SITING TRANSMISSION LINES IN A CHANGED MILIEU: EVOLVING NOTIONS OF THE "PUBLIC INTEREST" IN BALANCING STATE AND REGIONAL CONSIDERATIONS*

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This Article discusses how state public utility law presents a barrier to the siting of new high-voltage transmission lines to serve renewable resources, and how states can approach the law's evolution in order to preserve a role for state regulators in a new energy economy in which renewable energy will play a significant role. The traditional approach to determining the "public interest" in siting transmission lines is well on its way to obsolescence. Two developments over the past fifteen years have begun to challenge this paradigm. First, policies at the federal level and in many states have encouraged increased competition in generation, contributing to de-monopolization of the bulk power side of the industry. Second, the increased emphasis on the environment, energy independence, and other public policy objectives has resulted in a dramatically increased demand for renewable energy, particularly due to heightened attention to climate change. Given that wind power—the most economically viable renewable resource on a bulk-power basis—is feasible predominantly in locations far removed from load centers, the demand for new multistate transmission facilities has been brought clearly into focus.

After an Introduction, Part I describes the existing arrangements in several resource-rich Western states for siting new

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transmission lines, and the coexistence of those arrangements with a conventional understanding of the public interest in determining need and addressing environmental concerns under traditional state transmission siting laws. Part II discusses transmission issues related to the competitive wholesale market and increased attention to climate change, and highlights how federal law has expanded to accommodate some of these concerns. Part III emphasizes the need for a new definition of the public interest that might better reflect these new market circumstances and opportunities, and highlights the two main barriers to this: (1) legislative and/or regulatory inertia; and (2) an outdated cost-allocation model. The public interest under most state siting statutes is sufficiently capacious to give regulators some flexibility to evolve, but in other instances legislative action may be needed. In addition, the state cost-of-service ratemaking model must evolve to a more regional approach to allocating the costs of new transmission.

INTRODUCTION

In planning and approving the siting of new transmission lines, most state regulators balance the benefits of a new transmission line against the potential adverse consequences. This common approach to transmission siting is grounded in the traditional model of a vertically integrated public utility monopoly franchise, for which the primary purpose of a siting decision is to locate infrastructure to serve the utility's native load customers. Under the traditional paradigm, the burden of financing new transmission infrastructure is allocated to a utility's incumbent customers under cost-of-service ratemaking principles, based on an understanding that these customers will benefit from the new line. In making their decisions siting authorities have been required to first determine the need for transmission infrastructure, usually defined in economic terms.[1] The notion of the "public interest" that regulators consider in their balancing analysis implicitly focuses on benefits

1. A distinction is sometimes made between lines being built for reliability purposes and those being built for economic purposes. Since the determination of what constitutes "reliability" is, at root, an economic concept (namely, the value of lost load), this Article makes no distinction between the two. Some siting agencies, however, may well see the siting of lines to facilitate the marketing of a state's energy resources as a lesser order of need, since its objective is, almost by definition, driven by economic goals rather than system reliability. For states seeking to site lines, particularly for selling their energy, the distinction is one to keep in mind.

to the customers of a specific utility system, or to the consumers located in an individual state.

The traditional public utility paradigm from which today's common approach to siting evolved was predicated on individual utilities carrying out their planning activities largely in private, and using (or threatening to use) their powers of eminent domain to carry out their plans for building transmission to link power supply sources (generation facilities) and consumer demand (load). Utility regulators in some states assumed active roles in overseeing the process, but in others the regulatory approach has always been more *laissez faire*. However, even where state utility regulators took a *laissez faire* regulatory posture, local land use regulators often exercised considerable scrutiny over proposed new facilities—although more from the standpoint of local impacts than from a broader balance of costs and benefits for the overall system within that state, and much less on a broader regional level.

Over the past three decades, the traditional public utility paradigm morphed into the predominant current siting model—in which the siting determination is made on a centralized basis by a designated state agency—because a number of tensions rendered the old paradigm both impractical and anathema to a wide array of interests. From the public side, ratepayers were opposed to paying for what they believed to be "excess capacity" (that is, more investment in utility plants and transmission than was necessary to provide adequate service) possessed by utilities.[2] Ratepayers demanded more transparent and participatory planning activities by monopoly utilities to whom they were captive and whose costs they were obliged to pay.[3] In addition, the assessment of need was expanded to include environmental concerns, such as increased resistance to building new facilities on environmental and aesthetic grounds, as well as the concerns of those who believed they were victimized by the asymmetry between individuals bearing the environmental and social costs and those deriving the

2. *See* Joseph P. Tomain, *Electricity Restructuring: A Case Study in Government Regulation*, 33 TULSA L.J. 827, 834 (1998) (observing that "[o]ne consequence of the traditional rate formula encouraging capital investment was plant expansion because returns were calculated on capital investment").

3. Most, if not all, of the controversy regarding "excess capacity" revolved around generation and not transmission, but the changing paradigm affected the siting of both. *See* Richard J. Pierce, Jr., *The Regulatory Treatment of Mistakes in Retrospect: Cancelled Plants and Excess Capacity*, 132 U. PA. L. REV. 497 (1984) (describing the problem of excess capacity in electric power generation).

economic benefits.[4] For utilities, the increased transaction costs of obtaining all required permits from multiple jurisdictions for new plants and lines and the difficulties of complying with largely incoherent, inconsistent, and even contradictory sets of policies applicable to the siting of new assets was not sustainable.[5] Many utilities were also concerned that reviews by local land use regulators tended to emphasize local impacts over system-wide benefits.[6]

This more contemporary approach to siting was a compromise between consumer groups (as well as other public interest groups) and utilities to adopt what was often described as "one-stop shopping" for building new generating plants and transmission lines. State siting agencies' centralized proceedings enable the public to participate in utility planning and siting of facilities in exchange for a single forum applying a single set of statewide policies for making siting decisions that either preempt or allow for overruling local authorities, and combine state powers into a single agency.[7] Environmental stakeholders also find attractive the requirement that applicants for siting authority prove that there is a need for a facility whose value exceeds the environmental cost associated with the new facility.[8] Additionally, to the satisfaction of utilities in many, if

4. Some came to characterize such opposition as "NIMBY-ism": Not-In-My-Back-Yard. While some of the opposition to new facilities may well have constituted an exercise in parochialism, the inherent asymmetry between perceived local environmental or aesthetic insult and more geographically dispersed economic benefits is an inherent aspect of siting new facilities on the interconnected grid, and, therefore, an unavoidable source of potential conflict.

5. *See* Hoang Dang, *New Power, Few New Lines: A Need for a Federal Solution*, 17 J. LAND USE & ENVTL. L. 327, 343 (2002) (describing how many states "have consolidated the siting process into a one-stop permitting process that allows state authorities to preempt local governments").

6. *See id.* at 344 ("Consolidating the approval process with state authorities allows the state authorities to balance the impact of the transmission expansion against not only the local needs, but also the statewide and regional needs.").

7. Not all states adopted this centralized approach. There are still twenty or so states that operate on the original paradigm, in which multiple local governments must approve transmission lines. *See* Ashley C. Brown & Damon Daniels, *Vision Without Site, Site Without Vision*, ELECTRICITY J., Oct. 2003, at 23, 24.

8. States vary widely in regard to how agencies should balance costs and benefits of a proposed facility. Some require that state-level agencies merely find that there is a need sufficient to justify construction of the facility, leaving consideration of environmental concerns to local governments. Others require that the degree of need be probed more deeply depending on the severity of environmental harm (i.e., the greater the need, the greater the level of environmental harm that will be found tolerable). For further discussion of this second approach, see discussion *infra* Part I, contrasting the centralized approach of New Mexico with that of other states.

not all, jurisdictions using this approach, planning and siting approval is widely perceived as constituting *de facto*, if not *de jure,* regulatory approval of the project under consideration, thus effectively removing the risk of any subsequent rate-making determination of "imprudence" (i.e., a finding by regulators that may lead to disallowance of a utility's cost recovery) for any risk other than those associated with actual right-of-way acquisition and construction.[9]

While the regulatory process has evolved, two critical factors have remained constant over the course of the transition from the original siting paradigm to the predominant contemporary approach. The first is that the cost of each new transmission facility is generally included in the retail rate base of the utility building it.[10] While revenues derived from "off system" users of the facilities (i.e., non-native load, or those customers outside the utility's franchise area) may be credited back to captive retail ratepayers (i.e., native load), the full risk of the residual revenue responsibility for the line is generally borne by native load customers.[11] This widespread practice makes the allocation of costs a critical (in many cases, deter-

9. It is important to note that the discussion of paradigm shifts in this Introduction is of general trends. As will be noted below, not all states have shifted paradigms, and those that have use varying institutional arrangements for making siting decisions. *See infra* Part I.

10. *See infra* Part III.A–B.

11. Most states simply allowed recovery of the full cost of a transmission facility in rate base. *See* Richard P. Bonnifield & Ronald L. Drewnowski, *Transmission at a Crossroads*, 21 ENERGY L.J. 447, 461 (2000) ("In the past, transmission was generally built to deliver distant generation to the local loads of a vertically integrated utility. The value of transmission for the utility investor was integral with the return provided by generation and distribution. It was the generation prudence review by the state utility commissions that justified the investment in transmission expansion."). To the extent that "off system" users paid for their use of it, subject to the timing and vicissitudes of rate cases, the revenue requirement imposed upon native load customers might have been offset by the amount derived from such sales. In some cases state regulators only allowed the portion of costs allocated to retail ratepayers into rate base, on the theory that customers did not benefit from the line. For example, Virginia appears to limit cost recovery to lines in utility biennial plans designed to serve native load customers, or to other costs utilities incur to serve native load obligations. *See* Brian R. Greene & Katharine A. Hart, *Public Utility Law*, 43 U. RICH. L. REV. 295, 309 (2008). Subsequent to the formation of Regional Transmission Organizations ("RTOs"), states in regions served by the RTOs have acquiesced to transmission being put in wholesale rate base, subject to Federal Energy Regulatory Commission ("FERC") jurisdiction, and merely pass on to customers FERC transmission tariff costs incurred in delivery of bulk power to them. For further discussion of FERC cost recovery for transmission, see Patrick J. McCormick III & Sean B. Cunningham, *The Requirements of the "Just and Reasonable" Standard: Legal Bases for Reform of Electric Transmission Rates*, 21 ENERGY L.J. 389 (2000).

minative) component of obtaining siting approval for a proposed new transmission line. It is highly improbable that a state will approve a line being built by a jurisdictional utility (operating in that state) if the costs, or even the residual revenue risks, are to be borne by local consumers while the benefits are largely extra-jurisdictional.[12] In short, there is a powerful economic incentive to be parochial in siting decisions. The second constant is that the power to make siting decisions in electricity, contrary to the case in natural gas,[13] is (with some exceptions on the margin) a power to be exercised by the states—at least until the passage of the Energy Policy Act of 2005, which established a rather cumbersome (but also very limited) federal "backstop" role.[14] Despite this expansion of federal authority and continued proposals to further expand it, the power to site transmission lines remains primarily (often exclusively) a state function.[15]

The existing approach evolved fairly recently. However, despite its relative youth, it is already well on its way to obsolescence. Two developments over the past fifteen years have begun to challenge this approach. First, policies at the federal level and in many states have encouraged increased competition in electric power generation, contributing to demonopolization of the bulk power (wholesale) side of the indus-

12. As is discussed *infra* in Part I, many states limit consideration to in-state benefits, precluding regulators from even considering extra-jurisdictional benefits. Even if such consideration is not limited by law, to the extent that state regulators are politically accountable to in-state constituents through gubernatorial appointment or election, they have little political incentive to approve such a line.

13. *See* Richard J. Pierce, *The State of the Transition to Competitive Markets in Natural Gas and Electricity*, 15 ENERGY L.J. 323, 334 (1994) (noting differences in FERC's siting authority between the Natural Gas Act and the Federal Power Act).

14. See *infra* Part III.D for discussion of federal authority over transmission siting, as well as proposals to expand FERC's jurisdiction.

15. States that have enacted comprehensive siting statutes have been anything but uniform in terms of which state agencies are vested with siting authority. In some states it is the Public Service Commission, in others it is in a free-standing siting agency, and in still others it is in a body comprised of representatives of multiple state agencies. In Florida, while environmental agencies and the Public Service Commission have statutory responsibilities, the Governor's Cabinet sits as the final siting agency and may exercise preemptive authority over local governments and other siting decision makers. In other states, localities retain considerable powers, but state regulators possess appellate authority. In short, there is no single description of the decision-making process that accurately captures every state, even where there is a state siting statute. *See* Dang, *supra* note 5, at 343–44 (discussing Florida); Brown & Daniels, *supra* note 7, at 26–33 (discussing other states).

try.[16] Federal policy has been promoting the evolution of competitive regional wholesale power markets, opening up opportunities for utilities, states, and—depending on state policy—even end users to look to the interstate markets, particularly to robust and competitive ones, to both export and import electric power. At the state level, some states have opened up retail markets to competition, but even among those states who maintain the retail supply monopoly, local utilities have been encouraged or even required to conduct competitive bidding for new power supply options and/or to evaluate the possibility of procuring electric power in the competitive interstate market.[17] Second, the increased policy emphasis on the environment, energy independence, and other public policy objectives has resulted in a dramatic increase in the demand for renewable energy, particularly due to heightened attention to climate change. Given that wind power—the most economically viable renewable resource on a bulk-power basis—is feasible predominantly in locations far removed from load centers, the demand for new multistate transmission facilities has been brought clearly into focus.[18]

Not surprisingly, these two developments have presented the opportunity for resource-rich states to adopt economic development strategies to promote the construction of generating plants, often wind turbines, whose output is frequently intended as much for export into other states as it is for in-state consumption. For example, Western states such as Colorado, New Mexico, Utah, and Wyoming (some, if not all, of which are exporters of fossil-fueled power today) have the resource potential to be significant exporters in tomorrow's renewable energy world.[19] If approved by regulators in these states, multistate

16. See *infra* Part II.A for a description of the widespread significance of the wholesale power market to the industry today.

17. See *id.*

18. See *infra* Part II.B for a description of how heightened attention to climate change has brought this issue into focus.

19. Given that this Article was initially prepared for a conference on renewable resource development for specific states in the West, it is fairly comprehensive in surveying siting laws in Colorado, New Mexico, Utah, and Wyoming. Many other states, including states outside of the West, have transmission siting laws with similar features, so the observations we make about these states can be extended to other energy producing states in the U.S. as well. *See, e.g.*, Dang, *supra* note 5 (discussing Florida's siting statute); Greene & Hart, *supra* note 11 (discussing how Virginia limits cost recovery to native load benefits). States outside of the West face equally significant challenges in attracting capital to expand transmission infrastructure for new renewable projects. *See* Matthew L. Wald, *Wind Power is Feasible But Costly, Study Says*, N.Y. TIMES, Jan. 21, 2010, at B6 (noting

transmission projects could: (1) foster economic development based on exports of renewable energy to the energy sink states (i.e., those states that consume more power than they produce within their borders); and (2) advance critical federal and/or state environmental goals by making it possible to more effectively substitute renewable energy for fossil fuels throughout the western United States. Such projects would certainly provide benefits to local jurisdictional electricity consumers in electricity producing states (in the form of increased reliability as load increases and improved access to renewable energy for their own jurisdictional customers). But the private money to finance transmission would not necessarily come to the table for the purpose of serving the needs of jurisdictional customers alone; rather, it would likely come for the purpose of moving power from the producing "source" states to the energy "sink" states.

