote competition and economic efficiency and expand opportunities that would benefit consumers, (2) whether and how to extend to some or all customers the option of choosing their own electricity suppliers, (3) how such a restructuring could be implemented, and (4) the appropriate regulatory mechanisms to apply to a restructured electric industry. NOI at 1-2.

DEPARTMENT GOAL FOR THE FUTURE ELECTRIC INDUSTRY

Reducing costs, over time, for all consumers of electricity is the primary objective of the Department's efforts in restructuring the electric industry. The Department's overall goal in this proceeding is the development of an efficient industry structure and regulatory

framework that minimize long-term costs to consumers while maintaining the safety and reliability of electric services with minimum impact on the environment.

Long-term cost reductions will be achieved most effectively by increasing competition in the generation industry and enabling broad customer choice, thereby allowing market forces to play the principal role in organizing electricity supply for all customers. The primary elements of a fully competitive electricity market therefore will be customer choice and full and fair competition in generation. A competitive industry structure can also ensure safety and reliability and further environmental protection goals effectively.

The Department finds that the interests of ratepayers would best be served by an expedient and orderly transition from regulation to competition in the generation sector, in order to bring to ratepayers the benefits of competition as quickly as possible. Among the key issues in the transition to a competitive electricity market are the treatment of stranded costs and the unbundling of rates.

Although the record in this proceeding does not establish that there exists any clear legal entitlement to recovery of stranded costs, litigation over recovery of stranded costs would delay competition and the benefits it would bring. Therefore, responsible policy must provide electric utilities a reasonable opportunity to recover net, non-mitigatable stranded costs during the transition period. The Department finds that it has authority under G.L. c. 164, §§ 76 and 94 to implement this policy regarding stranded costs, and that such a policy is in the public interest.

The unbundling of rates is necessary to provide consumers with accurate price signals and the ability to purchase competitive generation supplies separately from transmission and

distribution services. The Department finds that it has authority under G.L. c. 164, §§ 76 and 94 to order the unbundling of electric rates, thus enabling the purchase and sale of electricity-related services in a transparent and comparable manner.

Transmission and distribution of electricity will likely remain monopoly services for the near future and thus will require continued regulatory oversight. Incentive regulation should govern these monopoly segments of the industry. During the transition to a fully competitive market, incentive regulation of the generation sector can also encourage suppliers to improve the efficiency of electricity production.

The Department will work closely with the Legislature and other appropriate government agencies to accomplish its overall goal of developing an efficient industry structure and regulatory framework that minimize long-term costs to consumers while maintaining the safety and reliability of electric service, with a minimum impact on the environment. A successful restructuring of the electric industry will be advanced by the coordination of state, regional and federal efforts in this direction.

PRINCIPLES FOR A RESTRUCTURED ELECTRIC INDUSTRY

In this Order, the Department develops principles that describe the key characteristics of a restructured electric industry as we envision it. These principles outline the key elements of the future industry structure, identify public policy goals that must continue to be served and indicate the nature of future regulation. These principles are set forth below and discussed in greater detail in Section III.

1. **Provide the broadest possible customer choice.**

2. **Provide all customers with an opportunity to share in the benefits of increased competition**.

3. **Ensure full and fair competition in generation markets.**

4. **Functionally separate generation, transmission, and distribution services.**

5. **Provide universal service**.

6. **Support and further the goals of environmental regulation.**

7. **Rely on incentive regulation where a fully competitive market cannot exist, or does not yet exist.**

PRINCIPLES FOR THE TRANSITION TO A RESTRUCTURED ELECTRIC INDUSTRY

The Department also sets out principles for guiding the transition from a regulated to a competitive industry structure. These principles identify fundamental conditions for facilitating the transition process and ensuring that the end result benefits customers. Section IV of the Order discusses these principles in greater detail.

1. **Honor existing commitments.**

2. **Unbundle rates**.

3. **Seek near-term rate relief.**

4. **Maintain demand-side management programs.**

5. **Ensure that the transition is orderly and expeditious, and minimizes customer confusion**.

IMPLEMENTATION

In Section V, the Department establishes a timetable for negotiations on restructuring and sets forth a schedule for filings by utilities. All interested parties are encouraged to participate in

negotiations. Utilities must then file restructuring proposals with the Department which include (1) a plan (that includes any negotiated resolutions) for moving from the current regulated industry structure to a competitive generation market and increased customer choice; (2) illustrative rates and supporting information that, at a minimum, indicate unbundle charges for generation, transmission, distribution, and ancillary services; (3) an identifiable charge reflective of the level of stranded costs to be recovered with all necessary supporting information; and (4) a plan for incentive regulation of the transmission and distribution systems. The filing of proposals will be staggered according to the following schedule: Boston Edison Company, Massachusetts Electric Company, and Western Massachusetts Electric Company are required to submit their proposals within six months of the issuance of this Order; Cambridge Electric Light Company, Commonwealth Electric Company, Eastern Edison Company, Fitchburg Gas and Electric Company and Nantucket Electric Company will be required to submit proposals within three months of the Department's Orders on proposals in the first round. The Department will review the filings and issue an Order on each as soon as possible.

I. BACKGROUND

A. Objectives of the Department's Notice of Inquiry

1. Introduction

On February 10, 1995, the Department of Public Utilities ("Department") launched an investigation into the potential for a historic restructuring of the electric utility industry in Massachusetts. See Notice of Inquiry and Order Seeking Comments on Electric Industry Restructuring, D.P.U. 95-30 ("NOI"). Traditionally, the electric utility industry has been presumed to be a natural monopoly that was most efficiently organized into vertically integrated businesses serving as exclusive providers to well-defined service territories. This presumption is no longer universally accepted. While certain functions associated with the industry may continue to be best organized as a monopoly, a much more competitive electric generation industry has already started to evolve.

The Department opened this inquiry to determine (1) how a restructuring of the electric industry in Massachusetts would promote competition and economic efficiency and expand opportunities that would benefit consumers, (2) whether and how to extend to some or all customers the option of choosing their own electricity suppliers, (3) how such a restructuring could be implemented, and (4) the appropriate regulatory mechanisms to apply to a restructured electric industry. NOI at 1-2.

Reducing costs, over time, for all consumers of electricity is the primary objective of the Department's efforts in restructuring the electric industry. The Department's overall goal in this proceeding is to develop an efficient industry structure and regulatory framework that minimize

long-term costs to consumers while maintaining the safety and reliability of electric services with minimum impact on the environment. Long-term cost reductions will be achieved most effectively by increasing competition in the generation industry through broad customer choice, thereby allowing market forces to play the principal role in organizing electricity supply for all customers.[1]

Affordable electricity concerns every Massachusetts household. Consumers in Massachusetts now pay some of the highest electricity rates in the United States. The Department believes that these high rates do not reflect an efficient electric utility industry. The success of the Department's initiative to restructure the electric industry will ultimately be judged on its ability to reduce costs and provide more and better choices to electricity consumers in Massachusetts. The terms on which electricity is made available are especially critical to the

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[1] During the 1970s and through the early 1980s, numerous regulatory reforms lessened the degree to which a number of industries were subject to economic regulation by government. These industries include the airlines, railroads, trucking, telecommunications, cable television, brokerage services, and natural gas. The quantitative benefit from these changes has been substantial. According to one estimate, society has gained at least $36-$46 billion (in 1990 dollars) annually from deregulation, primarily in the transportation industries. This gain equates to an improvement of 7 to 9 percent in the component of Gross National Product affected by regulatory reform. The bulk of these benefits has been captured by consumers. See "Economic Deregulation: Days of Reckoning for Microeconomists," Clifford Winston (The Brookings Institution), Journal of Economic Literature at 1264, 1284-1285 (September 1993). The Department has been encouraged by the results achieved in industries that have made the transition from regulation to competition and this has led us to examine whether similar improvements can be achieved in the electric utility industry.

ability of industries in Massachusetts to compete nationally and internationally, thereby providing good jobs and contributing to a sound economy.[2]

Along with achievement of its overall goal, the Department seeks to preserve society's ability to pursue other important public policy goals, including continued low-income consumer protection, energy efficiency, environmental protection, energy security, fuel diversity, and continued technological advance through research and development. It is likely that a competitive market will promote many of these goals, although some, such as low-income consumer protection, will require the Department's continued regulatory oversight. Others, such as environmental protection, will require coordination with state and federal environmental regulatory agencies.

2. Coordination with Other Policy Makers

The Department recognizes that any change in the electric industry in Massachusetts would both affect and be affected by the electric industry in New England and quite possibly other parts of North America. California, Connecticut, Illinois, Maine, Maryland, New Hampshire, New Jersey, New York, Ohio, Rhode Island, Vermont, and Wisconsin are among the states investigating greater competition in the electric industry. Because of the proximity of some of these jurisdictions to Massachusetts and the importance of interpool and intrapool relations for economic electric power exchanges, coordination between other jurisdictions and Massachusetts

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[2] Maintaining industrial competitiveness and affordability to consumers appears to be a prime motivating factor behind the decisions in other jurisdictions to investigate the transition to a more competitive environment in the electric industry. Proposed Policy Decision Adopting a Preferred Industry Structure, CA.P.U.C. Case R.94-04-031/I.94-04-032, at 4 (Issued May 24, 1995).

is desirable. Communication and cooperation among the New England states is already well established and will remain essential throughout this restructuring process. For example, the Department has monitored roundtable discussions with other New England regulators and industry representatives on such matters as the establishment of a regional transmission group ("RTG") and reform of the New England Power Pool ("NEPOOL"). In addition, coordination with the Federal Energy Regulatory Commission ("FERC") and the Securities and Exchange Commission ("SEC") will be necessary.

The Department derives its authority to regulate the electric utility industry in Massachusetts from a comprehensive regulatory framework enacted by the Massachusetts Legislature. When statutory changes have been required in order to permit the implementation of new policies and regulatory approaches, the Department has worked with the Legislature to develop necessary legislation. Likewise, if initiatives to restructure the electric utility industry require statutory change, the Department will coordinate with the Legislature in an effort to bring about change that is in the public interest. At each stage, we intend to keep the Legislature apprised of our policy proposals and progress.

B. Description of Regulated Monopoly Electric Industry

1. History and Current Structure

The electric industry in Massachusetts is a complex mosaic of service territories supported by generation, transmission, and distribution assets under the individual ownership of eight discrete investor-owned utilities ("IOUs")[3] and 40 municipal utilities. Municipal utilities are

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[3] The Department regulates eight investor-owned electric companies: Boston Edison (continued...)

typically operated by electric departments of municipal governments and presided over by appointed or elected boards. Four of the eight IOUs are wholly-owned subsidiaries of multistate public utility holding companies,[4] whose activities are regulated by the FERC and by the SEC, in addition to the Department. Ownership of central electric generating units is generally divided among utilities, with system reliability and economic dispatch of generating units coordinated by NEPOOL, which was formed for these purposes. See G.L. c. 164A. In recent years, qualifying cogeneration and small power production facilities ("Qualifying Facilities" or "QFs") under the Public Utility Regulatory Policies Act,

16 U.S.C. §§ 824 et seq., ("PURPA") and other non-utility generators ("NUGs") or independent power producers ("IPPs") have developed independently of traditional utilities to sell power in the wholesale market. New England Electric System and Northeast Utilities operate substantial intrastate electricity transmission lines on north-south and east-west axes. Other IOUs control much of the remaining transmission facilities, making most municipals dependent on them for any imported power. Each of the utilities distributes electricity over clearly defined service territories.

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Company; Cambridge Electric Light Company; Commonwealth Electric Company; Eastern Edison Company; Fitchburg Gas and Electric Light Company; Massachusetts Electric Company; Nantucket Electric Company; and Western Massachusetts Electric Company. These companies, either directly or through affiliates, own electric generation facilities, high-voltage transmission networks, and low-voltage distribution networks that are used to serve customers in their service territories. Because they control the process from the generation of electricity to its final distribution to consumers, they are known as vertically integrated utilities.

