

COMMERCE CLAUSE IMPLICATIONS OF MASSACHUSETTS' ATTEMPT TO LIMIT THE IMPORTATION OF "DIRTY" POWER IN THE LOOMING COMPETITIVE RETAIL MARKET FOR ELECTRICITY GENERATION

I. INTRODUCTION

On January 1, 1998, Massachusetts plans to allow all of its citizens to shop for their own suppliers of electricity in an open and competitive retail market.¹ Many other states across the nation also are planning to implement competitive retail markets for electricity.² This massive restructuring of the 200 billion dollar electricity utility industry, which is larger than both the automobile industry and the television industry, is the culmination of a complex combination of technological, economic and regulatory developments over the past few decades.³ The proponents of the restructuring plan predict that the creation of a competitive retail market for electricity will provide a tremendous

¹ See generally Commonwealth of Massachusetts Dep't of Pub. Utils., *Electric Industry Restructuring Plan: Model Rules and Legislation Proposal*, DPU 96-100 (Dec. 30, 1996) [hereinafter DPU 96-100]; *NEES, Mass. AG Competition Pact Gains Support Due to Emissions Provision*, UTIL. ENV'T REP., Sept. 27, 1996, at 6 [hereinafter *NEES, Mass. AG Competition Pact*]; *NEES, Mass. AG Seek Industry Support for Restructure Plan to Begin in '98*, N.E. POWER REP., Sept. 27., 1996, at 9 [hereinafter *NEES, Mass. AG Seek Industry Support*]; News Release from the Office of the Attorney General, Commonwealth of Massachusetts, *Harshbarger Unveils Electric Restructuring Plan: Massachusetts Electric is First Utility to Sign On*, at 1 (Sept. 12, 1996) [hereinafter *Harshbarger Unveils*].

² See Arden Dale, *Power Surge: Deregulation Turns Electric Industry Upside Down*, DOW JONES NEWS SERVICE, March 24, 1997, available in WESTLAW; Joseph Greenwald, *Power to the People: Deregulation is Shaking up the Utility Industry. Expect Cheaper Electricity and More Confusion*, TIME, Mar. 10, 1997, at 53 [hereinafter *Power to the People*]; William H. Miller, *Electrifying Momentum*, INDUSTRY WK., Feb. 17, 1997, at 69.

³ See generally Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities: Recovery of Stranded Costs by Public Utilities and Transmitting Utilities, 61 Fed. Reg. 21,540 (1996) [hereinafter Order No. 888]; Open Access Same-Time Information System and Standards of Conduct, 61 Fed. Reg. 21,737 (1996) [hereinafter Order No. 889]; B. Jeanine Hull et al., *Submitted Committee Report: Report of the Committee on Independent Power Production 1995-1996*, 17 ENERGY L.J. 503, 513 (1996); Peter Navarro, *A Guidebook and Research Agenda for Restructuring the Electricity Industry*, 16 ENERGY L.J. 347, 349-55 (1995); Elisabeth Pendley, *Deregulation of the Energy Industry*, 31 LAND & WATER L. REV. 27, 61 (1996); Greenwald, *supra* note 2, at 53.

benefit for consumers, resulting in savings of between 80 billion and 100 billion dollars annually.⁴

Although the retail price of electricity may decrease, however, the restructuring initiative also threatens to impose potentially disastrous economic, health and environmental effects on areas of the United States that are the unwilling recipients of air pollution from neighboring regions.⁵ In particular, the creation of a competitive retail market for electricity will likely place Northeastern electricity producers at a severe competitive disadvantage compared to low-cost, coal-fired plants in the Midwest, which probably will dramatically increase production to expand their market share.⁶ In turn, it is feared that the resulting increased emissions of particulates, ozone and other pollution in the Midwest will travel to the Northeast.⁷ Thus, the residents and environ-

⁴ See *Harshbarger Unveils*, *supra* note 1, at 1-2; Miller, *supra* note 2, at 69.

⁵ See Dr. Richard Rosen et al., *Promoting Environmental Quality in a Restructured Electric Industry* 15-16 (Dec. 15, 1995) (unpublished report prepared by the Tellus Institute for The National Association of Regulatory Utility Commissioners, on file with the author). The report indicates that several regions of the country are subjected to the long-range transport of air pollutants. See *id.* Pollutants travel from the Midwest to the Northeast, from the Ohio Valley and the Inner Southeast to the Southern Appalachian Mountains and from the Los Angeles Basin to the Colorado Plateau. See *DOE Public Meeting Signals Pollution Transport as Prime Legislative Goal*, UTIL. ENV'T REP., Oct. 25, 1996, at 5; *Mass. Eyeing "Ticket to Play" System for Out-of-State Power Producers*, UTIL. ENV'T REP., Nov. 8, 1996, at 7 [hereinafter *Mass. Eyeing "Ticket to Play"*]; *Nescaum: Ozone is Blowin' in the Wind*, ELEC. DAILY, Mar. 14, 1997, at 1; *Vermont's Draft Competition Strategy*, UTIL. ENV'T REP., Oct. 25, 1996, at 4 [hereinafter *Vermont's Draft Competition Strategy*]; Rosen, *supra*, at 15-16. Emissions from electricity generation contribute to at least four forms of air pollution that are deleterious to health and the environment. See TIMOTHY J. BRENNAN ET AL., *A SHOCK TO THE SYSTEM: RESTRUCTURING AMERICA'S ELECTRICITY INDUSTRY* 112-13 (1996). Particulate matter, such as soot, dust, dirt and aerosols, can create or exacerbate breathing and heart problems and lead to cancer and premature death. See *id.* Particulate matter also negatively impacts visibility and exposed surfaces. See *id.* Sulfur dioxide may also affect the heart and lungs. See *id.* It additionally may damage trees and contribute to acid rain, which harms lakes and streams and corrodes exposed materials. See *id.* Nitrogen dioxide contributes to ground-level ozone, which causes respiratory problems and crop losses. See *id.* Greenhouse gases, primarily carbon dioxide, are believed to contribute to global warming. See *id.* at 113. Electricity generation also can lead to the emission of toxic, heavy-metal elements such as mercury, lead and cadmium. See *id.* at 114. The shutdown of Massachusetts plants would also have significant economic consequences. See DPU 96-100, *supra* note 1, § X(C)(1).(3). In addition to losing jobs, the cities and towns where the generation plants are located will lose a great deal of tax revenue. See *id.* Many municipalities rely on the taxation of utilities for large portions of their budgets. See *id.* The restructuring of the electricity industry may lead to a reduction in the value of utility property and may reclassify generating facilities as manufacturing equipment, which is exempt from property taxation. See *id.*

⁶ See Scott Allen, *AG Targets Midwest Coal Plants: Proposes Restricting Electricity Imports*, BOSTON GLOBE, Dec. 3, 1996, at B1; Rosen, *supra* note 5, at 12-13, 15.

⁷ See BRENNAN, *supra* note 5, at 116-17; *Mass. Calls for Northeast to Unite in Fight Against 'Dirty' Midwest Power*, POWER MARKET WK., Dec. 9, 1996 [hereinafter *Mass. Calls for Northeast to Unite*]; Allen, *supra* note 6, at B1; *Vermont's Draft Competition Strategy Supports*, *supra* note 5, at 4; Rosen, *supra* note 5, at 15-16. Although the FERC's analysis of the environmental impacts of

ment of the Northeast may be subjected to increased levels of pollution.⁸ This, in turn, may force Northeastern electricity producers to implement additional pollution control measures to meet the ambient air quality standards required by the Clean Air Act, giving Midwest electricity producers an even greater competitive advantage.⁹ Tragically, this vicious cycle may harm the health and the environment of the Northeast and force many electricity generation plants in the region to shutdown.¹⁰ If the federal government fails to prevent this result, the states may have to act independently to ensure that the restructuring initiative does not lead to impaired human health, a deteriorated environment and economic ruin.¹¹

Several states in the Northeast presently are considering measures to mitigate this unfortunate by-product of deregulation.¹² These measures, however, must conform to the United States Supreme Court's Commerce Clause jurisprudence, which severely limits a state's ability to enact regulations that impede the flow of interstate commerce.¹³ Officials in Massachusetts, for example, unveiled a series of proposals in late 1996 to either ban or limit the importation of electricity generated by facilities that emit high levels of pollution.¹⁴ Using the Massa-

its Order No. 888 found that the rule would have only a small impact on ozone transport from the Midwest to the Northeast, other studies concluded that the effects would be substantial. See BRENNAN, *supra* note 5, at 116-17. A study by Henry Lee and Negeen Darani of Harvard University's Kennedy School of Government determined that the increase in generation from existing coal facilities would result in a 500,000 ton increase in nitrogen oxide emissions. See *id.* at 17. A study done by Resources for the Future concluded that the increase in pollution could be substantially higher. See *id.*

⁸ See BRENNAN, *supra* note 5, at 17; Rosen, *supra* note 5, at 15-16.

⁹ See U.S. N.E. Govs. *Urge Midwest Power Plant Emission Study*, DOW JONES TELERATE ENERGY SERV., Dec. 13, 1996; Rosen, *supra* note 5, at 15; Memorandum from the Commonwealth of Massachusetts, Executive Office of Environmental Affairs, Department of Environmental Protection, *Ensuring Full, Fair and Safe Competition in the Electricity Utility Industry: Generation Performance Standards for All Electricity Suppliers Serving the Commonwealth of Massachusetts* (Feb. 24, 1997) (on file with author) [hereinafter *Generation Performance Standards for All Electricity Suppliers*].

¹⁰ See DOE Public Meeting Signals Pollution Transport as Prime Legislative Goal, *supra* note 5, at 5; Mass. *Eyering "Ticket to Play"*, *supra* note 5, at 7; Vermont's Draft Competition Strategy, *supra* note 5, at 4.

¹¹ See *infra* notes 153-78 and accompanying text.

¹² See *Northeast/Power Restructuring -2: May Need Legislative Fix*, DOW JONES TELERATE ENERGY SERV., Dec. 20, 1996, available in WESTLAW; Vt. Agency Urges State Regulators to Keep Control Over Power Imports, UTIL. ENV'T REP., Dec. 6, 1996, at 6; Rhode Island Restructuring Bill Sponsor Urges National Reciprocity Legislation, N.E. POWER REP., Mar. 15, 1996, at 3.

¹³ See *infra* notes 179-247 and accompanying text.

¹⁴ See *Generation Performance Standards for All Electricity Suppliers*, *supra* note 9, at 1-3; Maine Gov., Mass. AG Urge Northeast to Protect Air Under Competition, ELEC. UTIL. WK., Dec. 9, 1996 at 10; Mass. Attorney General Asks Northeast Govs. to Penalize Dirty, Imported Power, UTIL. ENV'T REP., Dec. 6, 1996, at 1; Mass. Calls for Northeast to Unite, *supra* note 7; Mass. Enviro Official Warns

chusetts proposals as models, this Note analyzes the potential for Northeastern states to craft individual solutions to this looming problem that can withstand a challenge under the Commerce Clause of the United States Constitution.¹⁵ Section II describes the history of the electricity utility industry and the reasons for the trend toward a competitive retail market.¹⁶ Section III discusses Massachusetts' current plans to implement a competitive retail market for electricity.¹⁷ Section IV examines the potential negative impacts that a competitive retail market could have on the Northeast.¹⁸ Section V then describes several recent proposals by Massachusetts officials to mitigate these deleterious effects.¹⁹ Section VI examines Commerce Clause limitations on a state's ability to regulate articles of interstate commerce to advance local interests.²⁰ Section VII then analyzes the Commerce Clause implications of Massachusetts' proposals to limit the negative effects of the restructuring initiative.²¹ Section VII also suggests possible modifications to the proposals which would improve their ability to pass muster under the Commerce Clause.²²

II. THE DRIVE TOWARD A COMPETITIVE RETAIL MARKET FOR ELECTRICITY

The electricity industry has enjoyed over fifty years of guaranteed profits and stability as a result of its status as a regulated monopoly.²³ At the present time, however, the era of stability appears to be coming to an abrupt end.²⁴ Spurred on by technological innovation, pressure from the business sector and recent federal initiatives, the electricity industry seems poised to undergo a massive restructuring process that is likely to result in the creation of a competitive retail market.²⁵

Midwest Regulators to Address Ozone Transport, Dec. 2, 1996, available in WESTLAW [hereinafter, *Mass Enviro Official Warns*]; *Mass. Plan to Oversee Northeast Power Imports Angers Midwest Coal Utilities*, UTIL. ENV'T REP., December 20, 1996, at 7 [hereinafter *Mass. Plan to Oversee*].

¹⁵ See *infra* notes 248-313 and accompanying text.

¹⁶ See *infra* notes 23-82 and accompanying text.

¹⁷ See *infra* notes 83-126 and accompanying text.

¹⁸ See *infra* notes 127-52 and accompanying text.

¹⁹ See *infra* notes 153-78 and accompanying text.

²⁰ See *infra* notes 179-247 and accompanying text.

²¹ See *infra* notes 248-302 and accompanying text.

²² See *infra* notes 303-13 and accompanying text.

²³ See Navarro, *supra* note 3, at 349.

²⁴ See *id.*

²⁵ See Order No. 888, *supra* note 3; Order No. 889, *supra* note 3; Hull, *supra* note 3, at 503-04; Navarro, *supra* note 3, at 349-57.

A. *The Regulated Years*

Historically, the electrical utility industry has been treated as a natural monopoly because it was characterized by economies of scale and high barriers to entry.²⁶ In order to encourage the expansion of the electricity industry while avoiding the potential inefficiencies of monopoly pricing, utility regulators entered into a "regulatory compact" or "regulatory bargain" with the industry.²⁷ The regulatory compact subjects all segments of the electricity industry, generation, transmission and distribution, to comprehensive rate regulation and requires the utilities to provide reliable service to all of their customers in return for a guaranteed fair rate of return on capital.²⁸

Initially, the regulatory compact satisfied both the electricity industry and consumers.²⁹ The guarantee of a fair rate of return on capital investments gave utilities an incentive to build larger and larger power plants, thus increasing economies of scale.³⁰ This, in turn, caused the inflation-adjusted price of electricity to fall, benefiting the consumers.³¹

The electricity industry's era of stability, however, was subjected to a series of disruptions beginning in the late 1970s.³² Increased inflation, the Vietnam War, new environmental regulations, the Arab oil embargo and the unexpected high cost of nuclear power facilities all contributed to a substantial increase in the cost of generating electricity.³³ The end result was dramatic utility rate hikes that were met by strong resistance from consumers.³⁴ Public utility commissions in many states refused to increase the utility rates to a level that would allow the utilities to recover their cost of capital.³⁵ In turn, the utility executives were forced to decrease costs, and thus were unable to continue their large capital expenditures in power plants.³⁶

²⁶ See Douglas L. Heinold, *Retail Wheeling: Is Competition Among Energy Utilities an Environmental Disaster, or Can it be Reconciled with Integrated Resource Planning?*, 22 *RUTGERS COMPUTER & TECH L.J.* 301, 305-06 (1996); Navarro, *supra* note 3, at 349-50.

²⁷ See Heinold, *supra* note 26, at 305-06; Navarro, *supra* note 3, at 349-50.

²⁸ See Heinold, *supra* note 26, at 305-06; Navarro, *supra* note 3, at 349-50.

