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Moving *Power Forward*: Creating a Forward-Looking Energy Policy Based on a National RPS

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In Power Forward: The Argument for a National RPS, Professor Lincoln L. Davies provides a comprehensive and compelling argument for a national renewable portfolio standard ("RPS"). This Commentary Article reviews Professor Davies' assumptions and conclusions and places his RPS analysis in context within the broader energy and environmental debate.

Beyond expanding renewable energy generation and shifting away from fossil fuels, RPS legislation is often motivated by additional goals: addressing climate change, improving national security, and promoting economic development. This Commentary Article argues that, if these loftier goals are to be achieved, a better articulation of RPS objectives is necessary. Furthermore, a national RPS is the proper method for pursuing, and hopefully achieving, these goals because state-level impediments limit the possibilities for continued progress under state RPS programs. Finally, any national RPS will need additional legislative and regulatory assistance, beyond simply a well-designed RPS, to ensure that a national RPS fully achieves its objectives. Quite simply, in developing an effective U.S. energy policy, a national RPS is a great starting point, not an ending point.

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Moving *Power Forward*: Creating a Forward-Looking Energy Policy Based on a National RPS

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I. INTRODUCTION

In *Power Forward: The Argument for a National RPS*, Professor Lincoln L. Davies provides a comprehensive and compelling argument for a national renewable portfolio standard (“RPS”).¹ *Power Forward* provides an excellent overview of the key issues and challenges facing a potential federal-level RPS, followed by a unique and informative analysis of the variance across state RPSs, and explains many of the pitfalls of state-by-state regulation. Professor Davies then reviews and analyzes the various state-level RPS designs, efficacy, and performance. This analysis is perhaps the most significant addition *Power Forward* offers to the RPS discourse.

This Commentary Article considers Professor Davies’ analysis and largely agrees with both his assumptions and conclusions. There are three primary areas discussed in *Power Forward* that will be addressed in this Article. First, this Article expands upon Professor Davies’ discussion of RPS objectives and argues that a better articulation of those objectives, as well as subsequent strategies and tactics, is necessary if a national RPS is to become an effective reality. Second, it considers impediments to effective state-level RPSs raised in *Power Forward* and provides additional examples of those impediments that further support a shift to a national RPS. Finally, this Article argues that any national RPS will need additional legislative and/or regulatory assistance, beyond simply a well-designed RPS, to ensure that a national RPS fully achieves its objectives.

II. RPSs AS A MEANS TO AN END, OR JUST AN END?

Professor Davies appropriately asks whether “the RPS’s core aim of promoting renewable energy” is better served under state or federal law.² When discussing some of the additional justifications for RPSs, he further explains that such espoused “benefits are largely ancillary to RPSs’ core objective: promoting a new energy market in renewables to, in turn, spur

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¹ Lincoln L. Davies, *Power Forward: The Argument for a National RPS*, 42 CONN. L. REV. 1339 (2010).

² *Id.* at 1343.

the transition to a sustainably fueled society.”³ These points are well-stated, and serve, on one level, as an effective analysis of the RPS. They do not, however, tell the whole story.

A. Carefully Crafting Objectives, Strategies, and Tactics

Around 500 B.C., Chinese military strategist Sun Tzu explained, “Strategy without tactics is the slowest route to victory. Tactics without strategy is the noise before defeat.”⁴ In military operations, as well as in business and political arenas, successful operations require a clearly stated objective (or set of objectives) combined with a strategy (or set of strategies) designed to achieve that objective. Once the objectives and strategies are in place, tactics are used to obtain the desired result. As Prussian general and military theorist Carl von Clausewitz once explained, “Tactics is the art of using troops in battle; strategy is the art of using battles to win the war.”⁵

If the RPS is considered the objective, in and of itself, the question remains for “non-believers”: why promote renewable energy (and sustainable fuels) in the first place? It is this question—or rather, the failure to answer this question—that has been a significant impediment to a national RPS.

The problem is that with the RPS—or, more specifically, the renewable energy target percentage of the RPS—as the objective, the strategy becomes the process of passing the RPS legislation. The tactics would then be the varying mechanisms of incentivizing and enforcing compliance with the RPS. Professor Davies suggests, however, that the objective is not simply reaching, for example, a twenty percent renewable fuel mix in electric generation. The objectives are loftier than that.⁶

Professor Davies’ analysis suggests (appropriately) that the objective is to “spur the transition to a sustainably fueled society.”⁷ This goal, however, is much broader than mere creation of an RPS (unless the RPS mandate were set at or near one hundred percent). The strategy would then be to “promot[e] a new energy market in renewables.”⁸ Following this line of reasoning, the RPS serves as a tactical measure serving that end. That is, the RPS is one tactical way to achieve the strategic goal of creating a market in renewable energy, which, in turn, can help transition to electricity generation fueled by sustainable sources.

³ *Id.* at 1358.

⁴ ROBERT HANDFIELD, *SUPPLY MARKET INTELLIGENCE: A MANAGERIAL HANDBOOK FOR BUILDING SOURCING STRATEGIES* 233 (2006) (quoting Sun Tzu).

⁵ JOHN R. ELTING, *SWORDS AROUND A THRONE: NAPOLEON’S GRANDE ARMÉE* 529 (1997).

⁶ Davies, *supra* note 1, at 1357–59.

⁷ *Id.* at 1358.

⁸ *Id.*

The point here is not to quibble with Professor Davies' word choices in explaining the RPS process. Instead, the idea is to help put his RPS analysis in context within the broader energy and environmental debate, which extends beyond renewable energy into some of the other ancillary issues and goals discussed in *Power Forward*: climate change, national security, and economic development. This is important because, at the state level, it is not at all evident that all RPSs share the goals traditionally associated with RPS legislation. Professor Davies explains that the earliest rationale for an RPS was to encourage “development of alternate energy.”⁹ The evolution became much broader, encompassing economic, environmental, and national security concerns.¹⁰

It is simply not the case, however, that every state RPS passed because of a desire to promote renewable energy sources, much less pursue some of the loftier oft-stated goals. Each state's RPS is motivated by something that resonates strongly enough in that state for the RPS to become law. This different motivation is reflected in the different RPS design structures so aptly explained by Professor Davies.

