

NOTE

STATE RENEWABLE PORTFOLIO STANDARDS: THEIR CONTINUED VALIDITY AND RELEVANCE IN LIGHT OF THE DORMANT COMMERCE CLAUSE, THE SUPREMACY CLAUSE, AND POSSIBLE FEDERAL LEGISLATION

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Concerns about global warming, national energy security, and local air pollution have led to intense national debate about how the United States should generate the vast quantities of electrical power that it consumes.¹ Policymakers and other concerned parties are looking for ways to increase the diversity of the energy supply mix, decentralize power generation, reduce dependence on foreign oil, and reduce emissions of greenhouse gases (“GHGs”) and other air pollutants.² To achieve these goals, a wide variety of regulatory programs have been proposed or enacted³—many at the state

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¹ See, e.g., Thomas L. Friedman, *Turning the Election Green*, N.Y. TIMES, Apr. 25, 2007, at A27 (“‘A new conversation has started in the country—a new energy economy is what the people want,’ said Carl Pope, director of the Sierra Club. To get there, though, we need to force politicians to start thinking about going ‘green’ as part of our national security strategy, . . . as an economic opportunity, as a way to restore U.S. leadership, and as an answer for climate change.”); Rep. Frank Pallone (D-N.J.), Editorial, *Saving the Jersey Shore*, N.Y. TIMES, May 21, 2006, at 14NJ-23, (“[W]e need a sensible energy policy focused on conservation and efficiency. Conveniently, this approach would also help stabilize gas prices, reduce dependence on foreign oil and improve air quality.”); Chris Cilizza, *Climate Change a Security Issue, McCain Says*, WASH. POST, Apr. 24, 2007, at A10 (“Sen. John McCain (R-Ariz.) cast global warming and America’s dependence on foreign oil as national security issues in a speech on energy policy yesterday, the last of three addresses designed to outline the foundation of his soon-to-be announced presidential campaign.”); Editorial, *Energy Independence: The wrong target for policymakers*, WASH. POST, Jan. 21, 2007, at B6 (noting that “energy independence” is less rewarding than commonly perceived and should not be allowed to take precedence over attempts to curb global warming).

² See Adam Siegel, *No Efficiency in Power Line Debate*, WASH. POST, Jan. 11, 2007, at T8 (“We must not discount the potential to eliminate the need for the power lines through investment that would both reduce electricity demand (efficiency) and promote distributed power that provides resilience in the face of disaster.”).

³ See generally Kirsten Engel, *The Dormant Commerce Clause Threat to Market-Based Environmental Regulation: The Case of Electricity Deregulation*, 26 ECOLOGY L.Q. 243 (1999); Steven Ferrey, *Sustainable Energy, Environmental Policy, and States’ Rights: Discerning the Energy Future Through the Eye of the Dormant Commerce Clause*, 12 N.Y.U. ENVTL. L.J. 507 (2004); Database of State Incentives for Renewables & Efficiency, <http://www.dsireusa.org> (last visited Nov. 16, 2007).

level⁴—including the following: caps or taxes on the emissions of specific pollutants;⁵ subsidies for renewable energy research and generation, sometimes paid for by the energy sector at large through “system benefits charges”;⁶ the use of environmental externality values by public utility commissions in evaluating the costs of new generation projects;⁷ “green marketing” programs, which require utilities to provide consumers the option of purchasing energy generated from environmentally friendly sources;⁸ and renewable portfolio standards (“RPSs”), which require utilities to purchase specified amounts of their total generation needs from renewable sources.⁹

This Note examines the constitutional and practical issues raised by state RPS programs, which have become increasingly popular among states within the last five years.¹⁰ Part I of the Note describes RPSs and the energy eligibility restrictions that states are often motivated to include with them in order to reduce the leakage of economic benefits from the programs to other states. Many of these energy eligibility restrictions would likely be invalidated if challenged under the United States Constitution’s dormant Commerce Clause.¹¹ To address this threat of invalidation, Part II of the Note discusses current Supreme Court dormant Commerce Clause doctrine, under which statutes and regulations subject either to strict scrutiny, and likely held invalid, or to a more nuanced balancing test, in which case they are more likely to survive. Part III of the Note then analyzes the validity of state RPS programs and their energy eligibility restrictions under the dormant

⁴ See David R. Hodas, *State Law Responses to Global Warming: Is It Constitutional to Think Globally and Act Locally?*, 21 PACE ENVTL. L. REV. 53, 53–54 (2003) (comparing the frequency of policy initiatives on GHG mitigation at the state level with the inaction and opposition to such regulation at the federal level).

⁵ See, e.g., Regional Greenhouse Gas Initiative Memorandum of Understanding (Dec. 20, 2005), available at http://www.rggi.org/docs/mou_final_12_20_05.pdf (establishing a regional cap-and-trade program among several northeastern and mid-Atlantic states that limits carbon dioxide emissions from power plants in the region); Kevin Baumert, *Carbon Taxes vs. Emission Trading: What’s the Difference and Which is Better?*, GLOBAL POLICY FORUM, Apr. 17, 1998, http://www.globalpolicy.org/socecon/glotax/carbon/ct_et.htm (comparing the features and efficacy of carbon caps with those of carbon taxes).

⁶ See, e.g., MASS. GEN. LAWS ch. 25, § 20 (2006) (providing funds for the Massachusetts Renewable Energy Trust Fund); MASS. GEN. LAWS ch. 40J, § 4E (2006) (establishing and governing disbursement of the Massachusetts Renewable Energy Trust Fund). A system benefits charge is “a tax or surcharge mechanism for collecting funds from electric consumers,” the proceeds of which are typically “then used to ‘buy down’ the cost of power produced from sustainable technologies so that they can compete with more conventional technologies.” Ferrey, *supra* note 3, at 523 (citing Richard L. Ottinger & Rebecca Williams, *Renewable Energy Sources for Development*, 32 ENVTL. L. 331, 360 (2002)).

⁷ See, e.g., MINN. STAT. § 216B.2422 subd. 3 (2006).

⁸ See, e.g., MINN. STAT. § 216B.169 subd. 2 (2006).

⁹ See, e.g., 2007 Minn. Laws ch.3 1 (to be codified at MINN. STAT. § 216B.1691).

¹⁰ As of August 29, 2007, twenty-nine states had enacted RPSs and only seven of these programs predate 2002. See *infra* notes 19–24 and accompanying text. See generally Database of State Incentives for Renewables & Efficiency: Rules, Regulations, & Policies for Renewable Energy, <http://www.dsireusa.org/summarytables/reg1.cfm?&CurrentPageID=7&EE=1&RE=1> (last visited Nov. 16, 2007) [hereinafter DSIRE Summary Table] (providing links to descriptions of states’ RPS programs and to their governing RPS statutes and regulations).

¹¹ See U.S. CONST. art. I, § 8, cl. 3.

Commerce Clause. It pays special attention to two issues that have previously been addressed only in passing: (1) the validity of provisions that direct a state agency to implement an otherwise neutral statute in a discriminatory manner (favoring the economic interests of the state over those of other states); and (2) the validity of regulatory actions by a state agency that implement a completely neutral statute in a discriminatory manner. The analysis of Part III focuses on Minnesota's recently amended RPS statute,¹² which has established some of the most aggressive RPS obligations in the nation, as an example.

Finally, Part IV looks at the continued validity of state RPS programs under Supreme Court preemption doctrine, as well as their continued practicality, should Congress enact a federal RPS program or a federal cap on GHG emissions, which is an increasingly likely prospect. The Note concludes that the dormant Commerce Clause threat to discriminatory state RPS programs and to discriminatory implementation of neutral RPS programs is real and that state RPS programs, although unlikely to be preempted if a federal RPS program or GHG emissions cap is enacted, are likely to become at least somewhat less relevant in that event. In light of these considerations, the Note provides recommendations to Congress and state legislatures for ensuring the continued validity and effectiveness of state RPS programs.

I. RENEWABLE PORTFOLIO STANDARDS

Renewable portfolio standards are obligations on retail sellers of electricity to include in their generation "portfolios" a certain amount of electricity from "renewable" energy sources.¹³ Retailers can typically satisfy their RPS obligations by owning renewable energy facilities and producing their own renewable power or by purchasing such power from others' facilities.¹⁴ Offering retailers this flexibility allows them to meet their obligations

¹² 2007 Minn. Laws ch.3 1 (to be codified at MINN. STAT. § 216B.1691).

¹³ See NANCY RADER & SCOTT HEMPLING, *THE RENEWABLES PORTFOLIO STANDARD—A PRACTICAL GUIDE*, Prepared for the National Association of Regulatory Utility Commissioners 1 (2001). "Retail sellers of electricity" are entities that sell electric power directly to end users, as opposed to "wholesale" sellers, which sell to intermediaries. See FRED BOSSELMAN ET AL., *ENERGY, ECONOMICS AND THE ENVIRONMENT* 763 (2d ed. 2006). "The word 'portfolio' refers to the mix of power supply resources that a retail seller assembles to serve its customers." RADER & HEMPLING, *supra* note 13, at 2. As a general rule, energy sources are characterized as "renewable" if they "can be utilized without any discernable reduction in [their] future availability." Patrick R. Jacobi, Note, *Renewable Portfolio Standard Generator Applicability Requirements: How States Can Stop Worrying and Learn to Love the Dormant Commerce Clause*, 30 VT. L. REV. 1079, 1083 (2006) (citing FRED BOSSELMAN ET AL., *ENERGY, ECONOMICS, AND THE ENVIRONMENT* 113 (2000)). The most common examples of renewable energy sources include wind, solar, biomass, geothermal, and hydroelectric power. See *id.*; DSIRE Summary Table, *supra* note 10.

¹⁴ RADER & HEMPLING, *supra* note 13, at 2. As an example, amended Minnesota Statute section 216B.1691 subd. 2a requires that each electric utility "generate or procure" sufficient electricity from renewable energy sources. 2007 Minn. Laws ch.3 1 (to be codified at MINN. STAT. § 216B.1691).

by the most cost-effective means available to them; as a result, the environmental benefits targeted by RPS programs can be provided at a lower cumulative cost to providers and consumers than might be achieved by command-and-control programs.¹⁵ RPS programs can achieve even greater flexibility and economic efficiency if they include tradable credit systems that allow retailers to satisfy their obligations by purchasing renewable energy credits (“REC”s) that represent renewable energy generated by other providers.¹⁶ The use of RECs separates the “renewableness” of renewable energy from the energy itself, creating an entirely separate market for the renewable attribute alone, which is unencumbered by the physical constraints of the transmission grid.¹⁷ Most states include tradable credit systems in their RPS programs,¹⁸ and the remainder of this Note will assume, unless otherwise noted, that RECs can be used to satisfy RPS obligations.

Renewable portfolio standards are becoming an increasingly popular way for states to achieve the environmental and other benefits that result from a greater reliance on renewable energy. As of August 29, 2007, twenty-nine states and the District of Columbia had enacted RPSs;¹⁹ only seven of these programs were enacted before 2002,²⁰ and only one was enacted before 1997.²¹ On February 22, 2007, Minnesota enacted what has been called the

¹⁵ See RADER & HEMPLING, *supra* note 13, at 3; Engel, *supra* note 3, at 262–63.