²⁹ See Heinold, *supra* note 26, at 306-07; Navarro, *supra* note 3, at 350.

³⁰ See Heinold, *supra* note 26, at 306; Navarro, *supra* note 3, at 350.

³¹ See Heinold, *supra* note 26, at 307; Navarro, *supra* note 3, at 350.

³² See Heinold, *supra* note 26, at 307-09; Navarro, *supra* note 3, at 350-51.

³³ See Heinold, *supra* note 26, at 307-09; Navarro, *supra* note 3, at 350-51.

³⁴ See Heinold, *supra* note 26, at 309; Navarro, *supra* note 3, at 350.

³⁵ See Heinold, *supra* note 26, at 309; Navarro, *supra* note 3, at 350.

³⁶ See Navarro, *supra* note 3, at 350.

B. *Technological Advancements, PURPA and the Rise of Third Party Generators*

Although the utilities themselves no longer had the capital to invest in new capacity, the demand for new electricity generation was met by the creation of a new industry of third party generators.³⁷ Third party generators are independent producers of electricity who sell their electricity to the utilities to be delivered to the ultimate customer.³⁸ Technological innovation and the effects of the Carter Administration's Public Utility Regulatory Policies Act of 1978 ("PURPA") combined to stimulate the creation of this new segment of the electricity industry.³⁹

The Carter Administration passed PURPA to stimulate the development of alternative sources of electricity, to reduce the nation's reliance on foreign petroleum imports, and to protect the environment.⁴⁰ PURPA contained a "must take" provision that required the utilities to purchase any and all electricity offered by "Qualifying Facilities" ("QFs").⁴¹ Additionally, the Federal Energy Regulatory Commission's (the "FERC") regulations mandated that the utilities pay the QFs for the electricity at a rate based on the utility's "avoided cost."⁴² PURPA, however, provided QFs with a significant subsidy because the "avoided cost rate" that was calculated greatly exceeded the utilities' true avoided cost.⁴³

Combined with the subsidy provided by PURPA, technological innovation also contributed to the third party generator revolution.⁴⁴ This was largely due to the development, during the past few decades, of natural gas-fired generators, which qualify as QFs.⁴⁵ New, natural-gas fired, combined-cycle turbine generators, which are highly efficient

³⁷ See Heinold, *supra* note 26, at 310-11; Navarro, *supra* note 3, at 351, 356-57.

³⁸ See Heinold, *supra* note 26, at 310.

³⁹ See Public Utility Regulatory Act of 1978, Pub. L. No. 95-617, 92 Stat. 3117 (codified as amended in scattered sections of 16 U.S.C.); 2 CONNECTICUT TASK FORCE FOR RESTRUCTURING THE ELECTRIC INDUSTRY, FINAL REPORT TO THE LEGISLATURE, at 2-6 to 2-7 (Dec. 19, 1996) [hereinafter FINAL REPORT]; Heinold, *supra* note 26, at 310-11; Navarro, *supra* note 3, at 351, 356-57.

⁴⁰ See Navarro, *supra* note 3, at 351.

⁴¹ See *id.*

⁴² See Heinold, *supra* note 26, at 310; Navarro, *supra* note 3, at 351. The "avoided cost rate" was intended to be equal to the cost that the utility could save by not generating its own power from conventional sources. See Heinold, *supra* note 26, at 310; Navarro, *supra* note 3, at 351.

⁴³ See Navarro, *supra* note 3, at 351. The avoided cost price was calculated inaccurately because it was based upon highly overestimated, long-term forecasts of petroleum prices. See *id.*

⁴⁴ See *id.* at 351, 353, 356-57.

⁴⁵ See FINAL REPORT, *supra* note 39, at 2-6 to 2-7; Navarro, *supra* note 3, at 351, 353, 356-57.

and use a relatively cheap fuel, are now competitive with traditional large central station plants, even without the PURPA "avoided cost" subsidy.⁴⁶ The existence of a large number of independent power producers, which can compete effectively with large, central-station plants, provides a telling indicator that the electricity generation market may no longer be a natural monopoly.⁴⁷

C. Demands by Industry for Retail Competition

In addition to the combined effects of PURPA and technological advances, industrial consumers in states with relatively high retail electricity prices also were a driving force behind the movement toward the restructuring of the electricity industry.⁴⁸ The cost of electricity is an important factor that businesses must consider when making decisions regarding expansion and relocation, especially for electricity intensive businesses.⁴⁹ In this manner, electricity costs have an effect on the level of employment and economic growth within a particular region.⁵⁰ Thus, the price of electricity is very important to politicians, who have a vested interest in improving their region's overall economic health.⁵¹

In states where the cost of electricity is above either the national average or the price offered in neighboring states, industry consumers have relocated or have threatened to relocate to cut costs.⁵² For example, in Massachusetts, Raytheon, one of the state's largest employers, proposed a retail "wheeling" bill and threatened to relocate to another state unless it received a forty percent rate reduction.⁵³ In California, where electricity costs are roughly fifty percent above the national

⁴⁶ See FINAL REPORT, *supra* note 39, at 2-6 to 2-7; Navarro, *supra* note 3, at 353, 357. Small, Brayton-cycle, gas-fired combustion turbine units, generating 25 to 250 MW, can be installed at one-half to one-third the capital cost of conventional steam-electric stations. See Navarro, *supra* note 3, at 357 & n.43 (quoting Kurt Yeager, *Technology and Industry Structure*, ELEC. J., July 1995, at 58). According to one source, they can generate power at less than 3.0 cents per kWh. See Navarro, *supra* note 3, at 357 & n.41 (quoting Vinod Dar, *The Future of the U.S. Electric Utility Industry*, ELEC. J., July 1995, at 17). Another source claimed that "[g]enerating electricity by burning natural gas . . . is cheaper than producing power in even the most efficient new combined-cycle power plants." See Navarro, *supra* note 3, at 357 n.42 (quoting Vikram Budhraj, *Generation as a Business—Facts, Fumbles, Fictions and the Future*, ELEC. J., July 1995, at 36-41).

⁴⁷ See FINAL REPORT, *supra* note 39, at 2-7; Navarro, *supra* note 3, at 356-57.

⁴⁸ See Heinold, *supra* note 26, at 312-13; Navarro, *supra* note 3, at 354.

⁴⁹ See Heinold, *supra* note 26, at 312-13; Navarro, *supra* note 3, at 354.

⁵⁰ See Heinold, *supra* note 26, at 312-13; Navarro, *supra* note 3, at 354.

⁵¹ See Heinold, *supra* note 26, at 313; Navarro, *supra* note 3, at 354.

⁵² See Heinold, *supra* note 26, at 312-13; Navarro, *supra* note 3, at 354.

⁵³ See Denise Warkentin, *States Place Increased Importance on Retail-Wheeling Issues, Initiatives*, ELEC. LIGHT & POWER, April 1, 1996, at 15. The wheeling bill would have allowed Raytheon to

average, the state's economy has lost jobs to "job pirates" from neighboring states that offer electricity that is between two to six cents per kilowatt hour ("kWh") cheaper.⁵⁴ It is not surprising, therefore, that California was the first state to propose the restructuring of the electricity industry by deregulating generation and opening the utility transmission grid to competitive electric suppliers.⁵⁵

D. *Federal Initiatives that have Accelerated the Drive Towards the Deregulation of the Electricity Industry*

In addition to the technological advances, the effects of PURPA and demands by industry, recent federal initiatives also have contributed to the drive towards retail competition.⁵⁶ Specifically, a series of recent federal initiatives have opened the nation's transmission grid.⁵⁷ Providing access to the electricity transmission grid is absolutely essential for a competitive electricity retail market to succeed.⁵⁸

Historically, a utility's sole right to its transmission grid has allowed the utility to insulate itself from competition and to secure its monopoly power.⁵⁹ Competitors who could offer less expensive electricity to the utility's customers had to pay the utility a transmission fee in order to "wheel" the electricity to the consumer.⁶⁰ The transmission fee could be set in such a manner as to totally offset the price advantage held by the lower cost competitor, effectively thwarting competition.⁶¹

purchase its electricity from the supplier of its choice, presumably at a lower cost. *See id.* Wheeling is the process of sending electricity from one utility to its final destination over the transmission lines of another utility. *See* JOINT COMM. ON ELEC. UTIL. RESTRUCTURING OF THE MASS. LEGISLATURE, 103 (Mar. 20, 1997) [hereinafter JOINT COMM.].

⁵⁴ *See* FINAL REPORT, *supra* note 39, at 2-7; Navarro, *supra* note 3, at 354. In 1995, the average retail electricity rate in California was 10.16 cents per kWh, compared to 8.45 cents per kWh in the upper Midwest and 5.77 cents per kWh in the Midwest. *See Final Report*, *supra* note 39, page 3-5.

⁵⁵ *See* Navarro, *supra* note 3, at 354-55. The transmission grid is simply the lines and facilities used to transfer electricity. *See* Heinhold, *supra* note 26, at 306. As will be discussed below, the utilities own and control the transmission grid, giving them monopoly power. *See infra* notes 59-61 and accompanying text.

⁵⁶ *See* FINAL REPORT, *supra* note 39, at 2-15 to 2-17; DPU 96-100, *supra* note 1, § 1(2); Hull, *supra* note 3, at 503-05; Navarro, *supra* note 3, at 352.

⁵⁷ *See* FINAL REPORT, *supra* note 39, at 2-15 to 2-17; DPU 96-100, *supra* note 1, § 1(2); Hull, *supra* note 3, at 503-05; Navarro, *supra* note 3, at 352.

⁵⁸ *See* DPU 96-100, *supra* note 1, § IV(C)(3).

⁵⁹ *See* Navarro, *supra* note 3, at 352.

⁶⁰ *See id.* at 352.

⁶¹ *See id.* at 352.

The Energy Policy Act of 1992 (the "EPAAct") provided one step towards creating a competitive retail electricity market.⁶² The EPAAct provided FERC with the authority to order utilities to wheel wholesale power through their transmission grids for third parties.⁶³ This provided outside producers with some access to the utility's wholesale customers, and created a new class of wholesale generators.⁶⁴

Two orders issued by FERC on April 14, 1996 ultimately set the stage for the restructuring of the electricity industry, complete with retail competition.⁶⁵ FERC's Order No. 888 will allow all participants in the electricity market nondiscriminatory, open access to the nation's transmission network.⁶⁶ Under Order No. 888, utilities are not required to divest their generation assets.⁶⁷ The utilities, however, must "functionally unbundle" or "functionally separate" their transmission assets from their generating assets.⁶⁸ In this manner, the utilities must file nondiscriminatory, open access transmission tariffs that separately list the rates for wholesale generation, transmission and ancillary services.⁶⁹ The utilities then must offer transmission services to wholesale competitors at the same rate and under the same terms that it provides transmission services for its own wholesale sales and purchases.⁷⁰ As a result, competitors will be able to offer wholesale electricity to customers within the utility's transmission grid at a cost equivalent to the utility's transmission cost, allowing for a recovery of stranded costs.⁷¹

⁶² See DPU 96-100, *supra* note 1, § 1(2); Navarro, *supra* note 3, at 352.

⁶³ See DPU 96-100, *supra* note 1, § 1(2); Navarro, *supra* note 3, at 352.

⁶⁴ See Navarro, *supra* note 3, at 352.

⁶⁵ See FINAL REPORT, *supra* note 39, at 2-15 to 2-16; DPU 96-100, *supra* note 1, § 1(2); Hull, *supra* note 3, at 503-05.

⁶⁶ See FINAL REPORT, *supra* note 39, at 2-15; Hull, *supra* note 3, at 503.

⁶⁷ See Hull, *supra* note 3, at 504. It is feared that the utilities will give preferential treatment to their own generation facilities at the expense of competitors. See *id.* Nevertheless, Order No. 888 does not force utilities to divest their generation assets. See *id.* Instead, Order No. 888 will attempt to handle this problem as discussed below. See *infra* notes 68-72 and accompanying text.

⁶⁸ See Hull, *supra* note 3, at 504. The terms "functionally unbundle" and "functionally separate" simply mean that the utilities must treat their own generation assets as if they were separately owned. See DPU 96-100, *supra* note 1, § V(B)(3). As a result, the utilities may not give preferential treatment, such as lower transmission fees, to their own generation assets. See *id.*

⁶⁹ See Hull, *supra* note 3, at 503.

⁷⁰ See FINAL REPORT, *supra* note 39, at 2-15; Hull, *supra* note 3, at 503.

⁷¹ See FINAL REPORT, *supra* note 39, at 2-15 to 2-16; Hull, *supra* note 3, at 503, 508. Stranded costs are the imbedded costs of power plants and other facilities, which were built by the utilities under the regulatory compact, that the utilities will not be able to recover in a competitive market because they will no longer be guaranteed a fair rate of return. See DPU 96-100, *supra* note 1, § XI(A).

In all, Order No. 888 will allow outside competitors to compete with utilities based upon the cost of generation.⁷²

Even more importantly, Order No. 888 also provides for nondiscriminatory retail competition.⁷³ Although Order No. 888 does not require that utilities provide competitors with nondiscriminatory access to retail customers, nondiscriminatory transmission services for retail sales may be offered voluntarily by the utilities, which may be unlikely, or pursuant to state retail access programs.⁷⁴ Thus, Order No. 888 sets the stage for the creation of open and competitive retail markets for electricity in individual states.⁷⁵ As will be discussed below, Massachusetts already has unveiled several proposals to establish a competitive retail market for electricity.⁷⁶

The creation of retail markets under Order No. 888 could be facilitated by FERC's Order No. 889, which was issued simultaneously with Order No. 888.⁷⁷ Order No. 889 requires public utilities to create an electronic system, accessible via the Internet, which provides information regarding available transmission capacity, pricing and related information.⁷⁸ Thus, Order No. 888 and Order No. 889 provide the tools necessary to create an open, competitive retail market for electricity in individual states.⁷⁹

Thus, these recent federal initiatives set the stage for the complete restructuring of the electricity industry.⁸⁰ The EPA and FERC's Orders No. 888 and 889 developed the framework to allow for nondiscriminatory retail competition.⁸¹ It is now in each state's power to establish a competitive market for retail sales of electricity by developing its own retail access programs.⁸²

⁷² See DPU 96-100, *supra* note 1, § IV(C)(3).

⁷³ See Hull, *supra* note 3, at 505.

⁷⁴ See *id.*

⁷⁵ See *id.*

⁷⁶ See *infra* notes 83-126 and accompanying text.

⁷⁷ See FINAL REPORT, *supra* note 39, at 2-16; Hull, *supra* note 3, at 504.

⁷⁸ See FINAL REPORT, *supra* note 39, at 2-16; Hull, *supra* note 3, at 504.

⁷⁹ See FINAL REPORT, *supra* note 39, at 2-15 to 2-16; Hull, *supra* note 3, at 503-05.

⁸⁰ See FINAL REPORT, *supra* note 39, at 2-15 to 2-17; DPU 96-100, *supra* note 1, § I(2); Hull, *supra* note 3, at 503-05; Navarro, *supra* note 3, at 352.

⁸¹ See FINAL REPORT, *supra* note 39, at 2-15 to 2-16; DPU 96-100, *supra* note 1, § I(2); Hull, *supra* note 3, at 503-05; Navarro, *supra* note 3, at 352.