This reality challenges how regulators approach the public interest under the current approach to siting as well as its predecessor paradigm—both of which are more inwardly focused on the states' (or utility systems') own needs rather than on export potential. These new developments call into question the effectiveness of public utility law, particularly in states that wish to develop renewable energy sources for export. Can a siting agency, for example, consider the economic development or non-local environmental benefits in deciding to approve a project, a cost allocation, or a siting plan? What are the obstacles to using these factors as a sufficiently defensible rationale for our states to engage in multistate planning? Is solving the puzzle of cost allocation—i.e., keeping the costs to local ratepayers commensurate with the benefits they receive—sufficient to reconcile the tension between costs to jurisdictional customers and benefits to those outside the jurisdiction?

A failure to meaningfully address these issues may well serve not only to undermine a state's economic development plans, but may also undermine the evolution of viable, robust interstate markets and broader national environmental objectives related to climate change. Statutes—as well as regulators' and policymakers' understanding of the public interest—must also evolve beyond the parochial, more narrowly focused model that co-existed with traditional public utility regulation.

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that wind could provide 20–30 percent of capacity in the Eastern two-thirds of the U.S. by 2024, but that this would likely require transmission upgrades of about $93 billion).

In some instances, regulators face barriers to the evolution of the public interest that must be addressed by state legislatures or courts. These barriers must be confronted if state regulators are to retain their relevance in a wholesale market that is increasingly attentive to climate change considerations.

The Article proceeds in three parts. Part I describes the existing arrangements in the states of Colorado, New Mexico, Utah, and Wyoming for siting new transmission lines, and highlights the co-existence of those arrangements with a conventional understanding of the public interest in determining need and addressing environmental concerns under traditional state siting laws affecting transmission. Part II discusses transmission issues related to the competitive wholesale market and increased attention to climate change, and highlights how federal law has expanded to accommodate some of these concerns. Part III emphasizes the need for a new definition of the public interest that might better reflect these new market circumstances and opportunities, and highlights the two main barriers to this: (1) legislative and/or regulatory inertia; and (2) an outdated cost-allocation model. The public interest under many state siting statutes is sufficiently capacious to give regulators some flexibility to evolve, but in other instances state legislative action may be needed. In addition, the state cost-of-service ratemaking model must evolve to a more regional approach to allocating the costs of new transmission. The expansion of federal authority over transmission line siting addresses many barriers presented by parochial state laws, but it also seems clear (with or without new legislation) that regional approaches to planning and siting will increase in significance. Pending federal proposals fail to sufficiently address the issue of cost allocation for new transmission infrastructure, which will continue to pose a barrier to the development of new transmission projects. Even if new federal proposals are adopted into law, state regulators will need to evolve their understanding of the public interest under siting laws to adapt to new issues presented by the wholesale market and climate change.

I. EXISTING ARRANGEMENTS FOR TRANSMISSION LINE SITING AND COST ALLOCATION

Part I examines key elements of the transmission and siting approaches employed in several Western states: Colorado,

New Mexico, Utah, and Wyoming. We generalize from these approaches to highlight critical limits state laws present to fostering economic development based on exports of renewable energy. In addition, we examine the extent to which state siting approaches may present a barrier to federal and/or state environmental goals, especially where there are opportunities to effectively substitute renewable energy for fossil fuels and where interstate markets for renewable power have a potential to flourish.

A. Institutional Decision Makers and Processes

While all four states adopt features of the more contemporary siting approach—as opposed to the traditional decentralized paradigm for siting—the four states have very different institutional arrangements for making siting decisions. With the exception of New Mexico, where the Public Regulation Commission ("NMPRC") has siting power,[20] all of the states allow local authorities[21] varying degrees of authority over the siting of new lines.

For example, in Colorado, all proposed new transmission lines are required to obtain local approvals. In fact, prior to applying to the Colorado Public Utilities Commission ("CPUC") for the required Certificate of Public Convenience and Necessity ("CPCN"), utilities must have notified affected local governments of the intended filing.[22] While a CPCN may be issued by the CPUC before all local permits are obtained,[23] all local permits are required prior to construction.[24] Local governments have a limited period of time to consider siting applications,[25] and failure by local government to respond on a timely basis to an application deems the application approved.[26] If the statu-

20. N.M. STAT. § 62-9-1.A (2004).

21. "Local authorities" means both counties and municipalities, as applicable.

22. COLO. REV. STAT. § 29-20-108(4)(a) (2009).

23. City of Fort Morgan v. Colo. Pub. Utils. Comm'n, 159 P.3d 87, 89 (Colo. 2007).

24. Any adverse local decisions on applications for approval, however, are subject to appellate review by the CPUC, as long as an application for a CPCN has been filed. COLO. REV. STAT. § 29-20-108(5)(a).

25. Local authorities have twenty-eight days to ask applicants for additional information. *Id.* § 29-20-108(2). Final decisions by local governments must be rendered within 120 days of filing a preliminary application (if the preliminary application is required by local land use regulations), or within ninety days of the filing of a final application. *Id.*

26. *Id.*

tory time period for a CPCN lapses without CPUC action, the CPCN is approved.[27] Except for constitutional claims, CPUC decisions on CPCN applications are subject to judicial review by the district court on issues of law only.[28] The state has also adopted an Energy Resource Zone statute under which the regulated utilities are required to develop a plan every two years for needed transmission and submit it to the CPUC.[29] In addition, the statute mandates that CPUC should issue a CPCN for the utility's plans presented under the Energy Resource Zones if it is necessary for Colorado customers or for the utility to meet Renewable Portfolio Standard ("RPS") goals.[30] Air permits must be obtained from the Colorado Department of Public Health and the Environment.[31]

Other Western states, as many other states throughout the U.S., follow a similar approach. In Utah, applicants for siting approval are required to seek local siting permits, as well as a CPCN, by the Public Service Commission ("UPSC").[32] Environmental permits must be obtained from the state's Department of Environmental Quality.[33] Local governments have a limited time period to respond to an application,[34] and if they fail to do so applicants may seek a review by the Utility Facility Review Board.[35] The state also provides that in the event an applicant and a local government are in dispute over an application, the Board will resolve the matter.[36]

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27. In regard to CPCN applications, the CPUC has sixty days to approve or deny, or to ask for additional information. *Id.* § 24-65.1-108(1). According to section 24-65.1-108(2), there are specific requirements for a denial, but no requirements for an approval. *Id.* § 24-65.1-108(2). From this we infer that inaction can result in an approval but not in a denial.

28. *Id.* § 40-6-115.

29. *Id.* § 40-2-126.

30. *Id.* § 40-2-126(3)(a).

31. *Id.* § 25-7-101.

32. UTAH CODE ANN. §§ 54-4-25(1), (4)(a)(i) (2008).

33. *Id.* § 19-2-101.

34. *Id.* § 54-14-303(1)(e) (specifying a sixty-day window).

35. *Id.*

36. Either the local government or the applicant may seek review if there is a dispute over the following:

> 1) local government requirements resulting in excess costs without the local government agreeing to pay for such costs;
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> 2) a utility's belief that a condition imposed by the local government will impair safe, reliable, adequate, or efficient service;
>
> 3) failure of a local government to approve construction of a facility needed for requisite service quality;
>
> 4) failure of the local government to act on an application within the 60-day time period allowed by statute;

Likewise, in Wyoming, all transmission line applicants must obtain local approvals first and then proceed to a second level of review. The Public Service Commission of Wyoming ("WPSC") is empowered to hear appeals by utilities from an adverse decision by local authorities on a siting application.[37] A second level of review is conducted by the WPSC but there are no statutory time limits for the WPSC to render a decision.[38] For non-utilities, the Industrial Siting Council, a body within the Department of Environmental Quality, carries out a third level of review.[39] The Council has a statutorily defined time period in which it must render a decision.[40] All applicants must submit to an environmental review by the Department.[41]

New Mexico, however, adopts a more streamlined process for transmission line siting. Applicants need not seek local government approvals. A final decision by the NMPRC preempts all local laws and regulations and is deemed conclusive on all questions of siting, land use, aesthetics, and any other state or local requirements affecting the siting.[42] All applicants must file two applications with the NMPRC: one for a CPCN and a second one for a location permit.[43] The New Mexico PSC has a statutorily defined time period in which it must decide whether to grant a CPCN, although it also may extend that time frame for a limited time period.[44] Failure to act

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5) inconsistent rulings by affected local governments where the proposed facility straddles the border between the two jurisdictions; or

6) cost allocation where a facility located in one jurisdiction is intended to serve customers exclusively outside that jurisdiction.

Id. § 54-14-303.

37. WYO. STAT. ANN. § 37-2-213 (2009).

38. *Id.* (describing the procedures by which Commission approval takes effect). While this section does not explicitly say that there are no time limits, it does suggest as much because it does not provide for effect by default.

39. *Id.* §§ 35-12-102, -103, -106.

40. *Id.* § 35-12-113(a) (specifying forty-five days after receiving an application and conducting a hearing).

41. *Id.* § 35-12-106.

42. N.M. STAT. § 62-9-3.I (2004).

43. *Id.* § 62-9-1.A (requiring the CPCN); *id.* § 62-9-3.B (requiring the location permit). A third application is required for a right of way width determination when the requested right of way is more than 100 feet. *Id.* § 62-9-3.2.A.

44. *Id.* § 62-9-1.C (specifying a nine-month limitation on consideration of an application, with a possibility of a six-month extension). If an application for a location permit is filed after an application for a CPCN has been approved, the NMPRC has ninety days to rule on the location permit; if the application for a location permit is filed simultaneously with a CPCN application, the Commission has nine months to rule on both applications. *Id.* § 62-9-3.K. The NMPRC has six months to rule on an application for a right of way determination. *Id.* § 62-9-3.2.F.

constitutes approval.[45] While New Mexico does require parties to seek a local permit, if a local application is not approved within a defined time period, it can be approved at the state level.[46]

At first glance, the responsibilities assigned to local governments in Colorado, Utah, and Wyoming might be expected to skew decision making to focus heavily on concerns about the local impact of proposed new transmission lines. Of course, there are a variety of reasons localities may be unduly biased by what they perceive as adverse local impacts. Many businesses and residential landowners simply do not want to either have or even look at transmission lines close to their property for a host of reasons, ranging from health fears about electromagnetic fields ("EMFs"),[47] to aesthetics, perceived impact on crops and livestock, diminution of the economic value of their property, environmental concerns, and a variety of other reasons.[48] Such local concerns are magnified by a mismatch between who bears the costs and who benefits from a new line. Weighing costs and benefits across the entirety of a regional power market is almost certain to produce a very different result than if costs and benefits are focused through the prism of a local government official. Local officials may view costs as quite visible, dramatic, and focused, while the benefits may be far less apparent and are likely to be garnered by people and businesses distant from the locality where decisions are being made and the physical effects are felt.[49] Another potential problem with local decision making in siting new transmission

45. *Id.* § 62-9-1.C.

46. W. Interstate Energy Bd., Summary of State Transmission Siting Law in the Western Interconnection, http://www.westgov.org/wieb/transmission/other/siting_paper.pdf (last visited Feb. 12, 2010) [hereinafter Summary of Siting Law] (specifying 240 days).

47. It is not the intention of this Article to make any pronouncements on the health effects of EMFs associated with transmission lines. That is for scientists to determine. What is clear and indisputable, however, is that public concerns about EMFs are very often raised by interveners and public commentators in the course of siting decision-making processes as grounds for opposing the permitting of such facilities.

48. *See* Nancy A. McLaughlin, *Condemning Open Space: Making Way for National Interest Electric Transmission Corridors (Or Not)*, 26 VA. ENVTL. L.J. 399, 401 (2008) (describing aesthetic and conservation related concerns in siting transmission lines); 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, 316–19 (2005) (describing environmental and other concerns in siting a transmission line in Connecticut).

49. *See, e.g.*, Rossi, *supra* note 48, at 316–19 (describing opposition to the Cross-Sound line in Connecticut).

lines is the increased opportunity for interveners, such as competitors or organized interest groups whose motivations and objectives may have little to do with the specific line being proposed, driving up transaction costs for an applicant.[50] Simply stated, the more regulatory bodies to which an applicant must apply, the higher the process costs will be and the more likely it is that the litigiousness of intervenors could drive those costs even higher.[51] The result could well be to discourage investors from committing to projects and applicants or potential applicants from building.

While many local officials have a sense of balance and public interest that will lead them to give a fair hearing to the applications that come before them, there are also institutional reasons to view this process with serious caution. A number of factors contribute to potential downsides. The first is that, because some local governments may see benefits from the taxes paid by transmission owners or see a transmission line as a tool for economic development (perhaps not the new lines themselves but, more likely, the generators connected to them), the salience of local impacts may lead local decision makers to focus on the benefits a new line presents to the local community rather than to a larger constituency.[52] A second constraining factor is the tight deadlines for decision making imposed by states such as Utah and Colorado.[53] While tight deadlines might lead to quick rejections, the transaction costs in obtaining local decisions are also reduced by the short time frames allotted for them. Third, the existence of appellate mechanisms in many states tends to somewhat constrain parochialism in final outcomes, as redress from overly parochial local decisions is readily available to frustrated applicants.[54] In fact, the

50. *Id.*

51. The costs are not simply economic or financial. Entities seeking to build transmission lines must often expend considerable political and goodwill capital in order to gain needed approvals.

52. Taxes and economic development may not be the only benefits bestowed on local jurisdictions. It is not at all unknown for transmission developers to offer other "goodies," such as parks, community centers, maintenance equipment, fire equipment, etc., in order to "sweeten the pie" for communities.

53. UTAH CODE ANN. § 54-14-303(1)(e) (2008) (specifying a sixty-day window); COLO. REV. STAT. § 29-20-108(2) (2009) (requiring local governments to render their decisions within 120 days of filing a preliminary application, or within ninety days of the filing of a final application).

54. Such appeals will ultimately be to courts, which have the jurisdiction to hear appeals of adverse decisions of regulatory bodies. Ultimately, however, most state appellate courts defer to determinations of regulatory bodies in complex and controversial administrative law matters, such as siting determinations. *See* Mi-

appellate processes may well drive local officials to use their fleeting powers to derive certain concessions from an applicant that they might not be able to obtain if they simply reject an application and leave their fate to the appellate body.[55]

As these problems highlight, the more power vested in local authorities to make siting decisions, the more vagaries and uncertainties are also introduced to the process. While a state may have economic and environmental objectives that would be well-served by the construction of a new transmission line, allowing such decisions to be made at the local level by authorities who may have other (often conflicting) objectives in mind poses a high risk of leaving the state's broader objectives unaccomplished.[56] That is not to say that localities should not have some say in the siting of lines, but it is important to distinguish between having input and having decision-making powers. While perhaps the roles of local authorities in siting in effect only comprise input to the process, given the imposition of tight deadlines and appellate mechanisms, the effect of other variables such as criteria for appeals, overall transaction costs, and a variety of other factors suggest that local authorities can have considerable influence on outcomes as opposed to merely providing input.