¹⁶ See Engel, *supra* note 3, at 262–63 (“When a renewable portfolio standard is implemented through a tradable obligation scheme, a retailer can demonstrate compliance by proving ownership of renewable energy credits rather than the actual renewable-derived power Renewables generators could sell these credits separately to energy retailers or bundled together with the actual renewable power each credit represents. Energy retailers could decide for themselves whether to invest in renewable energy projects that generate credits or simply to purchase credits on a spot market.”); RADER & HEMPLING, *supra* note 13, at 3, 56–57.

¹⁷ See RADER & HEMPLING, *supra* note 13, at 56.

¹⁸ Of the twenty-nine states that have enacted RPS programs, *see infra* note 19, only two—Hawaii and Iowa—have not made some kind of provision for a tradable credit system. See DSIRE Summary Table, *supra* note 10; HAW. REV. STAT. §§ 269-91 to 93 (2007); IOWA CODE ANN. §§ 476.41–45 (2007). The fact that Iowa does not provide for a tradable credit system may be attributable to the early date that its program was enacted (1983). *See infra* note 21 and accompanying text. Hawaii’s choice not to include a tradable credit system may be attributable to its geographic isolation, which effectively limits the number of electricity providers whose use of renewable energy provides substantial environmental benefits to the state (other than reduction of GHG emissions) to a small number of in-state providers. Another reason for Hawaii’s choice may be that it allows electric utility companies and their affiliates to comply with the RPS standard by satisfying it in the aggregate. *See* HAW. REV. STAT. § 269-93.

¹⁹ See DSIRE Summary Table, *supra* note 10. The twenty-nine states with RPS programs are Arizona, California, Colorado, Connecticut, Delaware, Hawaii, Illinois, Iowa, Maine, Maryland, Massachusetts, Minnesota, Missouri, Montana, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Oregon, Pennsylvania, Rhode Island, Texas, Vermont, Virginia, Washington, and Wisconsin.

²⁰ *See id.* The seven states whose programs were enacted before 2002 are Connecticut (1998), Maine (1999), Nevada (1997), New Jersey (1999), Texas (1999), Wisconsin (1999), and Iowa (1983).

²¹ *See id.* Iowa’s RPS program was enacted in 1983. 1983 Iowa Acts, ch. 182, §§ 2–6 (codified at IOWA CODE §§ 476.41–45 (2007)).

“most aggressive” renewable portfolio standard in the nation.²² Amended Minnesota Statute section 216B.1691 requires electric utilities to “procure sufficient electricity generated by an eligible energy technology to provide . . . at least the following standard percentages of [each] utility’s total retail electric sales to retail customers in Minnesota . . . by the end of the year indicated:” (1) 12% by 2012; (2) 17% by 2016; (3) 20% by 2020; and (4) 25% by 2025.²³ In general, other states’ programs are structured similarly, with standards requiring that renewable energy sources ultimately satisfy 10% to 33% of these states’ electrical energy needs by final deadlines that are typically between the years 2015 and 2025.²⁴

Despite the fact that RPS programs are an economically efficient way of achieving environmental and other benefits, the very fact that such programs must be imposed by state regulators suggests the obvious—that electrical power usually cannot be produced as inexpensively from renewable sources as it can be from nonrenewable sources.²⁵ As a result, state ratepayers are likely to face higher utility bills due to RPS requirements because any resulting increased generation costs are passed on to them. A regulatory regime such as an RPS program is necessary to realize whatever environmental and national security benefits are targeted because these benefits are classic “public goods,” meaning that rational actors (in this case, either electricity ratepayers or regulators acting on their behalf) operating in a free market find it advantageous to “free ride” off the investments of others to-

²² Brian Bakst, *Pawlenty Signs Renewable Energy Law*, MINNESOTA STAR TRIBUNE, Feb. 22, 2007, <http://www.startribune.com/587/story/1018322.html>; see also Mark Brunswick, *Renewable energy gets a big boost; The Legislature OK'd a bill requiring more wind, hydrogen and solar power in Minnesota. Pawlenty said he'll sign it.*, MINNESOTA STAR TRIBUNE, Feb. 20, 2007, at A1; Dennis Lien, *State takes “landmark” step toward green power; Pawlenty signs bill setting aggressive standards for renewable energy production*, ST. PAUL PIONEER PRESS, Feb. 23, 2007, at A1. Bakst notes that “Minnesota’s numerical goal trails targets already in place for Maine and New York, but those states had been getting a significant amount of electricity from large-scale hydropower facilities before their standards were adopted.” Bakst, *supra*. Jeff Deyette, energy analyst at the Union of Concerned Scientists, said, “As of a percentage of where all their electricity will come from, Minnesota is now in the lead with this policy in terms of supporting new renewable energy development.” *Id.*

²³ These provisions are found in subdiv. 2a(a)(1)–(4) of the amended statute. See 2007 Minn. Laws ch.3 1 (to be codified at MINN. STAT. § 216B.1691). Subdiv. 2a(b)(1)–(4) imposes even more aggressive standards on Xcel Energy, the state’s largest retail provider, requiring that the following standard percentages be procured from renewable sources by the years indicated: 15% by 2010; 18% by 2012; 25% by 2016; and 30% by 2020. *Id.*

²⁴ See generally DSIRE Summary Table, *supra* note 10.

²⁵ See AM. WIND ENERGY ASS’N, WHAT DOES GREEN POWER COST? 1 (2007), http://www.awea.org/greenpower/gp_why4.html (“Green power typically costs an extra one to two cents per kilowatt-hour, although this varies. For residential customers, this usually means \$5 to \$10 a month extra.”); Jacobi, *supra* note 13, at 1084–85 (“Renewable energy costs more to produce than non-renewable energy, however, because most renewable energy sources provide power only intermittently and, geographically speaking, unevenly To overcome this problem, most renewable energy-production facilities require backup from facilities using fossil fuels. This . . . increases the already high up front costs necessary to fund renewable facilities.” (citing FRED BOSSELMAN ET AL., *supra* note 13 at 115)).

ward these benefits without ever paying anything themselves.²⁶ While states enacting RPS programs are typically powerless to prevent other states from enjoying the environmental and national security benefits created by their programs, it is feasible for them to use regulation to prevent the “leakage” of some of the programs’ economic benefits. These economic benefits, namely the jobs and commercial revenue created by construction and operation of new renewable energy generation facilities, can at least partially offset RPS programs’ overall costs to state citizens.²⁷

States have considered and pursued a number of regulatory strategies to keep the economic benefits of RPS programs within their borders.²⁸ Most of these strategies involve limitations on which renewable energy sources are eligible to satisfy the states’ RPS obligations. In-state and in-region location requirements limit the eligibility of qualifying renewable energy to that which is generated within the state²⁹ or within the surrounding region,³⁰ respectively. In-state consumption, metering, and sales requirements limit the eligibility of renewable energy to that which, respectively, is either physically consumed,³¹ or quantitatively verified³² (metered) within the state, or sold into the state.³³ Regional delivery requirements require that qualifying renewable energy be delivered into the regional power pool or independent system operator (“ISO”) control area serving the state.³⁴ In-state benefits requirements require that qualifying renewable energy provide sufficient

²⁶ See WILLIAM J. BAUMOL & WALLACE E. OATES, *THE THEORY OF ENVIRONMENTAL POLICY* 76–79 (1988).

²⁷ See RADER & HEMPLING, *supra* note 13, at 35.

²⁸ See generally Engel, *supra* note 3; Ferrey, *supra* note 3.

²⁹ Montana limits its definition of an “eligible renewable resource” to facilities that either (1) are located within Montana or (2) deliver electricity from another state into Montana and commence commercial operation after January 1, 2005. MONT. CODE ANN. § 69-8-1003(6)(2005). Thus, with respect to facilities operating prior to 2005, the state effectively has an in-state location requirement. Prior to 2001, Nevada strictly limited eligibility in its RPS program to “energy resources in [the] state.” NEV. REV. STAT. § 704.989(7) (2000), repealed by 2001 Nev. Stat. 355–56. A variation of the in-state location requirement is employed by Arizona and Colorado, which apply extra credit multipliers to renewable energy that is generated in-state. See ARIZ. ADMIN. CODE § R14-2-1618(C)(2) (2004); COLO. REV. STAT. § 40-2-124(1)(c)(III) (2007).

³⁰ See, e.g., CONN. GEN. STAT. § 16-245a(b) (2007); WASH. REV. CODE § 19.285.030(10) (2007).

³¹ See, e.g., N.M. CODE R. § 17.9.572.13B(2) (Weil 2007).

³² See, e.g., 16 TEX. ADMIN. CODE § 25.173(e)(4) (2007).

³³ See, e.g., N.M. CODE R. § 17.9.572.13B(2) (Weil 2007).

³⁴ Because of the interconnectedness of electricity transmission networks and the physical nature of electricity flows, which follow the path of least resistance, transmitting electricity directly from a specific generator or seller to a specific consumer is often impossible. See BOSSELMAN, *supra* note 13, at 859. Historically, interconnected electricity providers have participated in “power pools,” in which the contribution of electrons into a central “pool” by each provider is governed by informal cooperative mechanisms or short-term contracts. See *id.* at 860; Jacobi, *supra* note 13, at 1093–94. More recently, ISO control areas have been created in which the transmission network is managed by an independent third-party operator to ensure reliability of the transmission network and open and equal access to electricity providers and consumers. See BOSSELMAN, *supra* note 13, at 860.

specific (named)³⁵ or generic (unnamed) benefits to the state.³⁶ Finally, an alternative strategy to energy eligibility restrictions is to lower the costs of in-state renewable power generation through subsidies, which can be financed by system benefits charges on the energy sector at large or by general tax revenues.³⁷ All of these strategies can be used to retain the economic benefits of state RPS programs within state borders. However, implementation of any of these strategies can place burdens on interstate commerce and therefore raise dormant Commerce Clause problems.

II. DORMANT COMMERCE CLAUSE DOCTRINE

The Commerce Clause of the U.S. Constitution provides that “[t]he Congress shall have Power . . . [t]o regulate Commerce . . . among the several States”³⁸ It has long been recognized that while the clause is explicitly a positive grant of authority to Congress to regulate interstate commerce, it also has an implicit “negative” or “dormant” aspect in limiting the authority of States to regulate in the same way.³⁹ In determining whether state statutes or regulations⁴⁰ run afoul of the “dormant” Commerce Clause, the Supreme Court has repeatedly asserted that they be examined under one of two distinct lines of analysis.⁴¹ Under the first line, “[w]hen a state statute directly regulates or discriminates against interstate commerce, or when its effect is to favor in-state economic interests over out-of-state interests, [the Court has] generally struck down the statute without further inquiry.”⁴² “Indeed, when the state statute amounts to simple economic protectionism, a ‘virtually per se rule of invalidity’ has applied.”⁴³ Such statutes are subject to

³⁵ Rader and Hempling list environmental, resource diversity, technology advancement, in-state economic development, and political benefits as specific benefits provided by state RPS programs. *See* RADER & HEMPLING, *supra* note 13, at 3–5.

³⁶ *See id.* at A-3 to A-4.