⁸² See Hull, *supra* note 3, at 505.

III. MASSACHUSETTS' PLAN TO RESTRUCTURE THE ELECTRIC UTILITY INDUSTRY

Massachusetts is among the states that already has proposed plans to restructure its electric utility industry.⁸³ Currently, Massachusetts officials have unveiled four such plans.⁸⁴ On September 12, 1996, Massachusetts Attorney General Scott Harshbarger announced an initiative termed "Consumers First" which plans to introduce retail competition in the state beginning January 1, 1998.⁸⁵ The Massachusetts Department of Public Utilities (the "MDPU") unveiled its proposal to restructure the electricity industry on December 30, 1996.⁸⁶ In February of 1997, Massachusetts Governor William Weld submitted to the state legislature a bill to restructure the electricity industry.⁸⁷ More recently, on March 20, 1997, a joint committee of the Massachusetts legislature filed its own bill to restructure the industry.⁸⁸

A. "Consumers First": The Massachusetts Attorney General's Initiative to Restructure the Electric Utility Industry

On September 12, 1996, Attorney General Scott Harshbarger unveiled his plan to restructure the electric utility industry in Massachusetts.⁸⁹ The initiative, termed "Consumers First," would allow all Massachusetts consumers of investor-owned utilities, both residential and business, to choose their own supplier of retail electricity.⁹⁰ The plan also stresses increased competition, preservation of reliability and protection of the environment.⁹¹

Under the "Consumers First" plan, all Massachusetts customers of investor-owned, as opposed to municipally-owned, utilities will be able

⁸³ See generally DPU 96-100, *supra* note 1; Harshbarger Unveils, *supra* note 1, at 1-5; Hull, *supra* note 3, at 513; NEES, Mass. AG Competition Pact, *supra* note 1, at 6; NEES, Mass. AG Seek Industry Support, *supra* note 1, at 9.

⁸⁴ See 1997 MA H.B. 4311; JOINT COMM., *supra* note 53; See Harshbarger Unveils, *supra* note 1, at 1-5; NEES, Mass. AG Competition Pact, *supra* note 1, at 6; NEES, Mass. AG Seek Industry Support, *supra* note 1, at 9.

⁸⁵ See Harshbarger Unveils, *supra* note 1, at 1-5; NEES, Mass. AG Competition Pact, *supra* note 1, at 6; NEES, Mass. AG Seek Industry Support, *supra* note 1, at 9.

⁸⁶ See generally DPU 96-100, *supra* note 1.

⁸⁷ See generally 1997 MA H.B. 4311.

⁸⁸ See generally JOINT COMM., *supra* note 53.

⁸⁹ See Harshbarger Unveils, *supra* note 1, at 1-5; NEES, Mass. AG Competition Pact, *supra* note 1, at 6; NEES, Mass. AG Seek Industry Support, *supra* note 1, at 9.

⁹⁰ See Harshbarger Unveils, *supra* note 1, at 1.

⁹¹ See *id.* at 1-5; NEES, Mass. AG Competition Pact, *supra* note 1, at 6.

to choose their electricity supplier on January 1, 1998.⁹² Based on a Massachusetts Electric pilot program, which resulted in savings of fourteen percent, it is estimated that electricity consumers could benefit from substantial savings by entering the competitive market.⁹³ The plan also guarantees a savings of at least ten percent off today's prices for consumers who choose not to enter the competitive market, and instead accept the "Standard Offer."⁹⁴ At this guaranteed ten percent rate reduction, the Attorney General estimates that Massachusetts consumers will save three billion dollars over the first seven years of the plan.⁹⁵

The "Consumer First" plan also strives to ensure fair competition among the suppliers of electricity.⁹⁶ Outside competitors will be given a real chance to compete with the utilities because all suppliers will be allowed to bid for the right to supply the "Standard Offer" consumers as well as the consumers who enter the competitive market.⁹⁷ The existing utilities will also be treated fairly under the plan since they will be allowed to recover their "stranded costs" through a charge that will remain at 2.8 cents per kWh for the first three years, and will decline over time.⁹⁸ Current levels of reliability and customer satisfaction will be maintained by penalizing sub-standard providers up to two million dollars.⁹⁹

In addition, the Attorney General's "Consumers First" plan has several provisions intended to protect the state's environment.¹⁰⁰ As part of the plan, after the year 2000, older, fossil-fueled plants will have to meet the same emissions standards as new plants by the time the older plant is forty years old or by 2010, whichever occurs first.¹⁰¹ The

⁹² See *Harshbarger Unveils*, *supra* note 1, at 1; *NEES, Mass. AG Seek Industry Support*, *supra* note 1, at 9.

⁹³ See *Harshbarger Unveils*, *supra* note 1, at 2.

⁹⁴ See *Harshbarger Unveils*, *supra* note 1, at 1-2; *NEES, Mass. AG Seek Industry Support*, *supra* note 1, at 9.

⁹⁵ See *Harshbarger Unveils*, *supra* note 1, at 1-2.

⁹⁶ See *id.* at 2.

⁹⁷ See *id.*; *NEES, Mass. AG Seek Industry Support*, *supra* note 1, at 9.

⁹⁸ See *Harshbarger Unveils*, *supra* note 1, at 3; *NEES, Mass. AG Competition Pact*, *supra* note 1, at 6; *NEES, Mass. AG Seek Industry Support*, *supra* note 1, at 9.

⁹⁹ See *Harshbarger Unveils*, *supra* note 1, at 1-2; *NEES, Mass. AG Competition Pact*, *supra* note 1, at 6; *NEES, Mass. AG Seek Industry Support*, *supra* note 1, at 9.

¹⁰⁰ See *Harshbarger Unveils*, *supra* note 1, at 3; *NEES, Mass. AG Competition Pact*, *supra* note 1, at 6; *NEES, Mass. AG Seek Industry Support*, *supra* note 1, at 9.

¹⁰¹ See *Harshbarger Unveils*, *supra* note 1, at 3; *NEES, Mass. AG Competition Pact*, *supra* note 1, at 6; *NEES, Mass. AG Seek Industry Support*, *supra* note 1, at 9. This provision, however, will apply only to generating plants within Massachusetts. See *Harshbarger Unveils*, *supra* note 1, at 3; Testimony of Allan F. Bedwell, Deputy Commissioner of the Massachusetts Department of Envi-

plan also requires funding for renewable energy options and efficiency and conservation programs.¹⁰² For these reasons, the "Consumers First" initiative has gained the approval of some environmentalists.¹⁰³

B. *The MDPU Approach*

On December 30, 1996, the MDPU unveiled its plan to restructure the electricity industry in Massachusetts.¹⁰⁴ The MDPU intends to implement a competitive market for electricity by January 1, 1998.¹⁰⁵ In restructuring the electricity industry, the MDPU hopes to develop an efficient and fair industry structure that minimizes consumer costs, maintains safe and reliable service and minimizes the impact on the environment.¹⁰⁶

The MDPU proposal includes several provisions to foster efficiency and fairness in the restructured electricity industry.¹⁰⁷ The plan proposes that an independent system operator will oversee the bulk power system in New England, which comprises the generation and transmission facilities in the region.¹⁰⁸ The MDPU will continue to regulate the distribution of electricity, which continues to exhibit the characteristics of a natural monopoly, in order to provide an orderly and expeditious transition to the new industry structure.¹⁰⁹ The MDPU is hopeful that Order No. 888, as discussed in Section III, will allow all generators of electricity equal access to transmission facilities at identical prices.¹¹⁰

ronmental Protection, before the Joint Electric Utility Restructuring Committee of the Great and General Court, Dec. 10, 1996.

¹⁰² See *Harshbarger Unveils*, *supra* note 1, at 3; *NEES, Mass. AG Competition Pact*, *supra* note 1, at 6; *NEES, Mass. AG Seek Industry Support*, *supra* note 1, at 9.

¹⁰³ See *NEES, Mass. AG Competition Pact*, *supra* note 1, at 6. Lew Millford, senior attorney for the Conservation Law Foundation, stated that, "[i]t allows new, cleaner plants and renewable energy to compete for customers head-to-head against existing dirtier plants. It requires existing, dirtier coal and oil plants to clean up to the tight emissions standards their new competitors must meet." *Id.*

¹⁰⁴ See generally DPU 96-100, *supra* note 1.

¹⁰⁵ See *id.* § I(A).

¹⁰⁶ See generally *id.* Executive Summary Introduction, § III(C).

¹⁰⁷ See generally *id.* §§ III, IV, VI.

¹⁰⁸ See *id.* § III(C). The independent system operator will be completely independent of participants in competitive market for generation. See *id.* Thus, the independent system operator will be responsible for operating the bulk power system in a non-discriminatory manner that furthers efficient competition. See *id.* The independent system operator will also be responsible for maintaining current standards of reliability, for collecting information on power plant emissions, and for ensuring open access to the transmission system at non-discriminatory prices. See *id.*

¹⁰⁹ See DPU 96-100, *supra* note 1, § VI(B)(3).

¹¹⁰ See *id.* § IV(C)(3).

The MDPU proposal also attempts to prevent the potential abuse of vertical market power by companies that possess generation, transmission and distribution facilities.¹¹¹ Although the MDPU asserts that the cleanest solution to the problem of inter-affiliate transactions is to mandate divestiture of generation assets, it recognizes that it does not possess either the explicit or implicit statutory authority to do so.¹¹² Thus, while it merely encourages the divestiture of generation assets, the MDPU proposal requires the functional separation of generation, transmission and distribution assets within a single company.¹¹³ The MDPU proposal also attempts to treat the existing electric utilities fairly by allowing them a reasonable opportunity to recover net, non-mitigable stranded costs.¹¹⁴ The MDPU concluded that it was in the best interest of all concerned to allow for the recovery of reasonable stranded costs even though the electric companies have not established a clear legal entitlement.¹¹⁵

¹¹¹ See *id.* § V(B)(3).

¹¹² See *id.* § V(B)(1),(3).

¹¹³ See *id.* § V(B)(3). To effectuate the functional separation of a single company's generation, transmission and distribution assets, the MDPU proposes clear and enforceable rules of conduct to govern the interaction of the various divisions. See *id.* Additionally, electric companies that maintain generation facilities must create a separate marketing affiliate if they wish to sell power in the competitive marketplace. See *id.*

¹¹⁴ See DPU 96-100, *supra* note 1, § XI(B)(5). The MDPU defines stranded costs as:

(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.

Id. § XI(D)(1).

¹¹⁵ See *id.* § XI(B)(4). The electric companies claim that they are legally entitled to stranded cost recovery under the Fifth and Fourteenth Amendments of the United States Constitution, which prohibit the taking of private property for public use without just compensation. See *id.* § XI(B)(3)(b). Although the MDPU is not convinced that the electric utilities would succeed under the Takings Clause, it determined that allowing stranded cost recovery would "(1) ensure the provision of sound electric services during the transition to competition; (2) affirm reliability of commitments, which is an essential element in any future industry structure; (3) promote federal and state coordination and ensure equal treatment of similarly-situated utilities; and (4) avoid costly, reform-delaying litigation." *Id.* § XI(B)(4). The MDPU proposes that the legislature should require utilities that receive stranded cost recovery to make payments to their host municipalities in lieu of tax payments. See *id.* § X(C)(3). As discussed in note five, municipalities stand to lose a great deal of tax revenue because restructuring could reduce the value of utility property and could reclassify generating facilities as manufacturing equipment, which is exempt from property taxation. See *id.* § X(C)(1).

The MDPU proposal also contains provisions intended to benefit consumers of electricity, by striving to decrease the cost of electricity and by ensuring reliable service.¹¹⁶ The MDPU proposal envisions that most consumers will obtain the lowest price for electricity by contracting with a competitive supplier.¹¹⁷ Customers who never contract with a competitive supplier will receive standard offer generation service from their distribution companies.¹¹⁸ The standard offer generation service will be offered for five years and will be regulated by the MDPU.¹¹⁹ Customers who participate in the competitive market for electricity, but later leave the market for any reason, will be provided with the default service.¹²⁰ The default service will act as a safety net to provide temporary supply to customers as they seek a new, competitive supplier.¹²¹ The price for default service will be determined based on the spot market clearing prices.¹²² Further customer protection will be provided for consumers who face financial difficulties and who's health would be placed at risk by the termination of electricity services.¹²³

The MDPU plan also seeks to get municipally owned plants to enter the competitive retail market.¹²⁴ Although the MDPU indicates that it lacks the authority to require municipal utilities to open their service areas to competition, the department encourages them to allow their customers to participate in the retail market for generation of electricity.¹²⁵ The MDPU, however, believes that it has the authority to require municipal utilities that sell power on the competitive market

¹¹⁶ See generally *id.* § VII.

¹¹⁷ See *id.* § VII(A). In order to be eligible, competitive suppliers must register with the MDPU and supply basic information concerning prices and the environmental impact of its generation process. See *id.* § VII(B)(2),(6). The MDPU indicated that many members of the public voiced concern that they will be inundated with telephone solicitations from potential suppliers. See *id.* §(B)(3). The MDPU did not offer its own solution, but stated that competitive suppliers' ability to solicit customers will be limited by existing federal statutes and regulations. See *id.*

¹¹⁸ See *id.* § VII(C)(3)(b).

¹¹⁹ See DPU 96-100, *supra* note 1, § VII(C)(3)(b). The MDPU plans to set the standard offer rate at a level that will provide discounts compared to current electricity rates, yet at a level that will encourage customers to participate in the competitive generation market. See *id.*

¹²⁰ See *id.* § VII (C)(3)(c).

¹²¹ See *id.*

¹²² See *id.*

¹²³ See *id.* § VII (D). The MDPU plan proposes a winter moratorium on terminating service to customers who demonstrate a financial hardship, the prohibition of the termination of service to elderly and ill customers and to customers who have an infant, and restrictions on the termination of service to tenants whose electricity bills are paid by their landlords. See *id.* § VII (D)(1).

¹²⁴ See DPU 96-100, *supra* note 1, § X(A)(3).

¹²⁵ See *id.* § X(A)(1),(3).

to offer reciprocal rights to all suppliers of generation to sell electricity within the municipal utility's service territory.¹²⁶

IV. POTENTIAL EFFECTS OF A RESTRUCTURED ELECTRICITY INDUSTRY ON REGIONAL COMPETITION AND THE ENVIRONMENT

The "Consumers First" plan does contain provisions for fair competition among producers of electricity and protection of the environment.¹²⁷ The development of a competitive market for retail electricity, nevertheless, may place Massachusetts electricity producers at a severe competitive disadvantage, as compared to producers in other regions of the nation, and may deteriorate the state's environment.¹²⁸ This unfortunate result may occur as a result of increased utilization of low cost coal plants in the Midwest and the resultant increase in emissions that travel to the Northeast.¹²⁹

A. *The Competitive Advantage of Coal Production and the Resulting Vicious Cycle*

There are several reasons why coal plants in the Midwest may significantly increase production.¹³⁰ First, the advent of retail competition and access to new markets, such as Massachusetts consumers, will provide strong incentives for all generators of electricity to increase production in order to increase their market share.¹³¹ The 150 coal

¹²⁶ See *id.* § X(A)(3).

¹²⁷ See Harshbarger *Unveils*, *supra* note 1, at 3; *NEES, Mass. AG Competition Pact*, *supra* note 1, at 6; *NEES, Mass. AG Seek Industry Support*, *supra* note 1, at 9.