Consider, as an example, Maine. Maine passed its first RPS in 1997¹¹ with what appeared to be one of the most aggressive requirements ever considered for an RPS. The initial plan required Maine utilities to demonstrate that at least thirty percent of all their retail power sold in the state be derived from renewable sources.¹² The definition of “renewable” power in that initial Maine RPS, however, included existing power produced by hydroelectric and biomass plants that were already in operation.¹³ As it turned out, Maine utilities were able to meet the thirty percent requirement using generation sources already operating.¹⁴ Not a single new renewable generation facility was needed to meet the mandate.¹⁵

As such, it appears that Maine's goal in passing this initial RPS was not to increase use of renewable resources or change the electric generation fuel mix. Rather, it was apparently a mechanism—a strategy—to demonstrate that Maine was already deriving a significant portion of its electricity from renewable sources. A legitimate goal, perhaps, but as discussed, it is not one that fits within the general understanding of the rationale behind RPS legislation.

⁹ *Id.* (quoting IOWA CODE § 476.41 (2008) (emphasis added)).

¹⁰ *Id.* at 1358–59.

¹¹ ME. REV. STAT. ANN. tit. 35-A, § 3210 (Supp. 2009).

¹² *Id.* § 3210(3).

¹³ UNION OF CONCERNED SCIENTISTS, MAINE RENEWABLE PORTFOLIO STANDARD SUMMARY 1 (2008), available at http://www.ucsusa.org/assets/documents/clean_energy/maine.pdf.

¹⁴ *Id.* at 8.

¹⁵ *Id.*

In 2007, Maine enacted a second mandatory RPS specifically designed to develop new renewable resources.¹⁶ This second RPS required that covered electricity suppliers demonstrate that at least one percent of their total kilowatt-hour sales within the state were procured from “new renewable capacity resources” in 2008, increasing by one percent each year until 2017 (and beyond), when ten percent of such sales from renewable resources would be required.¹⁷ The design of Maine’s second RPS thus implements a new strategy: a mandate to pursue the goal of increasing the amount of renewable energy generation.

Ultimately, a national RPS would not, and could not, exist on an island. One way or another, a national RPS would be a part of a national set of goals and objectives. The success—or lack thereof—of a national RPS would depend on two key issues: (1) what those goals are; and (2) how well the RPS is designed to achieve those goals. To ensure success, those goals must be determined before the RPS is implemented. Otherwise, success will be a matter of luck.

III. REMOVING IMPEDIMENTS TO EFFECTIVE STATE RPS: INCONSISTENT RULINGS AND MISALIGNED INCENTIVES REGARDING RENEWABLE ATTRIBUTES

With regard to renewable energy credits (“RECs”), Professor Davies outlines some of the key issues raised under current state RPS regimes.¹⁸ He notes that the differing definitions of what constitutes a renewable resource and the differences in basic accounting methods from state to state impact the ability of REC markets to function efficiently.¹⁹ Davies is entirely accurate in this assessment, and it raises an additional consideration: the differing state-by-state standards and requirements also lead to different state court interpretations.

Contracts created prior to state RPS legislation provide a particularly appropriate example. In *Wheelabrator Lisbon, Inc. v. Department of Public Utility Control*, the Connecticut Supreme Court was asked to determine the proper owner (the utility or the generator) of RECs created pursuant to an entire output contract.²⁰ The contract was silent as to RECs because RECs did not exist at the time the contract was entered.²¹

In 1991, the utility, Connecticut Light and Power Company entered a contract to purchase “the entire [n]et [e]lectric [o]utput” of the generation

¹⁶ ME. REV. STAT. ANN. tit. 35-A, § 3210(3-A).

¹⁷ *Id.* § 3210(3-A)(A).

¹⁸ Davies, *supra* note 1, at 1359–64.

¹⁹ *Id.* at 1376–78.

²⁰ *Wheelabrator Lisbon, Inc. v. Dep’t Pub. Util. Control*, 931 A.2d 159, 163, 168 (Conn. 2007).

²¹ *Id.* at 170.

facility owned by a predecessor entity to Wheelabrator Lisbon, Inc.²² The court determined that the Department of Public Utility Control (“PUC”) was reasonable in determining that the term “electricity” in the 1991 contract included the renewable attribute of the electricity and thus the utility purchased the later-resulting RECs as part of the agreement.²³

As part of the rationale for this interpretation, the court explained:

[T]he term “unbundling” itself implies that the renewable attribute of the energy generated by renewable energy sources is an inherent attribute of the energy, and, therefore, the creation and state recognition of the certificates did not result in an entirely new commodity but in the splitting of a preexisting commodity, i.e., “electricity,” that the utility had contracted to purchase.²⁴

This is simply inaccurate. First, RECs are an entirely new commodity.²⁵ That is, they did not exist before the RPS and were created at the moment of enactment. As the Federal Energy Regulatory Commission (“FERC”) explained: “Indeed, states in creating RECs that are unbundled and tradeable have recognized this. The very fact that RECs may be unbundled and may be traded under [s]tate law indicates that the environmental attributes do not inherently convey pursuant to an avoided cost contract to the purchasing utility.”²⁶

Second, while “electricity” in the 1991 agreement was required by federal law to come from renewable sources,²⁷ “electricity” typically means the electrons coming from a generator (unless it is specifically defined with some other meaning), whether those electrons come from wind, biomass, or coal.²⁸

Suppose, for example, a state decided that electricity generated by wind power created “noise abatement certificates,” which were an obligation to pay \$500 per kilowatt-hour generated from wind. It would be hard to imagine, at least based on the contract language, that the purchaser

²² *Id.* at 163, 166.