B. Eligibility To Apply For Siting Approval / Exercise Powers Of Eminent Domain

Traditionally, electric transmission lines were built, owned, and operated by utilities.[57] Because in-state utilities

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chael Pappas, *No Two-Stepping in the Laboratories: State Deference Standards and Their Implications for Improving the* Chevron *Doctrine*, 39 MCGEORGE L. REV. 977 (2008) (observing that the vast majority of states give due weight or strong deference to agencies' reasonable constructions of statutes).

55. Note 52, *supra*, suggests the types of concessions that are sometimes sought although others, such as changing the precise routing of lines or imposing conditions, such as putting the line underground, are also common.

56. As has been well-recognized since James Madison laid out the basic argument in Federalist No. 10, the more local the decision-making process, the more likely the process will give weight to parochial concerns. THE FEDERALIST NO. 10 (James Madison). In the context of local siting decisions, NIMBY-type concerns could be expected to predominate, but would be less likely to carry the same degree of weight at the state or federal level, given that the broader the political base, the more likely it will be that powerful interest groups will cancel each other out.

57. Historically, electric utilities were vertically integrated, providing generation, transmission, and distribution, primarily for the purpose of serving customers within their monopoly franchise area. *See* Jon Wellinghoff & David L.

traditionally were the entities planning, proposing to build, and requesting siting for transmission lines—and because only utilities generally qualify for cost-of-service recovery for capital projects—under both the traditional paradigm and current approach many states limit the full benefits of transmission siting approval to utilities. For example, non-utilities proposing transmission lines, along with utilities lacking contracts with in-state customers (such as out-of-state utilities), may not qualify for the full benefits of siting approval, including the power of eminent domain.[58] Many laws relating to applications for siting approval and to the use of eminent domain to acquire right-of-way have been written in such a way that, under modern market conditions discussed below,[59] they constitute a barrier to attracting non-utility capital to the transmission business.

For example, in Colorado, it is not clear that anyone other than a public utility may apply to site a transmission line, although a public utility is defined broadly so that any party operating transmission lines may be a public utility.[60] This contrasts the broader language found in some other state statutes, which explicitly allows anyone to apply. For example, in Utah, anyone can apply to local governments for transmission siting permits. Also, utilities are required to apply to the UPSC for a CPCN, but non-utilities may proceed with local government approvals and need not apply for a CPCN.[61] New Mexico does not limit who can apply, allowing both utilities

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Morenoff, *Recognizing the Importance of Demand Response: The Second Half of the Wholesale Electric Market Equation*, 28 ENERGY L.J. 389, 389 (2007); *see also* Peter Z. Grossman, *Is Anything Naturally a Monopoly?*, *in* THE END OF A NATURAL MONOPOLY: DEREGULATION AND COMPETITION IN THE ELECTRIC POWER INDUSTRY 11, 30–32 (Peter Z. Grossman & Daniel H. Cole eds., 2003).

58. While so-called "merchant" (non-utility) transmission projects may be inefficient in certain contexts, there is considerable benefit to new entrants building transmission facilities without imposing the risks of new transmission investment on incumbent ratepayers. Merchant facilities, however, frequently face legal impediments in individual states and have thus had limited success to date. *See* Rossi, *supra* note 48, at 316–19, 333–35 (discussing barriers to merchant transmission and merchant power plants in states such as Connecticut and Florida).

59. *See infra* Part II.A.

60. COLO. REV. STAT. § 40-1-103 (2009); *see also* Summary of Siting Law, *supra* note 46, at 13. Summary of Siting Law only discusses the process for obtaining a CPCN for utilities, but references the broad definition of a utility in Colorado. A broad definition of a utility, however, does not allow an entity that does not want to take on the obligations of the state's utility laws to apply to site a transmission line.

61. Barnes v. Lehi City, 279 P. 878 (Utah 1929).

and non-utilities to apply for siting permits.[62] Wyoming also permits all parties to apply to site a transmission line, but, as noted above, the process for handling applications is different for non-utilities than it is for utilities.[63]

C. Need Determinations

In the most common current approach to transmission siting approval, state regulators evaluate two critical substantive criteria: need and environmental impact assessment. All new construction, by definition, will have some effect on the environment, landscape aesthetics, and the people living and working in reasonable proximity to the facility.[64] Officials in the siting process must decide if those effects, which are generally viewed as adverse, are outweighed by the benefits the proposed new line will bring. Those benefits are typically economic in nature. Further complicating the task for siting officials is a fundamental asymmetry: in most cases, the greatest adverse impact is geographically localized, while the benefits are geographically dispersed across a wide region.[65] Some of that asymmetry may be mitigated to a degree by rising concerns over climate change and carbon emissions—the consideration of which has the effect of looking at the impact on a far broader geographic basis, a subject explored below.[66]

Even before assessing the impact, however, the initial question for siting officials is what justifies construction of the new line in the first place. Historically, vertically-integrated utilities simply developed and presented on their own their individual growth projections, planned facility retirements, and plans for meeting that demand in terms of generation and transmission lines to link the plants to load centers, submitting them to siting authorities for approval.[67] Beginning in the 1980s, regulators in many states created public planning processes—often called "least cost planning" ("LCP") or "integrated resource planning" ("IRP")—designed to test utility forecasts through public scrutiny and analysis. These processes were also often designed to encourage, if not compel, utilities to

62. N.M. STAT. § 62-9-1 (2004).
63. *See supra* notes 35–39.
64. *See supra* note 4.
65. *Cf. supra* note 56 (mentioning Madison).
66. *See infra* Parts I.D & II.B.
67. This was the typical regulatory process under vertical integration, which predominated for most of the twentieth century. *See supra* note 57.

strive for greater efficiency not only in their own production and delivery operations, but to promote conservation and efficiency (demand side management ("DSM")) by their customers. In terms of the siting process, the effect was that the demand forecasts brought to siting agencies may have gone through more filters than had been customary in the past. In many cases, it raised new issues regarding efficiency gains that siting regulators had to consider before agreeing that a proposed new facility was necessary to meet demand.[68]

Because this Article is focused on siting in terms of economic development and energy exports, it will not provide a comprehensive survey of the traditional need criteria applied by state regulators, but will focus on need criteria and determinations relevant to the focus of the present problem at hand: namely, regional economic development which may require the consideration of out-of-state or off-system benefits.[69] For purposes of this Article, single system benefits are conceptually comparable to single state benefits, in the sense that we are examining out-of-system trading opportunities in the case of multistate utilities, as comparable to single state benefits in the context of single state utilities. In both cases, siting officials would be looking at one state's native-load customers versus another state's.

In terms of explicit statutory or legal authorization, the ability of siting authorities to consider factors other than the traditional need criteria for serving native load customers has been quite limited. For example, in Colorado, anyone applying to site a transmission line must demonstrate a need for the line to be built.[70] Apart from the traditional need criteria to serve native load customers within the state, the only specific guidance given to the CPUC or to local authorities, as the siting authorities, is that it appears that they may consider achieve-

68. *See, e.g., Maine Rejects Plan to Import Electric Power From Canada*, N.Y. TIMES, Jan. 15, 1989, at A32 (explaining that Maine rejected a new source of electricity imports, making reference to insufficient efforts at demand side management).

69. Some states have been forced to consider multistate benefits simply by virtue of the fact that utilities serving those states operate in multiple jurisdictions. For example, notwithstanding limited language in their statutes, states such as Utah and Wyoming (with PacifiCorp, a utility serving customers in both states) have experience with looking at benefits on a system wide, rather than single state basis. *See* PacifiCorp Company Overview, http://www.pacificorp.com/about/co.html (last visited Mar. 16, 2010) (noting that PacifiCorp operates in six states, including Utah and Wyoming).

70. COLO. REV. STAT. § 40-5-102 (2009).

ment of the state's objectives in meeting its RPS (an obligation that a certain percentage of each utility's sales come from renewable sources) in making siting decisions.[71] There is no statutory reference to any interests outside the state, or any specific reference to the export or import of energy other than as it relates to RPS. Thus, depending upon how the statutes are construed, the CPUC and local siting authorities are either precluded from considering out-of-state needs, or may give limited consideration to such needs as long as they are reasonably related to the needs of the state and/or serve Colorado consumers.

Other states in the West face similar legal limitations on need determinations. New Mexico's creation of a Renewable Energy Transmission Authority ("NMRETA"),[72] with an objective of exporting the state's renewable energy, suggests that the state legislature clearly contemplated building some lines for multistate purposes. Outside of projects that fall within that statute, where an applicant in New Mexico is required to demonstrate need, New Mexico provides no statutory guidance for regulators' consideration of multistate benefits. Moreover, the requirement that a specific application be filed for a right-of-way determination where the applicant is seeking a right of way for projects with a larger width would appear to impose an additional transaction burden on those proposing larger lines and is more likely to have greater impact on out-of-state applicants.[73] In Utah, applicants for siting a line must demonstrate need but there is no statutory guidance with regard to out-of-state considerations other than the reference to facilities for "the economic benefit of such public utility,"[74] a phrase that at least hints at benefits that may accrue from something other than serving native load customers.[75] Similarly, in Wyoming,

71. *Id.* § 40-2-124. In that connection, it is useful to note that nothing in Colorado law suggests that the siting authorities consider issues (such as economies of scale) that might spill over into other states in the course of making siting decisions. In short, the guidance is largely inward-looking. The one exception is that the CPUC is authorized to confer with, or hold joint hearings with, authorities of other states or any agency of the United States in connection with any matter under title 40 of the Colorado Code, and to enter into cooperative agreements with said entities to enforce the economic and safety laws of Colorado and the United States. *Id.* § 40-2-115.

72. N.M. STAT. § 62-16A-3 (2004).

73. *See id.* § 62-9-3.

74. UTAH CODE ANN. § 54-4-26 (2008).

75. Given that a single, multistate utility serves most of the state, that phrase may have less significance, in terms of looking outside of that single system, than

there is little statutory guidance to siting authorities with regard to out-of-state benefits.[76]

D. Externalities: Impact Assessment and Resource Mix

All state siting laws require a balancing of need against the non-economic[77] effects of the proposed facility.[78] Traditionally, a host of such matters were considered, but most of them were quite local in effect. These might have included (but were not necessarily limited to) environmental harm, effects on farming and livestock, health effects, fish and wildlife impacts, fauna impacts, parkland and wilderness considerations, aesthetics, local air quality, commercial and tourism effects, and watershed effects. The specific considerations varied somewhat from state to state, but in almost all jurisdictions the non-economic factors taken into account were characteristically local. NIMBY concerns, for example, are consistently considered by regulators in the siting process, and often drive the process.

For example, in 2006, Southern California Edison proposed to build a 230-mile high voltage transmission line from Blythe, California to the Palo Verde Nuclear Generating Station, located fifty miles west of Phoenix, Arizona. The siting of the line was approved by California regulators.[79] Arizona regulators, however, rejected the proposal, even though it would have

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appears at first blush. It is also interesting to contemplate what meaning should be attached to the fact that the statute refers to the benefit of the "utility," rather than the utility's customers.

76. However, Wyoming has created the Wyoming Infrastructure Authority ("WIA") to promote the selling of energy output produced in the state. WYO. STAT. ANN. § 37-5-303 (2009). It seems likely that, at least in terms of obtaining permits to further the purposes of the WIA, the definition of need looks not only to the domestic needs of the state but also to the operations of the interstate bulk power market beyond the state's boundaries.

77. Non-economic is being used in the context of external to the economics of the electrical network. Some of the effects may, in fact, be economic, or have economic implications, but are external to the economics of the project and the interconnected grid. Thus, for purposes of this Article, they are described as "non-economic."

78. *See, e.g.*, *supra* Part I.A (describing state siting statutes); *see also* Brown & Daniels, *supra* note 7 (describing state siting statutes).

79. So. Cal. Edison Co., Decision No. 07-01-040 (Cal. Pub. Utils. Comm'n Jan. 25, 2007), *available at* http://docs.cpuc.ca.gov/published/FINAL_DECISION/64017.pdf (order granting a Certificate of Public Convenience and Necessity).

been paid for by California ratepayers.[80] Emphasizing the ostensible environmental costs that the line would impose on Arizona at the expense of California, Arizona's regulators called the line a "230-mile extension cord."[81] Among the concerns stated were environmental impacts on "everything from native plants and wildlife to viewshed and archeological sites."[82] As one Arizona regulator bluntly put it, "I don't want Arizona to become an energy farm for California. This project, if we approved it, would use our land, our air and our water to provide electricity to California."[83]

When siting officials find that the non-economic consequences of a proposed project are of sufficient adversity, they can propose mitigation, such as changing a proposed route, changing proposed parameters (for example, requiring a widened right of way), or putting a line underground. In the case of damages that cannot be mitigated, siting officials can reject the line entirely. Needless to say, cost becomes a factor in considering whether to order mitigation, or in the selection of the precise type of mitigation required. Depending on the nature of mitigation required, approvals conditioned on costly mitigation can be the functional equivalent of a denial.

In some jurisdictions, the level of harm tolerated may be viewed in terms relative to the degree to which the proposed line is needed for local ratepayers.[84] In others, the limits of tolerance may be more absolute.[85] It is also likely that states with a relative tolerance for non-economic adverse consequences (such as Arizona) are likely to have a higher level of tolerance for lines they see as essential for reliability of supply to customers in their jurisdiction than for lines they see as be-

80. So. Cal. Edison Co., Case No. 130, Decision No. 69638 (Ariz. Corp. Comm'n June 6, 2007), *available at* http://images.edocket.azcc.gov/docketpdf/0000073735.pdf (order denying Certificate of Environmental Compatibility).

81. Press Release, Heather Murphy, Public Information Officer, Ariz. Corp. Comm'n, Regulators Reject "Extension Cord for California" (May 30, 2007), *available at* http://www.energylegalblog.com/files/ACC_Press_Release_Devers_II_Vote.pdf.

82. *Id.*

83. *Id.*

84. It is only natural, for example, that regulators consider harms in a relativistic way insofar as they are required to consider the impact on local or native load customers, or to the extent that they do so as a matter of regulatory practice.

85. *See, e.g., In re* Black Hills Power and Light, Docket No. 20002-44-EA-94 at 9 (Wyo. PSC 1995) (discussing the environmental impact and potential mitigation measures and emphasizing the importance of the line; this can be seen as more relativistic analysis as it considers how much environmental insult will be tolerated and how it should be dealt with).

ing primarily used to facilitate energy trading between utilities and across jurisdictions. As noted above, some states require a separate environmental analysis done outside the siting process itself (e.g., Utah, Wyoming, and Colorado, where the analysis is performed by the state environmental regulatory agency), often with issuance of a separate permit.[86] Regardless of how relativistic the siting authorities may be in their own characterization of costs and benefits, such criteria or a separate environmental permit issued by state or local regulators may trump even well-intending regulators who make an effort to consider broader regional benefits in assessing need.