³⁷ *See, e.g.*, MASS. GEN. LAWS ch. 25, § 20 (2006) (providing funds for the Massachusetts Renewable Energy Trust Fund); MASS. GEN. LAWS ch. 40J, § 4E (2006) (establishing and governing disbursement of the Massachusetts Renewable Energy Trust Fund); *see also* Engel, *supra* note 3, at 295–305; Ferrey, *supra* note 3, at 591, 595–610.

³⁸ U.S. CONST. art. I, § 8, cl. 3.

³⁹ *Wyoming v. Oklahoma*, 502 U.S. 437, 454 (1992).

⁴⁰ Nothing in the Constitution would suggest a distinction between state statutes, regulations, and other state and local regulatory actions under the dormant Commerce Clause, nor have any Supreme Court cases suggested a distinction. *See, e.g.*, *Wyoming v. Oklahoma* (striking down a state statute), *supra* note 39; *C & A Carbone, Inc. v. Town of Clarkstown, N.Y.*, 511 U.S. 383 (1994) (striking down a town ordinance); *H.P. Hood & Sons, Inc. v. Du Mond*, 336 U.S. 525 (1949) (invalidating a state commissioner’s licensing order). This Note will therefore treat state statutes, regulations, and other state and local regulatory actions interchangeably in its general discussion of the dormant Commerce Clause.

⁴¹ *See, e.g.*, *Carbone*, 511 U.S. at 390; *Wyoming v. Oklahoma*, 502 U.S. at 454–55 & n.12; *Philadelphia v. New Jersey*, 437 U.S. 617, 623–24 (1978).

⁴² *Brown-Forman Distillers Corp. v. N.Y. State Liquor Auth.*, 476 U.S. 573, 579 (1986) (citing *Philadelphia v. New Jersey*, 437 U.S. 617; *Shafer v. Farmers Grain Co.*, 268 U.S. 189 (1925); *Edgar v. MITE Corp.*, 457 U.S. 624 (1982)).

⁴³ *Wyoming v. Oklahoma*, 502 U.S. at 454–55 (quoting *Philadelphia v. New Jersey*, 437 U.S. at 624).

“strict scrutiny,”⁴⁴ and will be invalidated “unless the discrimination is demonstrably justified by a valid factor unrelated to economic protectionism,”⁴⁵ or the state “can demonstrate, under rigorous scrutiny, that it has no other means to advance a legitimate local interest.”⁴⁶ Under the second line of analysis, the “*Pike* test,” a state statute that “regulates even-handedly to effectuate a legitimate local public interest” and that has only “incidental” effects on interstate commerce will be upheld “unless the burden imposed on such commerce is clearly excessive in relation to the putative local benefits.”⁴⁷ Under either line of analysis, “the critical consideration is the overall effect of the statute on both local and interstate activity.”⁴⁸ The Court has also noted several times that there is no “clear line” separating those cases to which strict scrutiny applies and those to which the *Pike* test applies.⁴⁹

The Illinois statute that was invalidated in *Alliance for Clean Coal v. Miller* is one example of the kind of protectionist state regulation that is subject to strict scrutiny under the dormant Commerce Clause.⁵⁰ In *Alliance for Clean Coal*, the Seventh Circuit Court of Appeals struck down Illinois’s 1991 Coal Act⁵¹ because it unlawfully discriminated against the use of out-of-state coal.⁵² The Coal Act was the Illinois legislature’s response to Congress’s 1990 amendments to the Clean Air Act, which had effectively made the burning of low-sulfur western coal a less expensive means of Clean Air Act compliance for coal-fired generating plants than the burning of high-sulfur Illinois coal.⁵³ The court in *Alliance* found the following provisions of the Coal Act relevant to its decision: (1) those that required utilities and the state Commerce Commission to take the effects on the local coal industry into account when considering their Clean Air Act compliance plans; (2) those that required the four largest generating plants in the state then burning Illinois coal to include the installation of scrubbers in their compliance plans so that they would be able to continue using Illinois coal; (3) those that guaranteed that the plants would be able to include the costs of the scrubbers in their rate base; and (4) those that required that the Commission consider the impact on local employment when approving any 10% or greater de-

⁴⁴ See *id.* at 454, 455 n.12.

⁴⁵ *Id.* at 454.

⁴⁶ *Carbone*, 511 U.S. at 392.

⁴⁷ *Pike v. Bruce Church, Inc.*, 397 U.S. 137, 142 (1970).

⁴⁸ *Brown-Forman Distillers Corp. v. N.Y. State Liquor Auth.*, 476 U.S. 573, 579 (1986) (citing *Raymond Motor Transp., Inc. v. Rice*, 434 U.S. 429, 440–41 (1978)).

⁴⁹ See, e.g., *Brown-Forman Distillers*, 476 U.S. at 579; *Carbone*, 511 U.S. at 402; *Wyoming v. Oklahoma*, 502 U.S. at 455 n.12.

⁵⁰ 44 F.3d 591 (7th Cir. 1995).

⁵¹ 220 ILL. COMP. STAT. ANN. 5/8-402.1 (1993).

⁵² 44 F.3d at 595–97.

⁵³ See *id.* at 593. The 1990 amendments established a trading program for sulfur dioxide emission “allowances” and eliminated a pollution control device (“scrubber”) requirement. Together, these provisions made burning low-sulfur western coal a less expensive way to comply with the Clean Air Act than burning Illinois coal. See *id.* at 593.

crease in the use of Illinois coal.⁵⁴ The court found that all four of these provisions were discriminatory and protectionist in favor of the Illinois coal industry in both purpose and effect and thus found that the statute violated the dormant Commerce Clause.⁵⁵ The court rejected the state's arguments that the Coal Act merely "encouraged" the local coal industry and that, since it did not facially compel the use of Illinois coal or forbid the use of out-of-state coal, the Act did not discriminate, stating that "even ingenious discrimination is forbidden by the Commerce Clause."⁵⁶ Finally, the court rejected the state's attempt to justify its discrimination as a means of protecting a struggling state industry, stating that "[p]reservation of local industry by protecting it from the rigors of interstate competition is the hallmark of economic protection that the Commerce Clause prohibits."⁵⁷

The rejection of similar protective justifications in the case of *West Lynn Creamery, Inc. v. Healy*⁵⁸ demonstrates how certain kinds of subsidy programs can run afoul of the dormant Commerce Clause. In *West Lynn Creamery*, the Commissioner of the Massachusetts Department of Food and Agriculture had issued an emergency order that required every milk dealer in the state to make a monthly "premium payment" into a "Dairy Equalization Fund."⁵⁹ Although the dealers made the payment based on the volume of milk they processed from both in-state and out-of-state producers, the proceeds of the equalization fund were distributed solely to Massachusetts producers.⁶⁰ The Court ruled that, although the order consisted of two provisions—a nondiscriminatory tax and a state subsidy⁶¹—that would separately pass constitutional muster, the combination of the two had the discriminatory effect of a tariff and therefore violated the dormant Commerce Clause.⁶²

Finally, the case of *Minnesota v. Clover Leaf Creamery Co.*⁶³ provides a helpful example of the Court's application of the *Pike* doctrine. In *Clover Leaf Creamery*, the Court reversed a lower court decision that had invalidated a Minnesota statute that banned the sale of milk in plastic, nonreturnable, nonrefillable containers but permitted the sale of milk in other nonreturnable, nonrefillable containers, such as paperboard cartons.⁶⁴ The Court found that the statute regulated "evenhandedly" and in the resulting *Pike* analysis found that the statute effectuated "substantial" legitimate state

⁵⁴ *Id.* at 593–96.

⁵⁵ *See id.* at 595–97.

⁵⁶ *Id.* at 596 (citing *West Lynn Creamery, Inc. v. Healy*, 512 U.S. 186, 201 (1994)).

⁵⁷ *Id.* (quoting *West Lynn Creamery*, 512 U.S. at 205).

⁵⁸ 512 U.S. 186.

⁵⁹ *Id.* at 190.

⁶⁰ *See id.* at 190–91.

⁶¹ General state subsidies of local industry could easily be seen as protectionist and discriminatory, but have long been considered lawful. *See id.* at 210–11 (Scalia, J., concurring).

⁶² *See id.* at 194–96, 198–200.

⁶³ 449 U.S. 456 (1981).

⁶⁴ *Id.* at 459, 470–74 (evaluating MINN. STAT. § 116F.21 (1978)).

interests in “promoting conservation of energy and other natural resources and [in] easing solid waste disposal problems.”⁶⁵ At the same time, the Court found the asserted burdens on interstate commerce to be “relatively minor” because milk products could continue to move freely across the Minnesota border and because most dairies already packaged their products in more than one type of container, and thus could easily conform to the requirements.⁶⁶ The most serious of the alleged burdens—that the ban would disproportionately benefit Minnesota pulpwood producers and disproportionately harm plastic resin producers (of which there were none in Minnesota)—were held to be far from “clearly excessive” in relation to the local benefits “both because plastics [would] continue to be used in the production of plastic pouches, plastic returnable bottles, and paperboard itself, and because out-of-state pulpwood producers [would] presumably absorb some of the business generated by the Act.”⁶⁷

While the Court’s current dormant Commerce Clause doctrine, described above, presents serious questions about the measures that states use to try to retain the economic benefits of their RPS programs,⁶⁸ at least one commentator has questioned the wisdom of this doctrine. Kirsten Engel has suggested that the Court’s current dormant Commerce Clause doctrine adheres too rigidly to formalistic tests that often defeat the very goals that the Commerce Clause is meant to promote: “economic efficiency, interstate harmony, and a stronger union.”⁶⁹ Engel has suggested judicial reformation of the doctrine by, among other things, expanding the “market participant” exception.⁷⁰ The market participant exception, which is closely tied to the

⁶⁵ See *id.* at 471, 473.

⁶⁶ *Id.* at 472.

⁶⁷ *Id.* at 473. The Court found that the respondents had “exaggerate[ed] the degree of burden on out-of-state interests” and that the statute’s local benefits were “ample to support [the statute’s validity] under the Commerce Clause.” *Id.*

⁶⁸ See *infra* Part III.

⁶⁹ See Engel, *supra* note 3, at 322–23. *But see* H.P. Hood & Sons, Inc. v. Du Mond, 336 U.S. 525, 532–35 (1949) (suggesting that the Court’s anathema towards economically protectionist state barriers to interstate Commerce is “deeply rooted” in the history of the Constitution itself) (citing Baldwin v. G. A. F. Seelig, Inc., 294 U.S. 511, 521–22 (1935); other citations omitted).