[4] The four are Eastern Edison Company, a subsidiary of Eastern Utilities Associates; Fitchburg Gas and Electric, a subsidiary of UNITIL Corporation; Massachusetts Electric Company, a subsidiary of New England Electric System; and Western Massachusetts Electric Company, a subsidiary of Northeast Utilities.

Since its establishment by the Massachusetts Legislature in 1919,[5] the Department has pursued its goal of ensuring that regulated public utility companies provide safe, reliable, and least-cost service to Massachusetts consumers, with minimum impact on the environment. Pursuant to statute, the Department sets electricity rates (G.L. c. 164, §§ 93 and 94); preapproves contracts for the long-term purchase of electricity (G.L. c. 164, § 94A); maintains oversight over utility affiliate transactions (G.L. c. 164, §§ 76A, 85, 86A, and 94B); reviews and approves distribution and transmission lines with eminent domain authority (G.L. c. 164, §§ 72, 87-91; c. 166, §§ 21-28); approves demand forecast and supply plans (G.L. c. 164, §§ 69G-69R); oversees corporate matters, including the issuance of securities (G.L. c. 164, §§ 3-33); reviews acquisitions and mergers of utilities (G.L. c. 164, § 96); reviews and approves fuel costs and charges, and generating unit performance and procurement practices (G.L. c. 164, § 94G); and ensures that electric utilities fulfill their obligations to serve (G.L. c. 164, §§ 69G-69R, 87-92, and 124-125). Much of the statutory framework under which the Department regulates the electric industry was developed when the electric industry was a natural monopoly providing an essential service.[6] In addition to comprehensive state regulation, the federal Public Utility Holding Company Act of 1935,

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[5] Before 1919, the electric and gas utility industries were regulated by the Department's predecessor agencies, the Board of Gas and Electric Light Commissioners and the earlier Board of Gas Commissioners.

[6] See, e.g., Report of the Special Commission on Control and Conduct of Public Utilities, Authorized by Resolves of 1929, Chapter 55 (House No. 1200), at 48-49 (1930). The Department notes that not all functions performed by vertically integrated electric utilities exhibit the characteristics of natural monopoly; for example, it appears that generation services can be provided on a competitive basis.

15 U.S.C.A. §§ 79 et seq., ("PUHCA") also regulates the electric industry by (1) allowing electric utilities to operate on a vertically integrated basis, but only within contiguous states, (2) discouraging non-utility businesses from generating electricity for sale to distribution companies by subjecting such businesses to regulation under PUHCA, and (3) limiting registered holding companies from diversifying into non-utility businesses.

Over the past decade, increased wholesale electric competition and advances in combined-cycle gas-turbine technology have exposed a gap between the cost of generation on the wholesale market and the higher cost of generation reflected in current retail rates.[7] This gap has stimulated certain industrial customers to consider bypassing their local utility. The prospect of such bypass has, in turn, motivated utilities to offer large industrial customers substantial rate reductions in exchange for a commitment to remain a utility customer. In addition, a few retail customers have installed on-site generating units and, in some cases, sell excess power to their local utility. Clearly, the possibility of acquiring power supplies without relying on the supply portfolio of the traditional utility as an intermediary has attracted the notice of some large retail customers. In

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[7] The observed gap also reflects, in part, the difference between retail rates based on long-run historical costs and short-run wholesale prices that are low due to excess capacity. There are strong indications, however, that there is a long-term gap that is not dependent on the current excess electric generating capacity that exists in Massachusetts and New England. Because of technological advances and the reduction of construction times, the long-run incremental cost of new generation is likely to be below the cost of existing generation; this situation could persist for some time into the future. This is in some ways reminiscent of the situation that existed between 1950 and the 1973 oil price shock, during which time the average cost of electricity fell as more efficient generating units entered service. A Report to the California Public Utilities Commission by the Division of Strategic Planning, California Public Utilities Commission, at 24 (February 1993).

turn, the availability of lower-priced electricity has led to demands by persons within each customer class for access to this power.

Greater competition and increased customer choice in the electric industry now seem possible and have been the focus of Department inquiry in this proceeding. Regulatory initiatives and technological advances together have established the groundwork to support a substantial expansion of competition in the near future. Moreover and perhaps most important, customers in all classes are aggressively seeking more choices and demanding lower prices. On the basis of the inquiry in this docket, the Department concludes that these can best be achieved by expanding customers' choices in a more competitive electricity market.

2. Regulatory Initiatives to Promote Competition

a. Federal Initiatives

A number of federal initiatives have stimulated the move to a more competitive generation sector. Title II of PURPA, which was enacted to promote energy efficiency in fossil fuel consumption and to develop alternative fuel supplies, has been instrumental in creating an independent generation sector and a competitive wholesale market for electric power by requiring all utilities engaged in the distribution of electricity to offer to purchase electricity produced by QFs. Notably, PURPA did not authorize QFs to make electricity sales directly to consumers. The Energy Policy Act of 1992 ("EPACT") further advanced competition in generation by relaxing certain PUHCA restrictions and by ensuring transmission access for independent generating facilities. EPACT also established a new category of supplier to the wholesale

generation market, exempt wholesale generators ("EWGs"). EWGs are exempt from regulation under PUHCA, but still are not authorized to sell directly at retail.

Since the passage of EPACT, FERC's policy has been to promote competition in generation by fostering more efficient use of the transmission network through greater access for qualified entities that seek to exchange electricity between producers and consumers. On March 29, 1995, FERC issued its Notice of Proposed Rulemaking and Supplemental Notice of Proposed Rulemaking, 70 FERC § 61,357 (1995) ("Open Access NOPR"). In its Open Access NOPR, FERC proposes to (1) require all public utilities owning or controlling facilities used for transmitting electricity in interstate commerce to file open access transmission tariffs, (2) require electric utilities to take transmission service (including "ancillary services")[8] for their own wholesale sales and purchases of electric energy under the open access tariffs, (3) issue a supplemental proposed rule to permit the recovery of legitimate and verifiable stranded costs associated with requiring open access tariffs, and (4) issue regulations to implement the filing of open access tariffs and initial rates under these tariffs. Open Access NOPR at 6. FERC's goal is to encourage lower electric rates by structuring an orderly transition to competitive bulk power markets.[9]

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[8] The six ancillary services enumerated by FERC include (1) reactive power/voltage control, (2) loss compensation, (3) scheduling and dispatch, (4) load following, (5) system protection service, and (6) energy imbalance service. Open Access NOPR at 110-115.

[9] FERC's preliminary view is that the functional separation of wholesale services and commensurate unbundling of rates is necessary to implement non-discriminatory open access. The Open Access NOPR would require that a public utility's uses of its transmission system for the purpose of engaging in wholesale sales and purchases of electric energy be functionally separated from other activities, and that transmission services

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The Open Access NOPR requires transmission owners to offer non-discriminatory open access transmission and ancillary services to wholesale sellers and purchasers of electricity. Tariffs that offer point-to-point and network transmission services, including ancillary services, are required. The price and non-price terms and conditions of all services must be non-discriminatory. A transmission owner must charge itself and third parties the same rates for the use of its system and offer comparable services, terms, and conditions, a concept that FERC terms "comparability."

b. Department Initiatives

Throughout the last decade, the Department has pursued increased competition in the electric generation market.[10] In recent proceedings, the Department has reexamined many aspects of its policies and procedures, including traditional cost-of-service, rate-of-return regulation itself. In Mergers and Acquisitions, D.P.U. 93-167A at 21 (1994), the Department stated that it "is firmly committed to moving towards a more competitive market as a means to achieve [its] regulatory goals." In Incentive Regulation, D.P.U. 94-158 (1995), the Department examined incentive regulation as a means of allowing regulated utilities to participate more effectively in an

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(including ancillary services) be taken under its filed transmission tariff of general applicability. The Open Access NOPR would not require "corporate unbundling" (the divestiture of assets, or the establishment of a separate corporate affiliate to manage a utility's transmission assets), but would accommodate it. Open Access NOPR at 94.

[10] In its Investigation into Ratemaking Treatment for New Generation Facilities, D.P.U. 86-36-A (1989), the Department stated that "[w]here competition begins to emerge in business segments previously exhibiting natural monopoly characteristics, it may be appropriate or even essential that regulatory constraints be removed in favor of competitive market forces." Id. at 12; see also IRM Rulemaking, D.P.U. 89-239 (1990); Qualifying Facility Regulations, D.P.U. 84-276-B (1986).

increasingly competitive marketplace. The Department concluded that incentive regulation can improve the current regulatory framework. D.P.U. 94-158, at 40, 57.[11] The Department viewed incentive regulation as part of an ongoing evolution in the Department's regulatory practices that could anticipate the more significant changes contemplated in this proceeding. Finally, in IRM Streamlining, D.P.U. 94-162 (1995), the Department simplified regulations affecting electric utilities' resource acquisition processes in order to reduce regulatory burdens and promote market efficiency.

C. Procedural History

The Department issued its NOI in this case on February 10, 1995, with a list of 43 questions for commenters focusing on the broad areas of customer choice, future industry structure, restructuring benefits, regulatory role, ratemaking, jurisdiction, and transition issues. On March 31, 1995, 49 commenters filed written initial comments on the Department's NOI. Following receipt of the initial comments, the Department held 12 hearings at its offices in Boston on the NOI and the initial comments.[12] The Department also held two public hearings: the first on May 23, 1995, in Amherst, Massachusetts and the second on May 30, 1995, in Barnstable, Massachusetts. Written reply comments were filed on May 26, 1995. On June 19, 1995, the Department held a hearing at its offices in Boston on the reply comments. On July 17, 1995, the Massachusetts Electric Industry Restructuring Roundtable filed with the Department a set of

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[11] The Department strongly encouraged all jurisdictional gas and electric utilities to devise and propose incentive plans and expects that incentive plans will be filed either as unilateral petitions or as joint settlements. Incentive Regulation, D.P.U. 94-158, at 65.

[12] The Department held these hearings on April 12, 13, 18, 19, 24, 25, 26, 27, and 28 and May 8, 9, and 10, 1995.

interdependent principles.[13] On July 19, 1995, the Department held a hearing at its offices in Boston on these principles.

Commenters included legislators, state and federal agencies, residential and business consumer groups, utilities, IPPs, environmental groups, industrial concerns, and unaffiliated persons. The Department expresses its thanks to all commenters in this proceeding. The written and oral comments reflected considerable thought on issues that are important to the Commonwealth, as well as to others who participated in this proceeding. The comments also reflected thorough and creative thinking regarding specific issues that should be addressed in the restructuring effort. The Department's deliberations have been enhanced by the comments offered by all who made such efforts. In particular, the Department expresses its appreciation to the participants in the Massachusetts Electric Industry Restructuring Roundtable negotiations and to the Massachusetts Division of Energy Resources ("DOER"), the state agency under whose aegis the negotiations proceeded. The roundtable negotiations laid the groundwork for substantial future progress on consensual solutions to electric industry restructuring issues.

The Department has carefully reviewed and considered all comments received in the course of this proceeding. In this Order, the Department has not summarized in detail all

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[13] The signatories to the interdependent principles filed by the Massachusetts Electric Industry Restructuring Roundtable include: Action, Inc. a Community Action Program; American National Power, Inc.; Associated Industries of Massachusetts; Attorney General; Boston Edison Company; Cambridge Electric Light Company; Coalition of Non-Utility Generators, Inc.; Commonwealth Electric Company; Conservation Law Foundation; Eastern Edison Company; Massachusetts Department of Environmental Protection; Massachusetts Division of Energy Resources; Massachusetts Electric Company; Massachusetts Energy Directors Association; Massachusetts Energy Efficiency Council, Inc.; New England Cogeneration Association; The Energy Consortium; Smaller Business Association; and Massachusetts Audubon Society.

comments that were filed in response to its NOI. A complete list of commenters is provided in Appendix A.

II. DEPARTMENT GOAL FOR THE FUTURE ELECTRIC INDUSTRY

Reducing costs, over time, for all consumers of electricity is the primary objective of the Department's efforts in restructuring the electric industry. The Department's overall goal in this proceeding is to develop an efficient industry structure and regulatory framework that minimize costs to consumers while maintaining safe and reliable electric service with minimum impact on the environment. The cost of electricity in Massachusetts is higher than the Department believes can be achieved, and it must be reduced over the long term. We are undertaking this restructuring effort in order to lower the costs that customers pay for electricity. We believe that increasing competition in the industry and allowing market forces to operate wherever and whenever possible are the most effective means of increasing the efficiency and lowering the costs of providing electric services.