E. Cost Allocation/Ratemaking Considerations

The common practice of state commissions in the United States is to include the costs of the transmission assets of jurisdictional utilities in retail rate base, even further focusing the approval inquiry at the state level on benefits to in-state customers. Such an approach is typical for western states, which appear to make no distinction between the wholesale transmission cost of service and the retail transmission cost of service.[87] For example, the approach PacifiCorp uses to recover transmission costs in Utah, Idaho, and Wyoming, and the approach used to recover the costs of transmission in Colorado, appear to combine transmission cost of service and wholesale wheeling revenues with other cost of service functions, such as generation, distribution, and overheads, to form a single retail rate.[88] To be precise, the costs of transmission are allocated to native load rate base—most of which is retail, but some of which may be used by transmission-dependent utilities, whose purchase of transmission services fall within the Federal Energy Regulatory Commission's ("FERC's") jurisdiction.[89]

There are many users of transmission who are not native load. For purposes of retail rate regulation, there are three basic ways that state regulators can deal with this issue of cost

86. *See supra* Part I.A.

87. Becky Wilson, Rocky Mountain Area Transmission Study ("RMATS") States Transmission Cost Recovery Process 2 (Nov. 24, 2004) (unpublished manuscript, on file with Harvard Electricity Policy Group), *available at* http://www.westgov.org/wieb/electric/Transmission%20RP/papers/UTtcr.pdf.

88. *Id.*

89. Section 201(b) of the Federal Power Act limits FERC's jurisdiction over transmission to only wholesale transactions in the interstate market, and excludes distribution and retail transmission. 16 U.S.C. § 824(a) (2006).

allocation. One way (used by PacifiCorp) is to only include in the rate base that portion of the assets required for native load retail service and leave the utility to recover the balance of its revenue requirements from FERC rates.[90] A variation on this methodology is to exclude from retail rate base only that portion of the transmission dedicated to the service of wholesale native load.[91] A second approach is to exclude transmission entirely from retail rate base and simply pass on the rates set by FERC for the use of the grid by retail customers.[92] Finally, the most common methodology (largely derived from the traditional monopoly model) is to include all prudently incurred transmission costs in the retail rate base, and then, over the course of future utility rate cases, credit back to retail consumers those revenues derived from wholesale users.[93]

It is commonly perceived that such ratemaking practices have nothing to do with siting new lines. In fact, as we argue below, the practice states have historically used in allocating the costs of transmission has had a profound impact on siting lines throughout the United States.[94] That is because siting authorities have been reluctant to site a transmission line for their utilities when the costs—or at least the residual risks of bearing them—are imposed on consumers who may not derive much benefit from it.

II. CONSTRAINED TRANSMISSION: INTERSTATE MARKETS AND HEIGHTENED ATTENTION TO CLIMATE CHANGE

Part II discusses transmission issues related to two significant developments that have changed, and will continue to change, the electric power industry: the deregulated wholesale market and increased attention to climate change. While federal law has expanded to accommodate some of these concerns,

90. Colorado, for example, places the cost of transmission in retail rate base, although its commission has acknowledged that beneficiaries of a transmission line may not be the primary persons who may bear the costs. Pub. Serv. Co. of Colo., Decision No. C06-0786, 2006 Colo. PUC LEXIS 692 (Colo. Pub. Utils. Comm'n June 29, 2006).

91. Wilson, *supra* note 87, at 3 (observing that "[u]nder this approach, retail customers bear the risk of any difference in wholesale transmission cost of service and firm wholesale wheeling revenue").

92. "This approach is the basis for FERC wholesale wheeling transmission tariffs (OATTs) and a similar approach is also used in Utah and Idaho for retail recovery of natural gas pipeline cost." *Id.*

93. *Id.*

94. *See infra* Part III.D.

and several additional proposals for reform are pending,[95] state siting laws have not provided sufficient authority for states to expand infrastructure to accommodate either wholesale power markets or to expand infrastructure to accommodate renewable energy resources.[96]

A. Wholesale Competition

Any discussion of state public utility regulation today must begin against the backdrop of federal policies supporting competition in wholesale bulk power supply markets. Competition has radically changed the nature of the electric power industry, calling into question many of the traditional assumptions of state utility regulation, including transmission siting. Wholesale power markets have been largely deregulated since the mid-1990s, when FERC adopted open access policies for transmission in Order No. 888.[97] Congress has not opposed open access principles, and under the Obama Administration, FERC continues to embrace the open access goals for wholesale power markets adopted by FERC during the Clinton Administration and continued under the Bush Administration.[98] Indeed, promoting competition in bulk power markets has been a consistent characteristic of federal energy policy dating back to the late 1970s.[99] It only fully evolved into open access over the

95. Part II.C discusses the 2005 amendments to federal law as well as proposals to further amend federal law.

96. Some of the following descriptions of developments in wholesale markets, such as heightened attention to climate change and federal legal developments, echo in an expanded manner similar observations by Jim Rossi in *The Trojan Horse of Electric Power Transmission Line Siting Authority*, 39 ENVTL. L. 1015 (2009).

97. Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities, 61 Fed. Reg. 21,540 (May 10, 1996) (codified at 18 C.F.R. pts. 35 & 385 (2008)).

98. FERC's strategic plan, issued in 2009, continues to embrace the goals of wholesale competition and open access to transmission for power suppliers. FEDERAL ENERGY REGULATORY COMMISSION: THE STRATEGIC PLAN FOR FY2009–2014 7 (2009), http://www.ferc.gov/about/strat-docs/strat-plan.asp ("Improving the competitiveness of these markets is important in achieving that goal because it encourages new entry among supply-side and demand-side resources, spurs innovation and deployment of new technologies, improves operating performance, and exerts downward pressure on costs.").

99. According to the web site of FERC, an independent agency with members in both political parties:

> National policy for many years has been, and continues to be, to foster competition in wholesale power markets. In each major energy bill over the last few decades, Congress has acted to open up the wholesale elec-

course of FERC implementation of the Energy Policy Act of 1992, signed into law by the first President Bush.[100] Under federal open access policies, both utility and non-utility bulk power suppliers should be able to compete on a more level playing field. This challenges the traditional public utility regime, in which a utility that owns both transmission and generation could make decisions to favor its own incumbent supply options over competitors in making transmission decisions.[101]

As has been well recognized for a number of years, a competitive wholesale power market requires that significant physical or economic impediments to transmission be overcome.[102] If transmission is physically absent and/or priced based on the wrong economic principles, bulk power supply markets will not flourish.[103] Physical constraints can preclude remote, non-incumbent suppliers who do not own transmission from accessing customers; this is particularly problematic where existing transmission lines are limited in scale or do not exist at all, as may be the case in many remote areas that are resource rich for the purpose of renewable power development. If transmission is not appropriately priced to reflect opportunity costs in the wholesale power markets, there may be inadequate incentives for the development of transmission. At the same time, new entrant bulk power suppliers must have access to transmission under terms and conditions that are comparable to existing suppliers, rather than on conditions that are anticompe-

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> tric power market by facilitating entry of new generators to compete with traditional utilities. As the third major federal law enacted in the last 30 years to embrace wholesale competition, the Energy Policy Act of 2005 strengthened the legal framework for continuing wholesale competition as federal policy for this country. The Commission has acted quickly and strongly over the years to implement this national policy.

Federal Energy Regulatory Commission, Industries - Electric Competition, http://www.ferc.gov/industries/electric/indus-act/competition.asp (last visited Feb. 21, 2010).

100. Energy Policy Act of 1992, Pub. L. No. 102-486, 106 Stat. 2776 (1992) (codified as amended at 42 U.S.C. §§ 13201–13574 (2006)).

101. Such decisions may have been made for both efficiency-enhancing and anticompetitive reasons; the only intent here is to describe the reality of the movement towards wholesale competition and its inevitable implications, not to defend it.

102. *E.g.*, Richard J. Pierce, Jr., *A Proposal to Deregulate the Market for Bulk Power*, 72 VA. L. REV. 1183 (1986).

103. *See* Richard J. Pierce, Jr., *Completing the Process of Restructuring the Electricity Market*, 40 WAKE FOREST L. REV. 451, 469 (2005) (observing that the shortage in transmission capacity throughout the nation "will eventually doom all restructuring efforts and that will yield disastrous results for the entire U.S. market no matter how it is structured, unless and until it is solved").

titive.[104] Under the traditional vertical integration monopoly paradigm, in which rate regulation was the norm, utilities had little incentive to expand transmission for non-utility generation sources that did not serve native load customers, since they could preserve their monopolies by building just enough transmission to allow their own power supply to reach their own customers.[105] In part as a result of this traditional model, in the industry today certain areas of the U.S., such as parts of the Northeast and portions of the West, present transmission impediments for even existing sources of electric power.

While state siting authority may have been a stable mechanism to attract investment for transmission under the traditional public utility paradigm, many state siting statutes and regulations have not been updated to accommodate the interstate bulk power supply markets. Two aspects of state siting laws typically limit the ability of state regulators to consider opportunities for export and import opportunities in the wholesale market in siting transmission lines. First, many states limit the consideration of "need" to in-state benefits, rather than a broader consideration of the benefits of locating and building a transmission line. Historically, and under the approach used in many states today, state siting statutes envisioned a determination of need based on benefits to in-state customers.[106] If a particular state's customers may benefit from wholesale power markets, in terms of reliability or price or from competitive bulk power markets, transmission expan-

104. The issue of non-discriminatory terms and conditions is not quite the same as non-discriminatory pricing. Transmission services may well be provided on a non-discriminatory basis even though some users pay more than others, as long as the differences are based on justifiable circumstances such as geographic differences or differential benefits. Non-discrimination means that the rules are equally applicable to all, but those same rules may lead to differential prices or other disparate impacts on different market participants. Because of the potential for differential pricing implications, especially based on location, many economists would contend that the mere existence of grid constraints does not impair a market at all, as long as the pricing is correct. Others, including many advocates for renewable resources, particularly those in locations far removed from load, contend that such price differentials are a barrier to their effective participation in the market.

105. The effect of constraining the grid to preserve monopoly power has a number of by-products that are environmental and technological as well as economic. Failure to facilitate access not only favors incumbent utilities, it also tends to favor incumbent generating units. The result is often extended lives for older, "dirtier" generators, and barriers against optimal use of newer, more efficient units. For that reason, it can also be a barrier to the full utilization of new renewable energy generating plants.

106. *See supra* Part I.B.

sion could serve their interest. But, as discussed below, market developments and concerns with climate change render such a parochial understanding of benefits increasingly obsolete. Second, many states limit who can apply to site a transmission line; under existing law in many states, state siting authorities generally lack the ability to even consider, let alone rely on, export and import opportunities in the interstate wholesale markets as a basis for siting transmission lines.[107]

As to the need determination, many of the criteria siting statutes instruct state regulators to consider focus on benefits to in-state customers and do not include benefits to out-of-state customers or to the wholesale supply market.[108] Indeed, that traditional scenario has come under enormous stress in the face of the emergence of competitive bulk power markets, functional and corporate unbundling and de-verticalization, heightened concerns about resource utilization and mix, and because state specific reviews of need seem less meaningful in the context of multistate markets. An excellent example of this change is the question of what constitutes need in a competitive market. In a vertically-integrated monopoly model, the requirement to show need not only constitutes a possible justification for whatever environmental or other degradation might occur, it also protects consumers from having to pay for capacity in excess of what was required to adequately and reliably serve them. In a competitive market, on the other hand, where supply and demand drive prices, and where consumers are not "on the hook" to pay all of their suppliers' prudently incurred costs, excess capacity is (at least from a consumer perspective) a positive factor in driving down prices. From the opposite perspective, existing generators are likely to challenge proposed new generating plants or new transmission which will enable more generation to access more markets because of the fear that new entrants will drive down prices.[109] The stark

107. *See supra* Part I.C.

108. *See supra* Part I.B.

109. In fact, the earlier discussion about facilitating non-utility entry into the transmission business is worth mentioning again in the context that vertically integrated utility incumbents have very powerful economic incentives not to build transmission that would expose them to more competition. It is for that reason that, in the organized RTO markets in North America, transmission planning has been taken out of the hands of utilities and vested in the RTOs and their constituent processes. For discussion of the role of RTOs in transmission planning, see James J. Hoecker, *Transmission Planning—A New Lever for FERC?*, NAT. GAS & ELECTRICITY, Aug. 2007, at 21, 21, *available at* http://helppllc.com/transmission_planning0807.pdf. Since the Rocky Mountain states do not have a RTO, that op-

question for siting officials in today's environment is what constitutes need in a competitive market.

It is a seemingly simple question, but in fact it is quite complex. For states that view themselves as exporters of energy to a bulk power market, does the old paradigm, that need be determined in the context of what is required to serve the consumers in a given state, get replaced by a new approach that sees need in the broader context of the robustness of competition and the overall economic development of the state? Similarly, how does one determine need in the context of building new transmission to enable clean renewable energy to displace existing carbon-emitting generation that may yet have many years of useful life? For coal producing states, that is a particularly vexing problem, since the net effect of allowing the renewable displacement of coal could well have adverse effects on employment and the overall economy within the state, thereby calling into question how such a state should define its own economic development for purposes of need assessment in a siting proceeding. One further query worth mentioning is the geographic context within which siting officials in one state should consider need in another state. It is the same issue that individual states face when local officials have siting powers that impact an entire state, only now it is the question of an individual state making decisions that impact an entire multistate region.

Nationally, states vary widely on how parochial their siting statutes and practices are, but at least one case from Massachusetts[110] held that the state's Energy Facilities Siting Board was without authority to site a line within the state unless the entirety of the benefits of the transmission line accrued to in-state consumers. Some twenty years previously, the Supreme Court of Mississippi held that eminent domain could not be exercised in the state by a multistate utility that served Mississippi customers because some of the beneficiaries of the line for which condemnation powers were being used were out-of-state.[111] While not all states take such parochial points of view, the issue of out-of-state benefits can be legally and politically problematic for siting officials. This is but a short sample

tion is not available, so the issue of who can seek siting approval for a new transmission lines is not an insignificant one.

110. Point of Pines Beach Ass'n v. Energy Facilities Siting Bd., 644 N.E.2d 221, 222, 223–24 (Mass. 1995).

111. Miss. Power & Light Co. v. Connerly, 460 So.2d 107, 113 (Miss. 1984).

of the dilemmas and vexing questions facing siting officials in the current electricity market environment. How then are the siting regimes in the states of Colorado, New Mexico, Utah, and Wyoming, from a legal point of view, positioned to consider them?

It seems apparent from reading the states' primary siting statutes that the multistate markets were not the main priority of legislators in enacting the siting statutes, if they were even contemplated at all. However, more recent statutes creating Wyoming's WIA and New Mexico's NMRETA contemplated multistate markets for selling energy produced in their states for purposes of economic development.[112] It does not seem much of a stretch for siting authorities in those two states to take economic development and interstate markets into consideration in making their decisions. Similarly, given the increasing interdependence of states in the western U.S., and given that reliability is a constant factor in all discussions of need in siting proceedings, it is difficult to imagine siting authorities not taking into consideration the nature of the interconnected grid. Of course, consideration of needs for other states by siting a line in one's own state is not simply a selfless act of benevolence by the state taking those benefits into account. Instead, it may well be a decision taken to promote a state's economic self interest as a seller of energy but also potentially as a buyer of energy and a recognition of interdependence for reliability. On the other hand, opponents of siting a particular line could well contend that siting regulators are bound by language in narrowly crafted statutes.