⁷⁰ The thesis of Engel’s article is that “barriers to interstate commerce should be considered constitutionally permissible when they result from state efforts to: (1) retain the benefits of an incentive-based environmental market the state itself has created; (2) prevent the loss, to other jurisdictions, of the benefits generated where citizens collectively invest in industries using more environmentally sensitive production processes; or (3) stem the flow, to other states, of conventional economic benefits that result when a state forces industries to internalize the environmental costs of production and waste disposal.” Engel, *supra* note 3 at 250. Besides expanding the market participant exception, Engel recommends incorporating the theory of the “economic second best” into dormant Commerce Clause analysis. *Id.* at 324–34. This theory posits that, “where failures within an economic system prevent [efficient] conditions from prevailing . . . the presence of additional inefficiencies may cancel out the effects of the first inefficiency” and result in a “more efficient market overall.” *Id.* at 327–28 (citing R. G. Lipsey & K. Lancaster, *The General Theory of Second Best*, 24 REV. ECON. STUD. 11 (1956–57); WALTER NICHOLSON, MICROECONOMIC THEORY 521 (5th ed. 1992)). Commentators are split on whether economic efficiency is an appropriate guiding principle for Commerce

Court's tolerance of state subsidies,⁷¹ allows a state to discriminate in favor of its own citizens when it "has entered into the market itself," as opposed to when it acts in an exclusively regulatory role.⁷² However, while the distinction between routing funds to a favored in-state industry via the public treasury and achieving the very same thing through the regulation of private transactions may seem artificial in some instances, coming up with an alternative limiting principle to the market participant exception that will distinguish between universally accepted general subsidies and universally condemned discriminatory tariffs is problematic.⁷³ Additionally, while some on the Court, namely Justice Scalia joined by Justice Thomas, have recently expressed misgivings about overly expansive application of the dormant Commerce Clause, they have at the same time indicated a desire to adhere to *stare decisis* with respect to previous Court decisions interpreting the clause.⁷⁴

Clause jurisprudence and on whether it is historically grounded in the Constitution, although "[m]ost . . . seem to agree that . . . efficiency now explains much of modern dormant Commerce Clause jurisprudence." *Id.* at 326–27 & nn. 233–34.

⁷¹ See *id.* at 335.

⁷² See *Hughes v. Alexandria Scrap Corp.*, 426 U.S. 794, 806 (1976); *Reeves v. Stake*, 447 U.S. 429 (1980). Thus, in the RPS context, if a state itself was purchasing renewable power on behalf of its citizens, it would be free to discriminate in favor of in-state producers in its purchases because of its "market participant" status. See, e.g., *Alexandria Scrap*, 426 U.S. at 806 (upholding a statutory scheme whereby the state of Maryland, as a purchaser of old automobile hulks, purchased hulks on more favorable terms from in-state hulk suppliers than it did from out-of-state suppliers).

⁷³ Engel suggests that "[i]n order to limit the scope of [the proposed expanded market participant exception] in a principled manner, the exemption should apply only to that aspect of consumer preference legislation necessary to ensure that resident consumers enjoy the benefits of their consumer-based investment." Engel, *supra* note 3, at 341 (footnote omitted). Under this standard, Engel posits that "a renewable portfolio standard that expressly limits qualifying credits to those generated [in-state] would be valid, because such a restriction may be necessary for residents . . . to gain the environmental and economic benefits of the standard." *Id.* at 341–42. However, as Engel recognizes, "it could also be argued that a location restriction is not necessary to ensure that the legislating states receive the public goods benefits of [the] renewable portfolio standard." *Id.* at 342 n.272. An "add-on" location restriction like the one Engel describes can be easily severed from an RPS program simply by deleting the offending clause that restricts eligibility of renewable energy under the program to that generated within the state. Therefore, accepting the most plausible justification for such an add-on—that it makes the realization of the targeted public goods more economically palatable and politically salable—would effectively eviscerate the Commerce Clause by letting states enact protectionist legislation "as long as they really wanted to." If the restriction truly serves a legitimate purpose, then it is better dealt with under the already existing exceptions to the "virtually per se rule of invalidity." See *supra* notes 43–46 and accompanying text. Expanding the market participant exemption would only unnecessarily complicate the Court's dormant Commerce Clause doctrine. *But cf.* Engel, *supra* note 3, at 341 n.271 (suggesting that the Court's current subsidy and market participant precedents are inherently problematic themselves and only avoid seriously undermining the anti-protectionist principle of the Commerce Clause because of the infrequency with which states distribute cash subsidies).

⁷⁴ See *West Lynn Creamery, Inc. v. Healy*, 512 U.S. 186, 209–10 (1994) (Scalia, J., concurring); *cf.* *Wyoming v. Oklahoma*, 502 U.S. 437, 461–62 (1992) (Scalia, J., dissenting) ("I think it safe to say that the federal courts have never been plagued by a shortage of these suits brought by private parties, and that the nontextual elements of the Commerce Clause have not gone unenforced for lack of willing litigants."). *But see* Hodas, *supra* note 4, at 70–71 (sug-

Realistically then, there are only two plausible escapes from the Court's current dormant Commerce Clause doctrine for state RPS programs with economically protectionist measures. The first is a lack of enforcement, which seems to be the fortunate circumstance enjoyed by several states thus far. The second is congressional authorization that expressly allows states to implement such protectionist measures, which Congress could give under its express Commerce Clause power.⁷⁵ Barring such circumstances, state RPS programs will be scrutinized under the Court's current dormant Commerce Clause doctrine.

III. ANALYSIS OF STATE RPS PROGRAMS UNDER THE DORMANT COMMERCE CLAUSE

A. *The Validity of General RPS Energy Eligibility Restrictions*

Under the Supreme Court's current dormant Commerce Clause doctrine, a requirement that the renewable energy used to meet a state's RPS obligation be generated within the state itself, which is the most direct means for a state to retain the economic benefits of its RPS program for itself,⁷⁶ would almost certainly be struck down.⁷⁷ Such an in-state location requirement would be even more facially discriminatory against interstate commerce than Illinois's 1991 Coal Act, which was invalidated in *Alliance for Clean Coal* even though it did not facially compel the use of Illinois coal or forbid the use of out-of-state coal.⁷⁸ Because of this patent discrimination, an in-state location requirement would likely be struck down under the dormant Commerce Clause unless the state could "demonstrate, under rigorous scrutiny, that it [had] no other means to advance a legitimate local interest."⁷⁹ An in-state location requirement would be unlikely to fit into that "narrow class of cases," of which *Maine v. Taylor*, wherein a Maine statute banning the import of out-of-state baitfish was upheld because the state had no other way to prevent the spread of parasites and the adulteration of its native fish

gesting that it is not yet clear whether the current revival of federalist doctrine will lead to a recalibration of the "dormant Commerce Clause to be more deferential to state interests").

⁷⁵ See U.S. CONST. art. I, § 8, cl. 3; *H.P. Hood & Sons, Inc. v. Du Mond*, 336 U.S. 525, 526, 542 (1949) ("We have no doubt that Congress in the national interest could prohibit or curtail shipments of milk in interstate commerce, unless and until local demands are met. Nor do we know of any reason why Congress may not, if it deems it in the national interest, authorize the states to place similar restraints on movement of articles of commerce.").

⁷⁶ There is not likely to be a more direct way of retaining the jobs and commercial revenue created by the construction and operation of renewable energy generation facilities, see *supra* note 27 and accompanying text (identifying these elements as the primary economic benefits of RPS programs), than by requiring that they be located within the state.

⁷⁷ See Engel, *supra* note 3, at 272–74; RADER & HEMPLING, *supra* note 13, at A-1; Ferrey, *supra* note 3, at 583, 633; Jacobi, *supra* note 13, at 1111–12.

⁷⁸ See *supra* notes 50–57 and accompanying text.

⁷⁹ *C & A Carbone, Inc. v. Town of Clarkstown, N.Y.*, 511 U.S. 383, 392 (1994).

species, is a rare example.⁸⁰ Thus, because they are easily severable, as opposed to being integrated components essential for realizing the environmental benefits of RPS programs, in-state location requirements would almost certainly be struck down as provisions serving no purpose other than economic protectionism.⁸¹ Finally, in-region location requirements, while not discriminatory towards certain neighboring states, would still be facially discriminatory against the remainder of states and would therefore also be invalidated.⁸²

On the other hand, RPS programs with in-state consumption, metering, or sales requirements would likely survive scrutiny under the dormant Commerce Clause.⁸³ First, courts will probably not subject such restrictions to the “strict scrutiny” test because they do not facially discriminate against out-of-state sources:⁸⁴ renewable power from both in-state and out-of-state sources would have to pass identical even-handed tests under all three types of restrictions to be eligible to satisfy the RPS obligations.⁸⁵ As such, courts would analyze these restrictions under the *Pike* test.⁸⁶ The putative local benefits, including a cleaner local environment and greater decentralization of local power generation, would likely be considered substantial, just as the environmental benefits of prohibiting the sale of milk in plastic, nonreturnable, nonrefillable containers were in *Clover Leaf Creamery*.⁸⁷ By contrast, the incidental burdens on interstate commerce would likely be considered small or nonexistent, since it is unlikely that the proportion of new, renewa-

⁸⁰ See *id.* (citing *Maine v. Taylor*, 477 U.S. 131 (1986)).

⁸¹ See *Wyoming v. Oklahoma*, 502 U.S. 437, 454 (1992).

⁸² See *RADER & HEMPLING*, *supra* note 13, at A-1.

⁸³ See *Engel*, *supra* note 3, at 275–78; *RADER & HEMPLING*, *supra* note 13, at A-2, A-4 to A-7. In the case of metering, this assumes that there would be no discrimination against interstate commerce as to the possibly commercial activity of metering itself. Such discrimination would, like flow control ordinances, be “just one more instance of local processing requirements that [the Court has] long held invalid.” *Carbone*, 511 U.S. at 391. If the metering were done by the state itself, the “market participant” exception would likely apply so that there would be no dormant Commerce Clause violation. See *Hughes v. Alexandria Scrap Corp.*, 426 U.S. 794, 806 (1976).

⁸⁴ See *supra* notes 41–46 and accompanying text. On the contrary, such restrictions can be justifiable on their face as actions taken merely to constrain the direct effects of states’ lawful police powers over in-state consumption and purchasing behaviors to those within the state engaging in such behaviors. Indeed, any attempt to regulate out-of-state consumption and purchasing behaviors would likely violate the dormant Commerce Clause doctrine prohibiting extraterritorial regulation. See *Engel*, *supra* note 3, at 292 (citing *Healy v. Beer Inst.*, 491 U.S. 324, 336 (1989); *Cotto Waxo Co. v. Williams*, 46 F.3d 790, 793 (8th Cir. 1995); *Brown-Forman Distillers Corp. v. N.Y. State Liquor Auth.*, 476 U.S. 573, 582 (1986); *Edgar v. MITE Corp.*, 457 U.S. 624, 644 (1982); *Baldwin v. G.A.F. Seelig, Inc.*, 294 U.S. 511, 522 (1935)).

⁸⁵ Renewable power that is not consumed, metered, or sold within the state will not satisfy the obligations under the three types of restrictions regardless of whether it is generated inside or outside the state. Likewise, renewable power that is consumed, metered, or sold within the state will satisfy the obligations regardless of where it is generated.

⁸⁶ See *Pike v. Bruce Church, Inc.*, 397 U.S. 137, 142 (1970); see also *supra* notes 47, 63–67 and accompanying text.