¹²⁸ See Allen, *supra* note 6, at B1; *Generation Performance Standards for All Electricity Suppliers*, *supra* note 9, at 1-2; *Mass. Plan to Oversee*, *supra* note 14, at 7; U.S. N.E. Govs. -2: *Unequal Environment Rules Help Midwest*, DOW JONES TELERATE ENERGY SERV., Dec. 16, 1996, available in WESTLAW [hereinafter *Unequal Environment Rules*]; U.S. N.E. Govs. *Urge Midwest Power Plant Emission Study*, *supra* note 9.

¹²⁹ See Allen, *supra* note 6, at B1; *New Hampshire Plan Will Not Address Issue of Emissions from Older Plants*, UTIL. ENV'T REP., Sept. 27, 1996, at 7; *Northeast to Unite in Fight Against 'Dirty' Midwest Power*, POWER MARKET WK., Dec. 9, 1996; *Vermont's Draft Competition Strategy*, *supra* note 5, at 4; Rosen, *supra* note 5, at 15-16. It is believed that Massachusetts is the recipient of ozone and other pollutants that travel from the Midwest. See Letter from Allan F. Bedwell, Deputy Commissioner of the Commonwealth of Massachusetts Department of Environmental Protection, to Senator John D. O'Brien, Senate Chair of the Joint Committee on Electric Utility Restructuring (January 29, 1997) (on file with author). The Ozone Transport Assessment Group, a 37-state organization established to study the impact of the transport of ozone, has determined that pollution transportation is a function of meteorology and atmospheric chemistry, and that under certain conditions, ozone and other pollutants can be transported hundreds of miles. See *id.*

¹³⁰ See BRENNAN, *supra* note 5, at 117-18; Allen, *supra* note 6, at B1; Rosen, *supra* note 5, at 12-15.

¹³¹ See Allen, *supra* note 6, at B1; Rosen, *supra* note 5, at 13.

units in the Midwest, which are currently underutilized, could easily begin producing more power.¹³²

Additionally, coal producers in the Midwest have a significant competitive advantage over electricity producers in the Northeast.¹³³ In 1995 the average cost of electricity was nearly twice as high in the Northeast as it was in the Midwest.¹³⁴ This price discrepancy is due in part to the positive correlation between low cost of production and high levels of emission.¹³⁵ The Midwest operates approximately 150 coal-fired power plants, many of which are so old that they are not subject to modern air pollution standards.¹³⁶ Although these plants produce electricity at a lower cost than all other forms of production, they may produce as much as ten times the amount of pollution as natural gas-fired generators, which are subject to modern emissions standards.¹³⁷ Electricity generators in the Northeast, on the other hand, are subject to pollution standards that are two to ten times more stringent than federal standards.¹³⁸ This is due to the fact that air quality standards for ozone frequently have been exceeded in the Northeast.¹³⁹

The interaction between the competitive advantage possessed by Midwest producers of electricity and their high level of emissions could create a vicious cycle that will cause Northeastern producers to be even less competitive and will further deteriorate the environment.¹⁴⁰ As

¹³² See BRENNAN, *supra* note 5, at 117-18; Allen, *supra* note 6, at B1; Rosen, *supra* note 5, at 12.

¹³³ See BRENNAN, *supra* note 5, at 117; *Mass. Plan to Oversee*, *supra* note 14, at 7; *Unequal Environment Rules*, *supra* note 128; U.S. N.E. Govs. *Urge Midwest Power Plant Emission Study*, *supra* note 9; Rosen, *supra* note 5, at 15.

¹³⁴ See FINAL REPORT, *supra* note 39, at 3-5. In 1995, the average retail price of electricity was 10.22 cents per kWh in the Northeast and 5.77 cents per kWh in the Midwest. See *id.* The Northeast's significant reliance on nuclear power, which is very expensive due to the high cost of safety measures, contributes to the price difference. See Ross Kerber, *Nuclear Industry Faces Charges of Cutting Corners*, WALL ST. J. Feb. 1, 1996, at B4.

¹³⁵ See Rosen, *supra* note 5, at 15.

¹³⁶ See Allen, *supra* note 6, at B1; *Mass. Attorney General Asks Northeast Govs. to Penalize Dirty, Imported Power*, *supra* note 14, at 1; *Mass. Calls for Northeast to Unite*, *supra* note 7; U.S. N.E. Govs. *Urge Midwest Power Plant Emission Study*, *supra* note 9; Rosen, *supra* note 5, at 14.

¹³⁷ See BRENNAN, *supra* note 5, at 114, 118; NYMEX *Official Urges Congress to Ignore Environmental Concerns on Competition*, UTIL. ENV'T REP., April 12, 1996, at 12; Rosen, *supra* note 5, at 14.

¹³⁸ See Rosen, *supra* note 5, at 15 n.13.

¹³⁹ See Letter from Allan F. Bedwell to Sen. John D. O'Brien, *supra* note 129; Rosen, *supra* note 5, at 15. Mr. Bedwell indicated that Massachusetts exceeded the ozone standard 109 times over 30 days in 1988, 36 times over 9 days in 1991, 18 times over 9 days in 1993, 17 times over 8 days in 1995 and 2 times during the summer of 1996. See Letter from Allan F. Bedwell to Sen. John D. O'Brien, *supra*. The unusually cool summer of 1996 was credited with the relatively low number of exceedances in 1996, as high temperatures exacerbate problems with pollution. See *id.*

¹⁴⁰ See Allen, *supra* note 6, at B1; *Mass. Attorney General Asks Northeast Govs. to Penalize Dirty*,

Midwestern coal facilities increase production to meet the demand that a competitive market will create for their low cost product, they will emit even higher levels of pollution which will be transported to the Northeast.¹⁴¹ This increase in pollution in the Northeast will make it even more difficult than it already is for electricity producers in the Northeast to meet the federal pollution standards.¹⁴² As a result, the cost of producing electricity in the Northeast will increase further, thus increasing the competitive advantage held by the Midwestern producers.¹⁴³ This will provide even more pressure for Midwestern coal facilities to produce at higher levels, and the cycle will continue.¹⁴⁴ The end result to the Northeast could be disastrous.¹⁴⁵ Many electricity generation plants in the Northeast could be shut down, the environment could deteriorate severely and human health could be placed at risk as a result of the increased levels of pollution.¹⁴⁶

B. Possible Federal Solutions

The federal government may be able to ameliorate the pollution transport problem and break the vicious cycle described above before it starts.¹⁴⁷ In fact, there have been indications that the Clinton administration is planning to introduce legislation concerning the ozone transportation problem.¹⁴⁸ Even if this does not occur, several other potential federal remedies exist.¹⁴⁹

The Ozone Transportation Assessment Group (the "OTAG") has been investigating the problem for several years, but has not yet found

Imported Power, *supra* note 14, at 1; *Mass. Eyeing "Ticket to Play," supra* note 5, at 7; *U.S. N.E. Govs. Urge Midwest Power Plant Emission Study*, *supra* note 9; *Generation Performance Standards for All Electricity Suppliers*, *supra* note 9, at 1-2; *Rosen*, *supra* note 5, at 15.

¹⁴¹ See *supra* notes 6-8.

¹⁴² See *Mass. Attorney General Asks Northeast Govs. to Penalize Dirty, Imported Power*, *supra* note 14, at 1; *U.S. N.E. Govs. Urge Midwest Power Plant Emission Study*, *supra* note 9; *Generation Performance Standards for All Electricity Suppliers*, *supra* note 9, at 2; *Rosen*, *supra* note 5, at 15.

¹⁴³ See *Allen*, *supra* note 6, at B1; *Rosen*, *supra* note 5, at 15.

¹⁴⁴ See *Allen*, *supra* note 6, at B1; *Rosen*, *supra* note 5, at 15.

¹⁴⁵ See *Allen*, *supra* note 6, at B1; *DOE Public Meeting Signals Pollution Transport as Prime Legislative Goal*, *supra* note 5, at 5; *Vermont's Draft Competition Strategy*, *supra* note 5, at 4; *Generation Performance Standards for All Electricity Suppliers*, *supra* note 9, at 1-2.

¹⁴⁶ See *supra* note 5.

¹⁴⁷ See *DOE Public Meeting Signals Pollution Transport as Prime Legislative Goal*, *supra* note 5, at 5; *EPA Proposes Tighter Rules on PM and Ozone*, *COAL & SYN FUELS TECH.*, Dec. 6, 1996; *New Air Rules Could Reduce Pollution Flow into Northeast*, *THE BERKSHIRE EAGLE*, Dec. 1, 1996; *New EPA Standard Could Cramp Utilities*, *THE ELEC. DAILY*, Vol. 8, No 19, Jan. 30, 1997, at 1; *Reactions to New Particulate/Ozone Proposal Vary by Fuel Mix, Location*, *UTIL. ENV'T REP.*, Dec. 20, 1996, at 1.

¹⁴⁸ See *DOE Public Meeting Signals Pollution Transport as Prime Legislative Goal*, *supra* note 5, at 5.

¹⁴⁹ See *infra* notes 150-52 and accompanying text.

a feasible solution.¹⁵⁰ The Environmental Protection Agency (the "EPA") recently proposed new, tougher emissions standards that may force coal facilities to be retrofitted with pollution control devices, thus leveling the playing field by reducing the pollution flow into the Northeast.¹⁵¹ Congress has also taken some action to address this problem, as several bills have been introduced in the past year to restructure the electricity industry on a national scale.¹⁵²

¹⁵⁰ See *New Air Rules Could Reduce Pollution Flow into Northeast*, *supra* note 147; OTAG: *Ozone to Hit the Fan*, ELEC. DAILY, Nov. 1, 1996. OTAG is a partnership between the Environmental Protection Agency, the Environmental Council of the States, 37 state governments east of the Rocky Mountains and many industry and environmental groups. See *New Air Rules Could Reduce Pollution Flow into Northeast*, *supra* note 147. OTAG plans to create a comprehensive, super-regional ozone control strategy in the early months of 1997. See OTAG: *Ozone to Hit the Fan*, *supra*. OTAG may be considering an 85% across-the-board reduction of nitrogen oxide emissions from power plants. See *id.* Critics of OTAG believe that it may take much longer for OTAG to develop its plan because of the dozens of contradictory proposals and fundamental disagreements over the science of ozone transport. See *id.*

¹⁵¹ See generally National Ambient Air Quality Standards for Ozone, 61 Fed. Reg. 65,637 (1996) (to be codified at 40 C.F.R. pt. 50) (proposed Dec. 13, 1996); Interim Implementation Policy on New or Revised Ozone and Particulate Matter (PM) National Ambient Air Quality Standards (NAAQS), 61 Fed. Reg. 65,715 (1996) (to be codified at 40 C.F.R. pt. 51) (proposed Dec. 13, 1996); Implementation of New or Revised Ozone and Particulate Matter (PM) National Ambient Air Quality Standards (NAAQS) and Regional Haze Regulations, 61 Fed. Reg. 65,751 (1996) (to be codified at 40 C.F.R. pt. 51) (proposed Dec. 13, 1996); Proposed Requirements for Designation of Reference and Equivalent Methods for PM 2.5 and Ambient Air Quality Surveillance for Particulate Matter, 61 Fed. Reg. 65,763 (1996) (to be codified at 40 C.F.R. pts. 53, 58) (proposed Dec. 13, 1996); *EPA Proposes Tighter Rules on PM and Ozone*, *supra* note 147; *EPA Release of New Ozone/PM Standards to Stir Congressional and Court Actions*, 24 ENERGY REP. NO. 47, Dec. 2, 1996, available in 1996 WL 11831806; *New Air Rules Could Reduce Pollution Flow into Northeast*, *supra* note 147; *New EPA Standard Could Cramp Utilities*, *supra* note 147, at 1; *Reactions to New Particulate/Ozone Proposal Vary by Fuel Mix, Location*, *supra* note 147, at 1. The EPA proposes to lower the size of particulates that it regulates from 10 microns to 2.5 microns (for reference, a human hair is approximately 50 microns thick). See *EPA Proposes Tighter Rules on PM and Ozone*, *supra* note 147; *EPA Release of New Ozone/PM Standards to Stir Congressional and Court Actions*, *supra*. Smaller particulates may cause the most harm to the respiratory system because they lodge deeper in the lungs than larger particles and are more difficult for the lung's self-defense mechanisms to remove. See *Reactions to New Particulate/Ozone Proposal Vary by Fuel Mix, Location*, *supra* note 147, at 1. To further limit ozone, the EPA also intends to replace the current one-hour standard of 0.12 parts per million with an eight-hour standard of 0.08 parts per million. See *EPA Proposes Tighter Rules on PM and Ozone*, *supra* note 147; *EPA Release of New Ozone/PM Standards to Stir Congressional and Court Actions*, *supra*. The EPA's proposed rules face opposition from both industry, which is concerned about the high cost of compliance, and Republican leaders in Congress, who may challenge the stricter standards under a new law that gives them the power to review all major federal regulations. See *Reactions to New Particulate/Ozone Proposal Vary by Fuel Mix, Location*, *supra* note 147, at 1; *EPA Release of New Ozone/PM Standards to Stir Congressional and Court Actions*, *supra*.

¹⁵² See *Restructuring Bills Aim to Protect Renewables in Competitive Markets*, UTIL. ENV'T REP., July 19, 1996. A bill proposed by Rep. Dan Schaefer (R-Colo.) would require each generator to submit renewable energy credits to the FERC that amount to a certain percentage of the total energy produced by the generator that year. See *id.* The renewable energy credits could be

V. MASSACHUSETTS' PROPOSED ATTEMPTS TO PREVENT THE IMPORTATION OF "DIRTY" ELECTRICITY

In case there is no adequate federal solution in place by January 1, 1998, officials in Massachusetts are developing several contingency plans to maintain the competitiveness of in-state power producers, the health of the state's citizens and the integrity of the environment.¹⁵³ The Massachusetts Department of Environmental Protection (the "MDEP") recently proposed a plan to force out-of-state electricity producers to prove that their facilities meet certain environmental standards before they can sell electricity in the state.¹⁵⁴ In a similar development, Massachusetts Attorney General Scott Harshbarger circulated a proposal to the twelve Northeastern governors, calling on them to form a "clean air compact" to ban or limit the importation of "dirty" power.¹⁵⁵

A. *The Massachusetts Department of Environmental Protection "Ticket to Play" Plan*

MDEP Commissioner David Struhs recently unveiled a back-up plan to address the problems which would be caused by the transport of pollution from Midwest power producers to the Northeast if OTAG and the proposed EPA emissions standards fail to arrive at an acceptable solution.¹⁵⁶ The MDEP plan consists of a series of alternative steps that the state can take to get Midwestern electricity producers to

obtained either by actually producing electricity from renewable resources or by buying credits from generators with excess credits. See *id.* A bill proposed by Rep. Edward Markey (D-Mass.) encourages the use of renewable energy resources by exempting utilities from the mandatory purchase provisions of PUPRA, discussed *supra* note 41. See *id.*

¹⁵³ See *Maine Gov., Mass. AG Urge Northeast to Protect Air Under Competition*, *supra* note 14, at 10; *Mass. Attorney General Asks Northeast Govs. to Penalize Dirty, Imported Power*, *supra* note 14, at 1; *Mass. Calls for Northeast to Unite*, *supra* note 7; *Mass. Enviro Official Warns*, *supra* note 14; *Mass. Eyeing "Ticket to Play"*, *supra* note 5, at 7; *Mass. Plan to Oversee*, *supra* note 14, at 7.