²³ *Id.* at 176.

²⁴ *Id.*

²⁵ See *In re Ownership of Renewable Energy Certificates*, 913 A.2d 825, 827 (N.J. Super. Ct. App. Div. 2007) (“At issue [in the case] was ownership of a commodity created in this state for the electric power industry by the [Board of Public Utilities]: Renewable Energy Certificates (‘RECs’).”); CAROL SUE TOMBARI, *POWER OF THE PEOPLE: AMERICA’S NEW ELECTRICITY CHOICES* 172, 174 (2008); cf. David Hurlbut, *A Look Behind the Texas Renewable Portfolio Standard: A Case Study*, 48 NAT. RESOURCES J. 129, 150 (2008) (“[T]he fact that the power is generated by a renewable resource is another distinct source of economic value responding to both the RPS and to green-power demand, a value separate from the electricity’s work value.”).

²⁶ *American Ref-Fuel Co.*, 107 F.E.R.C. ¶ 61,016, at p. 61,044 (2004).

²⁷ See *Wheelabrator Lisbon*, 931 A.2d at 163–66.

²⁸ See Hurlbut, *supra* note 25, at 150 (“There is no physical distinction between electricity generated by wind power and electricity generated by a coal plant once the electrons get on the transmission system.”).

would have agreed to take on that part of the obligation. Nonetheless, it would be accurate to say that the contract to buy electricity from a wind farm is a contract to buy wind-based electricity; it does not necessarily follow that any purchaser of that electricity takes on rights or obligations related to the source of the power generation unless otherwise specified. This is not to say that the state could not specify that the purchaser takes on the obligation to pay when the state creates such new certificates. To the extent the law is silent, however, the contract should dictate.

Third, FERC had already made clear that contracts such as the 1991 agreement “do not convey REC’s to the purchasing utility (absent express provision in a contract to the contrary).”²⁹ FERC noted that although “a state may decide that a sale of power at wholesale automatically transfers ownership of the state-created REC’s, that requirement must find its authority in state law.”³⁰ Thus, state law could provide that REC’s in contracts created prior to enactment of an RPS transferred as part of that contract, but it is not inherent in the contract itself. In fact, some states seem to determine that the purchasing utility is the owner of unanticipated REC’s, not the generator.³¹

In all instances, even if the decision is permissible, this determination seems to ignore the initial goal of the Public Utilities Regulatory Policies Act (“PURPA”), the federal law under which these contracts were created, and the subsequent RPS, providing an incentive to develop renewable energy sources. As such, allowing the utility to take the REC’s provides the utility with an unexpected “windfall,”³² rather than providing that windfall to the renewable energy generator, the entrepreneur who answered the call. At a minimum, to the extent the utility was going to reap the benefit of the windfall, the state PUCs should have ensured that such benefit was passed along directly to consumers.

Another recent state case provides a different view of how REC’s interact with power purchase contracts. In *New Mexico Industrial Energy Consumers v. New Mexico Public Regulation Commission*, the New Mexico Supreme Court determined that REC’s are not “purchased power” and thus cannot be recovered through a utility’s “automatic adjustment clause.”³³ Instead, costs must be recovered through the traditional rate case procedure.³⁴

²⁹ American Ref-Fuel Co., 105 F.E.R.C. ¶ 61,004, at 61,005 (2003), *reh’g denied* 107 F.E.R.C. ¶ 61,016 (2004).

³⁰ *Id.*

³¹ See *Wheelabrator Lisbon*, 931 A.2d at 174 (reporting that at least nine states have made such a determination).

³² *Id.*

³³ N.M. Indus. Energy Consumers v. N.M. Pub. Regulation Comm’n, 168 P.3d 105, 116 (N.M. 2007).

³⁴ *Id.*

The New Mexico Renewable Energy Act (“REA”) is the state’s RPS that required that at least five percent of retail energy sold in New Mexico come from renewable sources as of 2006.³⁵ The 2004 REA provided for a one percent increase each year up to ten percent by 2011.³⁶ The REA permits utilities to recover reasonable costs of RPS compliance through the “rate-making process.”³⁷ The New Mexico Public Utility Act provides that certain costs may be recovered through an “adjustment clause,”³⁸ which the New Mexico Supreme Court noted does not require the traditional “notice, hearing, and approval process” that utilities must normally use to change rates as part of the ratemaking process.³⁹ Specifically, the automatic adjustment clause allows the utility to recover “taxes or cost of fuel, gas or purchased power.”⁴⁰

The court thus faced two issues: (1) whether costs recovered through the automatic adjustment clause were being recovered as part of the ratemaking process; and, if so, (2) whether the RPS compliance costs were properly recovered through the automatic adjustment clause (as opposed to traditional, and more arduous, ratemaking procedures). The New Mexico Public Regulation Commission (“PRC”) initially determined that because RECs were required as part of the utility’s “energy supply mix,” RECs were a “purchased power cost” (or at least “closely related to . . . purchased power”) appropriately included in the automatic adjustment clause.⁴¹ After determining that the automatic adjustment clause is part of the ratemaking process, the court turned to consider whether the PRC had the authority to allow recovery of RECs under that automatic adjustment clause.⁴² The court determined the PRC did not have that authority.⁴³

The purpose of the automatic adjustment clause is to “flow through” to electricity consumers the increases or decreases in costs of “*delivered* energy.”⁴⁴ The court determined that RECs are not “delivered” energy because the energy generated that created the RECs was not also purchased and delivered to the utility’s customers.⁴⁵ Although the court acknowledged that recovery under the automatic adjustment clause would be the “most efficient and cost-effective method” for recovering costs, it nonetheless found that state law simply did not allow it.⁴⁶

³⁵ *Id.* at 108 (quoting N.M. STAT. § 62-16-4(A)(1) (2004)).