⁸⁷ *Minnesota v. Clover Leaf Creamery*, 449 U.S. 456, 473 (1981). See also *supra* note 65 and accompanying text.

ble power from outside states under the restrictions would be significantly different from the proportion of old, nonrenewable power from outside states displaced by the program, due to the already existing physical constraints on power transmission.⁸⁸ Accordingly, it is unlikely that the burdens on interstate commerce would be considered “clearly excessive in relation to the putative local benefits.”⁸⁹ However, in addition to the likely lesser effectiveness in retaining economic benefits as compared with an in-state or in-region location requirement, in-state consumption, sales, and metering requirements would also likely add administrative complexity to an RPS program and, to some extent, reduce the flexibility and economic efficiency provided by a tradable renewable energy credit system.⁹⁰

By comparison, regional delivery requirements, such as those that require delivery into a regional power pool or ISO control area, possess the same nondiscriminatory characteristics as in-state sales, consumption, and metering tests but are likely to be more flexible and more easily administrable. Due to the difficulties of predicting and tracing electron flows,⁹¹ regional delivery requirements would be easier to monitor and enforce than an in-state consumption requirement, since the paths over which tracing would be required would be shortened. In addition, regional delivery requirements would allow for greater liquidity, and thus economic efficiency, in markets for RECs than in-state delivery and sales requirements, since they would decouple⁹² renewable energy credits from the renewable power itself at an earlier stage of electric transmission. Lastly, regional delivery requirements would avoid the peculiar physical limitations of an in-state metering requirement.⁹³ On the other hand, regional delivery requirements are perhaps a more oblique proxy for in-state economic and environmental benefits than in-state sales and consumption tests.⁹⁴ This might make regional delivery requirements less effective at retaining economic benefits for the enacting

⁸⁸ Cf. *Clover Leaf Creamery*, 449 U.S. at 472–73 (holding that the burden imposed on interstate commerce by Minnesota’s milk container statute was “relatively minor” despite allegations that the ban would disproportionately benefit Minnesota pulpwood producers and disproportionately harm plastic resin producers, of which there were none in Minnesota). See also *supra* notes 66–67 and accompanying text (describing the holding of *Clover Leaf Creamery* in greater detail). Rader and Hempling provide a cursory description of the effects of physical constraints on electricity flows. RADER & HEMPLING, *supra* note 13, at 34.

⁸⁹ *Pike*, 397 U.S. at 142.

⁹⁰ See *supra* notes 16–17 and accompanying text.

⁹¹ See BOSSELMAN ET AL., *supra* note 13, at 859–60; Jacobi, *supra* note 13, at 1093–94.

⁹² See *supra* note 17 and accompanying text.

⁹³ The in-state metering requirement could require construction of a special dedicated transmission line from an out-of-state generator to allow for direct, in-state metering of output. See RADER & HEMPLING, *supra* note 13, at A-2.

⁹⁴ This is because the requirement of delivery into a regional power pool or ISO control area would not be as likely to guarantee the displacement of nonrenewable energy generation that would cause local environmental harm to the state. Not surprisingly, the in-state benefits of a regional delivery requirement become more reliable the smaller the regional pool or control area is, which is perhaps why the requirements have been popular in northeastern states. See *infra* note 97 and accompanying text.

state, more vulnerable to invalidation under the *Pike* balancing test, and at least somewhat vulnerable to invalidation under the dormant Commerce Clause as extraterritorial regulation.⁹⁵ However, they are still likely to survive constitutional scrutiny for the same reasons as the in-state sales, consumption, and metering tests. Furthermore, they have been strongly endorsed by one commentator,⁹⁶ and are a popular feature of state RPS programs in several northeastern and Mid-Atlantic states.⁹⁷

Finally, the validity of RPS energy eligibility restrictions that are based on the provision of benefits to the state and of state subsidization of in-state renewable energy generation under the dormant Commerce Clause will likely depend on the particulars of how those program elements are structured. Under *West Lynn Creamery*, discriminatory subsidies of in-state renewable energy generation would likely risk invalidation if they were linked too closely to system benefits charges that were levied against in-state and out-of-state generation in general.⁹⁸ Benefits tests,⁹⁹ as long as they rejected economic benefits resulting from discrimination against interstate commerce, would likely survive under the *Pike* test, assuming that they were implemented in a manner that was not unduly burdensome on such commerce. Although Rader and Hempling endorse benefits tests,¹⁰⁰ administration of such tests would seem to present serious difficulties. Formulations of these tests that employed measurable, concrete criteria would likely be facially discriminatory towards interstate commerce and, thus, be virtually per se invalid.¹⁰¹ More vague formulations would raise administrability problems¹⁰² and might also be struck down under the dormant Commerce Clause if they effectively gave state commissions discretion to implement

⁹⁵ See *supra* note 84 and accompanying text. Regional delivery requirements should still survive an extraterritorial regulation test because the states imposing such requirements are not attempting to regulate the entire power pool or control area. Rather, the RPS percentage requirements are still based only on individual providers' electricity sales in the regulated state. See, e.g., N.J. ADMIN. CODE § 14:8-2.3 (2007). The increased costs to the providers are not likely to be passed on to consumers in another state for two reasons: (1) if the other state is regulated, the regulators would not allow the increased costs to be passed on to their consumers and (2) if the other state is deregulated, competition would prevent the costs from being passed on to consumers.

⁹⁶ See Jacobi, *supra* note 13, at 1128–34.

⁹⁷ See ME. REV. STAT. ANN. tit. 35-A, § 3210.2(B)(1)(Supp. 2006); N.J. ADMIN. CODE § 14:8-2.7 (2007); MD. CODE ANN., PUB. UTIL. COS. §§ 7-701(l)-(m), 7-704, 7-708 to 7-709 (LexisNexis Supp. 2006); 2007 N.H. LAWS HB 873-FN-Local § 362-F:6 subdiv. IV.; R.I. GEN. LAWS §§ 39-26-1 to 39-26-10 (2006).

⁹⁸ Kirsten Engel considers the risk of constitutional invalidation to be real but low and provides guidance on how states might structure their subsidies to avoid invalidation. See Engel, *supra* note 3, at 295–305. Steven Ferrey asserts that state renewable trust funds (trust funds established by states to subsidize renewable energy projects) as traditionally structured “will most likely fail constitutional muster if they discriminate based on geographic origin of the commerce.” Ferrey, *supra* note 3, at 590, 608.

⁹⁹ See *supra* notes 35–36.

¹⁰⁰ See RADER & HEMPLING, *supra* note 13, at A-3 to A-4.

¹⁰¹ See *id.* at A-4.

¹⁰² See Jacobi, *supra* note 13, at 1095–96.

standards in a discriminatory manner.¹⁰³ Considering these problems, it is not surprising that no states, to date, have implemented this approach.¹⁰⁴

B. Minnesota's RPS Statute: The Validity of Provisions That Direct a State Agency to Implement an Otherwise Neutral Statute in a Discriminatory Manner

In light of the dormant Commerce Clause analyses of RPS energy eligibility restrictions in Part III.A of this Note, Minnesota appears to have played it safe with its amended RPS statute, Minnesota Statute section 216B.1691, by requiring in subdivision 4(a) that the state's program "shall not give more or less credit to energy based on the state where the energy was generated."¹⁰⁵ However, beyond the unlikely possibility that the incidental burdens on interstate commerce of such a nondiscriminatory RPS program would be "clearly excessive in relation to [its] putative local benefits,"¹⁰⁶ Minnesota's statute potentially raises dormant Commerce Clause concerns because of the way in which it charges the state public utility commission with implementing the statute. Subdivision 9 states:

The commission shall take all reasonable actions within its statutory authority to ensure this section is implemented to maximize benefits to Minnesota citizens, balancing factors such as local ownership of or participation in energy production, development and ownership of eligible energy technology facilities by independent power producers, Minnesota utility ownership of eligible energy technology facilities, the costs of energy generation to satisfy

¹⁰³ See *infra* Part III.B–C.

¹⁰⁴ See DSIRE Summary Table, *supra* note 10.

¹⁰⁵ Subdivision 4 of Minnesota Statute section 216B.1961 establishes the RPS program's REC trading system:

(a) To facilitate compliance with this section, the commission, by rule or order, shall establish by January 1, 2008, a program for tradable renewable energy credits for electricity generated by eligible energy technology. The credits must represent energy produced by an eligible energy technology, as defined in subdivision 1. Each kilowatt-hour of renewable energy credits must be treated the same as a kilowatt-hour of eligible energy technology generated or procured by an electric utility if it is produced by an eligible energy technology. The program must permit a credit to be used only once. The program must treat all eligible energy technology equally and shall not give more or less credit to energy based on the state where the energy was generated or the technology with which the energy was generated. The commission must determine the period in which the credits may be used for purposes of the program.

(c) The commission shall facilitate the trading of renewable energy credits between states.

See 2007 Minn. Laws ch.3 4 (to be codified at MINN. STAT. § 216B.1691).

¹⁰⁶ *Pike v. Bruce Church, Inc.*, 397 U.S. 137, 142 (1970).

the renewable standard, and the reliability of electric service to Minnesotans.¹⁰⁷

While the nondiscriminatory credit recognition requirements of subdivision 4(a) would seem to preclude any “statutory authority” to implement section 216B.1691 in the discriminatory manner that subdivision 9 suggests, other provisions of the statute arguably do provide such authority. By using the word “may,” the text of the statute’s enforcement provision, subdivision 7, suggests that the commission has discretion over whether to issue any orders or impose any penalties when it finds noncompliance by a utility:

If the commission finds noncompliance, it may order the electric utility to construct facilities, purchase energy generated by eligible energy technology, purchase renewable energy credits, or engage in other activities to achieve compliance. If an electric utility fails to comply with an order under this subdivision, the commission may impose a financial penalty on the electric utility in an amount not to exceed the estimated cost of the electric utility to achieve compliance.¹⁰⁸

A commissioner balancing factors such as “local ownership of or participation in energy production”¹⁰⁹ and “Minnesota utility ownership of eligible energy technology facilities” might decide that “maximiz[ing] benefits to Minnesota citizens” would be best accomplished by strictly enforcing regulations against utilities that satisfy a large proportion of their RPS obligations with renewable power or credits from out-of-state sources and more

¹⁰⁷ See 2007 Minn. Laws ch.3 5–6 (to be codified at MINN. STAT. § 216B.1691). No other RPS statutes were found that contained similar charges to the implementing state agency. Most analogous might be the requirements for renewable energy certification promulgated by the New Mexico Public Utilities Regulation Commission, which, in describing the factors utilities should examine when deciding which renewable producers to buy from, state that “[o]ther factors being equal, preference shall be given to renewable energy generated in New Mexico.” N.M. CODE R. § 17.9.572.10(A)(1) (Weil 2007); see also Jacobi, *supra* note 13, at 1120–21 (discussing the likely invalidity of this New Mexico regulation). Several other RPS statutes identify promotion of in-state economic interests in their statements of legislative purpose but do not actually charge agencies with implementing the statutes in a discriminatory manner. See, e.g., 2007 N.C. Sess. Laws 397 1 (to be codified at N.C. GEN. STAT. § 62-2(a)(10)(b)); VT. STAT. ANN. tit. 30, § 8001(a)(1), (2) (2007).

¹⁰⁸ 2007 Minn. Laws ch.3 5 (to be codified at MINN. STAT. § 216B.1961).