While there are many ways of harnessing competitive forces to increase efficiency in the electric industry, the Department concludes that there are certain essential elements that a new industry structure must incorporate in order to realize the benefits of competition in a manner consistent with our statutory obligations. Key among these is customer choice. Customer choice may ultimately best be achieved by providing retail customers with direct access to those who produce or market electricity, but other steps to expand customer choice (e.g., the development of financial hedging instruments or contracts for differences) could also provide substantial benefits for customers.

The Department identifies a goal for restructuring the industry, but does not advocate a particular model as the framework for a new industry structure and so will not delineate the details of a new structure at this time. Instead, the Department provides guidance to all stakeholders, consistent with its regulatory responsibility, regarding the essential elements of a new industry structure and the transition thereto. Given the enormity and complexity of the restructuring task, it is not only necessary but also desirable to provide a large measure of freedom to enable the market to evolve, within the context of certain guiding principles.

We agree with the many commenters who have suggested that negotiations toward consensus and settlement are more likely than litigation to move restructuring forward, given the differing perspectives on substantive and jurisdictional issues among the numerous participants. In doing so, the Department notes that a broad range of perspectives and diverse interests have been presented by the commenters in this proceeding and have contributed to the development of our principles.

Section III of this Order presents a set of principles for the future electric industry that are guided by the Department's goal in industry restructuring. Section IV of this Order addresses the transition to a new industry structure, including important issues related to stranded cost recovery and rate unbundling. Section V establishes a timetable for negotiations on restructuring and sets forth a schedule for filings by utilities.

III. PRINCIPLES FOR A RESTRUCTURED ELECTRIC INDUSTRY

A. Principles

The following principles establish the essential underpinnings of an electric industry structure and regulatory framework designed to minimize long-term costs to customers while maintaining safe and reliable electric service with minimum impact on the environment.

1. Provide the broadest possible customer choice.

Customer choice is the guarantor of efficient and fully competitive markets.[14] Ultimately, customers served by the electric industry should be able to choose among a range of service providers, services, pricing options, and payment terms. As a corollary to their increased freedom of choice, customers should expect to be responsible for the consequences of their decisions.

2. Provide all customers with an opportunity to share in the benefits of increased competition.

The new industry structure must provide all customers with an early opportunity to share in the benefits of increased competition. One customer class may not reap benefits at the expense of another.

3. Ensure full and fair competition in generation markets.

Choice for retail customers cannot exist without a range of viable suppliers. The rules that govern market activity must apply to all buyers and sellers in a fair and consistent manner in order to ensure a fully competitive market.

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[14] The Department recognizes that under real-world conditions perfect competition cannot be achieved, since markets suffer such unavoidable constraints as imperfect information. Nevertheless, in striving for a fully competitive market, the Department seeks to ensure that certain impediments to competition, such as barriers to entry and use of monopoly power, are removed to the extent possible.

4. Functionally separate generation, transmission, and distribution services.

Generation, transmission and distribution services within the industry must be functionally separated in order to move to a fully competitive generation market based on customer choice. Vertical integration should not be allowed to interfere with the operation of efficient markets for electricity. However, mandatory divestiture is not desirable or necessary at this time. The functional separation of generation from transmission and distribution services is a necessary first step to address market power issues and limit a company's ability to provide itself an undue advantage in buying or selling services in competitive markets.

5. Provide universal service.

Electric service is essential and should be available and affordable to all customers. The new industry structure must provide a level of protection for low-income customers equivalent to that provided within the current industry structure. Each distribution utility must continue to have an obligation to connect all customers in its service territory to the distribution system.

6. Support and further the goals of environmental regulation.

A competitive industry structure should support and further the efforts of environmental regulators to reduce the environmental impacts of electricity generation. The Department believes that increased competition in the electric industry offers a new opportunity to harness market forces in pursuit of environmental improvement. Increased competition should create incentives for suppliers to anticipate and minimize the costs of complying with current and future environmental regulations at both existing and new plants. Consistent with the Department's principle of ensuring full and fair competition in generation markets, all like generating facilities

should over time be subject to equivalent levels of environmental regulation, insofar as this is compatible with our cost reduction objective and does not disadvantage Massachusetts relative to other states.

7. Rely on incentive regulation where a fully competitive market cannot exist, or does not yet exist.

Market forces should be allowed to replace regulation where and when fully competitive markets exist. Incentive regulation should govern any segment of the industry where a fully competitive market cannot exist, or does not yet exist. Specifically, incentive regulation should govern monopoly segments of the industry, such as distribution and transmission services; incentive regulation should also be applied to those generation providers that retain market power prior to the emergence of a fully competitive market.

B. Discussion

The principles presented above derive from consideration of the basic elements of monopoly and competitive markets and an identification of the changes needed to move from one to the other. The Department's discussion of the principles for restructuring the electric industry reflects the objective that costs to customers must be reduced over time and that the bulk power system must remain safe and reliable with a minimum impact on the environment.

1. Provide the broadest possible customer choice.

Customer choice is the foundation of our effort to foster a competitive market that will offer customers low-cost electric services. The ability of customers to choose among suppliers will provide the necessary pressure to encourage suppliers to be as efficient as possible. In choosing among a range of options, customers are likely to seek the suppliers that offer the

services they want at the lowest price. This will create incentives for suppliers to operate efficiently and to determine which services and products customers desire. Although it is difficult to identify the full range of choices that customers may have available in the future, customers should be able to choose from among a wide range of providers, services (including level of reliability[15] and demand-side management ("DSM")), pricing options, payment terms, and combinations thereof. As a corollary to their increased freedom of choice, customers must expect to be responsible for the consequences of their choices.

Customer choice of electric services can be addressed through a number of mechanisms, some of which were proposed during this investigation. The range of mechanisms to achieve customer choice in electric services includes the implementation of (1) a market structure based primarily on bilateral transactions between suppliers and customers with minimal coordination of the power system by a pool operator (sometimes referred to as "OPCO"), (2) a pool-based market structure whereby some or all purchases and sales would be made through a central entity, perhaps in conjunction with contracts for differences (sometimes referred to as "POOLCO"), (3) a structure whereby entities would compete to provide services to customers in a specific geographic area (e.g., a municipality, or a group of municipalities, sometimes referred to as "Competitive Franchise"), (4) self-generation, and (5) combinations and variations of the above.

For customer choice to spur competition in a market, customers must be able to compare the prices and terms of the various products and services that are available. This requires the

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[15] The Department makes a distinction here between retail service reliability and bulk power system reliability. While it is essential that the bulk power system (including transmission and distribution) operate in a reliable manner, individual customers should have the option to choose various levels of reliability in their electric service.

identification of distinct products and services (i.e., unbundling) and the ready availability of clear and transparent prices and current market information (i.e., a spot market). Thus, electric companies must separate their services and unbundle the rates for the services that they provide. The unbundling of rates is discussed in Section IV as a necessary step in the transition to increased competition.

2. Provide all customers with an opportunity to share in the benefits of increased competition.

Increased competition and customer choice will improve the efficiency of the electric industry. Over time, competition and greater efficiency should result in such benefits as lower costs and better choices for customers as they are able to select electric services suited to their particular needs. All customers must have the earliest practical opportunity to share in these benefits. It is not possible to foresee the specific effects that competition will have on different rate classes or on individual ratepayers; however, it will not be appropriate for one customer class to enjoy the benefits of competition and restructuring at the expense of another.

3. Ensure full and fair competition in the generation market.

Meaningful choice for retail customers, and the benefits we expect to accompany choice, require the existence of a range of viable suppliers who are able to compete in the generation market. The Department believes that a fully competitive generation market is not only desirable, but necessary. Without such a market, customers will have less effective choice, and their options for electric service will be limited.

A competitive generation market should exhibit several key characteristics. Suppliers will be able to enter the market with relative ease and will have sufficient information on market

conditions to make investment decisions with reasonable confidence. There must be a sufficient number of buyers and sellers to ensure competitive behavior; restructuring efforts should enable financially sound, well-managed entities to attract capital at a reasonable cost and thereby ensure a sufficient number of market participants. All participants should have fair and comparable access to necessary services. As electric utilities move from a regulated market into a more competitive setting for at least some parts of their business, the utilities will have to be increasingly mindful of state and federal antitrust law.

A fully competitive generation market must protect against any participant's use of horizontal market power.[16] The generation market must not be unduly concentrated, as that would lessen competition substantially in electric service. A fully competitive generation market must also avoid or limit vertical market power.[17] Vertical market power, exercised through control of monopoly transmission and distribution, can also impede the development and operation of a fully competitive electric generation market. Further, market participants must have access to clear and transparent prices and market information for both present and future transactions; thus, spot and forward markets are essential components of an efficient electricity market. Finally, rules and regulations must be applied in a fair and consistent manner to all participants in the market to enable them to compete based on their efficiency and productivity.

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[16] Horizontal market power in the electric industry could arise from undue concentration in the ownership of facilities at the same level in the chain of production. Such concentration could enable one or a few market participants to influence prices to their own benefit.

[17] Vertical market power in the electric industry could arise from one or a few market participants each having joint ownership of transmission, distribution, and generation facilities, and using such joint ownership to influence price in the market.

In a competitive electric industry, constraints on the transmission system can be constraints on the efficient functioning of the market itself. Therefore, as the industry makes the transition toward a competitive generation sector, adequate long-term investment in the transmission system is necessary to maintain acceptable levels of capacity, safety and reliability, and to enable the transmission system to support market functions. Careful attention must also be focused on issues related to the siting of new transmission facilities in order to ensure adequate transmission.

4. Functionally separate generation, transmission, and distribution services.

Vertical integration presents a special challenge to the development of truly competitive markets in the electric industry.[18] There are a number of ways in which the characteristics of the electricity market, through vertical integration, can stifle full and fair competition. Vertical control of essential transmission and distribution facilities could be subject to abuse through leveraging (i.e., conditioning the sale of a desired good or service upon the purchase of another that is not desired by the purchaser). In addition, cross-subsidization is of particular concern in the electric industry, where companies operating simultaneously in competitive and monopoly markets could subsidize competitive services by recovering a portion of the costs of those services through rates for monopoly services. Transactions in a competitive market should occur in an economically efficient manner without undue, and therefore anticompetitive, advantage from affiliations, relationships, or exclusive agreements.

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[18] Vertical integration is defined as the ownership or control of successive stages of the production process, as between generation and transmission or distribution.

Restructuring efforts must recognize and guard against the potential for anticompetitive behavior, both during and after the transition to a restructured industry. NOI at 20-21. The application of incentive regulation and antitrust law will control these effects. Incentive regulation is discussed further in Principle 7. The Department's goal of structuring a competitive industry to benefit consumers coincides with the goal of the antitrust laws to ensure full and fair competition.

The Sherman Act, 15 U.S.C. §§ 1, 2, the Clayton Act, 15 U.S.C. §§ 12-27, and the Massachusetts Antitrust Act[19] prohibit a variety of anticompetitive practices of any business engaged in trade. The opportunities for their application to the participants in the electric industry may increase as reliance on competitive forces in place of direct regulation increases.[20, 21]

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[19] The Massachusetts Antitrust Act, G.L. c. 93, § 1, states that "the purpose of this chapter [is] to encourage free and open competition in the interests of the general welfare and economy by prohibiting unreasonable restraints of trade and monopolistic practices in the commonwealth. This act shall be construed in harmony with judicial interpretations of comparable federal antitrust statutes insofar as possible."

[20] There are indications that immunities afforded by the state action doctrine, Parker v. Brown, 317 U.S. 341 (1943), are under increasing judicial scrutiny. See California Retail Liquor Dealers Assn. v. Midcal Aluminum, 445 U.S. 97 (1980); Patrick v. Burget, 486 U.S. 94 (1988); American Telephone & Telegraph Co., et al., Civ. Action Nos. 90-12866-NG and 92-10919-NG, Slip Op. at 12, 22 (D. Mass. 1995), citing Federal Trade Commission v. Ticor Title Insurance Company, et al., 504 U.S. 621 (1992).