³⁶ *Id.* (quoting N.M. STAT. § 62-16-4(A)(2)).

³⁷ N.M. STAT. ANN. § 62-16-6(A) (2010).

³⁸ *Id.* § 62-8-7(E).

³⁹ *N.M. Indus.*, 168 P.3d at 108.

⁴⁰ N.M. STAT. ANN. § 62-8-7(E).

⁴¹ *N.M. Indus.*, 168 P.3d at 109–10.

⁴² *Id.* at 111.

⁴³ *Id.* at 116.

⁴⁴ *Id.* at 114 (quoting N.M. PUB. REGULATION COMM’N R. 17.9.550.6 (2001)).

⁴⁵ *Id.* (emphasis omitted).

⁴⁶ *Id.* at 116.

Again, the court's analysis is reasonable, although by no means the only possible outcome. In fact, because of the RPS mandate, it could reasonably be argued that purchased RECs (at least up to the state mandated percentage) are a cost of "delivered energy." That is, RECs represent an increase in the cost of delivered energy because the law requires RECs as part of the delivery process. RECs, in essence, convert the utility's purchased power (or a portion thereof) into energy that meets the RPS requirement. Because state law requires that a certain percentage of purchased power be renewable, it is a fair argument that RECs are a cost of purchased power.

When read together, *Wheelabrator Lisbon* and *New Mexico Industrial* provide what appears to be a conflicting outcome. Even though the laws in each case were significantly different, placing these determinations side by side makes clear the complex and confusing nature of current RPS programs. In *Wheelabrator Lisbon*, Connecticut essentially determined that RECs are, by definition, "electricity."⁴⁷ New Mexico determined in *New Mexico Industrial* that RECs are not, by definition, "purchased power."⁴⁸ If nothing else, these cases indicate why sometimes the general public views lawyers' arguments as "*just words*."⁴⁹

In the end, and consistent with Professor Davies' argument,⁵⁰ these cases underscore two primary issues. First, state-by-state RPS interpretations can create confusion, thus limiting the effectiveness of the RECs marketplace. Inconsistent decisions such as these can also extend that confusion to the general public, negatively impacting public perception of RPSs generally. Second, state RPSs can provide a roadmap for avoiding some significant pitfalls and problems if a federal RPS were enacted. Thus, a federal RPS provides great promise because it would have the opportunity to improve the efficiency of the renewable energy market by implanting consistent rules created with knowledge of the lessons learned at the state level.

IV. A HELPING HAND: ADDITIONAL FEDERAL LEGISLATION IS NEEDED TO SUPPORT A NATIONAL RPS

As discussed above, a national RPS is necessarily part of a larger set of policy goals and objectives. A national RPS fits in with other energy and environmental policies, and other such policies fit (or can fit) in with a national RPS. In fact, not only does a national RPS fit with other policies, but a national RPS will also require other policies if it is to be successful.

⁴⁷ *Wheelabrator Lisbon, Inc. v. Dep't Pub. Util. Control*, 931 A.2d 159, 176 (Conn. 2007).

⁴⁸ *N.M. Indus.*, 168 P.3d at 116.

⁴⁹ STEVEN D. SMITH, *LAW'S QUANDARY* 7–8 (2004).

⁵⁰ See Davies, *supra* note 1, at 1364 ("[E]ven if utilities were not increasingly spanning geographical boundaries, the risk of conflicting RPSs would still be problematic.").

A national RPS will face a number of hurdles, two of which are especially critical. First, a national RPS will require a significant investment in infrastructure, especially in terms of generation to transmission infrastructure. Second, a national RPS, at least to the extent an initial RPS is not the end game, will require assistance if renewable fuels are to overcome, and not reinforce, the entrenchment of other fuel sources—particularly, coal. As this Part discusses, additional federal legislation can provide a national RPS the assistance needed to address and overcome both of these issues.

A. *Lack of Infrastructure Limits RPSs' Potential*

A successful RPS, state or federal, will require a significant investment in supporting infrastructure.⁵¹ This, of course, includes new and expanded renewable generation facilities, but also includes major needs in terms of transmission infrastructure.⁵² This need has long been recognized, but recent measures designed to increase infrastructure investment have been modest at best.⁵³

1. *State and Regional Limits: The Frontier Line Example*

At the state and regional level, there have been several attempts to increase transmission infrastructure, but there has been little success. A good example is the proposed Frontier Line, a project that officially began in April 2005 with a Memorandum of Understanding Among the Governors of California, Nevada, Utah, and Wyoming Concerning Electric Transmission Development (“Frontier Line MOU”).⁵⁴ The proposed Frontier Line is a 1300-mile transmission line that would run from Wyoming, through Utah and Nevada, to California.⁵⁵ The project was designed “to leverage . . . up to 6000 megawatts of wind power and 6000 megawatts of clean coal power.”⁵⁶ The project was initially estimated to cost between \$3.3 and \$5 billion, with between \$926 million and \$1.7

⁵¹ ENERGY INFO. ADMIN., U.S. DEP’T OF ENERGY, ENERGY AND ECONOMIC IMPACTS OF IMPLEMENTING BOTH A 25-PERCENT RENEWABLE PORTFOLIO STANDARD AND A 25-PERCENT RENEWABLE FUEL STANDARD BY 2025, at 5 (2007), available at <http://www.eia.doe.gov/oiaf/servicert/eeim/index.html>.

⁵² *Id.*

⁵³ See, e.g., Gregory Reed et al., *The FACTS on Resolving Transmission Gridlock*, in J. DUNCAN GLOVER ET AL., POWER SYSTEM ANALYSIS AND DESIGN 228, 228–29 (4th ed. 2008) (“[E]lectricity stakeholders must find solutions to the vexing problems of rapidly increasing demand, inadequate infrastructure, and the critical challenge of balancing energy growth with environmental protection.”).