¹⁰⁹ In *Lewis v. BT Investment Managers, Inc.*, the Supreme Court found that mere promotion of “local” ownership and financial control was protectionist and therefore invalid under the dormant Commerce Clause. See 447 U.S. 27, 43–44 (1980) (“With regard to the asserted interest in promoting local control over financial institutions, we doubt that the interest itself is entirely clear of any tinge of local parochialism. In almost any Commerce Clause case it would be possible for a State to argue that it has an interest in bolstering local ownership, or wealth, or control of business enterprise. Yet these arguments are at odds with the general principle that the Commerce Clause prohibits a State from using its regulatory power to protect its own citizens from outside competition.”).

laxly enforcing regulations against those utilities whose power or credits are obtained mostly from in-state sources.¹¹⁰

Through the interpretation of subdivisions 2b and 2c, a more explicit relaxation of the renewable portfolio standards could be used to achieve a similar discriminatory effect. Subdivision 2b(a) provides:

The commission shall modify or delay the implementation of a standard obligation, in whole or in part, if the commission determines it is in the public interest to do so. The commission, when requested to modify or delay implementation of a standard, must consider . . . other statutory obligations imposed on the commission or a utility.¹¹¹

Subdivision 2c permits the commission to exercise this authority to modify or delay implementation as part of an integrated resource planning (“IRP”) proceeding.¹¹² Under the authority of these provisions, the public utility commission could fulfill its subdivision 9 charge in a discriminatory manner by reducing standard obligations or delaying their implementation in order to benefit an electric utility that commits to obtaining some minimum portion of its renewable power obligation from in-state sources.¹¹³

Because of these real opportunities to implement Minnesota Statute section 216B.1691 in a discriminatory manner, the two clauses in subdivision 9 that charge the commission to “maximize benefits to Minnesota citizens”¹¹⁴ by considering (1) “local ownership of or participation in energy

¹¹⁰ While it is unlikely that a commissioner would ever explicitly announce such protectionist motivations behind an enforcement decision, the possibility of such an enforcement policy, coupled with the protectionist charge of subdivision 9 of amended Minnesota Statute section 216B.1691, bodes ill for the constitutional viability of the statute. *See infra* notes 114–117 and accompanying text.

¹¹¹ 2007 Minn. Laws. Ch.3 2–3.

¹¹² In an IRP proceeding, utilities must periodically file “resource plans” for approval by a public utility commission. *See, e.g.*, MINN. STAT. § 216B.2422 (2006). These plans indicate how a utility intends to supply the electricity needed to meet consumer demand under various forecast scenarios. *See id.* Subdiv. 1(d). Resource options might include “using, refurbishing, and constructing utility plant and equipment, buying power generated by other entities, controlling customer loads, [and/or] implementing customer energy conservation.” *See, e.g., id.*

¹¹³ Although a modified standard or delayed implementation that applied uniformly to all utilities could be used to achieve a similarly discriminatory effect against out-of-state sources, singling out individual utilities in the way described would seem to be a more effective and insidious way to accomplish the same ends. Some language in subdivision 2b(a) suggests that the standard could, in fact, be modified or delayed in such a selective manner. First, the commission can modify the standard “in whole or in part.” *See* 2007 Minn. Laws ch.3 1 (to be codified at MINN. STAT. § 216B.1691). Second, the statute allows the commission to modify the standard or delay its implementation because of “circumstances beyond an [individual] electric utility’s control.” *Id.*

¹¹⁴ This clause could also arguably be struck down under the Commerce Clause. However, because its discrimination does not specifically involve matters of commerce, it is more likely to survive than the two clauses singled out. *Cf. Jacobi, supra* note 13, at 1124 (citing TEX. UTIL. CODE ANN. § 39.904(a), (c)(2)(B) (Vernon 2004–2005) (Jacobi notes that, while language in Texas’s RPS statute stating that the statute was designed to “encourage the development, construction, and operation of new renewable energy projects at those sites *in this state*”

production” and (2) “Minnesota utility ownership of eligible energy technology facilities” would likely be struck down under the dormant Commerce Clause if challenged. These provisions facially discriminate against out-of-state economic interests and would likely be considered little more than “simple economic protectionism.”¹¹⁵ The court in *Alliance for Clean Coal v. Miller* invalidated similar provisions that required Illinois state commissioners to “take account of the effect on the local coal industry when considering [Clean Air Act] compliance plans” and to “consider the impact on employment related to the production of coal in Illinois” when approving any 10% or greater decrease in the use of Illinois coal.¹¹⁶ It makes little difference in such cases that the opportunity to discriminate against interstate commerce rests upon the discretion of a state commission. As the Supreme Court found in *Brown-Forman Distillers Corp. v. New York State Liquor Authority*, “[t]he protections afforded by the Commerce Clause cannot be made to depend on the good grace of a state agency.”¹¹⁷

C. Minnesota’s RPS Statute: The Legality of Regulatory Actions by a State Agency that Implement a Neutral Statute in a Discriminatory Manner

While invalidation of the arguably minor, discretionary provisions in subdivision 9 would leave Minnesota Statute section 216B.1691 largely intact, the analysis in Part III.B of this Note raises an interesting question: what might a state public utility commission, arguably predisposed to favor in-state interests and perhaps charged in its enabling act with promoting the “public interest” of its state’s citizens,¹¹⁸ get away with in implementing a facially neutral RPS statute in a discriminatory manner? There appears to be no direct case law on the subject, but state commissions acting in such a manner would potentially face legal challenges on two different grounds. First, their actions could be challenged under state administrative law doctrines analogous to the Administrative Procedure Act’s “arbitrary and capricious” doctrine.¹¹⁹ Although this might be the most straightforward route for

explicitly favors in-state renewable generation and could thus cause some Justices to find the statute discriminatory, the program’s eligibility requirements are more likely to violate the dormant Commerce Clause).

¹¹⁵ See *Philadelphia v. New Jersey*, 437 U.S. 617, 624 (1978).

¹¹⁶ *Alliance for Clean Coal v. Miller*, 44 F.3d 591, 595–96 (7th Cir. 1995).

¹¹⁷ 476 U.S. 573, 582 n.5 (1986); see also *Am. Meat Inst. v. Barnett*, 64 F. Supp. 2d 906, 921 (D.S.D. 1999) (rejecting assurances from the South Dakota Attorney General and Secretary of Agriculture that the state would “be sensitive to dormant Commerce Clause concerns” in implementing a discriminatory statute preventing price discrimination by meat packers and would administer it “in a narrow manner consistent with the Constitution”).

¹¹⁸ See, e.g., N.C. GEN. STAT. § 62-2(a)(1)–(3) (2006).

¹¹⁹ See 5 U.S.C. § 706 (1966) (“The reviewing court shall . . . (2) hold unlawful and set aside agency action, findings, and conclusions found to be—(A) arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law”); *Motor Vehicle Mfrs. Ass’n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 41 (1983); *Citizens to Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402, 413–14 (1971).

plaintiffs, it could be problematic if the state's administrative law doctrine gives a greater deference to state agencies. It also might undesirably prevent plaintiffs from bringing their suits in federal court, due to a lack of subject matter jurisdiction.¹²⁰ The second type of challenge a state commission might face is, of course, a dormant Commerce Clause action, which would clearly present a federal question that satisfied federal subject matter jurisdiction requirements and would allow a plaintiff to avoid the potential vagaries of a state's administrative law doctrine.

The Supreme Court case of *H.P. Hood & Sons, Inc. v. Du Mond*¹²¹ suggests that a state commission's actions in implementing a neutral RPS statute in a discriminatory manner would, in fact, be invalidated under the dormant Commerce Clause. In *Hood*, the Court ruled that, "as applied," a New York statute governing the licensure of milk dealers violated the dormant Commerce Clause when it was implemented by the state Commissioner of Agriculture and Markets in a discriminatory and protectionist manner.¹²² The statute at issue forbade the New York commissioner from granting a license to a milk dealer unless he or she was satisfied that "the issuance of the license [would] not tend to a destructive competition in a market already adequately served, and that the issuance of the license [was] in the public interest."¹²³ The commissioner denied plaintiff Hood, an established dealer that processed milk from producers in upstate New York to supply the city of Boston, a license for a new processing facility.¹²⁴ Considering that the new facility would "tend to reduce the volume of milk received [at other plants and] to increase [their] cost of handling milk" and would thus "have a tendency to deprive [local] markets of a supply needed during the short season," the commissioner found that licensing the proposed plant would, indeed, "tend to a destructive competition [and] not be in the public interest."¹²⁵ The Supreme Court did not challenge the statute itself or find any noncompliance by the commissioner.¹²⁶ Rather, it found that the commissioner had violated the dormant Commerce Clause by implementing the statute with "the avowed purpose and with the practical effect of curtailing . . . interstate commerce to aid local economic interests."¹²⁷

In light of *Hood*, implementation of a facially neutral RPS program in a discriminatory manner would likely be found an "as applied" violation of

¹²⁰ See U.S. CONST. art. III, § 2, cl. 1; 28 U.S.C. § 1331 (2000).

¹²¹ 336 U.S. 525 (1949).

¹²² See *id.* at 531, 545.

¹²³ NEW YORK AGRIC. & MKTS. LAW § 258-c (Consol. 1934).

¹²⁴ *Hood*, 336 U.S. at 526, 528.

¹²⁵ *Id.* at 528–29.

¹²⁶ *Id.* at 530 ("New York's regulations . . . are not challenged here but have been complied with."). This suggests that challenging the commission's implementation as being "arbitrary and capricious" would quite possibly have been unsuccessful.

¹²⁷ *Id.* at 530–31. The Court stated that the measures were not "supported by health or safety considerations but solely by protection of local economic interests, such as supply for local consumption and limitation of competition." *Id.*

the dormant Commerce Clause. If discretionary actions that a state agency takes in implementing a neutral statute (such as those that the Minnesota public utility commission has the authority to make under subdivision 7 of section 216B.1691 over whether and how to penalize noncompliance with RPS obligations and under subdivisions 2b and 2c over whether and how to modify or delay the obligations) are found to have a protectionist purpose or effect¹²⁸ similar to that of the New York state commissioner's denial of a milk dealer license in *Hood*,¹²⁹ those actions will likely be invalidated under the dormant Commerce Clause.¹³⁰ One case, *Walgreen Co. v. Rullan*, suggests that, if discriminatory implementation is sufficiently likely under a facially neutral statute and "nondiscriminatory alternatives adequate to preserve the local interest at stake" exist, the statute itself will be struck down.¹³¹ While *Walgreen* and *Hood* struck down discriminatory statutes and regulatory actions under the strict scrutiny standard, it stands to reason that, under the *Pike* test, even implementation of a neutral statute in a nondiscriminatory manner could be invalidated if the burden imposed on interstate commerce was "clearly excessive in relation to the putative local benefits."¹³²

IV. THE FUTURE OF RENEWABLE PORTFOLIO STANDARDS— A LARGER CONTEXT

In spite of the leakage of economic benefits to other states¹³³ and the possible dormant Commerce Clause problems posed by measures adopted to stop such leakage,¹³⁴ states continue to adopt new RPSs and to increase the

¹²⁸ Although *Alliance for Clean Coal v. Miller*, 44 F.3d 591 (7th Cir. 1995), and *Hood*, 336 U.S. 525, involved a statute and a regulatory action, respectively, that were found to be protectionist in both purpose and effect, protectionism in either purpose or effect appears to be sufficient for invalidation under the dormant Commerce Clause. See *Brown-Forman Distillers Corp. v. N.Y. State Liquor Auth.*, 476 U.S. 573, 579 (1986) ("When a state statute directly regulates or discriminates against interstate commerce, or when its effect is to favor in-state economic interests over out-of-state interests, [the Court has] generally struck down the statute without further inquiry.").