[21] The Sherman Act, Section 1, prohibits contracts, combinations, or conspiracies --forms of concerted behavior -- which restrain trade unreasonably, including price fixing, market division, group boycotts (also known as concerted refusals to deal) and tying arrangements, which are per se illegal, as well as other unreasonable restraints of trade. 15 U.S.C. § 1; G.L. c. 93, § 4. The Sherman Act, Section 2, prohibits monopolization and attempts to monopolize, through such means as predatory pricing, refusals to deal (including application of the "Essential Facilities Doctrine," United States v. Terminal Railroad Association, 224 U.S. 383 [1912]; Otter Tail Power Co v. United States, 410 U.S. 366 [1973]), monopoly leveraging, and cross-subsidization, among others. 15 U.S.C. § 2; G.L. c. 93, § 5. Additionally, anticompetitive mergers, acquisitions, and

(continued...)

Vertical integration and horizontal market power, with their potential for anticompetitive behavior and consequent reduction in benefits to customers, must not obstruct the development of a generation market that includes a wide variety of viable competitors. One of the ways to foster efficient competition is to require, at a minimum, the functional separation within a company of generation, transmission, and distribution services. Functional separation can check favoritism and other forms of anticompetitive behavior between affiliates in the offering or pricing of services. Mandatory divestiture, however, is not desirable or necessary at this time.

The FERC has taken an important and productive step toward reducing barriers to entry in the generation market and eliminating the competitive advantage of vertically integrated utilities in its Open Access NOPR. Open and equal access to transmission services, subject to safety and reliability concerns, is essential to a competitive generation market. In order to ensure that no single entity has an undue advantage in bringing its generation services to customers, FERC has proposed that rates for transmission services must be the same for all participants in the market. If adopted in a final rule, the strategy set forth in FERC's Open Access NOPR would reduce the potential for anticompetitive use of transmission assets and help ensure that electricity-generating entities that own transmission assets operate in a competitive manner. FERC's initiative is a very positive development, and the Department intends to pursue consistent policies. To build on this initiative, additional modifications to the current industry structure will need to be made at the state and regional levels to ensure that vertical integration does not interfere with the development

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[21](...continued)
certain joint ventures may be prohibited under the Clayton Act, Section 7, and a related state statute applicable to electric utilities. 15 U.S.C. § 18; G.L. c. 164, § 96.

of a competitive generation market. For example, NEPOOL's current efforts to reform its operations could help to reduce the impact of vertical market power.

5. Provide universal service.

All customers should have the opportunity to enjoy the benefits of competition. Electric service is essential and should be available and affordable to all customers. Some customers may not be able to afford basic services; therefore, the electric industry must continue to provide for universal service.

Under the existing regulated industry structure, electric companies have an obligation to serve all customers, and there are certain explicit protections to ensure that electricity is available to customers whose health and safety could be jeopardized by their inability to pay the full cost of electric service. Mechanisms must be developed within the new industry structure that ensure a level of protection for low-income customers equivalent to that provided within the current industry structure, although there may be a variety of ways to achieve this result. Consistent with the principle that electricity must be available to all customers, each distribution utility must continue to have an obligation to connect all customers in its service territory to the distribution system.

6. Support and further the goals of environmental regulation.

In keeping with our goal that electric services must be provided with minimum impact on the environment, the Department believes that increased competition in the electric industry should support and further the goals of environmental regulation. The process of producing electricity has an impact on the environment and therefore is subject to environmental regulation.

The environmental regulators' task is to set standards that, allowing an adequate margin of safety, are requisite to protect the public health and welfare. Environmental regulators appropriately have been the ones charged with setting standards and determining to whom they apply.

Electricity production also has been subject to economic regulation because of its monopoly characteristics. With respect to environmental impacts, economic regulators have first and foremost ensured that electric companies minimize costs to comply with current environmental regulations and minimize long-term costs to consumers by anticipating the impacts of potential future requirements. Economic regulators have also implemented policies that encourage resource selection decisions that favor less polluting generating resources, all else being equal. The task of economic regulators has not been to determine and hold utilities to environmental standards different from or more stringent than those imposed by environmental regulators.

As the electric industry becomes more competitive, the nature of this economic regulation will necessarily change. However, it is critical that, to the extent possible, the transition to competitive generation markets not undermine the achievement of environmental improvement goals. In fact, the Department believes that increased competition in the electric industry offers a new opportunity for harnessing market forces in the pursuit of environmental improvement. Increased competition should create greater incentives than currently exist for suppliers to anticipate and minimize the costs of complying with current and future environmental regulations at both existing and new plants.

In addition, the ability of a restructured electric industry to deliver the benefits of increased efficiency and lower costs to customers will depend on the development of full and fair competition in generation markets. The Department has a critical interest in promoting this development. If different environmental requirements are imposed on similar generators or groups of generators, such competition may be distorted. Therefore, the Department believes that all like generating facilities should over time be subject to equivalent levels of environmental regulation, subject to the following considerations.

As a practical matter, equalizing treatment of like generators must be balanced with the objective of reducing costs for consumers. Moreover, while promoting competition in generation, the Department must acknowledge that there may be adverse competitive consequences for Massachusetts if other states do not address the issue of different environmental requirements for similar generators. Equalizing treatment for all like generators may lead to increased environmental requirements for some generators rather than reduced requirements for others. While the Department believes this is important, it must be recognized that there may be cost consequences. These must be taken into account in negotiating and/or determining the timing and method for achieving similar treatment of similar plants, both within Massachusetts and across state boundaries.

Finally, the Department recognizes that, as an economic regulator, it cannot pursue this objective on its own. Not only must equalizing treatment of similar generators be balanced against the costs to achieve it, but it also must be congruent with environmental regulators' goals for achieving environmental improvement.

7. Rely on incentive regulation.

The Department intends to move rapidly to competition wherever and whenever possible; however, it recognizes that full competition will only be achieved over time. In Incentive Regulation, D.P.U. 94-158, at 40, the Department concluded that incentive regulation of monopoly functions has the potential to bring real efficiency gains and reduced costs to customers. As the electric industry is transformed to incorporate greater competition, different circumstances will result in different levels of regulatory review for generation, transmission, and distribution.

Until the transition to a fully competitive generation market has been completed, there will be a need for some regulation of the utility generation sector. The Department notes that approaches to achieving a fully competitive generation market, and thus the necessity for continuing to regulate the utility generation sector of the electric industry, will vary according to the details of particular restructuring proposals. In the transition to competition, regulation of this sector in all cases should seek to harness direct financial incentives as well as competitive market forces to ensure that generation facilities are operated in a manner consistent with competitive markets. Incentive regulation in the generation sector can also help to control the potential anticompetitive effects of horizontal and vertical market power. The development and implementation of incentive proposals, however, should not delay the introduction of competition.

The Department anticipates that the transmission and distribution of electricity will remain monopoly services, and will thus continue to require regulatory oversight. State regulation of transmission and distribution services should be consistent with, and complementary to, federal

regulation of transmission in order to avoid barriers to entry in the competitive generation market. Regulation of transmission services, regardless of jurisdiction, should ensure open access to the transmission grid, comparable pricing of transmission services to all users including the owner, and adequate levels of investment to ensure that the transmission system remains reliable and is expanded as appropriate. Any incentive proposal pertaining to transmission should promote simplified procurement of transmission services and the efficient use of transmission assets. Prices for transmission services should, to the extent possible, promote efficient use of the transmission system so that system constraints are minimized and transmission capacity is well-utilized. State regulation should ensure that owners of distribution facilities do not use such ownership to hinder the competitive generation market or to prevent effective choice of supplier by customers.

IV. TRANSITION FROM A REGULATED TO A COMPETITIVE INDUSTRY STRUCTURE

A. Transition Principles

In this section, the Department presents principles to guide the transition.

1. Honor existing commitments.

Utilities should have a reasonable opportunity to recover net, non-mitigatable, stranded costs associated with commitments previously incurred pursuant to their legal obligations to provide electric service. Utilities must take all practicable measures to mitigate stranded costs during the transition. The amount of stranded costs should be determined on a net basis that reflects all resources in a utility's portfolio (i.e., including those that positively or negatively vary from the market price for electricity). Any stranded cost recovery mechanisms should provide for

a non-discriminatory charge that cannot be bypassed. Stranded costs should be recovered for a period of time no longer than ten years.

2. Unbundle rates.

Rates for generation, transmission, distribution, and ancillary services should be unbundled as soon as possible. This unbundling of rates is critical to provide both customers and competitors with the information they need to make decisions in a more competitive environment.

3. Seek near-term rate relief.

In the near term, utilities should work to produce rates for all customers meaningfully lower than they would have been under the current system of rate regulation.

4. Maintain DSM programs.

Utility-implemented DSM programs have built a valuable infrastructure of expertise, capital, and labor in Massachusetts. There must be provision during the transition period to preserve this infrastructure so that DSM has a meaningful opportunity to compete in a restructured industry.

5. Ensure that the transition is orderly and expeditious, and minimizes customer confusion.

An orderly, expeditious transition process that minimizes customer confusion is critical to reaping the benefits from the move to a competitive industry structure. A negotiation process that involves all affected parties, including representatives of residential, commercial and industrial customers, utilities, independent power producers, power marketers, public interest and environmental organizations, and government agencies, is key to ensuring such an orderly

transition. The transition process should provide for public involvement and education and should be guided by the Department's principles outlined herein.

B. Discussion

In this section of the Order, the Department discusses issues that are essential to a successful, orderly transition from a regulated to a competitive electric industry structure.

1. Honor existing commitments.

a. Introduction

In this section, the Department discusses the definition of stranded costs, reviews the authority of the Department to grant stranded cost recovery, describes the Department's policy on stranded cost recovery, and discusses some practical considerations in designing a stranded cost recovery mechanism. In Appendix B, the Department briefly notes significant arguments made by commenters regarding recovery of stranded costs and analyzes arguments for and against a legal entitlement to recovery of stranded costs.

b. Definition of Stranded Costs

Many commenters have suggested that with widespread customer choice it may not be possible for today's electric utilities to collect revenues sufficient to recover costs that they incurred in a regulated environment or to recover certain as yet unascertainable liabilities that are likely to arise in the future associated with particular nuclear generating plants. This concern also extends to costs associated with contractual commitments that are hypothesized to be "above-market" and to regulatory assets. These potentially unrecoverable costs are termed "stranded," "strandable," or "transition costs" by commenters in this proceeding. For purposes of this

discussion, the term "stranded costs" will be used. Stranded costs include (1) the amount of the book cost or fixed cost associated with producing electricity from existing generation facilities that might not be recovered by the competitive market price for generation; (2) liabilities for future decommissioning and radioactive waste disposal associated with nuclear power plants that might not be recovered by the market price; (3) the amount by which the cost of existing contractual commitments for purchased power exceeds the competitive market price for generation; and (4) prudently incurred regulatory assets related to generation that were intended to be collected over time consistent with regulatory precedent or order.

This discussion will focus on stranded costs that may arise as the result of Department initiatives to promote competition in the generation sector of the electric utility industry. Stranded costs also could arise as the result of changes in the present regulatory structure initiated by the Legislature, Congress or FERC, changes instituted as the result of litigation, and changes that result from unregulated competition or from technological changes.

While Department initiatives may result in the "stranding" of historical costs and commitments that utilities have already entered into or incurred, utilities are in a position to avoid entering into or incurring new commitments and costs that might be stranded by the emergence of customer choice. The Department directs utilities to take immediate steps to avoid the creation of such costs. The Department's definition of stranded costs applies only to costs and commitments incurred prior to the date of issuance of this Order. Consistent with this definition, the Department will not entertain requests for recovery of such stranded costs incurred after the date

of issuance of this Order.[22]

c. Department Authority to Grant Stranded Cost Recovery

Although the Department's analysis indicates that claims of legal entitlement to stranded cost recovery on the part of the incumbent electric utilities[23] may be fairly debated,[24] the Department concludes that, even in the absence of any such legal entitlement, it nevertheless has sufficient authority to provide utilities a "reasonable opportunity"[25] to collect their stranded costs during a transition period from regulation to competition in the electric generation sector.[26] The

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22 The Department notes that electric utilities may incur some costs during the transition period in order to attain stated public policy objectives. The Department will ensure that electric utilities with any such prudently-incurred costs will have a reasonable opportunity to recover them before the transition period ends.