Looming over this issue as well is the specter of federal preemption. In stark political terms, the more parochial the viewpoint state siting officials take over time, the more likely it is that Congress will step in to preempt their authority where national goals are implicated.[113] Certainly, there is the precedent of states preempting the powers of local governments in siting for similar reasons (although it is a curious anomaly that of the four states this Article describes in detail, only one, New Mexico, has fully preempted local authorities[114]). It is al-

112. See *infra* notes 119–26 and accompanying text for a discussion of these two agencies.

113. This may happen through either express or implied preemption doctrine under the U.S. Constitution's Supremacy Clause, or through judicial application of the Commerce Clause's dormant or "negative" limitations on a state adopting and enforcing regulations that discriminate against out-of-state producers.

114. *See supra* Part I.

so interesting to see how many states in the West have evolved on these issues, from not wanting to be the energy farms for giant "energy sinks" (i.e., California) to, in some cases, seeing real benefits to becoming an energy farm. Of course, the degree of flexibility given to siting authorities to determine their scope of discretion in looking at their own state's economic development and the nature of market opportunities in serving the needs of consumers in another state will depend on how broadly courts interpret the statutes under which regulators operate. However, given the traditional weighing of local impacts and narrow focus on benefits, along with limited statutory language in many state siting statutes, it seems likely that many state regulators will take a more parochial rather than a broader regional view in making their transmission siting decisions.

Although most siting statutes do not explicitly mention economic development policy, an assertion of regulatory power to site a transmission line under such statutes may still stand on firm ground if regulators can make a link between a transmission line and economic development policy. The import of power may contribute to economic development by diversifying power supply options, creating downward pressures on price, providing customers greater reliability, and contributing to general economic growth in ways that benefit customers. In addition, and of perhaps greater economic growth opportunity, the availability of competitive bulk power supply options, including the ability to procure electricity by long-term contracts in the deregulated wholesale market, present many opportunities for resource-rich states to export power. Such a state might rely on the benefits to its own economy and customers to expand transmission within its borders, but under existing state siting statutes the consideration of benefits may end at its own borders if a neighboring or adjacent state is not willing to expand transmission for the same reasons. For such a state, the failure of an adjacent or neighboring state to site a facility will limit the ability to export resources and potentially can skew interstate bulk power supply markets.

A second significant legal limitation in state siting statutes is that many states limit siting applications or only offer the full range of benefits of siting approval, including eminent domain powers, to utilities.[115] For example, if a state is asked to

115. *See supra* Part I.B.

site a transmission line on behalf of an out-of-state applicant, including an out-of-state utility—using the wires in the state solely for the purpose of transmission—some state regulators lack authority to even consider the application unless the out-of-state applicant is willing to take on the obligations of an incumbent utility.[116]

With the emergence of wholesale competition, however, new players have entered the market. Merchant transmission companies, and even generating companies that want to build their own interconnections, are now viable business models being pursued in electricity markets in the U.S. and elsewhere.[117] For states interested in using their own resources for the export of energy, or for importing energy for the benefit of their consumers and economies, the attraction of capital to the transmission business would be facilitated if the investment could be sought from a broader pool of capital than simply utilities.[118] In fact, utilities may well be unwilling to make transmission investments that others might find attractive. The reasons why utilities might be reluctant to make transmission investment that others are willing to make include a desire to restrict or reduce competition, capital impairment of some sort, inadequate regulatory incentives, unwillingness to use up political capital or public goodwill, or perhaps simply that the demands on their capital budget are such that some transmission projects are of a lesser priority to them than they might be to others.

116. Although historically a commission decision regarding an applicant has been subjected to deference on appeal, some state statutes have been interpreted narrowly to only allow applications from utilities with an obligation to serve in-state customers. Tampa Elec. Co. v. Garcia, 767 So. 2d 428, 434 (Fla. 2000).

117. Part I.B discusses the implications of state siting laws for merchant transmission.

118. There may be a question in some states if, simply by virtue of operating a transmission line, a company must register as a utility in a state because of the nature of its business, see, for example, WYO. STAT. ANN. § 37-1-101(a) (2009), which defines a public utility as "every person that owns, operates, leases, controls, or has power to operate, lease or control . . . (C) Any plant, property or facility for the generation, *transmission*, distribution . . . for the public of electricity." (emphasis added). For purposes of this Article, we did not explore that issue because the primary focus is on whether someone other than the local incumbent utility can seek approval to site new line. If obtaining that approval, *ipso facto*, makes them a utility, it is not particularly relevant to issues being explored in this Article, other than to note that some investors, for a variety of reasons, might be deterred because they do not wish to be subjected to state utility regulation. It should also be noted that even if a transmission company were not state regulated, it is almost inevitably subject to FERC jurisdiction. *See* 16 U.S.C. § 824 (2006) (extending FERC jurisdiction over interstate transmission for resale).

With the possible exception of Colorado,[119] all of the state siting statutes detailed in this Article permit non-utilities to apply to site transmission lines but take a far more restrictive position in regard to the use of eminent domain to acquire the right of way.[120] In Colorado, utilities are expressly granted the ability to exercise condemnation rights, but non-utilities that are not expressly granted the power of eminent domain lack condemnation rights.[121] New Mexico similarly permits only public utilities to exercise eminent domain powers.[122] It should be noted, however, that New Mexico has created the NMRETA,[123] a state transmission authority created for the express purpose of providing transmission service for the export of the state's renewable energy generation. While the NMRETA statute did not create any new powers of eminent domain, as an agency of the state, it can, in fact exercise condemnation powers in order to obtain needed right of way. Similarly, in Utah, the statute explicitly permits the state to use eminent domain powers to build power lines, and the statute does not set any limits on what type of transmission builder may benefit from the state's exercise of that power.[124] In Wyoming, utilities may use condemnation, but only after obtaining a CPCN.[125] Wyoming's WIA may use eminent domain powers to acquire a right of way for new transmission, although it may not use those powers to acquire existing assets.[126]

In terms of advancing the interests of individual states as energy exporters, the ability of both utilities and non-utilities to receive siting permits for transmission is, for the reasons noted above, advantageous. Other than in Colorado, the states detailed in this Article have positioned themselves well from a legal point of view to attract capital from non-traditional sources, such as merchant investors, into the transmission sector. Not only does permitting non-utilities to invest in

119. This distinction may be less meaningful than it appears because Colorado broadly defines who may become a utility. *See supra* note 60 and accompanying text.

120. For purposes of this Article, the authors use the terms "eminent domain" and "condemnation" interchangeably and synonymously.

121. COLO. REV. STAT. §§ 32-12-125, 38-1-202(2)(e) (2009).

122. N.M. STAT. § 62-1-4 (2004).

123. *Id.* § 62-16A.

124. UTAH CODE ANN. § 78B-6-501(8) (2008).

125. WYO. STAT. ANN. § 1-26-815, § 1-26-816 (2009).

126. *Id.* § 37-5-304.

transmission open access to new capital, but it also removes the question of building transmission for exporting energy from the complexities of local utility ratemaking and related cost and/or risk allocations. In creating a state agency to build transmission to facilitate the export of their energy, New Mexico (renewable energy only) and Wyoming have gone a step beyond the other two states, in that they have created special-purpose entities with the ability to obtain siting permits and construct facilities using lower-cost public finance mechanisms.[127]

In regard to eminent domain, all four states, other than perhaps Wyoming in a hybrid way, follow the route of an overwhelming majority of states by providing public utilities the power to exercise condemnation powers, but not permitting other successful siting applicants, other than state-owned entities such as NMRETA and WIA, to use them. Wyoming has a hybrid status because it allows for utilities to exercise eminent domain powers to build transmission, but only after receiving a CPCN.[128] In a minority of states, eminent domain is acquired through the CPCN process, thus enabling all successful applicants to exercise powers most states only vest in utilities.[129] Wyoming, alone among the four states discussed in this Article, follows that path, but only in a limited sense because it only applies to utilities and not to non-utilities that obtain a CPCN.[130]

B. Climate Change

Heightened attention to climate change is another development that is challenging the traditional public utility model and its accompanying understanding of the public interest in siting. Many renewable resources, such as wind and solar, are geographically distant from the large load centers that may need them. T. Boone Pickens, for instance, highlighted the need to build massive transmission infrastructure to allow development of new wind turbine fields in Texas as, without such infrastructure, generating facilities are isolated and unable to

127. *See supra* notes 119–26 and accompanying text.

128. *See supra* notes 125–26 and accompanying text.

129. *See, e.g.*, WIS. STAT. ANN. § 32.07(1) (2006) ("A certificate of public convenience and necessity issued under s. 196.491 (3) shall constitute the determination of the necessity of the taking for any lands or interests described in the certificate.").

130. *See supra* notes 125–26 and accompanying text; *see also supra* Part I.B.

reach customers.[131] Likewise, precious wind resources in the Dakotas and the Rockies will only be able to reach customer bases if massive new transmission facilities are built.[132]

As with wholesale markets, most state siting statutes simply fail to consider the broader implications of greenhouse gas emissions. States do give an occasional nod to RPS goals, but explicit contemplation of the consideration of climate change and renewable energy goals is largely foreign to state siting statutes. As is discussed above, siting determinations in most states historically look to need for power based on specific physical definitions of what is required to provide service to incumbent customers. To the extent environmental impacts may be taken into account in state siting proceedings, historically these have been limited to local impact concerns, such as the local pollution impacts many states regulate. However, in contrast to a physical and economic claim of need to benefit in-state customers, climate change presents a "new" need for transmission, one that is based on a claim of need to benefit out-of-state suppliers, new-entrant energy supply firms, whose plans are consistent with meeting environmental policy objectives, and out-of-state customers. In addition, the environmental aspects of siting transmission to address climate change goals challenge the parochial, more narrowly (i.e., locally) defined interests state siting statutes were designed to support. While states do take into account traditional environmental harms, these are frequently limited to local environmental harms such as conventional pollutants and their impact on a state's population.[133] Broader out-of-state interests in mitigating the future harms associated with the energy economy are simply beyond the scope of most state siting

131. T. Boone Pickens proposed building as many as 4000 MW of wind turbines in the state of Texas. One acknowledged barrier to developing such a large wind turbine project is the lack of transmission lines in areas of the state that have strong wind resources. Elizabeth Souder, *T. Boone Pickens Plans Power Play With Huge Texas Panhandle Wind Farm*, DALLAS MORNING NEWS, May 15, 2008, at 1D, *available at* http://www.dallasnews.com/sharedcontent/dws/bus/stories/DN-pickenswind_15bus.ART.State.Edition1.4687df7.html.

132. Green Power Express has proposed building such a facility in the Midwest to serve portions of North Dakota, Minnesota, South Dakota, Iowa, Wisconsin, Illinois, and Indiana. Katie Howell, *"Green Power Express" Gains Federal Rate Incentives*, GREENWIRE, Apr. 13, 2009, http://www.eenews.net/Greenwire/print/2009/04/13/1; *see also* Matthew Wald, *Giving the Power Grid Some Backbone*, SCI. AM., Mar. 2009, at 52–57, *available at* http://www.scientificamerican.com/article.cfm?id=giving-the-power-grid-some-backbone&page=2.

133. For example, New Mexico explicitly contemplates the consideration of local environmental impacts. N.M. STAT. § 62-9-3 (2004).

statutes, and few statutes have been updated to explicitly take into account an increased dependence on renewable resources to address climate change concerns. For example, Colorado, Utah, and Wyoming's siting statutes[134] do not contain any explicit reference to climate change goals. As discussed below,[135] however, by beginning to acknowledge interstate concerns New Mexico has been more innovative in this regard.

In the context of states looking to export their energy production, as well as to contribute to the overall environmental goals of both their states and to the country, it is more useful to examine the broader effects that new transmission will have and what criteria states will employ to examine those effects. In particular, how will the fact that states are looking to export energy produced from renewable resources, primarily wind, impact siting decisions? Perhaps it is useful to view the issue as how siting officials will view the positive non-economic characteristics of renewable energy. With regards to benefits such as emissions (carbon and otherwise), national security, and resource conservation, wind and most other renewables have much potential. Ideally, state siting officials contemplating authorization of the construction of lines providing those resources access to the market place would consider such benefits; however, if state officials lack statutory authorization to consider such factors, it is not likely that they will do so.

None of the four states on which this Article is focused—and, as far as we are aware, no state nationally—explicitly requires siting officials to consider carbon emissions or other broader air quality issues, as opposed to local, or in-state, impacts that they are generally required to consider, in making decisions to plan or site transmission. None of the siting statutes surveyed in this Article includes an explicit reference to climate change, and in particular the out-of-state environmental effects of greenhouse gas emissions. It is also noteworthy that none of the statutes surveyed for this Article makes direct reference to the impact that a proposed line could have on the resource mix being used to generate energy,[136] although both

134. *See supra* Part I.

135. *See infra* notes 200–02 and accompanying text.

136. Very few, if any, states require transmission siting officials to think about the generation mix they may be enabling. Part of the reason for that is that, given the dynamic nature of the grid and changing fleets of generators, it is probably impossible for siting officials to know that information with any degree of precision. It is interesting to point out, however, that when article co-author Ashley Brown was an Ohio Commissioner, he was involved in discussions about the sale

Colorado and New Mexico have a mandatory RPS,[137] and Utah recently enacted a voluntary one.[138] While it may promote some renewable power and climate change goals, having an RPS goal, or incorporating RPS-related considerations into the relevant considerations for transmission planning and siting, is not sufficient for purposes of developing the export of renewable sources. Even where RPS exists, it is applied to how the energy procured and/or produced by the jurisdictional utilities for sale to its jurisdictional customers is generated, rather than to what energy is produced within the state.[139] There are no statutory admonitions to siting officials to be mindful of environmental effects other than those within each state's boundaries, no mention of assisting other states to meet their RPS objectives, nor even of taking advantage of the economies of scale in generation that might be taken advantage of by selling energy across multiple jurisdictions.

As concerns rise regarding climate change, as interest in renewable energy escalates, and as reliance on bulk power markets for supply grows, the siting laws and criteria for considering the environmental and other non-economic impacts of siting new transmission in many states appear to be increasingly obsolete. Many state siting statutes remain in a bit of a time warp, adopted based on assumptions associated with vertically integrated monopolies, indifference to the sources of energy, and primarily local environmental impacts. Whether in practice siting officials can move beyond that framework without further legislative authorization depends not only on their initiative and policy objectives, but also on how much

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of energy from the Midwest to the East Coast, during which Pennsylvania officials, who would have had to site lines to carry that commerce, argued strenuously that the net effect would be to produce more SO_2, NO_X, and CO_2 emissions than if East Coast states produced their own energy.

137. COLO. REV. STAT. § 40-2-124 (2009); N.M. STAT. § 62-15-1.

138. UTAH CODE ANN. § 54-17-602 (2008).

139. In addition, many states, including each of these three, permit trading of Renewable Energy Credits or their equivalent. *See* DSIRE: Database of State Incentives for Renewables & Efficiency, Colorado Incentives/Policies for Renewables & Efficiency, http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=CO24R (last visited Mar. 16, 2010); New Mexico Public Regulation Commission, http://www.nmprc.state.nm.us/renewable.htm (last visited Mar. 16, 2010); 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 Mar. 16, 2010). As a result, actual renewable power not only need not be generated in the state, but need not be delivered at all to the actual purchaser of the energy with green attributes or possibly even into the state's borders.

leeway the courts will provide them, or how much new direction their legislators will give them. Certainly, there are public policy reasons for state siting officials to take a broader perspective, but since siting decisions are governed by statutes passed by legislative bodies, much depends on how such authority is interpreted by siting officials and state courts.