¹⁵⁴ See *Mass. Attorney General Asks Northeast Govs. to Penalize Dirty, Imported Power*, *supra* note 14, at 1; *Mass. Calls for Northeast to Unite*, *supra* note 7; *Mass. Enviro Official Warns*, *supra* note 14; *Mass. Eyeing "Ticket to Play"*, *supra* note 5, at 7; *Massachusetts Might Condition Market Participation on Emissions Standards*, N.E. POWER REP., Nov. 8, 1996, at 2; *Generation Performance Standards for All Electricity Suppliers*, *supra* note 9, at 1-3.

¹⁵⁵ See *Allen*, *supra* note 6, at B1; *Maine Gov., Mass. AG Urge Northeast to Protect Air Under Competition*, *supra* note 14, at 10; *Mass. Attorney General Asks Northeast Govs. to Penalize Dirty, Imported Power*, *supra* note 14, at 1; *Mass. Calls for Northeast to Unite*, *supra* note 7; *Mass. Plan to Oversee*, *supra* note 14, at 7.

¹⁵⁶ See *Mass. Attorney General Asks Northeast Govs. to Penalize Dirty, Imported Power*, *supra* note 14, at 1; *Mass. Calls for Northeast to Unite*, *supra* note 7; *Mass. Enviro Official Warns*, *supra* note 14; *Massachusetts Might Condition Market Participation on Emissions Standards*, *supra* note 154, at 2.

improve their pollution controls.¹⁵⁷ The plan intends to level the competitive playing field between electricity producers in the Midwest and Northeast and to protect the environment and the public health of the region.¹⁵⁸

First, the commissioner urged the Midwestern utility regulators to voluntarily compel the dirtiest generators in their states to install proper, 1980's technology to reduce their pollution emissions.¹⁵⁹ He suggested that the Midwestern utility regulators could impose a non-bypassable wire charge on the dirtiest generators in their states, and use the funds generated to finance the new pollution controls.¹⁶⁰ This approach would serve to protect the environment and would decrease the Midwestern coal-fired units' competitive advantage without a protracted legal fight.¹⁶¹

If the Midwestern utility regulators do not respond to this appeal, which is likely, the MDEP plan contains provisions to force the Midwestern electricity producers to bear the burden of the cost of the pollution that they create.¹⁶² Because the MDEP recognized that the Commerce Clause of the United States Constitution would forbid an outright ban on the importation of electricity, it proposed a "generation performance standard" that it characterized as a "ticket to play" approach.¹⁶³ The ticket to play plan would require all power generators, both in-state and out-of-state, to meet minimum environmental performance standards before they could sell power in the state.¹⁶⁴ Although the MDEP did not propose specific standards, it suggested that it may be based on the tons of pollution generated per megawatt hour ("MWh").¹⁶⁵ The MDEP also suggested that the standard probably

¹⁵⁷ See *Mass. Attorney General Asks Northeast Govs. to Penalize Dirty, Imported Power*, *supra* note 14, at 1; *Mass. Calls for Northeast to Unite*, *supra* note 7; *Mass. Enviro Official Warns*, *supra* note 14.

¹⁵⁸ See *Mass. Calls for Northeast to Unite*, *supra* note 7; *Mass. Enviro Official Warns*, *supra* note 14; *Massachusetts Might Condition Market Participation on Emissions Standards*, *supra* note 154, at 2; *Generation Performance Standards for All Electricity Suppliers*, *supra* note 9, at 1-3.

¹⁵⁹ See *Mass. Enviro Official Warns*, *supra* note 14.

¹⁶⁰ See *Mass. Attorney General Asks Northeast Govs. to Penalize Dirty, Imported Power*, *supra* note 14, at 1.

¹⁶¹ See *id.*

¹⁶² See *Mass. Attorney General Asks Northeast Govs. to Penalize Dirty, Imported Power*, *supra* note 14, at 1; *Mass. Calls for Northeast to Unite*, *supra* note 7; *Mass. Enviro Official Warns*, *supra* note 14.

¹⁶³ See *Mass. Attorney General Asks Northeast Govs. to Penalize Dirty, Imported Power*, *supra* note 14, at 1; *Mass. Calls for Northeast to Unite*, *supra* note 7; *Mass. Enviro Official Warns*, *supra* note 14; *Mass. Eyeing "Ticket to Play," supra* note 5, at 7; *Massachusetts Might Condition Market Participation on Emissions Standards*, *supra* note 154, at 2.

¹⁶⁴ See *Mass. Enviro Official Warns*, *supra* note 14; *Massachusetts Might Condition Market Participation on Emissions Standards*, *supra* note 154, at 2; *Generation Performance Standards for All Electricity Suppliers*, *supra* note 9, at 2-3.

¹⁶⁵ See *Mass. Attorney General Asks Northeast Govs. to Penalize Dirty, Imported Power*, *supra* note

would be comparable to the existing emissions profiles of Massachusetts utilities.¹⁶⁶ The MDEP further indicated that the standard likely will apply to each producer's entire generation portfolio, rather than to each specific generating unit.¹⁶⁷

If the ticket to play approach does not pass constitutional muster, the Commissioner stated that the MDEP will find a way to impose an environmental and public health surcharge on the electricity that Midwestern generators sell to Massachusetts, to pay for the damage caused by the increased pollution.¹⁶⁸ The Commissioner indicated that half of the money collected from the surcharge would be used to fund the installation of environmental controls on the dirty generators in the Midwest.¹⁶⁹ The other half of the funds would be used to pay for the environmental, societal and health damages that the electricity production in the Midwest causes in Massachusetts.¹⁷⁰

B. *The Massachusetts Attorney General's "Clean Air Compact"*

Massachusetts Attorney General Scott Harshbarger has also sought a way to force Midwestern coal-fired facilities to reduce emissions before they are allowed to enter the retail market in Massachusetts.¹⁷¹ On December 2, 1996, Harshbarger circulated a proposal to the twelve Northeastern governors asking them to form a clean air compact.¹⁷² Harshbarger wants the Northeastern states to work together to limit or refuse the importation of electricity from states that permit "dirty" power plants to operate.¹⁷³

14, at 1; *Mass. Calls for Northeast to Unite*, *supra* note 7; *Generation Performance Standards for All Electricity Suppliers*, *supra* note 9, at 2.

¹⁶⁶ See *Mass. Eyeing "Ticket to Play," supra* note 5, at 7.

¹⁶⁷ See *id.* at 7; *Generation Performance Standards for All Electricity Suppliers*, *supra* note 9, at 2.

¹⁶⁸ See *Mass. Attorney General Asks Northeast Govs. to Penalize Dirty, Imported Power*, *supra* note 14, at 1; *Mass. Calls for Northeast to Unite*, *supra* note 7; *Mass. Enviro Official Warns*, *supra* note 14.

¹⁶⁹ See *Mass. Attorney General Asks Northeast Govs. to Penalize Dirty, Imported Power*, *supra* note 14; *Mass. Calls for Northeast to Unite*, *supra* note 7, at 1; *Mass. Enviro Official Warns*, *supra* note 14.

¹⁷⁰ See *Mass. Attorney General Asks Northeast Govs. to Penalize Dirty, Imported Power*, *supra* note 14, at 1; *Mass. Calls for Northeast to Unite*, *supra* note 7; *Mass. Enviro Official Warns*, *supra* note 14.

¹⁷¹ See *Allen*, *supra* note 6, at B1; *Maine Gov., Mass. AG Urge Northeast to Protect Air Under Competition*, *supra* note 14, at 10; *Mass. Attorney General Asks Northeast Govs. to Penalize Dirty, Imported Power*, *supra* note 14, at 1; *Mass. Calls for Northeast to Unite*, *supra* note 7; *Mass. Plan to Oversee*, *supra* note 14, at 7.

¹⁷² See *Allen*, *supra* note 6, at B1; *Maine Gov., Mass. AG Urge Northeast to Protect Air Under Competition*, *supra* note 14, at 10; *Mass. Attorney General Asks Northeast Govs. to Penalize Dirty, Imported Power*, *supra* note 14, at 1; *Mass. Calls for Northeast to Unite*, *supra* note 7.

¹⁷³ See *Allen*, *supra* note 6, at B1; *Maine Gov., Mass. AG Urge Northeast to Protect Air Under Competition*, *supra* note 14, at 10; *Mass. Attorney General Asks Northeast Govs. to Penalize Dirty, Imported Power*, *supra* note 14, at 1; *Mass. Calls for Northeast to Unite*, *supra* note 7.

The Massachusetts Attorney General suggested that the clean air compact should ban all importation of electricity from states where the power producers are not subjected to environmental standards that are comparable to the standards imposed on Northeastern electricity producers.¹⁷⁴ This would effectively ban the importation of electricity from all Midwestern electricity producers because their host states have far less stringent environmental standards.¹⁷⁵ Harshbarger also offered a more moderate plan in case this more extreme proposal is not acceptable.¹⁷⁶ Under this plan, the clean air compact would set an environmental standard for emissions on all generators of electricity and would impose a surcharge on sales of electricity produced by non-complying generators.¹⁷⁷ Although Harshbarger admitted that the proposals may be found to violate the Commerce Clause of the United States Constitution, he suggests that the plan could receive immunity from the Commerce Clause if it receives the blessing of Congress.¹⁷⁸

VI. COMMERCE CLAUSE LIMITATIONS ON ENVIRONMENTAL AND COMPETITIVE PROTECTIONISM

The Constitution grants Congress the power to regulate commerce among the states.¹⁷⁹ Many subjects of interstate trade that could potentially be subject to federal regulation inevitably escape congressional attention due to their local character and overwhelming number.¹⁸⁰ Where Congress fails to act, the states have the authority to regulate matters of legitimate local concern, such as the health and safety of its citizens.¹⁸¹ The Commerce Clause, however, limits the

¹⁷⁴ See Allen, *supra* note 6, at B1; *Maine Gov., Mass. AG Urge Northeast to Protect Air Under Competition*, *supra* note 14, at 10; *Mass. Calls for Northeast to Unite*, *supra* note 7; *Mass. Plan to Oversee*, *supra* note 14, at 7.

¹⁷⁵ See *Mass. Calls for Northeast to Unite*, *supra* note 7; Rosen, *supra* note 5, at 15 n.13.

¹⁷⁶ See *Mass. Calls for Northeast to Unite*, *supra* note 7.

¹⁷⁷ See Allen, *supra* note 6, at B1; *Maine Gov., Mass. AG Urge Northeast to Protect Air Under Competition*, *supra* note 14, at 10; *Mass. Calls for Northeast to Unite*, *supra* note 7.

¹⁷⁸ See *Maine Gov., Mass. AG Urge Northeast to Protect Air Under Competition*, *supra* note 14, at 10; *Mass. Attorney General Asks Northeast Govs. to Penalize Dirty, Imported Power*, *supra* note 14, at 1.

¹⁷⁹ See U.S. CONST. art. I, § 8, cl. 3. The Commerce Clause grants Congress the power "[t]o regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes." *Id.* The Framers granted Congress power over interstate commerce in "the conviction that in order to succeed, the new Union would have to avoid the tendencies toward economic Balkanization that had plagued relations among the Colonies and later among the States under the Articles of Confederation." *Oregon Waste Sys., Inc. v. Department of Envtl. Quality*, 511 U.S. 93, 98 (1994) (quoting *Hughes v. Oklahoma*, 441 U.S. 322, 325-326 (1979)); see generally *THE FEDERALIST* No. 42 (James Madison).

¹⁸⁰ See *City of Philadelphia v. New Jersey*, 437 U.S. 617, 623 (1978).

¹⁸¹ See *id.* at 623-24.

states' ability to burden the flow of interstate commerce.¹⁸² In analyzing the constitutionality of state regulation of interstate commerce, the United States Supreme Court applies heightened scrutiny to regulation that facially discriminates against articles of interstate trade.¹⁸³ The Court invalidates state regulation that discriminates against articles of interstate trade, either on its face or in its plain effect, unless the regulation advances a legitimate local purpose that could not be adequately served by nondiscriminatory alternatives.¹⁸⁴ On the other hand, the Court applies a much more flexible approach to state regulation that does not patently discriminate against interstate trade.¹⁸⁵ Where a state regulates evenhandedly to further a legitimate local interest, imposing only incidental effects on interstate commerce, the Court will uphold the regulation unless the burden imposed on interstate commerce is clearly excessive in relation to the putative local benefits.¹⁸⁶ This section examines both how the Court determines the appropriate level of scrutiny and how the Court applies the two tests to state regulation.

A. *The Court's Heightened Scrutiny of Facially Discriminatory Regulation of Interstate Commerce*

In 1978, in the landmark decision *City of Philadelphia v. New Jersey*, the United States Supreme Court held that a New Jersey statute that prohibited the importation of most solid or liquid waste violated the Commerce Clause of the Constitution because it facially discriminated against out-of-state commerce for no reason other than its origin.¹⁸⁷ In *City of Philadelphia*, the New Jersey State Legislature enacted a statute, which effectively closed its borders to all categories of waste.¹⁸⁸ The New Jersey legislature stated that the purpose of the ban was to protect the

¹⁸² See *Oregon Waste*, 511 U.S. at 98; *Maine v. Taylor*, 477 U.S. 131, 137 (1986); *Minnesota v. Clover Leaf Creamery Co.*, 449 U.S. 456, 470-71 (1981).

¹⁸³ See *infra* notes 187-221 and accompanying text.

¹⁸⁴ See *id.*

¹⁸⁵ See *infra* notes 221-47 and accompanying text.

¹⁸⁶ See *id.*

¹⁸⁷ 437 U.S. at 628-29.

¹⁸⁸ *Id.* at 618-619. The statute blocked the importation of all categories of waste, unless specifically excepted by the Commissioner of Environmental Protection. See *id.* at 619. The Commissioner promulgated regulations that provided four categories of exceptions that gave economic benefits to New Jersey commercial interests: garbage to be fed to New Jersey swine; separated waste material appropriate for and intended for a recycling or reclamation facility; municipal solid waste to be processed and used as fuel or heat; and pesticides, hazardous waste and chemicals to be processed or recovered at a registered solid waste disposal facility. See *id.* & n.2.

public health, safety and welfare of its citizens.¹⁸⁹ The ban on waste importation, however, negatively impacted operators of private landfills in New Jersey and the cities in other states that had agreements for waste disposal within New Jersey.¹⁹⁰ The opponents of the statute contended that the ban was merely an attempt to suppress competition and to stabilize the cost of solid waste disposal for New Jersey residents.¹⁹¹

The Court concluded that, regardless of the legislative purpose, the ban on out-of-state waste violated the Commerce Clause of the Constitution.¹⁹² The Court recognized that a state may enact legislation that places incidental burdens on interstate commerce in order to safeguard the health and safety of its citizens.¹⁹³ The Court, however, noting that it was alert to the evils of economic isolation, applied a virtual *per se* rule of invalidity to state legislation that amounts to simple economic protectionism.¹⁹⁴ The Court concluded that a state may discriminate against articles of commerce from other states only where there is some reason, apart from its origin, to treat the out-of-state commerce differently.¹⁹⁵

In *City of Philadelphia*, the Court concluded that both on its face and in its plain effect the New Jersey statute violated the principle of nondiscrimination.¹⁹⁶ The Court also reasoned that there was no basis for treating out-of-state waste differently than domestic waste, since one was not inherently more harmful than the other.¹⁹⁷ The Court further reasoned that it was impermissible for one state to attempt to isolate itself from a common problem by erecting a barrier to interstate trade.¹⁹⁸ Thus, the Court held that the New Jersey legislation was clearly impermissible under the Commerce Clause because it facially discrimi-

¹⁸⁹ See *id.* at 625.