23 By "incumbent," we mean the existing electric companies regulated by the Department under G.L. c. 164.

24 In Appendix B, the Department reviews legal arguments in support of stranded cost recovery based on explicit or implied exclusive franchise rights and Constitutional provisions requiring compensation for regulatory takings. Whether franchise-based claims of entitlement to stranded costs are legally well-grounded requires additional inquiry.

25 The decisions of the Supreme Court in Federal Power Commission v. Hope Natural Gas, 320 U.S. 591 (1944), and Bluefield Water Works & Improvement Co. v. Public Service Commission, 262 U.S. 679 (1923), require no more than a "reasonable opportunity" for regulated utilities to recover their investments. Some stranded cost recovery proposals, such as the access charge proposed by WMECo and others, could, if not carefully designed, convert the opportunity to recover stranded costs into a guarantee. It is not the intention of the Department to provide a greater opportunity than is available today.

26 The Department concludes that a stranded cost recovery mechanism implemented during a regulatory transition period would be relatively secure from legal challenge. Once full competition in the generation market is underway, however, access charges to collect stranded costs may be subject to legal challenge by market participants, including utility

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Department finds that it has authority under G.L. c. 164, §§ 76 and 94 to implement such a policy and that such a policy, if properly designed and implemented, would be in the public interest.

The generation and sale of electricity by electric utilities is governed by G.L. c. 164. This comprehensive statute promotes the fundamental state policy of ensuring uniform and efficient utility services to the public. See, e.g., Boston Gas Company v. Somerville, 420 Mass. 702, at 704, 706 (1995). Pursuant to G.L. c. 164, § 76, the Department has broad general supervisory power over the provision of electric service in Massachusetts and electric utility compliance with all pertinent statutes and Department regulations. See Incentive Regulation, D.P.U. 94-158, at 41. The Department also has broad authority to regulate rates in the electric industry under G.L. c. 164, § 94. See, e.g., American Hoechest Corporation v. Department of Public Utilities, 379 Mass. 408 (1980); Boston Real Estate Board v. Department of Public Utilities, 334 Mass. at 484-485; D.P.U. 94-158, at 43. These statutes and the cases interpreting them establish sufficient Department authority to grant stranded cost recovery during a transition from regulation to full competition in the electric generation sector, provided granting such recovery is in the public interest.

d. Department Policy on Stranded Cost Recovery

The transition to competition in electric generation will appropriately reallocate some risks and opportunities for benefits and thereby change the relationships between participants in today's industry structure. The current industry structure has clearly produced some benefits for ratepayers, including a high level of safety and reliability in the operation of the electric utility

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customers, at the Department or in the courts.

industry. A smooth, orderly, and expeditious transition from regulation to competition would carry these strengths forward into a restructured electric industry and would be in the public interest.

In order to achieve such a transition to a fully competitive generation market, it is essential to address the stranded cost issue. In some cases, costs that may be stranded today were reasonably incurred to ensure the high level of electric services to which ratepayers in Massachusetts have become accustomed. A structured transition that allows an appropriate measure of stranded cost recovery, rather than risking the abrogation of existing commitments, would be in the public interest, because it would ensure the provision of sound electric services during the transition. Existing commitments also should be honored because the reliability of commitments in general is an essential element in any future industry structure.

In addition, the Department sees potential gain to the public from allowing stranded cost recovery as a means of promoting federal and state coordination and ensuring equal treatment of similarly-situated utilities. First, coordination would discourage forum-shopping and efforts to restructure in order to avoid state jurisdiction. Forum shopping could occur if one regulatory authority offered more favorable stranded cost recovery provisions than another.[27] Coordination would also reduce the attractiveness of pursuing litigation on the issue of jurisdiction. Second, some states have expressed concern that it would not be beneficial to their citizens to open themselves to competition from out-of-state utilities, while the markets in neighboring states

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[27] The Department is studying FERC's description of its jurisdiction with regard to stranded costs and the questions that have been raised by FERC's proposed stranded cost recovery policy.

remained closed. There may be greater benefits to Massachusetts consumers from competition if neighboring states also open their electric generation markets to competition and customer choice, because of the benefits that may be derived from expanded economic electricity exchanges.

Finally, the Department is concerned that a move to full competition without making a provision for some measure of stranded cost recovery could provoke costly, reform-delaying litigation. These factors could in turn reduce the quality of electric service and delay the arrival of benefits from competition. Delay and litigation uncertainty are clearly not in the public interest and policy reform should seek to avoid these results. Accordingly, the Department recognizes the need to afford electric utilities a reasonable opportunity to recover stranded costs during a transition period.

Although the Department's stated policy provides for transitional stranded cost recovery, the Department cannot here decide the outcome of the many individual adjudications of stranded cost claims that could become necessary if utilities and other market participants are unable to reach a consensus on electric industry restructuring that is acceptable to the Department. As the Department's legal analysis indicates, the outcome of such adjudications is uncertain. The Department intends this policy pronouncement as guidance to parties in negotiations on this issue.

e. Practical Considerations in Structuring Stranded Cost Recovery

There are several issues related to the design of a stranded cost recovery mechanism for incumbent electric utilities. First, the Department will require the mitigation of stranded costs by

all available and reasonable means.[28] Restructuring proposals that include stranded cost recovery mechanisms should include strong incentives for utilities to mitigate stranded costs.

Second, the recovery of stranded costs, unless the recovery mechanism is properly designed, could have anticompetitive effects on the generation market. Open-ended recovery could give a utility an opportunity to price its generation as low as necessary to sell the desired amount of power in the market, while collecting the difference between actual revenue and its revenue requirement through a stranded cost charge. A stranded cost charge also could stifle competition by tying the provision of one service to another. A stranded cost charge may also be anticompetitive if it is designed in such a way that it makes access to the competitive generation market artificially unattractive to customers of incumbent electric utilities. Impeding market access during the period of stranded cost recovery would abrogate the important Department principle of customer choice. Accordingly, any stranded cost recovery mechanism presented to the Department for review should be designed to avoid or minimize any anticompetitive effects.

Third, the Department is concerned that certain mechanisms for recovery of stranded costs may unduly delay significant reductions in electric rates and/or the development of a fully competitive market. The Department believes that the achievement of these goals should be accelerated, not delayed, and that any stranded cost recovery plan should clearly support these goals. Therefore, stranded costs should not be included in an access charge or other recovery

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[28] Mitigation measures could include the following: (1) streamline existing operations; (2) identify supplemental revenue streams to support existing generating facilities; (3) sell excess generating facilities; and (4) accelerate depreciation and asset writedown provisions. See, e.g., Trigen-Boston Energy Corporation Initial Comments at 5.

mechanism for a period greater than ten years. The Department believes that the bulk of stranded cost recovery can be completed within five years.

Fourth, the stranded cost recovery mechanism should be consistent with the Department's precedent with regard to the non-discriminatory design of utility rates. The Department recognizes that pressure from industrial customers and others for rate relief will likely continue. Stranded cost recovery mechanisms should not be bypassable by any customers nor should they be discriminatory in any way. In addition, stranded cost recovery mechanisms should not assign to other customers the stranded costs that are appropriately allocated to a customer with options.

Fifth, there may be an advantage to establishing a stranded cost recovery mechanism with many of the same characteristics as a financial security. The right to receive stranded cost payments could be transferable to future owners of a particular generation facility with which stranded costs are associated. Transfer rights would facilitate the refinancing and restructuring of the electric utility industry, including efficient, pro-competitive mergers, spin-offs, and other corporate reorganization. Stranded cost revenues could in this way promote the acceleration of industry restructuring, the elimination of high-cost assets from the system, and the efficient employment of the remaining, cost-effective assets.

Finally, proponents of stranded cost recovery should explain how their chosen stranded cost recovery mechanisms would facilitate electric industry restructuring that is in the public interest.

2. Unbundle rates.

a. Introduction

As noted in Section III, above, for customer choice to spur competition in a market, customers must be able to compare the prices and terms of the various products and services that are available, and services must be available on comparable terms to suppliers. This requires the identification of distinct products and services and the availability of clear and transparent prices. Thus, electric companies must separate the services and unbundle the rates for the services that they provide. The separation of services is addressed above as a principle for the restructured electric industry. This discussion addresses the unbundling of rates as a necessary step during the transition to increased competition.

The Department believes that the functional unbundling of rates, with appropriate safeguards against cost-shifting and cross-subsidization, is a necessary first step to a competitive electricity market. In restructuring the Massachusetts electric industry, the Department will require that utilities unbundle their rates among the functions of generation, transmission, and distribution. Additionally, utilities are required to unbundle services, including ancillary services, to the greatest extent practical.

The unbundling of rates could result in cost shifting among or within classes of customers, and may implicate cost continuity concerns. Therefore, the Department will require that illustrative unbundled rates, employing new cost of service studies, be submitted by each utility as part of its restructuring proposal. Appropriate transition and revisitation mechanisms, where

appropriate, may be a part of such proposals. In this section, we present an analysis of the Department's authority to order the functional unbundling of rates.

b. Department's Authority to Order the Unbundling of Rates

Statutes governing the Department's authority over rates and related case law grant the Department wide discretion over the setting and design of rates. In the gas industry, for example, the Department has ordered the functional unbundling of rates for gas companies subject to its G.L. c. 164 jurisdiction. Chapter 164 also vests authority in the Department to order the functional unbundling of electric rates.

i. Statutory Authority

The Department has been granted broad ratemaking authority over gas and electric companies by the legislature. General Laws c. 164, §§ 94 and 94G describe the Department's statutory obligations to set rates of gas and electric companies.[29] In addition to these specific ratemaking sections, G.L. c. 164, § 76 grants the Department broad supervision of all gas and

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[29] G.L. c. 164, § 94 states in pertinent part: "Gas and electric companies shall file with the [D]epartment schedules, in such form as the [D]epartment shall from time to time prescribe, showing all rates, prices and charges to be thereafter charged or collected within the commonwealth for the sale and distribution of gas or electricity .... So much of said schedules shall be printed in such form and distributed and published in such manner as the [D]epartment may require."

G.L. c. 164, § 94G (b) states in pertinent part: "The [D]epartment may approve an itemized fuel charge in rates filed by electric companies to reflect changes in prudently incurred reasonable costs of fuels and power purchased by such companies .... The burden of proof shall be upon the utility company to demonstrate the reasonableness of energy expenses sought to be recovered through the fuel charge .... No such fuel charge shall be billed to customers without the specific approval of the [D]epartment after a public hearing."

electric companies.[30] These statutory provisions grant the Department wide latitude in the design and setting of rates.[31]

ii. Case Law

Although no Massachusetts case has directly addressed whether the Department has the authority to order the functional unbundling of rates, the courts have consistently stated that the Department's authority to design and set rates pursuant to G.L. c. 164, § 94 is broad and substantial. Boston Real Estate Board vs. Department of Public Utilities, 334 Mass. 447 (1956) held that the Department had the authority under G.L. c. 164, § 94 to eliminate a practice whereby an electric company sold electricity at wholesale for resale to the occupants of a building or group of buildings. The plaintiffs argued that Section 94 gives the Department jurisdiction only over "rates, prices, and charges," but that an order regulating the practice of resale is beyond the Department's power. The Supreme Judicial Court disagreed:

> Neither § 94 nor the order is, in our view, to be so narrowly construed. Rate practices as well as rate scales may be regulated under a power to prescribe rates. Florida Power & Light Co. v. State, 107 Fla. 317, 321-322. The amendment to § 94 in 1927 (St. 1927, c. 316, § 2) significantly broadened the power of the [D]epartment. The [D]epartment recommended the amendment to cause § 94 to

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30 G.L. c. 164, § 76 states in pertinent part: "The [D]epartment shall have the general supervision of all gas and electric companies and shall make all necessary examination and inquiries and keep itself informed as to the condition of the respective properties owned by such corporations and the manner in which they are conducted with reference to the safety and convenience of the public, and as to their compliance with the provisions of law and the orders, directions and requirements of the [D]epartment ...."