⁵⁴ Calif. Gov. Arnold Schwarzenegger et al., Memorandum of Understanding Among the Governors of California, Nevada, Utah, and Wyoming (Apr. 2005), available at <http://psc.state.wy.us/htdocs/subregional/Frontier%20Line%20MOU%20-%20FINAL.pdf>.

⁵⁵ *Western Governors Back Four-State, \$3.3B Line To Bring Energy to West Coast Load Centers*, ELECTRIC UTIL. WK., Apr. 11, 2005, at 16.

⁵⁶ THE FRONTIER LINE: A TRANSMISSION PROJECT FOR THE AMERICAN WEST 2 (2005), available at <http://psc.state.wy.us/htdocs/subregional/Frontierline040105.pdf>.

billion estimated in annual regional benefits.⁵⁷ If completed, western electricity consumers were expected to reap a net benefit relatively quickly.⁵⁸

Since the Frontier Line MOU was signed in 2005, the need for additional transmission infrastructure related to renewable energy in the project states has only increased. California, for example, increased its RPS requirement to thirty-three percent through Executive Order S-21-09, which also expanded the RPS to apply to all utilities, including publicly owned municipal utilities.⁵⁹ In addition, in 2006, California enacted Assembly Bill 32, which required the California Air Resources Board to regulate greenhouse gas sources as part of the state's plan to reduce greenhouse gas emissions to 1990 levels by 2020,⁶⁰ with a goal of total reduction of eighty percent of 1990 levels by 2050.⁶¹

Nevada, in 2009, increased its RPS requirement (originally passed in 1997)⁶² to twenty-five percent by 2025.⁶³ In 2008, Utah passed the Municipal Electric Utility Carbon Emission Reduction Act.⁶⁴ Although similar to an RPS, the Act lacks the mandate language found in a true RPS (i.e., compliance is only required to the extent it is "cost-effective"⁶⁵) and is thus really a renewable portfolio goal.⁶⁶ Nonetheless, this effort still evidences a greater interest and commitment to renewable energy than existed in 2005. Wyoming still does not have an RPS or renewable energy goal,⁶⁷ but is the source state of much of the renewable energy the Frontier Line was designed to provide.⁶⁸

Despite increased interest and commitment to renewable energy projects and a well-recognized need for additional transmission infrastructure, the Frontier Line has not progressed. The California

⁵⁷ *Id.*

⁵⁸ *Id.*

⁵⁹ Cal. Exec. Order No. S-21-09 (2009), available at <http://gov.ca.gov/executive-order/13269/>.

⁶⁰ CAL. HEALTH & SAFETY CODE §§ 38,501(e), 38,560 (West 2009); Cal. Exec. Order No. S-21-09, *supra* note 59.

⁶¹ Cal. Exec. Order No. S-21-09, *supra* note 59.

⁶² NEV. REV. STAT. §§ 704.7801–704.7828 (2007).

⁶³ Nev. S.B. 358 (approved by Governor May 28, 2009), available at http://leg.state.nv.us/75th2009/Bills/SB/SB358_EN.pdf.

⁶⁴ UTAH CODE ANN. §§ 10-19-101 to 10-19-302 (2010).

⁶⁵ *Id.* § 10-19-201(1)(a).

⁶⁶ See DSIRE: Database of State Incentives for Renewables & Efficiency, Utah: Incentives/Policies for Renewables & Efficiency, http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=UT13R&re=1&ee=1 (last visited June 17, 2010) ("While this law contains some provisions similar to those found in renewable portfolio standards (RPSs) adopted by other states, certain other provisions . . . indicate that this law is more accurately described as a renewable portfolio goal (RPG).").

⁶⁷ See DSIRE: Database of State Incentives for Renewables & Efficiency, Renewable Portfolio Standards (Feb. 2010), available at http://www.dsireusa.org/documents/summarymaps/RPS_Map.ppt (providing a map of states with and without RPS programs).

⁶⁸ See *As Utilities Race To Meet RPS with New Wind Projects, Key Grid Expansion Sets Slower Pace*, ELECTRIC UTIL. WK., June 11, 2007, at 1.

Independent System Operator (“California ISO”) reported in 2008, “A recent check of the Frontier Line transmission project website shows no activity on this project since May 2007.”⁶⁹ An even more recent check indicates that the Frontier Line project website no longer exists.⁷⁰

It is not obvious why the once-promising project appears to have failed. The California ISO opines, “A potential issue is the resource assumption for the project, since California is requiring that all imports match the emissions levels of combined-cycle natural gas-fired power plants.”⁷¹ It is also possible that the recent credit crisis and lack of state-level funding have made financing the project impossible. Perhaps the states, or some of the states, lost the interest (or the political will) to pursue the project. Regardless of the reason, a major transmission infrastructure project needed to increase access to renewable electric generation in the western United States has stalled.

2. Federal Program Failures: National Transmission Corridors

The regional approach to siting transmission lines, such as the proposed Frontier Line, is needed because there is limited (at best) federal authority for siting transmission infrastructure. Although FERC has jurisdiction over all wholesale (non-retail or “end-use”) electric transmission transactions and operations,⁷² FERC does not have jurisdiction for the siting and construction of transmission lines except in limited circumstances. In 2006, FERC obtained limited “backstop authority” through the Energy Policy Act of 2005.⁷³

This “backstop authority” is a limited grant of power available only in circumstances where the states lack the authority to authorize construction or otherwise have failed to act.⁷⁴ Furthermore, backstop authority is limited to areas the Department of Energy (“DOE”) identifies as a “national interest electric transmission corridor” (“NIETC”).⁷⁵ DOE filed its August 2006 National Electric Transmission Congestion Study, designating two NIETCs: the Mid-Atlantic Area National Interest Electric Transmission Corridor and the Southwest Area National Interest Electric Transmission (covering southern portions of California, Arizona, and

⁶⁹ CAL. ISO, REPORT ON PRELIMINARY RENEWABLE TRANSMISSION PLANS 48 (2008), available at <http://www.caiso.com/2007/2007d75567610.pdf>.