¹⁹⁰ See *id.* at 619.

¹⁹¹ See *id.* at 625-26.

¹⁹² *City of Philadelphia*, 437 U.S. at 626-27. The Court reasoned that, "[t]his dispute about ultimate legislative purpose need not be resolved, because . . . the evil of protectionism can reside in legislative means as well as legislative ends." *Id.* at 626.

¹⁹³ See *id.* at 623-24.

¹⁹⁴ *Id.* at 624. The Court stated that, "[t]he crucial inquiry, therefore, must be directed to determining whether ch. 363 is basically a protectionist measure, or whether it can fairly be viewed as a law directed to legitimate local concerns, with effects upon interstate commerce that are only incidental." *Id.*

¹⁹⁵ *Id.* 626-27.

¹⁹⁶ *Id.* at 627. The Court reasoned that, "On its face, it imposes on out-of-state commercial interests the full burden of conserving the State's remaining landfill space." *Id.* at 628.

¹⁹⁷ See *City of Philadelphia*, 437 U.S. at 629.

¹⁹⁸ See *id.* at 628.

nated against an article of interstate commerce for no other reason than its origin.¹⁹⁹

In *Oregon Waste Systems, Inc. v. Department of Environmental Quality of Oregon*, a similar case decided in 1994, the United States Supreme Court held that Oregon's surcharge on the in-state disposal of solid waste generated in other states violated the Commerce Clause because the surcharge facially discriminated against interstate commerce, and the state was unable to show a legitimate local purpose which could not have been adequately served by nondiscriminatory alternatives.²⁰⁰ In 1989, Oregon imposed a \$2.25 per ton surcharge on all out-of-state waste disposed of at in-state facilities.²⁰¹ Although an \$.85 per ton fee also was imposed on the disposal of waste generated in Oregon, the operator of a solid waste landfill in Oregon challenged the rule under the Commerce Clause.²⁰²

The Court indicated that the first step in analyzing a law under the Commerce Clause was to determine if the law discriminated against interstate commerce or if it merely regulated evenhandedly with only incidental effects on interstate commerce.²⁰³ Because the Court determined that it was obvious that the \$2.25 per ton surcharge on out-of-state waste was discriminatory on its face, the Court reasoned that the application of the virtual per se rule of invalidity was appropriate.²⁰⁴ Under the heightened scrutiny test, the Court declared that it would invalidate the surcharge unless the state could show that it advanced a legitimate local concern that could not be adequately served by nondiscriminatory alternatives.²⁰⁵ The Court concluded that the state did not show that the surcharge advanced such a legitimate local concern.²⁰⁶ Rather, the Court concluded that Oregon's surcharge con-

¹⁹⁹ *Id.* at 628-29.

²⁰⁰ 511 U.S. 93, 108 (1994).

²⁰¹ *See id.* at 96.

²⁰² *See id.* at 97.

²⁰³ *See id.* at 99. The Court stated that "discrimination" simply means differential treatment of in-state and out-of-state economic interests that benefits the former and burdens the latter. *Id.*

²⁰⁴ *See id.* at 100.

²⁰⁵ *Oregon Waste*, 511 U.S. at 100-01.

²⁰⁶ *Id.* at 101-07. The Court noted that Oregon neither claimed that the disposal of out-of-state waste imposed higher costs on the state than did the disposal of in-state waste, nor that out-of-state waste posed any unique safety or health concerns that would legitimize the surcharge. *See id.* at 101. The Court rejected Oregon's contention that the surcharge was a "compensatory tax" that simply made the shippers of out-of-state waste pay their fair share of the cost of disposing of out-of-state waste. *See id.* at 102. The Court also rejected Oregon's claim that the surcharge was intended to prevent Oregon citizens from bearing the costs of disposing of out-of-state waste. *See id.* at 105-06.

stituted economic protectionism.²⁰⁷ Thus, the Court invalidated the surcharge because it facially discriminated against interstate commerce based only on its origin, and because the state was unable to show the advancement of a legitimate local concern.²⁰⁸

Conversely, in 1986, in *Maine v. Taylor*, the United States Supreme Court upheld a Maine statute that prohibited the importation of live baitfish because it determined that it was enacted to serve a legitimate local purpose that could not be served adequately by available nondiscriminatory alternatives.²⁰⁹ In *Taylor*, the state contended that it enacted the ban to protect the state's unique and fragile fisheries from parasites and nonnative species that might have been contained in the shipments of live baitfish.²¹⁰ An operator of a bait business in Maine, who was indicted for arranging to import 158,000 live baitfish in violation of the ban, moved to dismiss the indictment claiming that it unconstitutionally burdened interstate commerce.²¹¹

The Court in *Taylor* recognized that the challenged statute restricted interstate trade in the most direct manner possible, by blocking all incoming shipments of baitfish at the border.²¹² Thus, because the import ban discriminated on its face, the Court subjected the statute to the heightened scrutiny test.²¹³ In applying the heightened scrutiny test, the Court stated that it would hold the statute unconstitutional unless it served a legitimate local purpose that could not be served as well by available nondiscriminatory means.²¹⁴ The Court, however, concluded that Maine had a legitimate interest in protecting against the potential risks imposed on the state's aquatic ecology by the inadvertent importation of parasites and nonnative species.²¹⁵ In analyzing the second part of the heightened scrutiny test, the Court noted that scientifically accepted techniques for sampling and inspecting live baitfish for parasites and nonnative species did not exist.²¹⁶

²⁰⁷ *Id.* at 106.

²⁰⁸ *Id.* at 108.

²⁰⁹ 477 U.S. 131, 151-52 (1986).

²¹⁰ *Id.* at 133.

²¹¹ *See id.* at 132.

²¹² *See id.* at 137.

²¹³ *Id.* at 138.

²¹⁴ *Taylor*, 477 U.S. at 138, 140.

²¹⁵ *Id.* at 140-41, 148. Thus, *Maine* may be distinguished from *City of Philadelphia* because Maine discriminated against imported baitfish for reasons other than origin. *See id.*; *City of Philadelphia v. New Jersey*, 437 U.S. 617, 627, 629 (1978).

²¹⁶ *See Taylor*, 477 U.S. at 146-47. The Court further noted that a state "is not required to develop new and unproven means of protection at an uncertain cost." *Id.* at 147.

In upholding the constitutionality of the ban on live baitfish, the Court emphasized the distinction between state legislation enacted to protect in-state economic interests and legislation enacted to further legitimate local concerns.²¹⁷ As in *City of Philadelphia*, the Court recognized that statutes that amounted to "simple economic protectionism" have been subjected to a "virtual per se rule of invalidity."²¹⁸ The Court in *Taylor*, however, stated that the Commerce Clause does not elevate the protection of free trade above all other concerns.²¹⁹ The Court concluded that so long as a state does not needlessly obstruct interstate commerce or attempt to protect its in-state economic interests, "it retains broad regulatory authority to protect the health and safety of its citizens and the integrity of its natural resources."²²⁰ Thus, the Supreme Court in *Taylor* held that the ban on the importation of live baitfish was constitutionally valid because it served a legitimate local purpose that could not have been served as well by available nondiscriminatory alternatives.²²¹

B. *The Court's Treatment of Facially Neutral Regulation that Imposes an Incidental Burden on Interstate Commerce*

In 1970, in *Pike v. Bruce Church, Inc.*, the United States Supreme Court used a balancing test to invalidate a nondiscriminatory Arizona act that regulated the packaging of cantaloupes because the burdens that it imposed on interstate commerce were clearly excessive in relation to the local benefits that it provided.²²² Arizona's stated purpose in passing the act was to promote and preserve the reputation of Arizona growers by prohibiting the shipment of inferior or deceptively packaged produce.²²³ The act was used to prohibit a company from transporting uncased cantaloupes from the company's ranch in Arizona to a nearby facility in California for processing and packaging.²²⁴ Because the company had no other facility nearby in Arizona, the

²¹⁷ See *id.* at 148, 151.

²¹⁸ See *id.* at 148 (quoting *City of Philadelphia*, 437 U.S. at 624).

²¹⁹ *Id.* at 151.

²²⁰ *Id.*

²²¹ *Taylor*, 477 U.S. at 151.

²²² 397 U.S. 137, 142, 145-46 (1970). The Arizona act required all cantaloupes grown in the state and offered for sale to be packaged in approved, closed containers. See *id.* at 132.

²²³ See *id.* at 143.

²²⁴ See *id.* at 138-39. Ironically, the Court noted that the plaintiff in *Pike* grew cantaloupes of exceptionally high quality. See *id.* at 144. Therefore, the state was attempting to ensure that the packaging on the high quality cantaloupes indicated that they were grown in Arizona, thus improving the reputation of Arizona growers. See *id.*

parties stipulated to the fact that the practical effect of the prohibition was to compel the company to build packing shed facilities in Arizona.²²⁵ The new facility would have cost \$200,000 and would have taken many months to construct.²²⁶ The resulting delay would have led to the loss of the company's 1968 cantaloupe crop.²²⁷ The company, therefore, challenged the constitutionality of the act.²²⁸

In analyzing the constitutionality of the act, the Court applied a balancing test rather than the more rigid, heightened scrutiny test.²²⁹ The Court reasoned that the balancing test was appropriate for non-discriminatory regulation enacted to further legitimate local concerns that impose incidental effects on interstate commerce.²³⁰ The Court stated that it would uphold such legislation unless the burdens that it imposed upon interstate commerce were clearly excessive in relation to the local benefits.²³¹ In *Pike*, the Court concluded that the state's interest in promoting the reputation of its growers could not constitutionally justify requiring the plaintiff to construct a \$200,000 packing plant in the state.²³² Thus, the Court held that a nondiscriminatory act that nonetheless imposed incidental burdens on interstate commerce was unconstitutional because the burdens on interstate commerce were clearly excessive in relation to the local benefits.²³³

Conversely, in 1981, in *Minnesota v. Clover Leaf Creamery Co.*, the United States Supreme Court held that a Minnesota statute banning the retail sale of plastic, nonreturnable milk containers did not violate the Commerce Clause under the balancing test formulated in *Pike*.²³⁴ The Minnesota Legislature enacted the statute to promote resource and energy conservation and to ease the state's solid waste disposal problems by encouraging the use of environmentally superior contain-

²²⁵ See *id.* at 140.

²²⁶ See *id.* at 139-40.

²²⁷ See *Pike*, 397 U.S. at 139. The company estimated that it would have lost \$700,000. See *id.*

²²⁸ See *id.* at 138.

²²⁹ *Id.* at 142.

²³⁰ See *id.* at 142. The Court stated that, "[w]here the statute regulates even-handedly to effectuate a legitimate local public interest, and its effects on interstate commerce are only incidental, it will be upheld unless the burden imposed on such commerce is clearly excessive in relation to the putative local benefits." *Id.*

²³¹ *Id.* In balancing the local purpose against the burden that it imposed upon interstate commerce, the Court indicated that it would consider the nature of the local interest and whether it could be promoted by less burdensome means. See *id.*

²³² 397 U.S. at 145.

²³³ *Id.* at 142, 145.

²³⁴ 449 U.S. 456, 474 (1981). The Minnesota statute forbade the sale of milk and fluid milk products in non-returnable, nonrefillable rigid or semirigid containers composed of at least 50% plastic. See *id.* at 459.

ers.²³⁵ Numerous Minnesota and non-Minnesota companies involved in various segments of the dairy industry challenged the statute under the Commerce Clause.²³⁶

In *Clover Leaf*, the Court noted that the Commerce Clause limits state legislation even in areas of legitimate local concern, such as environmental protection and resource management.²³⁷ The Court further indicated that the balancing test established in *Pike* was appropriate for scrutinizing the Minnesota statute because it regulated even-handedly by prohibiting all milk retailers from selling milk in plastic, nonreturnable containers, regardless of origin.²³⁸ In applying the *Pike* balancing test, the Court concluded that the ban on plastic, nonreturnable containers was valid because the burden that it imposed on interstate commerce was not clearly excessive in relation to the local benefits.²³⁹ The Court reasoned that the ban imposed relatively minor burdens on interstate commerce because milk products in all other containers could still move freely across Minnesota's border and because most dairies would suffer only a slight inconvenience because they already packaged their products in several different types of containers.²⁴⁰

The Court reached this conclusion despite evidence that plastic resin used in the banned containers was produced entirely out-of-state, and that pulpwood used to manufacture paperboard containers was a major Minnesota product.²⁴¹ The Court reasoned that although pulpwood producers in Minnesota were likely to benefit from the statute, plastics would continue to be used in the production of plastic pouches, returnable bottles and paperboard itself.²⁴² In addition, out-of-state producers of pulpwood would likely absorb some of the business generated by the act.²⁴³ The Court further determined that even if the ban

²³⁵ See *id.* at 459, 466, 468-69. The State contended that the plastic containers required more energy to produce and took up more space in landfills than other nonreturnable milk containers. See *id.* at 468-69. The statute was intended to buy time in order to further develop and promote environmentally preferable alternatives, such as refillable plastic bottles and plastic pouches, before the rigid, non-returnable plastic containers became entrenched in the market. See *id.* at 459-60, 465. The State contended that it permitted the continued use of paperboard containers because they were less popular than the plastic container, and thus would not provide as much competition during the transition to environmentally superior containers. See *id.* at 465.

²³⁶ See *id.* at 458 & n.1.

²³⁷ See *id.* at 471.

²³⁸ See *id.* at 471-72.

²³⁹ *Clover Leaf*, 449 U.S. at 472-73.

²⁴⁰ See *id.* at 472.

²⁴¹ See *id.* at 473.

²⁴² See *id.*

²⁴³ See *id.* at 473.

on nonreusable, plastic containers placed a heavier burden on out-of-state industry, the burden was not clearly excessive in comparison to the state's legitimate interest in conserving energy and natural resources and in solving its waste disposal problems.²⁴⁴ The Court stated that it would not invalidate a nondiscriminatory statute that served a legitimate state purpose simply because it caused some business to shift from a predominantly out-of-state industry to a predominantly in-state industry.²⁴⁵ Additionally, under the final prong of the *Pike* balancing test, the Court concluded that the local benefits provided by the ban could not have been effectuated by an approach with less of an impact on interstate commerce.²⁴⁶ Thus, the Court held that the Minnesota ban on the retail sale of milk products in nonreturnable, plastic containers was valid under the Commerce Clause because it regulated evenhandedly without excessively burdening interstate commerce in relation to the local benefits served and because no adequate nondiscriminatory alternatives existed.²⁴⁷

VII. ANALYSIS OF THE CONSTITUTIONALITY OF THE MASSACHUSETTS PROPOSALS

If implemented, any of Massachusetts' proposals to ban or limit the importation of electricity generated by high emission facilities would almost certainly face constitutional challenge under the Commerce Clause by affected out-of-state producers.²⁴⁸ In order to ascertain if the United States Supreme Court would uphold the various Massachusetts proposals discussed above, it is essential to determine whether the Court would apply the heightened scrutiny test formulated in *City of Philadelphia* or the more flexible balancing test outlined in *Pike* and its progeny.²⁴⁹ This section will examine each proposal to determine the appropriate level of constitutional scrutiny and will consider the likelihood of their passing constitutional muster.²⁵⁰

²⁴⁴ *Clover Leaf*, 449 U.S. at 473.