31 While the Department has the authority to approve the voluntary divestiture of assets from one electric company to another, if it finds the sale is in the public interest, see G.L. c. 164, § 96, there is no explicit statutory authority by which the Department may order divestiture, nor is it likely to be implied.

> read substantially as now, in order to give the [D]epartment `jurisdiction of the entire rate structure [emphasis added].' (1927 House Doc. No. 1020, page 8.) Section 94 requires the filing of `schedules ... showing all rates, prices and charges ... with all forms of contracts thereafter to be used in connection therewith.' It gives the [D]epartment jurisdiction not only over the stated rates, prices and charges for various classifications of service, and the relationship between classifications, but also over reasonably related terms and conditions stated in the service contract or the filed schedules.

See Ambassador Inc. v. United States, 325 U.S. 317, 322 n. 3 (1945); Campo Corp. v. Feinberg, 279 App. Div. (N. Y.) 302 (1952), affirmed, 303 N. Y. 995 (1952), (New York Public Service Comm., Case No. 14279) (1951).

American Hoechest Corporation v. Department of Public Utilities, 379 Mass. 408 (1980), citing Massachusetts Electric Company v. Department of Public Utilities, 376 Mass. 294, 302 (1978), states a basic principle of ratemaking. "The [D]epartment is free to select or reject a particular method as long as its choice does not have a confiscatory effect or is not otherwise illegal." Boston Edison v. Department of Public Utilities, 375 Mass. 1, cert. denied, 439 U.S. 921 (1978) defined confiscatory effect:

> Confiscation occurs when the Department's ratemaking decision deprives a utility of the opportunity to realize a fair and reasonable return on its investment. Boston Gas Co. v. Department of Public Utilities, 368 Mass. 780, 789-790 (1975). A return is fair and reasonable if it covers utility operating expenses, debt service, and dividends, if it compensates investors for the risks of investment, and if it is sufficient to attract capital and assure confidence in the enterprise's financial integrity.

Therefore, the case law grants the Department broad discretion in the design and setting of rates, as long as the method chosen by the Department does not have a confiscatory effect upon the utility. The Supreme Judicial Court's recognition of the Department's latitude in ratemaking

supports the Department's view that it has ample authority to order the functional unbundling of rates.

iii. Department Precedent

Under G.L. c. 164, which governs both the electric and the gas industries, the Department has ruled on numerous cases of unbundling of rates in the gas industry. As a result of changes in the gas industry occasioned by FERC Order 436, in response to a petition to require the jurisdictional natural gas local distribution companies to file tariffs that provide for rates, charges and service for transportation of natural gas for industrial end-users, the Department established its general principles regarding transportation rates; these principles later resulted in unbundled transportation rates. See New England Energy Group, D.P.U. 85-178 (1987).

Numerous company-specific adjudications followed, and the Department set firm transportation rates for jurisdictional gas utilities. See, e.g., North Attleboro Gas Company, D.P.U. 94-130-A (1994); Boston Gas Company, D.P.U. 93-60 (1993); Colonial Gas Company,

D.P.U. 93-78 (1993); Essex County Gas Company, D.P.U. 93-107 (1993); and Bay State Gas Company, D.P.U. 89-81 (1989).

3. Seek near-term rate relief.

Electric industry restructuring should create competitive markets that are expected over time to produce prices lower for all customers than would have been paid under the current system. In addition, in the near term, utilities should work to produce rates for all customers meaningfully lower than they would have been under the current system of rate regulation. Utilities should also make available a reasonable opportunity for greater near-term rate relief for customers that choose to assume greater market risk.

4. Maintain DSM programs.

The Department notes that, for many years, consumers in Massachusetts have benefitted from the energy savings and environmental benefits achieved through the demand-side management ("DSM") programs implemented by electric companies. As a direct result of utility-implemented DSM programs, a valuable infrastructure of expertise, capital and labor has developed in Massachusetts. There must be provision during the transition period to continue these benefits and to ensure that DSM has a meaningful opportunity to compete in a restructured industry. The Department believes that DSM may well be competitive in the future provided that this infrastructure is sustained during the transition. Accordingly, electric companies should continue to implement DSM programs and be provided a fair opportunity to recover prudently incurred DSM-related costs. Such recovery should continue until DSM technologies and

implementation practices can compete effectively in open electricity markets but not beyond the end of the transition period.

In a restructured electric industry, competitors in the market can use DSM as a competitive strategy (i.e., either as a resource option or service offering) to attract and retain customers. Similarly, once they are provided with accurate price signals, customers should be able to evaluate and choose among an array of electricity products and services, including DSM, so that they may maximize their individual benefits.

5. Ensure that the transition is orderly and expeditious, and minimizes customer confusion.

As the industry moves to what will likely be a fundamentally different structure with a more complex set of service providers, there is a potential for unintended effects adverse to the public interest. A disorderly transition process could result in customer confusion or dissatisfaction which, in turn, could undermine restructuring efforts and reduce the anticipated benefits of an improved industry structure. To ensure that the transition process is orderly and expeditious, and minimizes customer confusion, some level of regulatory oversight will be necessary.

A smooth transition process would best be achieved through a negotiation process that includes all affected parties including representatives of residential, commercial and industrial customers, utilities, independent power producers, power marketers, public interest and environmental organizations, and government agencies. As transition plans are approved for implementation, customers must be informed about when and how those plans will affect their electric service. Importantly, customers must also be made aware of any opportunities they will

have to procure electric services from alternative suppliers, and of the responsibilities and risks associated with the range of choices they might be offered.

V. IMPLEMENTATION

In the preceding sections of this Order, the Department has stated its overall goal for a restructured industry. The Department has also identified the essential characteristics of a restructured industry, as well as the important issues to be considered in the transition to a restructured industry. To guide the process of transition, we have provided principles for the restructuring and for the interim steps toward our goal. Given the complexity of the legal, policy and technical issues in this transition, consensus and settlements are more likely than litigation to advance restructuring. Negotiation consistent with the principles established in this Order will allow stakeholders to strike an appropriate balance among competing interests and to achieve an orderly transition. The Department supports the multiple requests from commenters for a period during which participants would negotiate settlements.

In restructuring, the concepts of competition and customer choice are fundamental, and the basic principles will apply to all restructuring proposals; however, electric company corporate structures, service territories, rate structures and stranded costs may require individual treatments. Each electric company should undertake negotiations with all interested participants to develop a plan for moving toward competition in generation and retail customer choice, decide the amount and develop a mechanism for stranded cost recovery, and establish unbundled rates.

One of the basic principles behind restructuring is that it should provide all customers with an opportunity to share in the benefits of increased competition. Accordingly, any negotiations

should include representatives of residential, commercial and industrial electricity consumers in the Commonwealth. We also look forward to broad participation by such groups in subsequent proceedings before the Department as negotiated settlements are submitted for approval.

The Department is eager to move forward on restructuring through negotiations; however, it is important that movement toward a new industry structure proceed without undue delay. Therefore, the Department is unwilling to allow negotiations to continue indefinitely. Accordingly, the Department establishes a schedule by which electric companies must file the following: (1) a plan (that includes any negotiated resolutions) for moving from the current regulated industry structure to a competitive generation market and to increased customer choice; (2) illustrative rates and supporting information that, at a minimum, indicate unbundled charges for generation, distribution, transmission, and ancillary services;[32] (3) an identifiable charge reflective of the level of stranded costs to be recovered, with all necessary supporting information; and (4) a plan for incentive regulation of the transmission and distribution systems.

To avoid imposing an undue burden on the Department and on the stakeholders who may participate in several electric company restructuring negotiations, filing deadlines for settlements or, in the absence of negotiated settlements on all points, proposals to fulfill the requirements listed above, will be staggered according to the following schedule: Boston Edison Company ("BECo"), Massachusetts Electric Company ("MECo"), and Western Massachusetts Electric

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[32] Based on rate impact and other policy considerations, the Department will require utilities to (1) file tariffs consistent with those illustrative unbundled rates, (2) delineate those unbundled service costs for informational purposes on customer bills without implementing an immediate change to the rates by which bills are calculated, or (3) pursue some other approach.

Company ("WMECo") will be required to submit their proposals within six months of the issuance of this Order; Cambridge Electric Light Company, Commonwealth Electric Company, Eastern Edison Company, Fitchburg Gas & Electric Company, and Nantucket Electric Company will be required to submit proposals within three months of the issuance of the Department's Orders related to the restructuring proposals of BECo, MECo, and WMECo. The Department intends to review the filings and issue an Order on each as soon as possible.

We look forward to working with the participants in the wholesale and retail electricity markets, and with the Legislature, to construct a regulatory framework that will facilitate a swift and effective transition to a restructured electric industry.

VI. ORDER

Accordingly, after due notice, hearing, and consideration, it is

ORDERED: That future restructuring proposals shall be reviewed in a manner consistent with this Order.

By Order of the Department,

_____
Kenneth Gordon, Chairman

_____
Mary Clark Webster, Commissioner

_____
Janet Gail Besser, Commissioner

APPENDIX A: LIST OF COMMENTERS

Investor-Owned Utilities

(1) Boston Edison Company
(2) Cambridge Electric Light Company, Canal Electric Company, and Commonwealth Electric Company (together, "COM/Energy")
(3) Eastern Edison Company
(4) Fitchburg Gas and Electric Light Company
(5) Massachusetts Electric Company
(6) Western Massachusetts Electric Company

Municipal Light Departments and MMWEC

(7) Chicopee & Westfield Municipal Light Departments
(8) Municipal Light Departments
(9) Massachusetts Municipal Wholesale Electric Company ("MMWEC")
(10) Shrewsbury Municipal Light Department
(11) Sterling Municipal Light Department

Public Officials and Government Agencies

(12) Scott Harshbarger, Attorney General
(13) Barnstable County Commissioners
(14) Massachusetts Department of Environmental Protection
(15) Massachusetts Division of Energy Resources
(16) United States Department of Energy
(17) United States Environmental Protection Agency
(18) Representative Christopher Hodgkins
(19) Senator Mark Montigny
(20) Massachusetts Water Resources Authority

Other Commenters

(21) Alternative Power Source
(22) American Wind Energy Association
(23) Applied Resources Group, Inc., an independent energy consulting company
(24) Associated Industries of Massachusetts
(25) Business for Social Responsibility Education Fund
(26) Center for Energy Efficiency and Renewable Technologies
(27) Cape & Islands Self Reliance Corporation, a consumer interest group
(28) Coalition of Non-Utility Generators
(29) Connecticut River Watershed Council, Inc.
(30) Conservation Law Foundation, an advocate for DSM and renewable energy resources
(31) The Energy Consortium, an unincorporated group of industrial, commercial and institutional users of energy
(32) ENRON Capital & Trade Resources, an IPP and power marketer

(33) Institute for Energy and Environmental Research
(34) Intercontinental Energy Corporation, owner and operator of a cogeneration plant in Massachusetts
(35) International Fuel Cells, manufacturer of fuel cells and division of United Technologies Corporation
(36) International Paper Company
(37) IRATE, Inc., citizens' group formed to foster an understanding of and participation in utility rate-setting procedures
(38) Levy Associates, an independent management consulting firm
(39) Massachusetts Alliance of Utility Unions
(40) Massachusetts Energy Efficiency Council, a DSM trade association
(41) Massachusetts Public Interest Research Group
(42) National Consumer Law Center, Inc., an advocate for low-income electricity consumers
(43) National Independent Energy Producers, a national IPP trade association
(44) National Power PLC and American National Power, Inc., owner of electric-generating facilities in England and Wales, and the IPP subsidiary operating in the United States, respectively
(45) New England Cogeneration Association
(46) Pace University Law School, Office of Renewable Energy Technology Analysis
(47) Pequod Associates, an energy consulting firm
(48) Renewable News Network, advocate of renewable energy sources
(49) Retailers Association of Massachusetts
(50) Save Our Regional Economy, advocate of manufacturing jobs in Southeastern Massachusetts
(51) Trigen-Boston Energy Corporation, owner of Boston's district heating and cooling system
(52) Union of Concerned Scientists, an organization dedicated to advancing responsible public policies in areas where technology plays a critical role
(53) Wheelabrator Environmental Systems, Inc., owner of qualifying facilities
(54) Wheeled Electric Power Company, promoter of customer choice in retail electric markets

APPENDIX B: LEGAL ANALYSIS OF STRANDED COST RECOVERY

I. INTRODUCTION

This appendix briefly notes commenters' arguments regarding recovery of stranded costs and contains a preliminary analysis of claims of a legal entitlement to recovery of stranded costs. This analysis is for discussion purposes. The Department reiterates its important policy finding that a reasonable opportunity for recovery of stranded costs is in the public interest. Further, the Department notes that the honoring of existing commitments is a critical foundation for the future electric industry.