C. Expansion of Federal Authority Over Transmission

Congress has responded to some of the concerns about state authority over expanding transmission line siting. In 2005, Congress added "backstop" authority, authorizing FERC to preempt state siting authorities to expand transmission in limited regions of the country facing transmission constraints.[140] Proposals to expand FERC's transmission authority are also pending before Congress as a part of the climate change legislation that is supported by the Obama Administration.[141] There is an obvious irony in the context of the current debate in Congress over whether there should be federal preemption of the states in regard to transmission siting: while much of the states' political opposition to the expansion of federal siting authority focuses on arguments against preemption of local authority, the irony is that states themselves only acquired siting powers by expressly preempting local jurisdictions.

In the 2005 Energy Policy Act,[142] Congress amended the Federal Power Act, for the first time delegating authority to Department of Energy ("DOE") to designate National Interest Energy Transmission Corridors ("NIETCs") and to FERC to exercise some "backstop" permitting authority over states within the NIETCs.[143] According to these amendments, DOE "may designate any geographic area experiencing electric energy transmission capacity constraints or congestion that adversely affects consumers as a national interest electric transmission corridor."[144] In compliance with the 2005 Energy Policy Act,

140. *See infra* notes 142–47 and accompanying text.

141. *See infra* notes 177–86 and accompanying text.

142. Energy Policy Act of 2005, Pub. L. No. 109–58, 119 Stat. 594 (2005).

143. 16 U.S.C. § 824p (2006).

144. *Id.* § 824p(a)(2). Section 216(a)(4) of the Energy Policy Act of 2005, amending 16 U.S.C. § 824p, provides specifics as to what the Secretary *may* consider in designating the corridors. *Id.* § 824p(a)(4)(B)–(E). Generally, the DOE may consider the economic effects of inadequate or unreasonably priced electricity within the corridor and in the end markets served by the corridor. *Id.* It may also

DOE completed its study of transmission congestion in August of 2006, and in 2007 it published draft designations of the Mid-Atlantic and Western National Interest Energy Corridors based on the study.[145] The statute also requires the Secretary of Energy to consult with the states and conduct a study of electric transmission congestion every three years following the initial NIETC designation.[146]

Although the scope of FERC's backstop authority is geographically limited exclusively to the corridors specifically identified by DOE,[147] there are also limits on when FERC can exercise its authority within the NIETCs. Construction permits for transmission within NIETCs can be issued by federal regulators, irrespective of the traditional state authority over

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consider whether "a diversification of supply is warranted;" whether "the energy independence of the United States would be served by the designation;" whether "the designation would be in the interest of national energy policy;" and whether "the designation would enhance national defense and homeland security." *Id.* Section 216(a)(4)(B)(i) of the Energy Policy Act also allows the Secretary to consider whether "economic *growth* in the corridor, or the end markets served by the corridor, may be jeopardized by reliance on limited sources of energy, *and* [whether diversification of supply, energy independence, national energy policy, national defense, and homeland security would be served]." *Id.* § 824p(a)(4)(B)(i) (emphasis added).

145. Office of Electricity Delivery and Energy Reliability; Draft National Interest Electric Transmission Corridor Designations, 72 Fed. Reg. 25,838 (May 7, 2007). In October 2007, the DOE issued its final designations of the corridors. National Electric Transmission Congestion Report, 72 Fed. Reg. 56,992-02 (Oct. 5, 2007). A pending case before the Ninth Circuit challenges the degree to which DOE can rely on renewable resources in designating NIETC's. Wilderness Soc'y v. U.S. Dep't of Energy, No. 08-71074 (9th Cir. filed Mar. 13, 2008). The filing of this lawsuit is interesting because it points out a schism among environmentalists in regard to building new transmission. *See id.* At the risk of being a bit simplistic, the debate divides the environmental community. The schism is between those whose focus is primarily on air quality (including carbon emissions) and who want to reduce dependence on fossil fuels on one hand, and those who are more focused on land and water issues (e.g., wildlife and vegetation) and concerned about the proliferation of generators (including wind turbines) and transmission lines across the landscape on the other. Air quality advocates want to see more wind generation and other renewable resources and want to ensure that there is sufficient transmission to link "clean energy" to load centers. Land and water quality advocates, on the other hand, prefer to see generation built closer to load centers and find barriers to the construction of power lines useful in the achievement of their policy objectives. Thus, one group of environmentalists prefers to facilitate the construction of more transmission, while another seeks to restrict it.

146. 16 U.S.C. § 824p(a)(1).

147. *See* Eric W. Struble, Comment, *National Interest Electric Transmission Corridors: Will State Regulators Remain Relevant?*, 113 PENN. ST. L. REV. 575, 579 (2008) (concluding that practically the 2005 amendments to the FPA only constitute federal preemption in certain states).

transmission siting, if one of the following three sets of conditions designated in the statute are met. First, FERC can override the state if the "State in which the transmission facilities are to be constructed or modified does not have authority to approve the siting of the facilities,"[148] or cannot "consider the interstate benefits expected to be achieved by the proposed construction or modification of transmission facilities in the State."[149] Second, FERC can override the state if "the applicant . . . does not qualify to apply for a permit or siting approval . . . because the applicant does not serve end-use customers in the State."[150] Third, FERC can override the state if a state commission with authority to approve the facility has either "withheld approval for more than 1 year,"[151] or has conditioned its approval so that the construction will not "significantly reduce transmission congestion in interstate commerce or is not economically feasible."[152]

If FERC determines that one of these statutorily specified criteria is satisfied, FERC may override a state commission, and issues a construction permit (which would include the power to exercise eminent domain in a federal district court)[153] but only if additional conditions are present. Specifically, the facilities must be used for the transmission of electric energy in interstate commerce;[154] the contemplated construction must be "consistent with the public interest";[155] it must be expected to "significantly reduce transmission congestion in interstate commerce and protect[ ] or benefit[ ] consumers";[156] it must be "consistent with sound national energy policy" and expected to "enhance energy independence;"[157] and finally, it must be expected to "maximize, to the extent reasonable and economical, the transmission capabilities of existing towers or structures."[158] To date, only one application to exercise FERC's backstop authority has been received by FERC; that

148. 16 U.S.C. § 824p(b)(1)(A)(i).
149. *Id.* § 824p(b)(1)(A)(ii).
150. *Id.* § 824p(b)(1)(B).
151. *Id.* § 824p(b)(1)(C)(i).
152. *Id.* § 824p(b)(1)(C)(ii).
153. *Id.* § 824p(e).
154. *Id.* § 824p(b)(2).
155. *Id.* § 824p(b)(3).
156. *Id.* § 824p(b)(4).
157. *Id.* § 824p(b)(5).
158. *Id.* § 824p(b)(6).

application was withdrawn and the agency has yet to exercise its backstop authority in a single case.[159]

Despite Congress' expansion of transmission siting authority in 2005, it is widely perceived that FERC's authority over transmission might not be sufficient to allow transmission siting approval in certain areas of the country.[160] Concerns have focused on the fact that many renewable resources, the development of which would depend on transmission, are located outside of DOE's geographically defined NIETCs.[161] According to FERC Chairman Jon Wellinghoff, "[w]e need a National policy commitment to develop the extra-high voltage ("EHV") transmission infrastructure to bring renewable energy from remote areas where it is produced most efficiently into our large metropolitan areas where most of this Nation's power is consumed."[162]

In addition, FERC's statutory authority under the 2005 amendments to the Federal Power Act has been narrowly construed by federal courts, calling into question the scope of FERC's authority in certain instances. In *Piedmont Environmental Council v. FERC*,[163] the U.S. Court of Appeals for the Fourth Circuit interpreted FERC's siting authority narrowly. Specifically, at issue in that case was the language of the statute that authorizes FERC to override a state and issue a construction permit, including the power of eminent domain, if a state commission with authority to approve the facility has "withheld approval for more than [one] year."[164] FERC initially interpreted this statutory language to authorize the agency to exercise its backstop authority in instances where a state regulator had explicitly *denied* an application.[165] However,

159. *See* Federal Energy Regulatory Commission, Transmission Line Siting Prefiling Requests, http://www.ferc.gov/industries/electric/indus-act/siting/prefiling-req.asp (last visited Feb. 21, 2010).

160. *See supra* notes 131 and accompanying text (mentioning T. Boone Pickens's concerns); *see also* CTR. FOR AM. PROGRESS, WIRED FOR PROGRESS: BUILDING A NATIONAL CLEAN ENERGY SMART GRID 24 (2009).

161. *Wellinghoff Sees Big FERC Role Supporting Obama Green Energy Goals*, ENERGY WASH., Dec. 30, 2008, at 3, *available at* http://www.ferc.gov/about/com-mem/wellinghoff/12-30-08-energy-washington.pdf.

162. *Hearing on Legis. Regarding Electric Transmission Lines Before the S. Comm. on Energy and Natural Resources*, 111th Cong. 2 (2009) (statement of Jon Wellinghoff, Acting Chairman, Federal Energy Regulatory Commission) [hereinafter *Wellinghoff Senate Testimony*].

163. Piedmont Envtl. Council v. Fed. Energy Regulatory Comm'n, 558 F.3d 304 (4th Cir. 2009).

164. 16 U.S.C. § 824p(b)(1)(C)(i) (2006).

165. *Piedmont*, 558 F.3d at 311.

relying on its characterization of the plain language of the statute, the *Piedmont* panel resolved the issue at *Chevron*'s step one,[166] interpreting the language of Section 216 of the FPA to preclude FERC from exercising its transmission siting backstop authority where an application to build a transmission line has been denied (as opposed to *approval withheld*, as explicitly mentioned in the statute) by state regulators within one year.[167] The Court reasoned that the phrase "withheld approval for more than one year"[168] does not, read by itself, include the "outright denial of a permit application within the one-year deadline."[169] The decision was not unanimous. The dissent argued that the majority misread the language of the statute and the 2005 amendments to the FPA, and that FERC's interpretation of the FPA is entitled to *Chevron* step two deference.[170] Both FERC's request for rehearing en banc and its petition for certiorari were denied.[171]

The Fourth Circuit *Piedmont* decision involves only one of the multiple statutory grounds that Congress allowed FERC to rely on in exercising its backstop authority. However, some interpret the decision as seriously hobbling FERC's ability to implement its backstop authority.[172] As Chairman Wellinghoff

166. Chevron U.S.A., Inc. v. Natural Res. Def. Council, Inc., 467 U.S. 837, 842 (1984). *Chevron*, of course, laid down a two-step process for courts reviewing agency legal interpretations. At step one (which the majority focused on in *Piedmont*) a court first determines whether Congress has "directly spoken to the precise question at issue. If the intent of Congress is clear that is the end of the matter." *Id.* On the other hand, if the court concludes that "the statute is silent or ambiguous with respect to the specific [question]," the court moves on to step two, at which point it defers to the agency's construction of the statute in question if the construction is permissible. *Id.* at 843.

167. *Piedmont*, 558 F.3d at 315 (reversing FERC's interpretation of the language of the Federal Power Act siting backstop authority to include the denial of the applications, and limiting its language to "withheld approval for more than one year").

168. 16 U.S.C. § 824p(b)(1)(C)(i).

169. *Piedmont*, 558 F.3d at 315.

170. *Id.* at 323 (Traxler, J., dissenting).

171. Petition of Respondent FERC for Rehearing En Banc, *Piedmont*, 558 F.3d 304, No. 07-1651 (4th Cir. Apr. 2, 2009); Petition for Writ of Certiorari, Edison Elec. Inst. v. Piedmont Envtl. Council, 2010 WL 154946, No. 09-343 (U.S. Jan. 19, 2010).

172. In fact, it is questionable that it does so in a manner that will preclude the exercise of backstop authority in most instances. FERC has other statutory grounds that it can invoke to preempt a state, assuming the state does not deny an application and comply with those specific criteria. 16 U.S.C. § 824p(b). FERC and DOE also retain authority to expand NIETCs. 16 U.S.C. § 824p(a). Even after *Piedmont*, a significant amount of backstop power remains with federal authorities. For further discussion, see Rossi, *supra* note 96, at 1033–35.

has stated, "[the *Piedmont*] court's ruling is a significant constraint on the Commission's already-limited ability to approve appropriate projects to transmit energy in interstate commerce."[173] For example, the only Section 216 proceeding initiated at FERC—Southern California Edison's application to build the Arizona portion of the Devers-Palo Verde No. 2 project[174]—seems to involve a denial of an application (rather than a state withholding approval), and it is unclear the extent to which any of the other criteria[175] that would trigger FERC backstop authority are present. In any event, FERC will not get to decide the question(s) in that proceeding, since the company has decided to withdraw its application from consideration.[176]

In response to such concerns, several proposals pending before Congress would further expand FERC's authority to preempt state and local land use decisions related to electric power transmission. These include a large-scale climate change bill approved by the House of Representatives[177] and two proposals pending before the Senate.[178]

The House of Representatives has adopted landmark climate change legislation, The American Clean Energy and Security Act of 2009 (commonly known as the "Waxman-Markey" bill) that, among other things,[179] endorses a regional transmission planning model and includes the expansion of federal "backstop" authority over transmission. The bill proposes regional planning entities for transmission and puts in place a system of FERC review of these plans for consistency with transmission planning principles.[180] These principles, which FERC would need to develop, will "facilitate the deployment of renewable and other zero-carbon and low-carbon

173. *Wellinghoff Senate Testimony*, *supra* note 162, at 5–6.

174. *See supra* notes 79–83 and accompanying text.

175. *See supra* notes 147–52 and accompanying text (noting other criteria FERC may use to invoke its backstop powers).

176. *Edison Drops Plan for Power Line in Arizona*, L.A. TIMES, May 15, 2009, http://articles.latimes.com/2009/may/16/business/fi-edison16; *Southern California Edison Will Not See License to Construct Transmission Line in Arizona at this Time*, TRANSMISSION & DISTRIBUTION WORLD, May 18, 2009, http://tdworld.com/overhead_transmission/socal-edison-cancels-transmission-license-0509/.

177. *See infra* notes 179–82 and accompanying text.

178. *See infra* notes 183–86 and accompanying text.

179. American Clean Energy and Security Act of 2009, H.R. 2454, 111th Cong. (2009). Waxman-Markey also adopts a controversial cap and trade program to begin to price carbon emissions and adopts a national renewable energy portfolio standard. *See id.* § 101 (renewable energy standard); *id.* § 721 (cap & trade).

180. *Id.* § 151.

energy sources for generating electricity to reduce greenhouse gas emissions while ensuring reliability, reducing congestion, ensuring cyber-security, minimizing environmental harm, and providing for cost-effective electricity services throughout the United States."[181] Other provisions expand FERC's backstop authority, but the primary scope of the expansion of federal authority in Waxman-Markey is curiously limited to Western Interconnection states and does not expand FERC's power over transmission for Eastern Interconnection states, ERCOT, Alaska, or Hawaii. Under the Waxman-Markey bill, if a state fails to approve the construction and routing within one year of an application that is consistent with a regional plan on file with FERC, rejects the application, or imposes 'unreasonable' conditions on the project, FERC may preempt a transmission application and issue its own Certificate of Public Convenience and Necessity;[182] this overrules the effects of the Fourth Circuit's *Piedmont* decision. However, given that Waxman-Markey embraces far greater preemptive effect in Western states, FERC's power to exercise backdrop siting authority will vary depending on which region of the country a proposed transmission project is located in.