²⁴⁵ *Id.* at 474.

²⁴⁶ *Id.* at 473-74.

²⁴⁷ *Id.* at 474.

²⁴⁸ See *Mass. Plan to Oversee*, *supra* note 14, at 7.

²⁴⁹ See *Oregon Waste Sys., Inc. v. Department of Env'tl Quality*, 511 U.S. 93, 100-01 (1994); *Maine v. Taylor*, 477 U.S. 131, 137-38, 140 (1986); *Clover Leaf*, 449 U.S. at 471-72, 474; *City of Philadelphia v. New Jersey*, 437 U.S. 617, 623-24, 629 (1978); *Pike v. Bruce Church, Inc.*, 397 U.S. 137, 142 (1970).

²⁵⁰ See *Oregon Waste*, 511 U.S. at 100-01; *Taylor*, 477 U.S. at 137-38, 140; *Clover Leaf*, 449 U.S. at 471-72, 474; *City of Philadelphia*, 437 U.S. at 623-24, 629; *Pike*, 397 U.S. at 142.

A. *Constitutional Analysis of the Attorney General's Proposals: The Outright Ban and the Performance-Based Surcharge*

The Court would almost certainly invalidate the Attorney General's proposed ban on the importation of power from states that do not subject their electricity producers to environmental standards comparable to those imposed on Northeastern producers.²⁵¹ Although the proposed ban would advance the legitimate local concerns of protecting the health and the environment of Massachusetts from the deleterious effects of Midwestern generated pollution, as discussed above, it most likely would be subjected to the rigorous heightened scrutiny test.²⁵² The proposed ban is an especially appropriate target for heightened scrutiny analysis because it blatantly discriminates against an article of interstate commerce based on its origin.²⁵³ There is no reason to treat the end product, electricity, differently because electrons generated out-of-state are indistinguishable from domestically produced electrons.²⁵⁴ Massachusetts could argue, however, that even though foreign and domestic electrons themselves are identical, the fact that different methods of production are used in the generation process justifies the discriminatory treatment.²⁵⁵ Although this argument potentially could persuade the Court that the ban was imposed for a legitimate reason other than mere origin, the ban would significantly burden interstate commerce in its practical effect.²⁵⁶ This is apparent due to the fact that the proposed ban would prohibit all electricity producers in non-complying states, even renewable energy producers such as solar and wind that emit no pollution, from selling power to

²⁵¹ See Allen, *supra* note 6, at B1; Maine Gov., Mass. AG Urge Northeast to Protect Air Under Competition, *supra* note 14, at 10; Mass. Attorney General Asks Northeast Govs. to Penalize Dirty, Imported Power, *supra* note 14, at 1; Mass. Calls for Northeast to Unite, *supra* note 7.

²⁵² See Oregon Waste, 511 U.S. at 100-01; Taylor, 477 U.S. at 137-38, 140; City of Philadelphia, 437 U.S. at 623-25; Maine Gov., Mass. AG Urge Northeast to Protect Air Under Competition, *supra* note 14, at 10; Mass. Calls for Northeast to Unite, *supra* note 7.

²⁵³ See Oregon Waste Sys., 511 U.S. at 100; Taylor, 477 U.S. at 137-38, 148; City of Philadelphia, 437 U.S. at 626-27, 629; Allen, *supra* note 6, at B1; Maine Gov., Mass. AG Urge Northeast to Protect Air Under Competition, *supra* note 14, at 10; Mass. Attorney General Asks Northeast Govs. to Penalize Dirty, Imported Power, *supra* note 14, at 1; Mass. Calls for Northeast to Unite, *supra* note 7.

²⁵⁴ See Oregon Waste, 511 U.S. at 101; City of Philadelphia, 437 U.S. at 626-27, 629; Maine Gov., Mass. AG Urge Northeast to Protect Air Under Competition, *supra* note 14, at 10; Mass. Attorney General Asks Northeast Govs. to Penalize Dirty, Imported Power, *supra* note 14, at 1; Mass. Calls for Northeast to Unite, *supra* note 7.

²⁵⁵ See Oregon Waste, 511 U.S. at 101; City of Philadelphia, 437 U.S. at 626-27, 629.

²⁵⁶ See Taylor, 477 U.S. at 138; City of Philadelphia, 437 U.S. at 627; Allen, *supra* note 6, at B1; Maine Gov., Mass. AG Urge Northeast to Protect Air Under Competition, *supra* note 14, at 10; Mass. Calls for Northeast to Unite, *supra* note 7.

Massachusetts residents.²⁵⁷ The proposed ban also fails under the third prong of the heightened scrutiny test since numerous, less discriminatory alternatives are available to the Commonwealth.²⁵⁸ The Attorney General's own surcharge proposal and the more moderate proposals suggested by the MDEP, which would either ban or place a surcharge on all electricity, regardless of origin, that did not meet generation performance standards, reveals this fact.²⁵⁹ Thus, as Attorney General Harshbarger indicated, the proposed ban would be allowed only if Congress explicitly delegated Massachusetts the authority to erect the ban because the ban facially discriminates against interstate commerce and less discriminatory alternatives could be implemented to address the problem.²⁶⁰

The Supreme Court would be more inclined to uphold the Attorney General's more moderate proposal to impose a surcharge on sales of electricity that do not comply with environmental standards for emissions.²⁶¹ This proposal could escape heightened scrutiny if it is applied to both in-state and out-of-state producers.²⁶² Depending on the basis for the emissions standard employed, it is possible that the Court could find the practical effect of the surcharge is to discriminate against interstate commerce.²⁶³ For example, the emissions standard could be set at a level that exempts all or most of Massachusetts' generators from the surcharge, yet imposes the surcharge on a significant percentage of out-of-state producers. This would appear to be

²⁵⁷ See *City of Philadelphia*, 437 U.S. at 627; Allen, *supra* note 6, at B1; *Maine Gov., Mass. AG Urge Northeast to Protect Air Under Competition*, *supra* note 14, at 10; *Mass. Calls for Northeast to Unite*, *supra* note 7.

²⁵⁸ See *Oregon Waste*, 511 U.S. at 100-01; *Taylor*, 477 U.S. at 138, 140, 146-47, 151; *Maine Gov., Mass. AG Urge Northeast to Protect Air Under Competition*, *supra* note 14, at 10; *Mass. Calls for Northeast to Unite*, *supra* note 7; *Massachusetts Might Condition Market Participation on Emissions Standards*, *supra* note 154, at 2.

²⁵⁹ See *Maine Gov., Mass. AG Urge Northeast to Protect Air Under Competition*, *supra* note 14, at 10; *Mass. Calls for Northeast to Unite*, *supra* note 7.

²⁶⁰ See *Oregon Waste*, 511 U.S. at 100-01, 1355; *Taylor*, 477 U.S. at 139-40; *Maine Gov., Mass. AG Urge Northeast to Protect Air Under Competition*, *supra* note 14, at 10; *Mass. Attorney General Asks Northeast Govs. to Penalize Dirty, Imported Power*, *supra* note 14, at 1.

²⁶¹ See *Maine Gov., Mass. AG Urge Northeast to Protect Air Under Competition*, *supra* note 14, at 10; *Mass. Calls for Northeast to Unite*, *supra* note 7.

²⁶² See *Oregon Waste*, 511 U.S. at 99; *Taylor*, 477 U.S. at 138, 151-52; *Minnesota v. Clover Leaf Creamery Co.*, 449 U.S. 456, 471-72 (1981); *City of Philadelphia*, 437 U.S. at 624; *Pike v. Bruce Church, Inc.*, 397 U.S. 137, 142 (1970). It is unclear whether or not the surcharge will be assessed against Massachusetts generating facilities that do not comply with the standards for emissions. See *Maine Gov., Mass. AG Urge Northeast to Protect Air Under Competition*, *supra* note 14, at 10; *Mass. Calls for Northeast to Unite*, *supra* note 7.

²⁶³ See *Taylor*, 477 U.S. at 138; *City of Philadelphia*, 437 U.S. at 627; *Maine Gov., Mass. AG Urge Northeast to Protect Air Under Competition*, *supra* note 14, at 10; *Mass. Calls for Northeast to Unite*, *supra* note 7.

the type of economic protectionism that the Court is especially vigilant in striking down.²⁶⁴

If the Court concludes that the surcharge is merely economic protectionism, it would then need to determine if Massachusetts was justified in discriminating against foreign electricity for a legitimate purpose other than origin.²⁶⁵ As discussed above, Massachusetts could argue that although the final product is identical regardless of its origin, discrimination against methods of production that emit high levels of pollution is justified because of health and environmental concerns.²⁶⁶ Even if the Court accepts this justification for the discriminatory treatment of out-of-state producers, it would invalidate the surcharge if it determines that a nondiscriminatory alternative exists.²⁶⁷ For example, the Court could determine that a general surcharge on all electricity would reduce Massachusetts' consumption of electricity, alleviating the health and environmental problems caused by electricity generation.²⁶⁸ Thus, it is unlikely that the proposed surcharge would survive the rigid requirements of the heightened scrutiny test.²⁶⁹

If, on the other hand, the Court determines that the surcharge neither facially discriminates against interstate commerce nor discriminates in practical effect, it would apply the balancing test outlined in *Pike*.²⁷⁰ The Court would balance the local benefits of the surcharge with the incidental burden that it imposes on interstate commerce.²⁷¹ It is difficult to speculate about the result of the balancing test because Attorney General Harshbarger did not indicate the amount of the proposed surcharge.²⁷² If Massachusetts sets the surcharge at an arbitrary rate that greatly exceeds the damage that is actually caused by

²⁶⁴ See *Taylor*, 477 U.S. at 138, 148; *Clover Leaf*, 449 U.S. at 471; *City of Philadelphia*, 437 U.S. at 623-24, 627.

²⁶⁵ See *Oregon Waste*, 511 U.S. at 100-01, 108; *Taylor*, 477 U.S. at 138, 140, 151-52; *City of Philadelphia*, 437 U.S. at 626-27, 629.

²⁶⁶ See *Oregon Waste*, 511 U.S. at 101, 108; *Taylor*, 477 U.S. at 151-52; *City of Philadelphia*, 437 U.S. at 626-27, 629.

²⁶⁷ See *Oregon Waste*, 511 U.S. at 100-01; *Taylor*, 477 U.S. at 138, 140, 146-47, 151.

²⁶⁸ See *Oregon Waste*, 511 U.S. at 100-01; *Taylor*, 477 U.S. at 138, 140, 146-47, 151; *City of Philadelphia*, 437 U.S. at 626.

²⁶⁹ See *Oregon Waste*, 511 U.S. at 100-01, 109; *Taylor*, 477 U.S. at 138, 140, 151-52.

²⁷⁰ See *Oregon Waste*, 511 U.S. at 99; *Taylor*, 477 U.S. at 138; *Clover Leaf*, 449 U.S. at 471-72; *City of Philadelphia*, 437 U.S. at 624; *Pike v. Bruce Church, Inc.*, 397 U.S. 137, 142, 145-46 (1970); *Maine Gov., Mass. AG Urge Northeast to Protect Air Under Competition*, *supra* note 14, at 10; *Mass. Calls for Northeast to Unite*, *supra* note 7.

²⁷¹ See *Oregon Waste*, 511 U.S. at 99; *Taylor*, 477 U.S. at 138; *Clover Leaf*, 449 U.S. at 471-74; *Pike*, 397 U.S. at 142, 145-146.

²⁷² See *Allen*, *supra* note 6, at B1; *Maine Gov., Mass. AG Urge Northeast to Protect Air Under Competition*, *supra* note 14, at 10; *Mass. Calls for Northeast to Unite*, *supra* note 7.

the pollution emitted by the non-complying facility, the Court would likely hold that the local benefits do not justify the burden imposed on interstate commerce.²⁷³ If the surcharge rate is calculated based upon the amount of damage caused in Massachusetts by pollution produced in non-complying electricity facilities, however, the Court likely would hold that the burdens imposed on interstate commerce were not clearly excessive in relation to the local benefits.²⁷⁴

As the Court noted in *Clover Leaf*, the Court would not necessarily invalidate the surcharge even if it imposes a relatively heavier burden on out-of-state electricity producers than on in-state producers.²⁷⁵ The Court will not invalidate a nondiscriminatory statute that serves a legitimate local purpose merely because it causes some business to shift from out-of-state industry to in-state industry.²⁷⁶ Massachusetts, therefore, may be allowed to set the emissions standard at a level comparable to the current emissions profiles of most in-state generators.²⁷⁷ Because Massachusetts electricity producers already are subjected to relatively strict emissions standards, setting the emissions standards at this level still would be justified as benefiting health and the environment.²⁷⁸ The surcharge would be more likely to withstand an attack under the Commerce Clause if the emissions standard is set at a level that forces some in-state electricity producers to pay the surcharge.²⁷⁹ If the proposed surcharge does not discriminate on its face or in its practical effect and it furthers a legitimate local concern that is not clearly excessive in relation to the burdens imposed on interstate commerce, the Court will treat the regulation with significant deference.²⁸⁰ The Court would not necessarily invalidate the surcharge even if it determines that Massachusetts could implement an approach with less of an impact on interstate commerce.²⁸¹ As the Court indicated in *Pike*, the existence of less burdensome means is not determinative, but, rather,

²⁷³ See *Oregon Waste*, 511 U.S. at 99; *Taylor*, 477 U.S. at 138; *Clover Leaf*, 449 U.S. at 471-74; *Pike*, 397 U.S. at 142, 145-46; *Mass. Attorney General Asks Northeast Govs. to Penalize Dirty, Imported Power*, *supra* note 14, at 1.

²⁷⁴ See *Oregon Waste*, 511 U.S. at 99; *Taylor*, 477 U.S. at 138; *Clover Leaf*, 449 U.S. at 471-72; *Pike*, 397 U.S. at 142, 145-46.

²⁷⁵ See *Clover Leaf*, 449 U.S. at 473-74.

²⁷⁶ See *id.* at 474.

²⁷⁷ See *id.* at 473-74.

²⁷⁸ See *id.*; *Rosen*, *supra* note 5, at 15 n.13.

²⁷⁹ See *Clover Leaf*, 449 U.S. at 473.

²⁸⁰ See *Maine v. Taylor*, 477 U.S. 131, 138 (1986); *Clover Leaf*, 449 U.S. at 471-74; *Pike v. Bruce Church, Inc.*, 397 U.S. 137, 142, 145-46 (1970).