II. SUMMARY OF COMMENTS ON STRANDED COST RECOVERY

Generally, arguments in favor of stranded cost recovery on legal grounds rely either on the existence of a hypothesized "regulatory compact" or on Constitutional provisions that proscribe the taking of private property without just compensation. For example, in their joint memorandum on stranded cost recovery ("Joint Legal Memorandum"), Boston Edison Company ("BECo"), Cambridge Electric Light Company and Commonwealth Electric Company (collectively, "COM/Energy"), and Western Massachusetts Electric Company ("WMECo") have argued that (1) the existence of a "regulatory compact" between the Commonwealth (acting through the Department on behalf of Massachusetts ratepayers) and the utilities requires the Department to allow electric utilities to recover all stranded costs; (2) electric utilities are legally entitled to be afforded a reasonable opportunity to recover stranded costs to avoid confiscatory effects; and (3) federal and state coordination issues require the recovery of stranded costs. We

address the first two contentions in Section III of this appendix; see Order, Section IV.B.1.d. for a discussion of federal-state coordination.

According to BECo, COM/Energy, and WMECo, the regulatory compact establishes that utilities have an obligation to serve all customers seeking electric service, reliably, at least cost, and at non-discriminatory rates in exchange for the right to serve within a defined service territory (Joint Legal Memorandum at 7). As part of this regulatory compact, electric utilities are subject to extensive scrutiny by government agencies and their rates are limited to recovery of only those costs that are prudently incurred, with a reasonable return on invested capital (id.). Their right to serve customers within a defined service territory is deemed by these commenters to be an exclusive franchise. Despite their claim to an exclusive franchise, however, they state that they only seek "a reasonable opportunity to recover their previously approved level of costs, and seek no greater opportunity than they would have if there were no restructuring undertaken by the Department" (id. at 28-29).

Commenters have also made policy arguments in support of stranded cost recovery. For example, Massachusetts Electric Company ("MECo") argues that regulators have an obligation, while considering prospective changes in the regulation of utilities under their jurisdiction, to fulfill the obligations created by past regulatory practices, standards, and decisions (MECo Initial Comments, Comments of Paul F. Levy at 2). WMECo contends that embedded costs are costs that should be paid by all end-users of the electric system, as well as by those customers who may be able to take advantage of opportunities outside the traditional electric system (WMECo Response to NOI Questions at 29). In the view of Fitchburg Gas and Electric Light Company

("Fitchburg"), stranded costs should be recoverable from those classes of customers that will benefit from the transition to a more competitive market and on whose behalf the utility undertook prudent commitments pursuant to its statutory obligation to serve (Fitchburg Initial Comments at 8).

The Attorney General makes three points regarding stranded costs. First, he asserts that utilities are not entitled to insurance against the risk that market conditions may not permit full recovery of past investments (Attorney General Initial Comments at 47). Second, he urges the Department to indicate in unambiguous terms that there is no broad absolute right to an assurance that past costs will be recovered (Attorney General Reply Comments at 4). Finally, while the Attorney General believes that the Department has sufficient authority to provide the opportunity for the recovery of such costs in the appropriate circumstances, he asks the Department to announce that such authority cannot be exercised in the abstract, but rather must await individual adjudications of the facts and law attending each particular claim of stranded costs (id.).

III. ANALYSIS OF LEGAL ARGUMENTS ON STRANDED COST RECOVERY

There are two parts to the legal analysis of stranded cost recovery: (1) an analysis of whether Massachusetts electric utilities have been granted exclusive franchise rights and the implications of franchise rights for recovery of stranded costs; and (2) an analysis of whether and when Constitutional provisions against takings could be implicated by regulatory changes being considered by the Department.

A. Exclusive Franchise Rights and the "Regulatory Compact"

One way in which incumbent utilities could support their claim for stranded cost recovery is to demonstrate, rather than merely assert, that they hold exclusive franchise rights to provide customers within their service territories with generation, transmission, and distribution services. In order to support a claim to an exclusive franchise, utilities could show either that they have been explicitly granted such rights, or that a "regulatory compact" or contract somehow creates implied rights. Under an exclusive franchise, the status of an incumbent utility could be analogized to that of a party to a contract. Thus, if there were an exclusive franchise, "breach" of that exclusive franchise by the authorization of retail competition or other forms of customer choice could be compensable, depending in part on whether the value of the exclusive franchise had been impaired. A finding that utilities do possess exclusive franchise rights would not end the analysis, however, because questions would remain regarding the terms of the franchise and whether, once granted, it remained subject to change by the Department or by the Legislature, and on what terms change might occur. Likewise, a finding that a particular franchise is non-exclusive would not foreclose the possibility of compensation for impairment of that non-exclusive franchise on some other basis.

The record in this docket on the franchise question is not ample and appears largely based on a claim of an implicit grant of exclusivity. To judge whether a Massachusetts electric utility has been explicitly granted an exclusive franchise, the Department would examine corporate charters, incorporation papers, statutes, or special legislative acts, or other evidence of a state grant that explicitly awards the claimed franchise rights, whether exclusive or non-exclusive. This analysis is consistent with that employed by the Department in Ecological Fibers, D.P.U. 85-71, at

4 (1985), where the Department concluded that the record in the case was "devoid of any evidence, aside from unsubstantiated assertions, demonstrating that [Fitchburg] has an exclusive right to provide utility service in Lunenburg."[1] See also New Bedford Gas and Edison Light Company, D.P.U. 12765 and 12799 (1959) (utility contended that it was permitted by its charter to operate anywhere within the Commonwealth). No commenter has put on record in this docket original legislative grants of franchise, acts of incorporation, or other documents in support of such a claim.

Regarding claims to implied franchise rights, the Department examines whether the comprehensive regulatory scheme in Massachusetts applied to the electric utility industry constitutes a "regulatory compact" or contract between the Commonwealth, on behalf of

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[1] Whether a franchise or service territory is exclusive or, if exclusive, encompasses more than transmission and distribution may be debated. See, e.g., Attorney General v. Walworth Light & Power Company, 157 Mass. 86, at 87-88 (1892) (monopoly discussed solely in terms of transmission and distribution). Franchising by the Commonwealth is an ancient feature of Massachusetts law, but case law, while suggestive, does not appear dispositive. Cases illustrating the development, nature, and obligations of Massachusetts franchises include Spring v. Lowell, 1 Mass. 422, 430 (1805); Wales v. Stetson, 2 Mass. 142, 146 (1806); Stoughton v. Baker, 4 Mass. 521, 526-531 (1808); Proprietors of Charles River Bridge v. Proprietors of Warren Bridge, 6 Pick. [23 Mass.] 376, 403-408 (1828); Proprietors of Charles River Bridge v. Proprietors of Warren Bridge, 7 Pick. [24 Mass.] 344, 442-532 (1829) ("The general rule is, that in government grants nothing passes by implication," Morton, J., at 461); Lumbard v. Stearns, 4 Cush. [58 Mass.] 60, 62 (1849); Braslin v. Somerville Horse Railroad Company, 145 Mass. 64, 67-68 (1887); Proprietors of Mount Hope Cemetery v. City of Boston, 158 Mass. 509, 521-522 (1893); Turner v. Revere Water Company, 171 Mass. 329, 334-335 (1898); Boston Real Estate Board v. Department of Public Utilities, 334 Mass. 477, 488-492 (1956). G.L. c. 164, §§ 87-88, suggest that franchises are not exclusive. Certainly, the history of the franchise in Massachusetts is complex.

For records of incorporations, mergers, and acquisitions, see Manufactured Gas Waste Generic Investigation, D.P.U. 89-161 (1990), Exhibit DPU-15-A (Flow-chart Depicting Corporate History of Gas and Electric Utilities in Commonwealth of Massachusetts).

Massachusetts ratepayers, and the utilities. Then perhaps, so the argument runs, the regulatory compact implicitly grants exclusive franchise rights to incumbent electric utilities. Pursuant to statute, the Department comprehensively regulates the operations of electric utility companies in Massachusetts. See Order, Section I, at 6. In exchange for compliance with this comprehensive statutory scheme and regulations promulgated by the Department under that scheme, investor-owned utilities contend that they receive an exclusive retail franchise, free from retail competition. See, e.g., Commonwealth Electric Company v. Department of Public Utilities, 397 Mass. 361, 368-369 (1986), cert. denied, 481 U.S. 1036 (1986) ("In return for its shelter from the uncertainties of the competitive marketplace, the public utility assumes the responsibility to provide adequate service at reasonable rates"); Attorney General v. Haverhill Gas Light Company, 215 Mass. 394, 399 (1913) ("'[F]ranchise' means the right to manufacture and supply gas for a particular locality and to exercise the special rights and privileges in the streets and elsewhere which are essential to the proper performance of its public duty and the gain of its private emoluments and without which it could not exist successfully"); see also Delmarva Power & Light Company v. City of Seaford, 575 A.2d 1089 (Del.Supr. 1990) (utility franchise found not explicitly exclusive, but public service commission's policy to restrict competition against pioneer utilities[2] found to warrant fair compensation from infringing municipal utility).

Sections of G.L. c. 164 that relate to the nature of franchise territories include the following: (1) G.L. c. 164, § 21, which prohibits any regulated utility from transferring its franchise or contracting with any person to perform its duties under the franchise without

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[2] A "pioneer utility" is the first to serve an area. The Department has no similar policy favoring pioneer utilities over potential competitors.

legislative authority; (2) G.L. c. 164, § 30, which authorizes the Department to permit an electric utility to conduct business in towns and cities other than those named in its charter; and (3) G.L. c. 164, §§ 87 through 91, which establish the process by which an electric utility may gain consent from a municipality to serve customers within that municipality, even though another utility may already be supplying electricity there. At first examination, G.L. c. 164, § 21 appears to support one aspect of the regulatory compact: it prevents a utility from transferring its franchise to another person and thereby helps to enforce the obligation to serve. Rather than codifying perpetual exclusive utility franchises, the other sections cited set rules by which electric utilities may compete and be subjected to competition in both their own and other service territories.[3]

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[3] WMECo in its reply comments concedes that the Legislature has retained the right to amend utility charters and franchises (WMECo Reply Comments at 31). However, WMECo also contends that legislative action regarding electric utility franchises would constitute a taking and would thereby trigger certain Constitutional protections that are discussed in more detail in Appendix B, Section III.B., below. This question is of particular importance with regard to the Department's authority to promote customer choice. WMECo, for example, argues that the Legislature, not the Department, has authority to amend a utility's franchise (WMECo Reply Comments at 32). The Attorney General, however, contends that the Department itself has the power to amend franchises in the public interest (Attorney General Initial Comments at 57, citing Holyoke Street Railway Company v. Department of Public Utilities, 347 Mass. 440, 445 (1964)). Assuming the Attorney General's contention is correct, Department authority is still delegated by the Legislature.