In the Senate, which has yet to seriously take up broader climate change legislation, including controversial carbon pricing measures such as cap and trade, a couple of pending stand-alone bills could address transmission and other renewable issues. Senator Bingaman has proposed the American Clean Energy Leadership Act of 2009, a transmission bill that cleared the Senate Energy and Natural Resource Committee in July 2009.[183] Bingaman's bill overrules the effects of *Piedmont*, but unlike Waxman-Markey it does not distinguish between eastern and western states in defining FERC's backstop authority. In addition, Bingaman's bill authorizes FERC to allocate the costs of new transmission projects, although a controversial amendment to this provision (known as the "Corker amendment") only allows FERC to allocate transmission costs to customers once it determines "the costs are reasonably proportionate to measurable economic and reliability benefits."[184] An

181. *Id.*

182. *Id.*

183. American Clean Energy Leadership Act of 2009, S. 1462, 111th Cong. (2009).

184. *Id.* § 121. The Corker amendment superseded previous language in Bingaman's bill, which would have precluded regional cost allocation if

alternative bill sponsored by Senator Reid, the majority leader, would allow DOE to designate "national renewable energy zones" based on locations that are capable of generating more than 1000 megawatts of renewable energy.[185] His approach basically retains the primary role of states in siting transmission lines, while expanding FERC's backstop authority in such areas.[186]

III. EVOLVING THE "PUBLIC INTEREST" TO NEW MARKET CONDITIONS

Part III emphasizes the need for a new definition of the public interest that might allow state regulators to retain their relevance under these new market circumstances and highlights the two main barriers to this: (1) legislative inertia; and (2) an outdated cost-allocation model. The public interest under some state siting statutes may be sufficiently capacious to give siting authorities some flexibility to evolve, but in other instances legislative action may be needed. In addition, the state cost-of-service model and cost allocations must evolve to a more regional approach to allocating the costs of new transmission.

A. An Evolving Understanding of Need

The traditional definition of need, as noted above, has been excessively inward looking—in the sense that it is highly focused on what is needed to serve the electricity demand of the consumers within the state and/or within the scope of a single utility system.[187] That perspective is rooted in the old industry model of vertically-integrated, largely insular, monopolies. It is almost completely outdated in the context of competitive, multistate bulk power markets, in the context of states seeking to exploit their resources, particularly renewable ones, for export, and in the context of concerns about more global environmental impacts, such as climate change. Those changes in the market structure and in the socio-political milieu of the electricity

"disproportionate to reasonably anticipated benefits." For a more detailed discussion, see *infra* Part III.D.

185. Clean Renewable Energy and Economic Development Act, S. 539, 111th Cong. § 3 (2009).

186. *Id.*

187. *See supra* Part I.

industry require policy makers and regulators to take a fresh look at the defining need for purposes of siting new transmission lines. Ideally, siting officials or regulators possess sufficient discretion under current legal authority to do this on their own. Given the increasingly dynamic nature of the business, it would be desirable for them to have this discretion, since going to the legislature every time market or social circumstances change could be quite cumbersome and would require, in many cases, a major effort to accomplish. Nonetheless, given the outdated notions of need, officials should seek new statutory authority if they determine it is essential to revise the determinations of need.

One possible approach is for state regulators to not require an applicant to demonstrate need at all.[188] This is actually not as radical as it may seem at first blush. As noted above, need is an economic concept. In a competitive market, it is extremely unlikely that any firm would take the risk of constructing, or even making an extensive application proposal for a line if it were not convinced of the economic opportunity the project presents. Thus, unless the line is being proposed by a utility for inclusion in rate base, and the need determination is serving as a proceeding for pre-approval of inclusion in rate base, it is difficult to see what is accomplished by requiring a public adjudication of need. Indeed, it could well be argued that in the context of a competitive bulk power market that new transmission would enhance, the more supply options that exist are in both consumers' and the public's interest. Moreover, the capital at risk is that of the proponent of the line, so the money at stake is an entirely private matter.

In the case of utilities that seek to put transmission in retail rate base, which is effectively a socialization of the costs across a narrow spectrum of potential users of the facility (see further discussion on this question below)[189], the issue of siting ought to be completely separate from the question of inclusion

188. This is not to suggest that there ought not be a thorough review of the non-economic factors (e.g., environmental and other impacts). They are constant and should always undergo review in a siting process. The absence of a requirement to show need may reduce somewhat the ability of siting officials to take a relativistic approach of weighing the degree of need against the degree of adverse consequences, but there certainly should be known criteria that are applicable and usable in consideration of any application. If an applicant wanted to have the criteria waived or modified, it would still have the burden of demonstrating why that request should be granted.

189. *See infra* Part III.D.

of a line in rate base. There may clearly be a need for a line to be built to serve the overall market, but it may not be required to serve native-load customers. The latter issue goes to cost allocation and not to whether the line itself should be sited. Thus, if a utility seeks to build a line, it may seek approval. If it also seeks to include the costs associated with that asset in its retail rate base, that is an altogether different issue for regulators to determine in a ratemaking or rate-related proceeding. A utility may decide that the revenues derived from use of the line by non-native load customers will be sufficiently compensatory without rate base inclusion to put its capital at risk, or it may decide that the risk of non-recovery is too great in the absence of inclusion in rate base and will choose not to go ahead with the project.

There is the potential, of course, that failing to pre-approve need could have an adverse effect on a utility's cost of capital, given that in many states a need determination may lead to a presumption that a project's costs will be included in its retail rate base. Whether that possibility of driving up the cost of capital actually materializes, however, depends on how state regulators allocate the residual revenue responsibility for the facility. The traditional approach of allocating costs and residual revenue responsibility for new transmission to retail rate base may actually understate the cost of capital. Using an artificially narrow definition of benefits, based on customers within a specific firm's jurisdiction, fails to recognize larger risks that any investor in a transmission line may face, underrepresenting the actual cost of capital for transmission projects and discouraging new investment in transmission. In addition to whatever effects this has on cost of capital, it is important to consider potential construction cost savings, given that transmission projects are rife with the potential for far exceeding estimates made at the project proposal stage.

If a state does not have the appetite for eliminating the requirement that need be demonstrated, then it should, at a minimum, considerably broaden the perspective and criteria for assessing the need. In today's environment, the insular single-state, or single-system perspective, which is relevant to the question of inclusion in rate base, can no longer be justified for use in siting decisions. Rather, the context for determining need should explicitly include the following:

1. The impact of the proposed facility on the regional power grid and the market being served by it (e.g., effect on competitiveness);

2. The effect of the proposed facility on alleviating constraints, weaknesses, congestion, and other shortcomings on the existing grid;

3. The effect that the proposed facility will have on the resource mix of generators whose output will be accessible to consumers (e.g., will it facilitate access of renewable resources to load centers?);

4. Expected regional environmental effects (e.g., reduced carbon emissions), of the anticipated changed dynamics of the regional grid after the line is put in service; and

5. The impact of the proposed new line on the state's and region's economy and economic development.

B. Increased Attention To Climate Change

In addition to challenging the need determination, developments in the electric power industry also challenge how state regulators approach environmental regulation considerations in transmission siting. In particular, heightened attention to climate-change aspects of energy challenges state regulators to widen the horizon of criteria to at least consider fuel mix concerns. Siting new lines in today's milieu requires something beyond merely traditional service reliability for customers and necessarily involves broadening environmental focus beyond the traditional emphasis on local effects.

Historically, state regulators may have considered the fuel mix and conservation alternatives in siting power plants primarily for purposes of enhancing reliability and protecting consumers, or on the environmental front to consider local air and water quality, as well as other non-economic impacts in proximity to the proposed facility.[190] However, the fuel mix of supply options at the aggregate system level, or throughout the entire grid, was generally not an explicit consideration

190. For example, under Florida's Power Plant Siting Act, in making decisions to approve the siting of generators, regulators are explicitly instructed to consider the need for fuel diversity and supply reliability, and whether the proposed plant is the most cost-effective alternative available. In addition, the agency must consider the "conservation measures taken by or reasonably available to the applicant . . . which might mitigate the need for the proposed plant." FLA. STAT. § 403.519(3) (2008).

regulators were required to balance in the siting of transmission lines.[191] Many states have adopted RPSs or explicit goals for the adoption of renewable technologies for the generation of electric power.[192] The success of such renewable goals, however, depends on the availability of transmission in order to allow these resources to reach major consumer markets in metropolitan areas that are geographically distant from natural resources.[193] Historically, however, transmission siting proceedings have not focused much, if at all, on overall fuel mix beyond emphasizing fuel diversification as a means to promoting reliability and protecting consumers. While many states have adopted RPS goals, most of these states do not explicitly incorporate into their transmission siting statutes any explicit consideration of RPS goals in planning and siting transmission lines. Even if they are explicitly acknowledged this may only be lip service to the larger problem of siting transmission to facilitate growth in a state's renewable power production.[194]

In addition, state siting statutes have traditionally been focused on local land use concerns and conventional pollutants that impose local harms.[195] Climate change challenges this traditional understanding of environmental regulation, which has focused on addressing local harms. With heightened awareness to climate change, regulators are increasingly being called on to consider national, and even the international, impacts of their decisions; an environmental regulation scheme that may have worked well to preserve local land uses, protect local uses and conservation goals, and protect against the local impact of pollutants is challenged to adapt to a new set of problems that focuses on out-of-jurisdiction, not in-jurisdiction, harms.[196] To be sure, some of the states have been leaders in

191. *See supra* Part II.B.

192. *See supra* notes 137–39 and accompanying text; *see also* Joshua P. Fershee, *Changing Resources, Changing Market: The Impact of a National Renewable Portfolio Standard on the U.S. Energy Industry*, 29 ENERGY L.J. 49 (2008) (surveying various state RPS approaches).

193. *See* BRACKEN HENDRICKS, CTR. FOR AM. PROGRESS, WIRED FOR PROGRESS: BUILDING A NATIONAL CLEAN-ENERGY SMART GRID (2009), http://www.americanprogress.org/issues/2009/02/pdf/electricity_grid.pdf.

194. *See supra* Part II.B.

195. *See supra* Part I.

196. Jonathan B. Wiener, *Think Globally, Act Globally: The Limits of Local Climate Change Policies*, 155 U. PA. L. REV. 1961, 1964 (2007) (arguing that "think globally, act locally" is not prudent advice for protecting the environment when "externalities arise from wide-spread and geographically moveable sources").

the implementation of climate change legislation;[197] however, energy and transmission siting in particular requires states to reassess their approach.

While transmission line siting authority in most states is insufficient to address such concerns, some states have explicitly expanded the legal authority of state siting bodies to consider climate change goals, or at least taking steps to reduce carbon emissions. For example, New Mexico has been a leader in this regard, adopting in 2007 H.B. 188, the New Mexico Renewable Energy Transmission Authority Act.[198] While this statute does not expand state eminent domain power beyond traditional utilities, it does establish a Renewable Energy Transmission Authority Board for planning and gives it the power of eminent domain (not as a new power, but simply as a consequence of being a state agency), the power to approve tax-exempt bonds, and to approve charges to pay for transmission projects.[199] According to a state agency document at least 30 percent of any new transmission capacity must be for renewable-derived electricity.[200] New Mexico's innovative statute parallels the approach of some other states. California has also explicitly authorized its state regulators to include its renewable portfolio goals in transmission planning and siting, including through the specification of competitive renewable energy zones for transmission.[201] Texas has also endorsed the concept of competitive renewable energy zones, designed to address in particular the expansion of the renewable energy economy in the state.[202]

These states seem to focus predominantly on promoting state-focused goals, and, to the extent such laws allow

197. Kirsten Engel, *State and Local Climate Change Initiatives: What is Motivating State and Local Governments to Address a Global Problem and What Does This Say about Federalism and Environmental Law?*, 38 URB. LAW. 1015, 1016–20 (2006) (briefly surveying state and local initiatives).

198. H.B. 188, 48th Leg., 1st Reg. Sess. (N.M. 2007) (enacted and codified as N.M. STAT. § 62-16A (2009)).

199. N.M. STAT. § 62-16A-3 & -4.

200. N.M. Energy, Minerals & Natural Res. Dep't, Fact Sheet on H.B. 188, Renewable Energy Transmission Authority Act, http://www.emnrd.state.nm.us/ECMD/LawsRegulationsExecutiveOrders/documents/HB-188-RETA-fact-sheet-07.pdf (last visited Feb. 12, 2010).

201. California Energy Commission, Renewable Energy Transmission Initiative, http://www.energy.ca.gov/reti/index.html (last visited Feb. 12, 2010).

202. *See* Public Utility Commission of Texas, Competitive Renewable Energy Zones, http://www.puc.state.tx.us/rules/subrules/electric/25.174/25.174ei.cfm (last visited Feb. 12, 2010); *see also* TEX. UTIL. CODE ANN. § 39.904 (2007) (containing the relevant statutory provisions in the Texas Public Utility Regulatory Act).

consideration of out-of-state benefits in siting transmission, they appear to remain the exception and not the rule. A net power consuming state such as California is likely to see its main goals as diversifying resources beyond traditional fossil fuels, conserving energy, and sparking development of new renewable energy startups. A net energy producing state, such as New Mexico, is more likely to see its main goal as encouraging economic development of a renewable energy sector based on natural resources, whether they are located in urban or rural areas. There may be obstacles if consumer and producer interests are not aligned across jurisdictions, and in many instances producer interests are not sufficiently strong in the renewable sector to support legislative reform that advocates changes to state laws regarding transmission to allow renewable resources to flourish.

Moreover, even where individual states have reformed transmission siting laws, often the effectiveness of transmission reforms depends on the discretion of state regulators who continue to adhere to the traditional understandings of the public interest embedded in the model of vertical integration of the traditional public utility. Any individual state's reform efforts can be hobbled if neighboring states do not incorporate similar considerations into their transmission siting laws. For example, even if New Mexico does include broad considerations such as the development and export of renewable resources into its siting statutes, its effort to effectively reach markets such as California could be thwarted if a state such as Arizona adheres to a limited definition of the public interest in siting statutes and refuses to allow the siting of a transmission line to transport New Mexico power to California. As a physical matter, Arizona and other states may not favor treating transmission as nothing more than a conduit for out-of-state interests. Out of state electrons will likely be intermingled onto a grid that benefits Arizona customers. However, if Arizona adheres to a narrower definition of the public interest than does New Mexico or California, Arizona producers could use their market power over transmission to exclude competition from New Mexico producers and to capture rents that could benefit California consumers.

Finally, it is not sufficient for state siting statutes to merely incorporate or mimic RPS goals. RPS goals typically focus on electricity purchases and sales, not on power production within a state. In addition, with tradable renewable energy

credits there is no guarantee that renewable power will flow into a state at all. If the goal is to truly encourage development of a state's renewable natural resources, a state RPS goal alone, or consideration of a state RPS in transmission siting decisions, is not an effective means to that end, and a broader approach to transmission needs to be taken.