⁷⁰ A May 19, 2010, search of the site listed in the California ISO report, <http://www.frontierline.org/>, generated the message, “Server not found.”

⁷¹ CAL. ISO, *supra* note 69, at 48.

⁷² See 16 U.S.C. § 824(b) (2006); *New York v. FERC*, 535 U.S. 1, 17 (2002) (“[FERC’s] jurisdiction includes ‘the transmission of electric energy in interstate commerce’ and ‘the sale of electric energy at wholesale in interstate commerce.’” (quoting 16 U.S.C. § 824(b)).

⁷³ See 16 U.S.C. § 824p (2006).

⁷⁴ *Id.*

⁷⁵ *Id.*

Nevada).⁷⁶ In most circumstances, absent a legislative change, each state in which the transmission lines would be built retains siting and construction jurisdiction.⁷⁷

Even though it has been five years since the Energy Policy Act of 2005 provided FERC with backstop transmission siting authority, zero projects have commenced under this authority. Some commentators were skeptical of the power provided under this authority at the outset,⁷⁸ but there was still some hope for success.⁷⁹

Unfortunately, the U.S. Court of Appeals for the Fourth Circuit significantly constrained FERC's ability to exercise this authority.⁸⁰ Under the Energy Policy Act of 2005, FERC is permitted to "issue one or more permits for the construction or modification of electric transmission facilities in a national interest electric transmission corridor" if it is determined that (among other options):

(C) a State commission or other entity that has authority to approve the siting of the facilities has—

(i) withheld approval for more than 1 year after the filing of an application seeking approval pursuant to applicable law or 1 year after the designation of the relevant national interest electric transmission corridor, whichever is later; or

(ii) conditioned its approval in such a manner that the proposed construction or modification will not significantly reduce transmission congestion in interstate commerce or is not economically feasible⁸¹

⁷⁶ Office of Electricity Delivery and Energy Reliability, Draft National Interest Electric Transmission Corridor Designations, 72 Fed. Reg. 25,838 (May 7, 2007); *see also* National Electric Transmission Congestion Report, 72 Fed. Reg. 56,992 (Oct. 5, 2007).

⁷⁷ Cf. Jim Rossi, *Transmission Siting in Deregulated Wholesale Power Markets: Re-Imagining the Role of Courts in Resolving Federal-State Siting Impasses*, 15 DUKE ENVTL. L. & POL'Y F. 315, 315–16 (2005) ("Ultimately, FERC may need authority to preempt state siting laws, but absent congressional action, courts might empower state and local siting boards to take into account federal goals in competitive markets in making siting decisions.").

⁷⁸ *See, e.g.*, Joshua P. Fershee, *Misguided Energy: Why Recent Legislative, Regulatory, and Market Initiatives Are Insufficient To Improve the U.S. Energy Infrastructure*, 44 HARV. J. ON LEGIS. 327, 332, 360 (2007) (stating that the backstop-authority siting process "is protracted and inefficient" and "similar past initiatives have failed to produce significant results").

⁷⁹ *See* Steven J. Eagle, *Securing a Reliable Electricity Grid: A New Era in Transmission Siting Regulation?*, 73 TENN. L. REV. 1, 46 (2005) (acknowledging the limitations of the federal backstop siting authority but stating that the Energy Policy Act of 2005 still had the potential to encourage new transmission investment and help "stave off a catastrophic electric transmission shortage").

⁸⁰ *See* *Piedmont Env'tl. Council v. FERC*, 558 F.3d 304, 315 (4th Cir. 2009) (holding that Congress gave FERC authority to act only when the state cannot act, fails to act in a timely manner, or acts inappropriately by granting a permit with unattainable conditions).

⁸¹ 16 U.S.C. § 824p(b)(1) (2006).

FERC had concluded that the phrase in part (C)(i) above, “withheld approval for more than 1 year,” included a state’s denial of a permit, not just a state’s failure to act.⁸² The Fourth Circuit determined, “The continuous act of withholding approval does not include the final administrative act of denying a permit.”⁸³ As such, FERC’s backstop authority cannot be used to overrule a state’s outright denial of a permit; the authority is only available where the state refuses to act at all or acts “inappropriately by granting a permit with project-killing conditions.”⁸⁴

The court considered, then rejected, FERC’s argument that “Congress would not ‘intentionally *allow* federal intervention in the event of onerous state approvals that scuttle projects in national corridors, and yet intentionally *bar* federal review where the state outright denies the application, achieving the same result.’”⁸⁵ The court determined that there was a “crucial difference” between the two scenarios:

When a state commission grants approval with project-killing conditions, it misuses its authority, and the state licensing system has failed. On the other hand, when a state commission denies an application outright, it acts with transparency and engages in a legitimate use of its traditional powers. There is thus no logical inconsistency between authorizing FERC to assume jurisdiction in the case of permit approvals with overburdensome conditions but not in the case of outright denials.⁸⁶

Of course, it is not clear why “transparency” in denying a permit therefore makes that denial legitimate. It seems readily apparent that a state commission could “misuse its authority” in denying a permit in the same way it might in issuing a permit with “overburdensome conditions.” The language Congress used in this provision was, at a minimum, inartful, because it is open to (and, in fact, compels) interpretation. Because Congress granted FERC authority to facilitate necessary transmission projects where the current regulatory regime failed to ensure such transmission was built,⁸⁷ however, the proper interpretation of the language would have been the broader interpretation, as advocated by FERC.⁸⁸

⁸² Regulations for Filing Applications for Permits to Site Interstate Electric Transmission Facilities, 71 Fed. Reg. 69,440, 69,444 (Dec. 1, 2006).

⁸³ *Piedmont Envtl. Council*, 558 F.3d at 315.

⁸⁴ *Id.*

⁸⁵ *Id.* at 314.

⁸⁶ *Id.* at 314–15.