²⁸¹ See *Clover Leaf*, 449 U.S. at 471, 473; *Pike*, 397 U.S. at 142.

is one factor considered in balancing the local purpose against the burdens imposed on interstate commerce.²⁸²

B. *Analysis of the MDEP's Ticket to Play Proposal*

Due to the similarities between the MDEP's ticket to play proposal and the Attorney General's surcharge proposal, the United States Supreme Court most likely would apply similar constitutional analysis.²⁸³ The ticket to play proposal would probably not be subjected to heightened scrutiny analysis because it will be facially neutral, applying the same generation performance standard to all power generators regardless of their origin.²⁸⁴ If the MDEP follows through with its indication that the standard will be comparable to the existing emissions profiles of Massachusetts utilities, however, the Court might hold that the proposal discriminates against interstate commerce in practical effect.²⁸⁵ As discussed in the analysis of the Attorney General's surcharge proposal, Massachusetts would appear to be effectuating economic protectionism if most of the in-state facilities already comply with the standard while a significant percentage of out-of-state facilities do not.²⁸⁶ If this proves to be the case, the ticket to play proposal would be subject to the rigorous heightened scrutiny test.²⁸⁷

The ticket to play proposal most likely would not stand up to the heightened scrutiny test.²⁸⁸ The proposal would pass the first prong of the test because it advances legitimate local concerns by mitigating the effects of the vicious cycle discussed in Section VII above, which could potentially result in deleterious effects on the health of Massachusetts'

²⁸² See *Clover Leaf*, 449 U.S. at 471, 473; *Pike*, 397 U.S. at 142.

²⁸³ See generally *Mass. Attorney General Asks Northeast Govs. to Penalize Dirty, Imported Power*, *supra* note 14, at 1; *Mass. Calls for Northeast to Unite*, *supra* note 7; *Mass. Enviro Official Warns*, *supra* note 14; *Massachusetts Might Condition Market Participation on Emissions Standards*, *supra* note 154, at 2.

²⁸⁴ See *Oregon Waste Sys., Inc. v. Department of Envtl. Quality*, 511 U.S. 93, 99-101 (1994); *Taylor*, 477 U.S. at 138; *Clover Leaf*, 449 U.S. at 472; *City of Philadelphia v. New Jersey*, 437 U.S. 617, 623-24, 627 (1978); *Pike*, U.S. at 142; *Mass. Enviro Official Warns*, *supra* note 14; *Massachusetts Might Condition Market Participation on Emissions Standards*, *supra* note 154, at 2.

²⁸⁵ See *Taylor*, 477 U.S. at 138; *City of Philadelphia*, 437 U.S. at 627; *Mass. Eyeing "Ticket to Play"*, *supra* note 5, at 7; *Massachusetts Might Condition Market Participation on Emissions Standards*, *supra* note 154, at 2.

²⁸⁶ See *Taylor*, 477 U.S. at 148; *City of Philadelphia*, 437 U.S. at 623-34, 627-28; *Mass. Eyeing "Ticket to Play"*, *supra* note 5, at 7; *Massachusetts Might Condition Market Participation on Emissions Standards*, *supra* note 154, at 2.

²⁸⁷ See *Oregon Waste*, 511 U.S. at 99-101; *Taylor*, 477 U.S. at 148; *City of Philadelphia*, 437 U.S. at 623-24, 627-28; *Mass. Eyeing "Ticket to Play"*, *supra* note 5, at 7; *Massachusetts Might Condition Market Participation on Emissions Standards*, *supra* note 154, at 2.

²⁸⁸ See *Oregon Waste*, 511 U.S. at 100-01, 108; *Taylor*, 477 U.S. at 138, 140; *Mass. Calls for Northeast to Unite*, *supra* note 7; *Mass. Enviro Official Warns*, *supra* note 14.

citizens and the quality of the environment.²⁸⁹ Massachusetts also may persuade the court that the ticket to play program satisfies the second prong of the test. It does not discriminate merely on the basis of origin because it is aimed at the method of production rather than the nature of the final product.²⁹⁰ The ticket to play proposal, however, almost certainly would fail the third prong of the heightened scrutiny test.²⁹¹ To invalidate the proposal, the Supreme Court merely would have to determine that a nondiscriminatory alternative was available that could adequately advance the state's interest.²⁹² For example, as suggested above, the Court could conclude that a general surcharge on all electricity sold in the state would mitigate the deleterious effects of the restructuring of the electricity utility industry by decreasing the amount of electricity purchased.²⁹³ Alternatively, the Court may conclude that Massachusetts could have established the generation performance standard based exclusively on careful and thorough considerations of health and environmental concerns, rather than merely setting it at a level comparable to the current emissions profiles of Massachusetts utilities.²⁹⁴ Thus, due to the almost insurmountable standard imposed by the heightened scrutiny test, the ticket to play proposal most likely would not withstand this rigorous analysis.²⁹⁵

Under the flexible balancing test formulated in *Pike*, however, the Supreme Court would likely uphold the MDEP ticket to play proposal.²⁹⁶ As noted above, the ticket to play proposal would advance the legitimate state concerns of preventing harm to human health and to the environment by regulating in a facially neutral manner.²⁹⁷ The MDEP should base the generation performance standards on health

²⁸⁹ See *Oregon Waste*, 511 U.S. at 100-01; *Taylor*, 477 U.S. at 138, 140, 148 n. 19, 151; *City of Philadelphia*, 437 U.S. at 624; *Mass. Calls for Northeast to Unite*, *supra* note 7; *Mass. Enviro Official Warns*, *supra* note 1.

²⁹⁰ See *Oregon Waste*, 511 U.S. at 101; *Taylor*, 477 U.S. at 151-52; *City of Philadelphia*, 437 U.S. at 627, 629.

²⁹¹ See *Oregon Waste*, 511 U.S. at 100-01; *Taylor*, 477 U.S. at 138, 140, 146-47, 151.

²⁹² See *Oregon Waste*, 511 U.S. at 100-01.

²⁹³ See *City of Philadelphia*, 437 U.S. at 626.

²⁹⁴ See *Oregon Waste*, 511 U.S. at 99-101; *Minnesota v. Clover Leaf*, 449 U.S. 456, 472, 474 (1981); *City of Philadelphia*, 437 U.S. at 624, 626-27; *Pike*, 397 U.S. at 142.

²⁹⁵ See *Oregon Waste*, 511 U.S. at 99-101, 108; *Taylor*, 477 U.S. at 138, 140, 151-52; *Mass. Attorney General Asks Northeast Govs. to Penalize Dirty, Imported Power*, *supra* note 14, at 1; *Mass. Calls for Northeast to Unite*, *supra* note 7; *Mass. Enviro Official Warns*, *supra* note 14.

²⁹⁶ See *Oregon Waste*, 511 U.S. at 99; *Taylor*, 477 U.S. at 138; *Clover Leaf*, 449 U.S. at 471-72; *City of Philadelphia*, 437 U.S. at 624; *Pike*, 397 U.S. at 142, 145-46; *Mass. Attorney General Asks Northeast Govs. to Penalize Dirty, Imported Power*, *supra* note 14, at 1; *Mass. Calls for Northeast to Unite*, *supra* note 7; *Mass. Enviro Official Warns*, *supra* note 14.

²⁹⁷ See *Clover Leaf*, 449 U.S. at 471-72, 474; *Pike*, 397 U.S. at 142-43; *Mass. Enviro Official Warns*, *supra* note 14; *Massachusetts Might Condition Market Participation on Emissions Standards*, *supra* note 154, at 2.

and environmental considerations, rather than merely setting the level based upon the existing emissions profiles of Massachusetts utilities.²⁹⁸ The Court would be less likely to hold that such a standard, which presumably would prohibit some Massachusetts generators from selling electricity while allowing out-of-state generators that comply with the standard to obtain additional business, discriminated in practical effect against interstate commerce.²⁹⁹ As indicated in *Clover Leaf*, the Court will not automatically invalidate the ticket to play proposal even if it causes some business to shift from in-state interests to out-of-state interests.³⁰⁰ The Court would not invalidate the ticket to play proposal under the *Pike* balancing test unless the burdens on interstate commerce are clearly excessive in relation to the local benefits furthered.³⁰¹ In light of the substantial state interest in mitigating the deleterious effects of pollution transported to Massachusetts from the Midwest, the Court would probably hold that it is sufficient to justify the burdens imposed on interstate commerce by the ticket to play proposal.³⁰²

C. Proposal to Protect the Health and Environment of the Northeast Without Violating the Commerce Clause of the United States Constitution

Both the generation performance standard and the surcharge based on emissions standards can potentially pass constitutional muster.³⁰³ To survive a constitutional challenge, Massachusetts must craft the regulation in a manner that will compel the Court to apply the flexible, balancing test originated in *Pike*, rather than the heightened scrutiny test.³⁰⁴ Thus, it is essential that the regulation applies even-handedly to both in-state and out-of-state producers of electricity.³⁰⁵

²⁹⁸ See *Mass. Eyeing "Ticket to Play," supra* note 5, at 7; *Massachusetts Might Condition Market Participation on Emissions Standards, supra* note 154, at 2.

²⁹⁹ See *Oregon Waste*, 511 U.S. at 99; *Clover Leaf*, 449 U.S. at 472-74.

³⁰⁰ See 449 U.S. at 473-74.

³⁰¹ See *Oregon Waste*, 511 U.S. at 99; *Clover Leaf*, 449 U.S. at 471-74; *Pike*, 397 U.S. at 142, 145-46. The availability of less discriminatory alternatives would be considered by the Court as part of the balancing test. See *Clover Leaf*, 449 U.S. at 471, 473; *Pike*, 397 U.S. at 142.

³⁰² See *Maine v. Taylor*, 477 U.S. 131, 148 (1986); *Clover Leaf*, 449 U.S. at 473; *City of Philadelphia v. New Jersey*, 437 U.S. 617, 624 (1978); *Pike*, 397 U.S. at 142-43, 145-46; *Mass. Attorney General Asks Northeast Govs. to Penalize Dirty, Imported Power, supra* note 14, at 1; *Mass. Calls for Northeast to Unite, supra* note 7; *Mass. Enviro Official Warns, supra* note 14.

³⁰³ See generally *Maine Gov., Mass. AG Urge Northeast to Protect Air Under Competition, supra* note 14, at 10; *Mass. Attorney General Asks Northeast Govs. to Penalize Dirty, Imported Power, supra* note 14, at 1; *Mass. Calls for Northeast to Unite, supra* note 7; *Mass. Enviro Official Warns, supra* note 14.

³⁰⁴ See 397 U.S. at 142, 145-46; see also *Oregon Waste*, 511 U.S. at 99-101; *Taylor*, 477 U.S. at 138, 140; *Clover Leaf*, 449 U.S. at 471-72; *City of Philadelphia*, 437 U.S. at 623-24.

³⁰⁵ See *Oregon Waste*, 511 U.S. at 99-100; *Taylor*, 477 U.S. at 138, 151-52; *Clover Leaf*, 449 U.S. at 471-72; *City of Philadelphia*, 437 U.S. at 624; *Pike*, 397 U.S. at 142.

This will avoid the appearance that the regulation is merely the type of economic isolationism that the Court strikes down with impunity.³⁰⁶

To further demonstrate to the Court that the regulation does not discriminate against interstate commerce in its practical effect, Massachusetts must take great care in determining the acceptable emissions standard.³⁰⁷ The emissions standard must be based solely upon a careful and thorough study of the effects of increased pollution on the health and safety of Massachusetts' citizens and environment.³⁰⁸ Thus, the standard should not be set at a level merely because it is comparable to the current emissions profiles of Massachusetts utilities.³⁰⁹ If the emissions level is based purely on health and safety criteria, it could pass constitutional muster even if it incidentally places greater burdens on out-of-state electricity producers.³¹⁰

The Court likely would apply the *Pike* balancing test to regulations that follow the suggestions outlined above.³¹¹ The Court recognizes that states have a legitimate interest in protecting the health of its citizens and the quality of its environment.³¹² Thus, if the Massachusetts regulation applies evenhandedly to all producers of electricity, regardless of origin, and merely imposes incidental burdens on interstate commerce, the Court would be unlikely to hold the burdens to be clearly excessive in relation to the local interests.³¹³

VIII. CONCLUSION

The restructuring of the electricity generation industry is rapidly approaching. In the very near future, all electricity customers may be permitted to seek out the most attractive retail packages available. Although it is estimated that consumers could save billions of dollars annually as a result of the creation of a competitive market for retail electricity, serious health, environmental and economic dangers loom on the horizon. As discussed in Section III, the restructuring of the electric utility industry may result in a vicious cycle that transports

³⁰⁶ See *Taylor*, 477 U.S. at 138, 148; *Clover Leaf*, 449 U.S. at 471; *City of Philadelphia*, 437 U.S. at 623-24, 627.

³⁰⁷ See *Taylor*, 477 U.S. at 148; *City of Philadelphia*, 437 U.S. at 627.

³⁰⁸ See *Mass. Eyeing "Ticket to Play," supra* note 5, at 7; *Massachusetts Might Condition Market Participation on Emissions Standards, supra* note 154, at 2.

³⁰⁹ See *Oregon Waste*, 511 U.S. at 99-101; *Clover Leaf*, 449 U.S. at 472, 474; *City of Philadelphia*, 437 U.S. at 624, 626-27; *Pike*, 397 U.S. at 142.

³¹⁰ See *Clover Leaf*, 449 U.S. at 473-74.

³¹¹ See *Oregon Waste*, 511 U.S. at 99-101; *Taylor*, 477 U.S. at 138; *Clover Leaf*, 449 U.S. at 471-72; *City of Philadelphia*, 437 U.S. at 624; *Pike*, 397 U.S. at 142, 145-46.

³¹² See *Taylor*, 477 U.S. at 148; *Clover Leaf*, 449 U.S. at 471; *Pike*, 397 U.S. at 143.

³¹³ See *Oregon Waste*, 511 U.S. at 99-100; *Taylor*, 477 U.S. at 138; *Clover Leaf*, 449 U.S. at 471-72; *Pike*, 397 U.S. at 142, 145-46.

increasing amounts of pollution to the Northeast as the competitive advantage of coal-fired electricity generators in the Midwest grows larger. The end result could be disastrous to the Northeast, placing human health at risk, deteriorating the environment and making it impossible for many electricity producers in the region to compete. Thus, the states in the Northeast have a vested interest in ensuring that this potential disaster is averted. If the federal government fails to implement an acceptable solution, the Northeastern states may be forced to devise their own plans to prevent the realization of their fears about restructuring. The states must devise their restructuring plans very carefully, however, to withstand the inevitable Commerce Clause challenges by affected out-of-state power producers. The Northeastern states must strive to ensure that their plans regulate evenhandedly against both in-state and out-of-state producers so they are not subjected to the rigorous, heightened scrutiny constitutional test. Additionally, the states must make certain that the burdens imposed on interstate commerce do not unreasonably exceed the legitimate local benefits to the health of the states' citizens and the environment. Although the United States Supreme Court likely would invalidate an outright ban on electricity from certain states, such as the Massachusetts Attorney General's proposed ban, under the heightened scrutiny test, limits based on generation performance standards may survive a challenge under the Commerce Clause. Thus, if the states in the Northeast carefully modify the Massachusetts general performance standards so that they neither discriminate against out-of-state generators facially or in practical effect and so that the standards employed are carefully crafted to match the anticipated environmental and health impacts in Massachusetts, they may succeed in limiting the importation of dirty power from the Midwest.

JUSTIN M. NESBIT