The Department's precedent suggests that the Department has authority to promote customer choice. In Gas Transportation Rates, D.P.U. 85-178 (1987), the Department began the process of facilitating customer choice of supplier in the natural gas industry. Also of note is the Supreme Judicial Court's recent decision in Massachusetts Oil Heat Council v. Department of Public Utilities, 418 Mass. 798 (1994), where the Court relied, in part, on "the discretion granted [to the Department] under [G.L. c. 164, § 94] to promote the policy of increased competition in the energy market." The Department has broad authority to regulate the electric industry under G.L. c. 164, § 94. See Incentive Regulation, D.P.U. 94-158, at 42-43 (1995); see also Boston Gas

(continued...)

They also do not help to clarify the terms of utility franchises, but instead strongly suggest that the state has retained unrestricted authority to permit competition in franchise territories at any time. Cases cited by commenters on the issues controlled by G.L. c. 164, §§ 21, 30, and 87 through 91 are consistent with the statutes, but otherwise provide no additional insight into the regulatory compact claimed by the utilities. See, e.g., Boston Edison Company v. Boston Redevelopment Authority, 374 Mass. 37, 54-55 (1977); Boston Real Estate Board v. Department of Public Utilities, 334 Mass. 477, 486 (1956); Attorney General v. Haverhill Gas Light Company, 215 Mass. 394, 399 (1913).

To the extent that the case in favor of stranded cost recovery rests on implied grants of exclusive franchise rights, the Department notes that no commenter has discussed or distinguished a line of cases that stands against the proposition that grants by implication may limit the exercise of the police power. See Boston Real Estate Board v. Department of Public Utilities, 334 Mass. at 488-489 ("[R]easonable and non-arbitrary action under the police power may be taken although it may diminish or destroy without compensation the value of property not actually taken"); Blair v. City of Chicago, 201 U.S. 400, 471-472 (1906) ("[A]ll rights which are asserted against the [s]tate must be clearly defined, and not raised by inference or presumption; and if the charter is silent about a power, it does not exist"); Proprietors of the Charles River Bridge v. Proprietors of the Warren Bridge, 36 U.S. 420 (1837);[4] but see Delmarva Power & Light Company v. City of

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(...continued)
Company v. Somerville, 420 Mass. 702, at 704 (1995); Boston Real Estate Board v. Department of Public Utilities, 334 Mass. 477, at 484-485 (1956).

[4] In discussing the nexus between the police power and the Contracts Clause, U.S. Const., (continued...)

Seaford, 575 A.2d 1089 (the Delmarva case may be distinguishable from others in this line because it concerns a public entity successfully competing for customers with a private franchised utility, at least implying state action). The legislative prohibition on transfer of a charter without legislative approval is consistent with these cases; a derivative doctrine is that a franchise grant from the state must be deemed as intended solely for the benefit of the corporation receiving it and hence, in the absence of express permission by the state, may not be transferred to a successor. Memphis & L.R.Co. v. Commissioners, 112 U.S. 609, 617 (1884); see also Attorney General v. Haverhill Gas Light Company, 215 Mass. at 402; Weld v. Board of Gas and Electric Light Commissioners, 197 Mass. 556, 557 (1908). The meaning and relevance of this line of cases to electric industry restructuring require explanation by proponents of any future settlements that address stranded cost recovery.

Based on this analysis, Massachusetts electric utilities' claim to exclusive franchises is, at best, uncertain. If in fact electric utilities in Massachusetts do not have exclusive franchises, it is not clear whether they would be legally due compensation for any part of a non-exclusive franchise in the event of electric industry restructuring. The Department does not state or suggest that proof of such a legal claim is categorically impossible, only that the proof has not yet been persuasively advanced and that it would be subject to legal dispute in any event.

B. Constitutional Provisions Against Regulatory Takings

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[4](...continued)

Art. I, § 10, Cl. 1, this seminal case previews many of the arguments recently advanced, whether pro or con, on the question of stranded costs. See Charles River Bridge, 36 U.S. at 534-551 (majority opinion of Taney, C.J.) and 581-649 (dissenting opinion of Story, J.); see also Charles River Bridge, 7 Pick. [24 Mass.] at 442-532.

Without a claim to express or implied exclusive franchise rights, utilities may in the near future be exposed to competition that could create significant stranded costs and possibly lead to financial distress. At issue is whether the introduction of retail customer choice in the generation market without compensation for any reduction in value of utility assets would constitute a "taking" of utility property in violation of the Fifth and Fourteenth Amendments. See Federal Power Commission v. Hope Natural Gas, 320 U.S. 591 (1944); Bluefield Water Works & Improvement Co. v. Public Service Commission, 262 U.S. 679 (1923); but see Market Street Railway Company v. Railroad Commission of California, 324 U.S. 548 (1945) (the due process clause does not insure values or require restoration of values that have been lost by the operation of economic forces); Donham v. Public Service Commissioners, 232 Mass. 309 (1919).

Both the United States Constitution and the Massachusetts Constitution protect property rights of regulated electric utilities. Rates for regulated electric utilities must be designed to raise revenue that is sufficient to recover their costs, raise capital necessary to the discharge of their public duties, and otherwise assure confidence in the financial integrity of the enterprise. Duquesne Light Company v. Barasch, 488 U.S. 299, 307 (1989); Hope, 320 U.S. at 603; Bluefield, 262 U.S. at 692-693. The Supreme Court elaborated on this standard in Duquesne:

> [W]hether a particular rate is "unjust" or "unreasonable" will depend to some extent on what is a fair rate of return given the risks under a particular ratesetting system, and on the amount of capital upon which the investors are entitled to a return.

Duquesne, 488 U.S. at 310. Under G.L. c. 164, § 94, the Department is responsible for ensuring the "propriety" of proposed electric utility rates. In practice, the Department has interpreted this

to mean that rates must be "just and reasonable." See Incentive Regulation, D.P.U. 94-158, at 42; see also Duquesne, 488 U.S. at 310. Section 94 also requires that rates set by the Department not be unjustly discriminatory or unduly preferential. See Attorney General v. Department of Public Utilities, 390 Mass. 208, 234 (1983), citing American Hoechest Corp. v. Department of Public Utilities, 379 Mass. 408, 411 (1980). Consistent with these Constitutional and statutory restrictions, the Department has found that it is within its ratemaking authority to modify, refine, or supplement the existing cost-of-service, rate-of-return ("COS/ROR") regulatory framework, or to adopt new ratemaking approaches. Incentive Regulation, D.P.U. 94-158, at 46. The Supreme Court has identified one other Constitutional concern that is pertinent here:

> A State's decision to arbitrarily switch back and forth between methodologies in a way which requires investors to bear the risk of bad investments at some times while denying them the benefit of good investment at others would raise serious constitutional questions.

Duquesne, 488 U.S. at 315. See also Associated Gas Distributors v. FERC, 824 F.2d 981, 1021-1030 (D.C. Cir. 1987) (D.C. Circuit remanded FERC's natural gas open access decision for failure to deal with pipelines' take-or-pay exposure). At the Department, the development and implementation of pro-competitive policies have been gradual, measured, and consistent, in order to avoid the risks of arbitrary switching warned about in Duquesne.

The Constitutional principles to be applied where comprehensive regulation of an industry or service is to continue under a changed regulatory framework (e.g., a switch from COS/ROR regulation to incentive regulation) are clear. However, the principles to be applied where a rapid transition from a regulated monopoly industry to a fully competitive industry or service is being considered are not clear. In this proceeding, the Department has investigated the possibility of

substantially expanding competition and introducing broad customer choice in the generation sector of the electric industry. In fact, a fully competitive generation market has been a goal of the Department for some time. See Investigation into Ratemaking Treatment for New Generation Facilities, D.P.U. 86-36-A (1989). The electric utilities argue that an "abrupt change"[5] from a regulated monopoly industry to a fully competitive industry without compensation for resultant stranded costs would be a risk unanticipated by shareholders. They contend that utilities are entitled to "reasoned consistency" in the treatment of how costs are included in rate base.

For the Department, there are two questions that arise from a consideration of the Constitutional principles to be applied during a transition from regulation to competition: first, would the introduction of broad customer choice represent a change in the method of regulation of Massachusetts electric utilities or a form of deregulation; and second, would stranded costs that result from either a change in the method of regulation or a move toward deregulation give rise to a valid "taking" claim. The Supreme Court has identified limitations on the use of the Due Process Clause to support a "taking" claim:

> [T]he [D]ue [P]rocess [C]lause never has been held by this Court to require a commission to fix rates on the present reproduction value of something no one would presently want to reproduce, or on the historical valuation of a property whose history and current financial statements showed the value no longer to exist, or on an investment after it has vanished, even if once prudently made, or to maintain the credit of a concern whose securities already are impaired. The [D]ue [P]rocess [C]lause has been applied to prevent governmental destruction of existing economic values. It has not and cannot be applied to insure values or to restore values that have been lost by the operation of economic forces.

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[5] See Order, Section I, at 10-11 for a discussion of the Department's ongoing efforts to encourage competition in the electric industry.

Market Street, 324 U.S. at 567. See also Commonwealth Electric Company, 397 Mass. at 368 ("The ratepayers are not the guarantors of the company's success"); Donham, 232 Mass. at 317.[6]

The reasoning applied by FERC to the stranded cost issue in its Open Access NOPR sheds light on possible distinctions between changes in regulatory methods and deregulation. FERC's Open Access NOPR would impose significant new requirements on public utilities that would help FERC to achieve the goal of robust competitive wholesale markets (Open Access NOPR at 138-139). FERC's proposal in the Open Access NOPR would give a utility's historical wholesale customers enhanced opportunities to reach new suppliers and, therefore, would affect the way in which utilities traditionally have recovered costs (id. at 139). FERC's view is that utilities should be allowed to recover the costs incurred under the old regulatory regime according to the expectations of cost recovery established under that regime (id. at 139-140). FERC, however, is not proposing to deregulate transmission service under its jurisdiction. Rather, to ensure that all participants in wholesale electricity markets have non-discriminatory open access to the transmission network, FERC seeks to require all transmission owners to "offer non-discriminatory open access transmission and ancillary services to wholesale sellers and purchasers of electric energy in interstate commerce" (id. at 88-89).

Given that FERC is pursuing a major change in its regulation of transmission, the electric utilities under its jurisdiction may have a strong legal entitlement to recovery of costs that could be stranded as a result of this shift and it may therefore be appropriate for FERC preemptively to propose its own stranded cost recovery mechanism. FERC's investigation, however, seems

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[6] Commenters have sought to distinguish Market Street and Donham from the changes being considered in the instant inquiry (see Joint Legal Memorandum at 25-28).

clearly distinguishable from the Department's, which concerns the feasibility of expanding competition and customer choice in the generation sector of the Massachusetts electric utility industry. While the pricing of transmission services would remain subject to review under FERC's proposal, the Department anticipates that the pricing of generation in a competitive generation market would be determined by market forces, not by an administrative process.

The Department concludes, as with exclusive franchises, that it is uncertain whether Massachusetts electric utilities have any legal entitlement to stranded cost recovery based on arguments of confiscation arising from a Department decision to expand competition in the electric generation market and to introduce customer choice. It appears that the utilities are in the strongest position to argue that they would have a legal entitlement to stranded cost recovery during a regulatory transition from regulated to fully competitive electric generation. However, this issue could be rendered moot once generation competition and customer choice have commenced, if jurisdictional utilities are not hindered by Department regulation from competing against newcomers.[7]

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[7] There is interaction between federal and state regulatory authorities regarding two types of stranded costs: (1) contractual commitments entered into pursuant to PURPA; and (2) liabilities for future decommissioning and radioactive waste disposal associated with nuclear power plants. In the case of contracts made under PURPA, utilities may be required by statutory and regulatory mandates to keep these contractual commitments. If utilities cannot mitigate these commitments, the Department might be obligated to develop a stranded cost charge that would allow jurisdictional utilities a reasonable opportunity to recover these costs.

In the case of stranded costs associated with future liabilities of nuclear power plant owners, federal law that seeks to protect public safety could also override the lack of exclusive franchises. If nuclear power plant owners were unable to collect from a competitive market revenues sufficient to cover anticipated liabilities that arise from

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operation of those plants over time, Congress might intervene to ensure that some adequate revenue source is provided. Whether it is appropriate for state regulators to address this issue at this time is an open question.