⁸⁷ See 153 CONG. REC. H6782 (daily ed. June 20, 2007) (statement of Rep. Gene Green (D-Tex.)). Rep. Green indicated:

[T]he Energy Policy Act of 2005, EPACT, allowed for the designation of national interest corridors where congestion in the electricity grid is jeopardizing reliable service and raising the cost to electricity consumers. . . . FERC is authorized to get

3. *Repeal of PUHCA: When Mergers Do Not Lead to (Transmission) Acquisitions*

Professor Davies explains that, in light of the Energy Policy Act of 2005 provisions effectively repealing the Public Utilities Holding Company Act (“PUHCA”),⁸⁹ the “trend of multi-state utilities is only likely to increase.”⁹⁰ For seventy years, PUHCA had, among other things, limited utility mergers to those that were geographically contiguous,⁹¹ thus significantly limiting utility mergers in general.⁹² Without those limits, Professor Davies correctly notes that “utilities operating in more than one state may well increase—and face the prospect of needing to comply with multiple RPSs, a task both costly and inefficient.”⁹³

It is also worth noting, however, that this is not likely to be much of a problem. PUHCA was repealed, at least in part, to help facilitate infrastructure investment by allowing a broader group of potential investors to enter the market.⁹⁴ The idea was that these investors would bring with them their interest and ability, along with the additional capital, to make infrastructure investments that had been lacking in recent years.⁹⁵ This hope has not been achieved.

Although there was initial interest in a number of mergers following PUHCA’s repeal, many (and perhaps most) have not occurred. This is in part because of greater merger scrutiny at the state level, an opportunity expanded in the Energy Policy Act of 2005. As such, the desired (if not expected) level of mergers has been modest, and the potential additional investment funds available for expanded transmission infrastructure have not followed.

More than anything, PUHCA’s repeal provides a cautionary tale with regard to energy policy. The repeal was hotly contested and costly in terms of time and effort spent, and yielded little, if any, result. As a mechanism to induce investment, the repeal has been largely ineffective. As a mechanism to reduce regulation, this appears to be true, as well. Energy investment, especially renewable energy investment, is expensive

involved only if the State is unwilling to or cannot act, then only after exhaustive Federal considerations.

Id.

⁸⁸ See *Piedmont Envtl. Council*, 558 F.3d at 313–14 (discussing FERC’s interpretation that withholding approval includes denial of an application within one year).

⁸⁹ Energy Policy Act of 2005, Pub. L. No. 109-58, §§ 1261–63, 119 Stat. 594, 972–74 (2005).

⁹⁰ Davies, *supra* note 1, at 1363.

⁹¹ See 15 U.S.C. § 79k(b)(1) (2000) (repealed 2005); see also *N. Am. Co. v. SEC*, 327 U.S. 686, 704 (1946) (stating that PUHCA requires utility holding companies to “integrate and coordinate their systems” and “divest themselves . . . of geographically and economically unrelated properties”).

⁹² See Fershee, *supra* note 78, at 335–36.

⁹³ Davies, *supra* note 1, at 1363.

⁹⁴ See Fershee, *supra* note 78, at 337–38.

⁹⁵ See Markian M.W. Melnyk & William S. Lamb, *PUHCA’s Gone: What Is Next for Holding Companies?*, 27 ENERGY L.J. 1, 1–2 (2006).

and moves slowly. Mild nudges are not likely to have any discernable effect.

B. *Beyond the RPS: Using the Environmental Law and Energy Law Overlap To Avoid Entrenchment of Fossil Fuels*

Professor Davies explains that a national “RPS moves energy and environmental law closer together.”⁹⁶ He notes that these two areas of the law have a tendency to operate along separate paths, despite their obvious and inherent overlap.⁹⁷ He then notes that both energy and environmental law have been moving toward market-based approaches to regulation: market-based rates on the energy law side and cap-and-trade measures on the environmental side.⁹⁸

Given the scope of his article, Professor Davies appropriately focuses his analysis on this overlap in the RPS context.⁹⁹ There is, however, an additional risk, and an additional opportunity, raised by these two “intrinsically intertwined” areas of the law that warrants comment.¹⁰⁰ On its own, a federal RPS, especially one with renewable goals set too low (i.e., one that does not appreciably affect the status quo), runs the risk of entrenching other fuel sources (most obviously, coal).¹⁰¹ With less than three percent of the current U.S. electricity supply coming from renewable energy sources,¹⁰² a fifteen or twenty percent goal seems far off (and even overly aggressive) to some.¹⁰³ If the national RPS works, however, these goals will be achieved in the relatively near future.

Once the fuel source mix reaches, for instance, twenty percent from renewable sources, it is possible that technology will have advanced to the point that an RPS is unnecessary. That appears to be the hope of many policy makers. This is a nice goal, but prior long-range planning mistakes suggest that such assumptions are inappropriate and potentially costly.¹⁰⁴

⁹⁶ Davies, *supra* note 1, at 1393.

⁹⁷ *Id.* at 1391–92.

⁹⁸ *Id.* at 1392–93.

⁹⁹ *Id.* at 1393.

¹⁰⁰ *Id.* at 1392.

¹⁰¹ Cf. Joseph P. Tomain, “Steel in the Ground”: *Greening the Grid with the iUtility*, 39 ENVTL. L. 931, 945 (2009) (proposing a “new regulatory compact” because the traditional ratemaking process “entrenched dirty energy”).

¹⁰² President Barack Obama, Remarks by the President on Clean Energy at Trinity Structural Towers Manufacturing Plant (Apr. 22, 2009), available at http://www.whitehouse.gov/the_press_office/Remarks-by-the-President-in-Newton-IA/.

¹⁰³ See *Senate Compromises on Energy Bill After Filibuster of Tax Package and Renewable Portfolio Standard*, FOSTER NAT. GAS REP., Dec. 14, 2007, at 1 (“While a renewable portfolio standard might sound like a wise idea in principle, it’s going to be almost impossible in reality to meet . . .” (quoting Rep. Joe Barton (R-Tex.))).