¹²⁹ *Hood*, 336 U.S. at 530–531.

¹³⁰ See *Jacobi*, *supra* note 13, at 1120–21 (finding that, although New Mexico's RPS statute does not contain discriminatory language, the state's facially discriminatory RPS regulations would be labeled as such and invalidated under Supreme Court doctrine).

¹³¹ See *Walgreen Co. v. Rullan*, 405 F.3d 50, 55, 59 (1st Cir. 2005). In *Walgreen*, the court struck down a Puerto Rico statute that required all commercial interests wishing to open or relocate a pharmacy in Puerto Rico to obtain a certificate of need because "[when] viewed more critically and in light of the Secretary's enforcement of the Act, the Act discriminate[d] against interstate commerce by permitting the Secretary to block a new pharmacy . . . simply because of the adverse competitive effects . . . on existing pharmacies," most of which were owned by interests within Puerto Rico. See *id.* at 53, 55. Indeed, "[w]hen the amendment was enacted, over ninety-two percent of pharmacies operating in Puerto Rico were locally-owned concerns." *Id.*

¹³² *Pike v. Bruce Church, Inc.*, 397 U.S. 137, 142 (1970).

¹³³ See *supra* Part I.

¹³⁴ See *supra* Part III.

proportions of renewable energy that existing programs require.¹³⁵ However, the mounting pressure for federal legislation that addresses global climate change¹³⁶ raises an important question: what would the continued legality of state renewable portfolio standards be if a federal RPS or other program addressing global climate change were enacted? As was mentioned in Part II of this Note, Congress has the power to explicitly authorize states to incorporate into their RPS programs economic restrictions that burden interstate commerce.¹³⁷ Along the same lines, Congress could just as easily provide explicit authorization for states to adopt RPS programs themselves in spite of any federal legislation with which they might overlap. However, absent such explicit authorization, a federal RPS program could create a different kind of constitutional barrier to state RPS programs, one which could result in the invalidation of such programs altogether: federal preemption under the Supremacy Clause.¹³⁸

It is generally recognized that federal law can preempt state laws in three different ways: “by express language in a congressional enactment, by implication from the depth and breadth of a congressional scheme that occupies the legislative field, [and] by implication because of a conflict with a congressional enactment.”¹³⁹ These forms of preemption are commonly re-

¹³⁵ See *supra* notes 10, 19–24 and accompanying text.

¹³⁶ See, e.g., UNITED STATES CLIMATE ACTION PARTNERSHIP, A CALL FOR ACTION: CONSENSUS PRINCIPLES AND RECOMMENDATIONS FROM THE U.S. CLIMATE ACTION PARTNERSHIP 2, 6 (2007) [hereinafter USCAP, A CALL FOR ACTION], available at <http://www.us-cap.org/ClimateReport.pdf> (“[W]e, the members of the U.S. Climate Action Partnership (USCAP) have joined together to recommend the prompt enactment of national legislation in the United States to slow, stop and reverse the growth of greenhouse gas (GHG) emissions over the shortest period of time reasonably achievable.”). USCAP is an “unprecedented alliance” of U.S.-based businesses, including Alcoa, BP America, Caterpillar, Duke Energy, DuPont, FPL Group, General Electric, Lehman Brothers, PG&E, and PNM Resources, and four leading environmental organizations: Environmental Defense, Natural Resources Defense Council, Pew Center on Global Climate Change, and World Resources Institute. See Press Release, United States Climate Action Partnership, Major Businesses and Environmental Leaders Unite to Call for Swift Action on Global Climate Change (Jan. 22, 2007), available at <http://www.us-cap.org/media/release.pdf>; see also, e.g., Union of Concerned Scientists, Federal Policies—The 2005 Energy Bill, http://www.ucsusa.org/clean_energy/clean_energy_policies/energy-bill-2005.html (last visited Nov. 16, 2007) (“Despite the 31,000 last-minute letters from UCS activists around the country, the final bill [of the Energy Policy Act of 2005] excluded a Renewable Electricity Standard that would have required major electric utilities to gradually increase their use of clean renewable energy such as wind, solar, and bioenergy. Although the renewables standard passed the Senate with bi-partisan support, House leadership stripped it from the final bill.”); Union of Concerned Scientists, Renewable Energy Standards—Mitigating Global Warming, http://www.ucsusa.org/clean_energy/clean_energy_policies/RES-climate-strategy.html (last visited Nov. 16, 2007) (promoting renewable portfolio standards to prevent the harmful and likely irreversible effects of global warming).

¹³⁷ See *supra* note 75 and accompanying text.

¹³⁸ U.S. CONST. art. VI, cl. 2 (“This Constitution, and the Laws of the United States . . . shall be the supreme Law of the Land; . . . any Thing in the Constitution or Laws of any State to the Contrary notwithstanding.”).

¹³⁹ *Lorillard Tobacco Co. v. Reilly*, 533 U.S. 525, 541 (2001) (citations omitted); see also *Mich. Canners & Freezers Ass’n, Inc. v. Agric. Mktg. & Bargaining Bd.*, 467 U.S. 461, 469 (1984) (“Federal law may pre-empt state law in any of three ways. First, in enacting federal law, Congress may explicitly define the extent to which it intends to pre-empt state law (citing

ferred to as “express,” “field,” and “conflict” preemption. Under the doctrine of express preemption, it is elementary that all state RPS programs would be invalidated by a congressional RPS statute that explicitly provided for preemption. In the absence of such express language, however, the relevant question would be whether “conflict” preemption existed due to conflicts between the state and federal standards. In general, state environmental standards that are more stringent than their federal counterparts have been upheld by the courts, either because Congress has explicitly reserved authority in its otherwise-conflicting statute for the states to adopt such controls¹⁴⁰ or because of the Supreme Court’s long-standing presumption against implied preemption.¹⁴¹ Meanwhile, state standards that are less stringent than federal ones might be allowed to stand, but, as a practical matter, the state standards would become largely irrelevant because the necessary compliance with the more stringent federal standards would effectively guarantee compliance with the state standards.¹⁴²

In order to remove any possible ambiguity regarding more stringent state RPSs, Congress should put an explicit savings clause into any federal RPS statute to confirm the validity of such standards.¹⁴³ Such authorization

Shaw v. Delta Air Lines, Inc., 463 U.S. 85, 95–96 (1983)). Second, even in the absence of express pre-emptive language, Congress may indicate an intent to occupy an entire field of regulation, in which case the States must leave all regulatory activity in that area to the Federal Government (citing Fidelity Savings and Loan Ass’n v. De la Cuesta, 458 U.S. 141, 153 (1982); Rice v. Santa Fe Elevator Corp., 331 U.S. 218, 230 (1947)). Finally, if Congress has not displaced state regulation entirely, it may nonetheless pre-empt state law to the extent that the state law actually conflicts with federal law. Such a conflict arises when compliance with both state and federal law is impossible (citing Florida Lime and Avocado Growers v. Paul, 373 U.S. 132, 142–43 (1963)), or when the state law ‘stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress (quoting Hines v. Davidowitz, 312 U.S. 52, 67 (1941)).’”

¹⁴⁰ See Robert L. Glicksman, *From Cooperative to Inoperative Federalism: The Perverse Mutation of Environmental Law and Policy*, 41 WAKE FOREST L. REV. 719, 743 (2006); Hodas, *supra* note 4, at 69. *But see* Clean Air Act § 209(e), 42 U.S.C. § 7543(e) (2000) (providing that no states other than California can adopt vehicle emission standards that differ from those set by the Environmental Protection Agency).

¹⁴¹ See *Medtronic, Inc. v. Lohr*, 518 U.S. 470, 485 (1996) (“First, because the States are independent sovereigns in our federal system, we have long presumed that Congress does not cavalierly pre-empt state-law causes of action. In all pre-emption cases, and particularly in those in which Congress has ‘legislated . . . in a field which the States have traditionally occupied,’ we ‘start with the assumption that the historic police powers of the States were not to be superseded by the Federal Act unless that was the clear and manifest purpose of Congress.’”) (quoting *Rice v. Santa Fe Elevator Corp.*, 331 U.S. 218, 230 (1947)) (citing *Hillsborough County v. Automated Med. Labs., Inc.*, 471 U.S. 707, 715–16 (1985); *Fort Halifax Packing Co. v. Coyne*, 482 U.S. 1, 22 (1987)). *But see* Note, *New Evidence on the Presumption Against Preemption: An Empirical Study of Congressional Responses to Supreme Court Preemption Decisions*, 120 HARV. L. REV. 1604, 1604 (2007) (noting that the Court “has not reliably applied this presumption, and Justices frequently disagree about when the presumption applies and what result it requires in any given case”) (footnotes omitted).

¹⁴² See Jonathan H. Adler, *When is Two a Crowd? The Impact of Federal Action on State Environmental Regulation*, 31 HARV. ENVTL. L. REV. 67, 85 (2007).

¹⁴³ Such savings clauses are common in federal pollution control statutes, including section 7416 of the Clean Air Act, section 1370 of the Clean Water Act, section 2617(a)(1) of the

would permit states to serve as policy laboratories¹⁴⁴ in environmental regulation and would restore to states some of their traditional authority over regulating their local environments.¹⁴⁵ Further, unlike the case of vehicle emissions regulation, where Congress has explicitly preempted most state standards,¹⁴⁶ RPS obligations that are more stringent than their federal counterparts are unlikely to create economic inefficiency attributable to non-uniform manufacturing requirements on industry.¹⁴⁷

As Congress considers calls for federal legislation on climate change, one benefit of a national RPS program that it should recognize, besides an increase in the environmental and energy security benefits that state programs already provide, is the overall efficiency gains that could be provided by the adoption of a federal program that included a national REC trading system. Such a system would reduce the entry barriers states considering the implementation of new RPS programs that make use of RECs currently face, reduce the collective overall costs of state RPS programs through economies of scale, and improve the integrity of REC trading systems by reducing or eliminating the possibility of intentional or inadvertent double-counting of credits.¹⁴⁸ In fact, given the benefits of consolidation and the number of states that have already adopted their own RPS programs with tradable credits,¹⁴⁹ Congress should consider establishing a national REC trading system even if it never establishes federal RPS obligations. Along the same lines, as long as such a federal system seems far off, states should seriously consider developing regional credit trading systems; existing environmental regional programs, such as the Regional Greenhouse Gas Initiative (“RGGI”) cap-

Toxic Substances Control Act, and section 6929 of the Resource Conservation and Recovery Act. See Glicksman, *supra* note 140, at 743.