¹⁰⁴ See, e.g., STEVEN MARK COHN, TOO CHEAP TO METER: AN ECONOMIC AND PHILOSOPHICAL ANALYSIS OF THE NUCLEAR DREAM 107 (1997) (discussing Atomic Energy Commission Chairman Lewis Strauss’s 1954 efforts to get science journalists to promote nuclear power, in part by “suggesting the possibility of ‘electricity too cheap to meter’”).

If technology does not change significantly, by the time the twenty percent RPS goal is met, it is highly likely that traditional (i.e., fossil) fuel sources making up the other fifty to sixty percent of the electric generation¹⁰⁵ could be even more entrenched than they are today.

The reason: as the use of renewable sources increases, the demand for traditional fossil fuel, primarily coal and natural gas, will almost certainly drop.¹⁰⁶ As the price for these sources drops, the appeal of “cheap energy” from these sources will increase. Without additional and concomitant measures, an RPS may win the battle, but not the war.

As such, an effective national RPS warrants additional support from the environmental law arena. To assist the long-term goals of a national RPS, a price on carbon is essential,¹⁰⁷ most likely through a cap-and-trade program or mandated carbon permits.¹⁰⁸ Although many of the RPS proposals also included cap-and-trade programs, a frequent criticism has been that such programs are redundant.¹⁰⁹ This is not accurate.¹¹⁰

Just as energy law and environmental law overlap, so too would a national RPS and a national cap-and-trade program. A national RPS would reduce emissions to some degree, and a national cap-and-trade program

¹⁰⁵ This number assumes a fuel mix of twenty percent from renewables, twenty to thirty percent from nuclear, and the remainder from fossil fuels. Even if nuclear power makes a strong comeback, it is hard to imagine that enough nuclear generation would be online at that point to amount to more than an additional ten percent of the national power supply.

¹⁰⁶ See Press Release, Woods MacKenzie, Federal Renewable Portfolio Standard Will Reduce Power and Natural Gas Costs, But Not Have a Significant Impact on GHG Emission Levels (May 2007), available at <http://publicutilities.utah.gov/archive/federalrenewableenergyportfoliostandard.pdf> (reporting the results of a study that determined a fifteen percent RPS would cause lower consumption, and thus lower cost, of fossil fuels, but have little impact on carbon emissions).

¹⁰⁷ See Michael P. Vandenbergh et al., *Micro-Offsets and Macro-Transformation: An Inconvenient View of Climate Change Justice*, 33 HARV. ENVTL. L. REV. 303, 334 (2009). Setting a price on carbon will require a creative approach:

The more transformative approach [to addressing climate change] will require a level of law and policy innovation comparable to the one that occurred two decades ago, launching the current focus on cap-and-trade and carbon tax solutions. It may be that a single concept comparable to increasing the price of carbon will emerge to meet this need.

Id. (footnote omitted). For further discussion on the pricing of carbon appearing in this Commentary Issue, see Jim Rossi, *The Limits of a National Renewable Portfolio Standard*, 42 CONN. L. REV. 1425, 1443–46 (2010).

¹⁰⁸ This is, at its core, a carbon tax. Permits, however, seem more palatable than taxes these days.

¹⁰⁹ See *Statement Before the H. Comm. on Energy and Commerce, Subcomm. on Energy and Air Quality*, at 3 (Apr. 23, 2009) (statement of James Y. Kerr, II, Counsel, Electric Reliability Coordinating Council), available at http://energycommerce.house.gov/Press_111/20090423/testimony_kerr.pdf (“The market-based least-cost objective of the [recently proposed] cap-and-trade program is thereby undermined by the [also proposed RPS], and for no additional policy benefits.”).

¹¹⁰ See Marilyn Brown, *Foreword* to CHRISTOPHER COOPER & BENJAMIN SOVACOO, RENEWING AMERICA: THE CASE FOR FEDERAL LEADERSHIP ON A NATIONAL RENEWABLE PORTFOLIO STANDARD (RPS) 3, 3 (2007), available at http://www.newenergychoices.org/dev/uploads/RPS%20Report_Cooper_Sovacool_FINAL_HILL.pdf (stating that the National Commission on Energy Policy concluded a cap-and-trade program combined with an RPS and increased fuel economy standards “will produce significantly larger environmental benefits over the next two decades while still meeting the economic test of ‘no significant harm’”).

could encourage the use of renewable energy sources. The national RPS, however, serves to encourage development of generation from a particular type of source, while the cap-and-trade program would require payment for consumption of certain other sources and encourage use of a broader set of sources (e.g., nuclear power). Therefore, if the current iterations of a national RPS are intended as starting points, not ending points, additional (and more direct) carbon reduction legislation is also needed if a national RPS is to achieve its broader energy and environmental policy goals.

V. CONCLUSION

As Professor Davies makes clear, the case for a national RPS significantly outweighs the case for the status quo. A national RPS could help encourage necessary investment in new energy infrastructure, facilitate a national market for RECs, and minimize or eliminate problems created by inconsistent state rulings. Beyond that, a federal system could take what is learned from state-level mistakes and conflicts and incorporate that knowledge into a national RPS. In this way, the United States would take the best an RPS has to offer, while minimizing any difficulties.

When (hopefully) developing and implementing a national RPS, there must be a focus on programs to facilitate broader energy policy goals, such as reducing environmental harm, creating jobs, improving national security, and, yes, addressing climate change. Not everything needs to happen at once, and given the broad scope of state-level RPSs, a national RPS is a logical place to start. A national RPS, however, will need help from other energy legislation—such as federal siting authority for transmission lines and a price on carbon—if the largest goals of the RPS are to be achieved. Quite simply, a national RPS is a great starting point, not an ending point, if the country is to *Power Forward*.