¹⁴⁴ See *New State Ice Co. v. Liebmann*, 285 U.S. 262, 311 (1932) (Brandeis, J., dissenting) (“It is one of the happy incidents of the federal system that a single courageous State may, if its citizens choose, serve as a laboratory; and try novel social and economic experiments without risk to the rest of the country.”).

¹⁴⁵ See generally Adler, *supra* note 142 (discussing the historical evolution of environmental protection in the United States from a patchwork of state laws, local ordinances, and common law nuisance protections, to a predominantly federal regulatory regime that emerged in the 1970s, and, finally, to the current trend towards some increase in state control and also discussing the conflicting scholarly opinions on the appropriate balance between federal and state control over environmental regulation); Hodas, *supra* note 4, at 69–70 (discussing the Supreme Court’s revived federalism doctrine).

¹⁴⁶ Under section 209(e) of the Clean Air Act, only California is allowed to set vehicle emissions standards that differ from the national standards set by the Environmental Protection Agency, and the California emissions standards must be more stringent than their federal counterparts. See 42 U.S.C. § 7543(e) (2000). However, under section 177 of the Clean Air Act, other states are allowed to adopt more stringent standards as well, but only if their standards are identical to those of California. See 42 U.S.C. § 7507.

¹⁴⁷ Whereas compliance with differing vehicle emissions standards could require very different fleets of vehicle models to match both the emissions standards and consumer demand in different jurisdictions, differing RPS standards would simply require more or less of the same types of renewable energy generation facilities and technologies.

¹⁴⁸ See RADER & HEMPLING, *supra* note 13, at C-1 to C-3.

¹⁴⁹ See *supra* notes 18–19 and accompanying text.

and-trade program for carbon emissions that ten northeastern and Mid-Atlantic states recently adopted, could provide suitable models.¹⁵⁰

Although states should be mindful of the legal implications of a national RPS program, they should probably recognize that the most likely Congressional response to global climate change is actually the establishment of a cap-and-trade system for GHG emissions. Such a system is already prescribed by the Kyoto Protocol,¹⁵¹ has been implemented by the European Community¹⁵² and by the ten states participating in RGGI,¹⁵³ and has been called for by congressional members from both parties.¹⁵⁴ While the subject matter and effects of a national cap on GHG emissions would somewhat overlap those of state RPS programs, the differences between the two would likely be substantial enough to prevent implicit “field” preemption. In *Hillsborough County v. Automated Med. Labs., Inc.*, the Court stated that “[t]he question whether the regulation of an entire field has been reserved by the Federal Government is, essentially, a question of ascertaining the intent underlying the federal scheme.”¹⁵⁵ Although the precise intent behind a hypothetical federal regulatory scheme for GHG emissions is conjectural, the scheme would presumably address only GHG emissions and the mitigation of global warming, whereas RPS obligations are designed to address air pollutants in general, as opposed to just GHG emissions, and to alleviate

¹⁵⁰ On April 20, 2007, Maryland became the tenth state to sign the Regional Greenhouse Gas Initiative (“RGGI”), joining Connecticut, Delaware, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont. See Regional Greenhouse Gas Initiative Second Amendment to Memorandum of Understanding 1 (Apr. 20, 2007), available at http://www.rggi.org/docs/mou_second_amend.pdf. RGGI outlines a regional cap-and-trade program to limit carbon dioxide emissions from power plants in participating states; the signatory states commit to proposing the program for legislative or regulatory approval within their respective states. See Regional Greenhouse Gas Initiative Memorandum of Understanding 2–3 (Dec. 20, 2005), available at http://www.rggi.org/docs/mou_final_12_20_05.pdf. See generally Regional Greenhouse Gas Initiative: An Initiative of the Northeast and Mid-Atlantic States of the U.S., <http://www.rggi.org/index.htm> (last visited Nov. 16, 2007).

¹⁵¹ Kyoto Protocol to the United Nations Framework Convention on Climate Change, 37 I.L.M. 22, 26, 35 (Dec. 10, 1997).

¹⁵² Council Directive 2003/87/EC, Establishing a Scheme for Greenhouse Gas Emission Trading within the Community and Amending Council Directive 96/61/EC, 2003 O.J. (L 275) 32, available at http://ec.europa.eu/environment/climat/emission/implementation_en.htm.

¹⁵³ See *supra* note 151.

¹⁵⁴ See, e.g., Michael Cooper, *In Speech, McCain Intends to Push for Cap on Emissions*, N.Y. TIMES, Apr. 23, 2007, at A16 (“[Senator] McCain [(R-Ariz.)], who has introduced legislation to lower carbon emissions, said that as president he would set ‘reasonable caps’ on carbon and other greenhouse gas emissions, and would allow companies that reduced their emissions to earn credits that they could trade for a profit.”); Nathan Burchfiel, *Boxer Promises Carbon Cap Legislation*, CYBERCAST NEWS SERVICE, Apr. 19, 2007, <http://www.cnsnews.com/ViewCulture.asp?Page=/Culture/archive/200704/CUL20070419a.html> (“Sen. Barbara Boxer (D-Calif.), chairman of the Environment and Public Works Committee, pledged Wednesday to push legislation that would put caps on carbon emissions in an effort to fight global warming. In a speech in Washington, D.C., Boxer said three senators—Delaware Democrat Top Carper, Tennessee Republican Lamar Alexander, and Vermont Independent Bernie Sanders—are writing legislation that would cap carbon emissions . . .”).

¹⁵⁵ 471 U.S. 707, 715–16 (1985).

local air pollution in addition to global warming.¹⁵⁶ Such differences undercut the notions that “[t]he scheme of federal regulation is so pervasive as to make reasonable the inference that Congress left no room for the States to supplement it” and that the “federal interest is so dominant that the federal system will be assumed to preclude enforcement of state laws on the same subject.”¹⁵⁷ Therefore, given the assumption that “the historic police power of the States,” in this instance, the traditional power of the states to regulate their retail electricity sales, was “not to be superseded by [a] Federal Act unless that was the clear manifest purpose of Congress,” field preemption of a state RPS program by a federal GHG cap-and-trade program seems unlikely.¹⁵⁸

Of more concern, then, is the policy question of whether the coexistence of state RPS programs and a federal GHG cap-and-trade program would be inefficiently duplicative in addressing closely related environmental and national energy security concerns. The answer to that question likely depends on the values that states place on the environmental benefits of RPS programs other than reduced global warming¹⁵⁹ and on the curtailment of power generation from nonrenewable, non-GHG emitting sources, i.e. nuclear generation. Lastly, it is possible that the creation of a national trading system for GHG allowances would actually be somewhat synergistic, rather than duplicative, in facilitating a national trading system for RECs. Thus, state RPS programs are likely to remain viable, but to become at least somewhat less relevant, in the event that Congress enacts a federal cap on GHG emissions.

¹⁵⁶ In addition, a federal GHG cap would likely be seen as encouraging nuclear power generation, whereas RPS programs, depending on their definitions of renewable sources, would generally discourage the use and development of nuclear power.

¹⁵⁷ See *Rice v. Santa Fe Elevator Corp.*, 331 U.S. 218, 230 (1947).

¹⁵⁸ *Medtronic, Inc. v. Lohr*, 518 U.S. 470, 485 (1996). Section 201(b)(1) of the Federal Power Act established the jurisdiction of the Federal Power Commission, now the Federal Energy Regulatory Commission, over “the transmission of electric energy in interstate commerce” and over “the sale of such energy at wholesale,” but left retail sales of electric energy in the power of the states. See 16 U.S.C. § 824(b)(1) (2006); *Fed. Power Comm’n v. Conway Corp.*, 426 U.S. 271, 276 (1976) (“The Commission has no power to prescribe the rates for retail sales of power companies.”). See generally BOSSELMAN, *supra* note 13, at 759–72 (presenting and discussing statutory and case law regarding the division of federal and state jurisdiction over the electricity industry).

¹⁵⁹ Note that, even though a state’s RPS program might target global warming more aggressively than a national cap on GHG emissions, the likely effect would be nil, as the state’s reduced use of GHG allowances would be absorbed by producers in other states. However, to the extent that state RPS programs reduce GHG emissions prior to the enactment of national GHG caps, state RPS programs may have an effect on the federal cap levels chosen by Congress.

VI. CONCLUSION

States face many obstacles in implementing renewable portfolio standards, including the leakage of economic benefits to other states,¹⁶⁰ the possible dormant Commerce Clause problems that measures adopted to prevent such leakages pose,¹⁶¹ and the possibility of preemption by or significant overlap with future federal RPSs or GHG cap-and-trade programs.¹⁶² Nevertheless, states continue to adopt new RPSs and to raise existing ones.¹⁶³ These states, along with Congress, should consider the validity of existing and proposed state RPS programs under the dormant Commerce Clause and how such programs are likely to be affected, both legally and practically, by enactment of a federal RPS program or GHG emissions cap.

Despite the lack of legal challenges, to date, to state RPS statutes that discriminate against interstate commerce, the threat of invalidation under the dormant Commerce Clause to such statutes, and to state agencies' discriminatory implementation of even neutral RPS statutes, is clear under established Supreme Court doctrine. To avoid such challenges, states enacting or amending RPS programs and seeking to retain the resultant economic benefits for themselves should avoid in-state or in-region restrictions on energy eligibility, as well as language that requires or encourages state agencies to implement RPS programs in a discriminatory manner. Instead, states should employ in-state consumption or sales restrictions, or regional power pool or control area delivery requirements. For its part, Congress should consider explicit authorization of protectionist restrictions in state RPS programs, since the overall utility of such restrictions in providing incentives for states to overcome public choice problems and enact aggressive standards may outweigh the resulting burdens on interstate commerce.

Similarly, Congress and state legislatures should consider the potential effects, both constitutional and practical, that a federal RPS program or GHG emissions cap would have on state RPS programs. Although preemption by such federal programs seems unlikely, state RPS obligations would nevertheless become at least somewhat less relevant in addressing global warming and national energy security concerns if such a federal RPS program or GHG emissions cap were enacted. However, state RPS programs would still provide states with a significant means of providing local environmental benefits beyond the amelioration of global warming. States can improve the chances of their RPS programs surviving preemption if they tailor them to highlight the provision of such benefits. Congress should consider explicit authorization of the existence of state RPS programs alongside any federal RPS program or GHG cap that it enacts. In addition, Congress

¹⁶⁰ See *supra* Part I.

¹⁶¹ See *supra* Part III.

¹⁶² See *supra* Part IV.

¹⁶³ See *supra* notes 19–24 and accompanying text.

should consider establishing a national REC trading system, either as part of a federal RPS program or as an adjunct to a GHG cap-and-trade system, that could accommodate trading of RECs for state programs' purposes and thus enhance those programs' efficiencies.

The "energy" exhibited in the current debate over our nation's energy supply and how the composition of that supply affects interests as important and diverse as the natural environment and our national security is evidence of that composition's importance. The proliferation of state RPS programs highlights the important role states can play in affecting the composition of our energy supply and in protecting and promoting environmental and security interests in ways that reflect individual state values. In light of the important role that state RPS programs can play, state legislatures and Congress should maintain a "renewable" awareness of the legal landscape surrounding state RPS programs and act accordingly to ensure their continued validity and effectiveness.