C. State Statutory/Regulatory Inertia and Legal Barriers

Many of the barriers to siting lines that would improve competitiveness on the western bulk power markets also improve access for energy exporting states, increase market opportunities for renewable resources—particularly wind—and contribute to economic development in the states affected are rooted in state law and/or regulation. One of the most significant—but under-discussed—barriers relates to how states provide for cost-recovery for transmission investments, given that with wholesale competition and heightened attention to climate change it is increasingly likely that those who would benefit from new transmission will not be the same customers who would bear the costs under traditional rate regulation.[203]

To illustrate the problem, consider the following example. A line designed to transmit New Mexico's renewable energy into California would have to cross Arizona, so an Arizona utility may seek to site a line to accommodate that energy flow.[204] Arizona may already have little incentive to approve the line because the benefits primarily go to the sellers and buyers in neighboring states, while the physical effects of the line will be predominantly felt in Arizona, a state that is not intended to be a beneficiary. If the Arizona utility then seeks to put the new facility in its retail rate base, the native load customers of the Arizona utility will have to pay for it, or, at least stand ready to pay for it if the off-system use of the facility was less than fully

203. See Rossi, *supra* note 96, at 1044–48, for further discussion of the cost allocation and transmission pricing issue and its potential implications for investment in transmission.

204. While the issue of who is eligible to apply to site a new transmission line is discussed above in regard to the four states discussed in this Article, it is important to note that in some states, only utilities are eligible to apply, so their participation would be mandatory. See Tampa Elec. Co. v. Garcia, 767 So.2d 428 (Fla. 2000), for an example of where this is the case, at least in regard to generation. Obviously, where an incumbent utility is the only eligible party to build a line, the issue of rate treatment for that line becomes even more critical to obtaining siting approval.

compensatory to the local utility.[205] That possibility turns what is already an incentive to reject the line into a virtual economic mandate to do so for Arizona siting officials.[206]

From the perspective of New Mexico, a net power exporting state, there also may be strong incentives to reject the line if it imposes costs on native customers. For example, if the NMPRC were to include the interconnections to generation for export in the rate base of a jurisdictional utility (when the facility is to be used primarily to export power out of state and provide the utility's customers little benefit) it is likely that there would be significant opposition to the siting of the line from customers who do not wish to subsidize the exporters of electric power. While this example is purely hypothetical, the possibility of it occurring, in the West or elsewhere in the U.S., is not insignificant.[207]

Setting aside the question of correct price signals, as well as the basic ratemaking principle that the cost-causer should be the one who pays, and examining the issue solely from the perspective of siting decisions, the allocation of costs among users has an enormous impact on how the siting process will occur.[208] Imposing costs on non-beneficiaries will make siting

205. In the example, the Arizona utility would almost certainly not want to be involved in such a project unless it was assured of full revenue recovery. If the full recovery would be from the buyers and sellers in the contemplated transaction, the utility might entertain involvement, but if full recovery meant having to seek inclusion of the new line in retail rate base, the utility might still defer on the basis of not wanting to use up political capital and goodwill to get the project approved.

206. In fact, Arizona regulators rejected the proposed Devers Palo Verde 2 (even though all of its costs would have been borne by Southern California Edison) ostensibly because of environmental impact, although many suspect the real reason was because of fear that California's thirst for energy would increase demand to the point that Arizona consumers would experience rising electricity prices as a result. So. Cal. Edison Co., Case No. 130, Decision No. 69638 (Ariz. Corp. Comm'n June 6, 2007), *available at* http://images.edocket.azcc.gov/docketpdf/0000073735.pdf. One can only imagine the situation if Arizonans were also being asked to pay for the line. The same line was approved by the California Public Utilities Commission. So. Cal. Edison Co., Decision No. 07-01-040 (Cal. Pub. Utils. Comm'n Jan. 25, 2007), *available at* http://docs.cpuc.ca.gov/published/FINAL_DECISION/64017.pdf.

207. It is also important to keep in mind in this example that there is a risk that the siting officials involved may have a higher hurdle for economic transmission than they do for transmission for what they deem to be reliability. *See supra* note 1.

208. The issues of price signals and cross subsidies for renewables, or any other resource, are not being set aside in this Article because the authors believe them to be insignificant. They are important, but they are simply beyond the scope of this Article, which focuses primarily on siting issues.

lines in states located between sellers and buyers (already a difficult task) even more problematic, and may even have similar consequences in the selling state. While placing transmission used primarily for the export of a state's resources in the retail rate base may provide financial comfort for the utilities undertaking the construction, that benefit may well be offset by the opposition of those being asked to bear the residual revenue risk for that line, despite its perceived negligible benefits for them, in the event that the revenues from the off-system use of the line do not cover its full costs. Both New Mexico, in its creation of NMRETA, and Wyoming, with its WIA, appear to recognize this problem and have attempted to surmount it, while maintaining a competitive advantage, through the use of lower cost public finance.[209]

Apart from whether transmission is included in retail rate base, there is the issue of allocating costs among all affected parties in a given region. This is a vexing problem, even in regions with mechanisms for regional transmission planning and even more difficult where regional planning processes do not exist. Some contend that it is the inability to resolve cost allocation controversies that have stymied the construction of additional transmission even more than siting problems have. For the most part, however, the inability to resolve cost allocation issues has surfaced in instances where the utilities, or, perhaps, other investors, fail to agree between themselves as to who should bear what portion of the costs associated with a proposed line. The most likely result of such a stalemate is that the proposed line will never come to be, rather than that it will encounter problems being sited.[210] Where the utilities are in agreement about the risks and costs of a line, it is the customers who are likely to bear a line's costs; where customers who do not see benefits are called upon to pay, such a line may generate strong resistance in the siting process that has little to do with either need or environmental harm.

209. *See supra* notes 72–73 and accompanying text (discussing New Mexico); *supra* note 76 and accompanying text (discussing Wyoming). To the extent that these agencies directly exercise the power of eminent domain as a public agency, rather than granting it to a privately-owned utility, they may be able to take advantage of lower cost public financing of transmission, such as through tax-exempt bonds.

210. If multiple users will need to build a line for shared use purposes and they cannot agree between themselves, it is less likely that a line will be proposed in the first instance than where the likely users of a line agree in advance regarding who will share the risks and costs associated with constructing the line.

For those states looking to export their energy resources, however, the inability to find means of resolving cost allocation disputes can constitute just as much of a barrier to the business plans as to siting a line. In regions with regional transmission organizations ("RTOs") there is a recognized framework for joint planning and trying to resolve cost allocation disputes.[211] The issue is often more complicated in regions that lack organized markets and planning processes. It is important for states looking to export their energy production to assure that cost allocation methodologies are clear, and, if not, that there is a workable mechanism for resolving them on a timely basis. It is worth noting that the four states are in two different interstate groups established, at least in part, to resolve cost allocation issues in transmission. Utah and Wyoming are in the footprint of the Northern Tier Transmission Group ("NTTG"),[212] while Colorado and New Mexico utilities and regulators are part of WestConnect.[213] For each of these states it is important that they make sure they are able to resolve cost allocation issues across the entire region into which they intend to sell energy. It may be of lesser value to have regional arrangements with some states, or among utilities in some states, if those states or companies only cover some of the market region in which energy will be traded. Generally, the larger the footprint for resolving cost allocation issues, the fewer seams or other distortions one will encounter in planning transmission, and, once it is built, in trading on the wholesale market.

With regard to the states of Colorado, New Mexico, Utah, and Wyoming, there are a variety of changes to law and/or regulation that would greatly facilitate the states achieving their

211. See *infra* Part III.D for discussion of such approaches.

212. As the NTTG web site describes:

> The Northern Tier Transmission Group (NTTG) is a group of transmission providers and customers that are actively involved in the sale and purchase of transmission capacity of the power grid that delivers electricity to customers in the Northwest and Mountain States. Transmission owners serving this territory work in conjunction with state governments, customers, and other stakeholders to improve the operations of and chart the future for the grid that links all of these service territories.

See Northern Tier Transmission Group, http://www.nttg.biz/site/ (last visited Feb. 12, 2010).

213. *See* WestConnect, Members and Steering Committee, http://www.westconnect.com/about_steeringcomm.php (last visited Feb. 12, 2010) (listing Colorado and New Mexico utilities and regulators as members).

objectives of promoting environmentally sustainable economic growth. One of those changes has already been discussed above: namely, changing the way in which need is defined for purposes of siting within individual states. However, a number of additional reforms are necessary to laws in these states, or in other states that follow a similar approach.

To begin, state preemption of local government decision-making powers in the siting process can greatly facilitate transmission siting. New Mexico has already preempted local authorities.[214] While the other states have proscribed local powers in a variety of ways, the requirements for submitting multiple applications and, perhaps, multiple proceedings with the potential for conflicting results and endless demands for concessions, is both daunting and costly. Local governments should have input into the process, but not a veto or absolute decision-making power.

In addition, facilitation of the process would also be served by creating a single, uniform process for siting. Although New Mexico has preempted local governments, it has also needlessly complicated the process by requiring separate applications for need determinations, location approvals, and right-of-way width determinations.[215] It is not clear that any interest is being served by such complexity. In Wyoming, there are separate processes for siting depending on whether the applicant is a utility or not.[216] There is no apparent public purpose for that distinction.[217] Several of the states require regulators to do environmental analysis;[218] this is a perfectly reasonable requirement, as long as it is folded into a single decision-making process, but to the extent it is a separate proceeding, it undermines coordination in the process.

All potential investors—whether utility or non-utility—should be permitted to submit applications for approving the siting of transmission. It appears that there are no absolute

214. *See* N.M STAT. § 62-9-3(I) (Supp. 2009).

215. *See id.* § 62-9-1 (requiring CPCN); § 62-9-3 (requiring location permit); § 62-9-3.2 (requiring right-of-way width determination when requested right-of-way is more than 100 feet).

216. *Compare* WYO. STAT. ANN. § 35-12-106 (2009) (applying to "person[s]"), *with id.* § 37-2-205 (applying to utilities).

217. The only obvious reason for that distinction has to do with the utility's possibility of including the proposed line in rate base. That issue has already been explored above. *See supra* note 11 and accompanying text.

218. *See supra* Part I.A.

barriers to that possibility in three of the states,[219] but is not clear that anyone other than utilities can apply in Colorado.[220] It is reasonable to establish such qualifications as financial capabilities, and ability to comply with applicable environmental, safety, financial, and reliability standards, but limiting eligibility to apply to utilities only unnecessarily limits access to capital markets and reinforces the market power of incumbent utilities.

In all of the states eminent domain flows from status as a public utility.[221] For the same reasons as enumerated above, the powers of condemnation of property ought to flow out of the siting process and not be bestowed on only one type of applicant. While there is no reason to limit the current eminent domain powers vested in utilities, when it comes to transmission, there is no logic to providing eminent domain to one type of actor who obtains siting approval and not to others. While there ought to be criteria limiting how the powers of condemnation can be used (e.g., common carriage obligations or right-of-way maintenance), those conditions ought to be universally applicable to all successful applicants. Interestingly, Wyoming requires a utility to obtain a CPCN before exercising eminent domain to build a transmission line; this goes only halfway to recognizing eminent domain as an outcome of the siting process, as it does not extend eminent domain to non-utilities.[222] Eminent domain should be given for limited purposes and never to bestow undue advantage on any party or class of parties.[223]

Also, at least on a prospective basis, the costs of transmission should not be included in state retail rate base. For all of the reasons enumerated above, it distorts the process of determining need. It also has the decided effect of affording utilities the opportunity to socialize their transmission costs among native load customers, while other investors are putting their own

219. *See supra* Part I.B.

220. *See* COLO. REV. STAT. § 40-1-103 (2009).

221. *See supra* Part I.B.

222. *See, e.g.*, WYO. STAT. ANN. § 37-2-205 (2009).

223. The advantages that accrue from being able to exercise eminent domain powers are not limited to the actual exercise of them. In fact, it is often preferable to not actually have to flex that muscle. That being said, the negotiating dynamics of acquiring property, and most likely the resulting price, can be heavily influenced by the fact that a seller is aware that the buyer possesses the power to condemn the seller's property in the absence of a mutually acceptable, consensual agreement.

capital at risk. It also forces regulators and siting officials to look at applications with a localized bias, since all of the risks of covering the lines are being imposed only on a subset of potential users of the line. Transmission costs ought to be borne by all users by passing on the rates set by FERC.[224]

Finally, geographic separation of states with similar concerns complicates the problem.[225] This complicates transmission planning by limiting the regions across which cost allocation can be agreed upon. While that does not *per se* affect siting decisions, it does seem likely that it will limit the number of applications filed. Without greater coordination the net effect over the long run is likely to be reduced market access for those states seeking to export energy.

D. Interstate Governance Barriers

In addition to state-based legal barriers, there are broader governance obstacles—at the levels of regional governance and federalism—to the evolution of the public interest to accommodate new transmission siting issues.[226] A heightened role for regional coordination seems inevitable, as the Waxman-Markey bill envisions. However, the precise form of regional governance bodies and the role states will play in the regional governance process seem quite uncertain. The uncertainty associated with governance decisions in planning and siting transmission—for example, who, precisely, will make decisions?—alone may make it difficult for the extant legal regime to attract the kind of capital necessary to sufficiently expand the transmission grip to allow states to fully take advantage of export and import opportunities.

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224. There are a variety of other reasons for adopting such a policy, but they are beyond the scope of this Article. *See generally* ROSS BALDICK ET AL., A NATIONAL PERSPECTIVE ON ALLOCATING THE COSTS OF NEW TRANSMISSION INVESTMENT: PRACTICE AND PRINCIPLES (2007).

225. For example, despite being relative neighbors, and serving the same Rocky Mountain market area, for purposes of allocating transmission costs Utah and Wyoming are in one subregion (served by PacifiCorp, a multistate utility that cuts across both states) and New Mexico and Colorado are in another.

226. Although a full discussion of these issues is beyond the scope of this Article, they are addressed here to highlight the alternative institutional setting to defining the public interest in transmission line siting. At some level, states compete with FERC and regional entities for regulatory effectiveness, and in our view for state regulation to remain relevant these institutional alternatives must be taken into account and considered in determining the form and content of state regulation.

A purely state-led approach to coordination, such as the Regional Greenhouse Gas Initiative ("RGGI") in the eastern U.S., may provide one approach to interstate governance. However, this strategy may lack the certainty of a binding legal regime and may be subject to the same kinds of legal challenges that have recently been mounted against the RGGI.[227] As an alternative, a top-down regional planning and siting process, which is led by federal principles such as those endorsed in Waxman-Markey,[228] may produce a more uniform set of principles to guide governance and overcome some of the obstacles of a purely state-led approach to regional coordination. Even this, however, is not without its costs, as to truly be effective any regional body must engender a sufficient common purpose in cooperation among its stakeholders to overcome the strong incentives an individual state may face in defecting to the in-state benefits that have predominated in both conventional public utility paradigm as well as the modern approach to siting in most states.

Associated with a move to interstate governance models are even more complicated questions regarding cost sharing. From a ratemaking perspective, the costs of transmission infrastructure are best spread among all of its beneficiaries, whether they are located in or out of state. The conventional public utility model poses a formidable barrier to such a cost-sharing principle. A recent report by the Center for American Progress states the problem, which we highlight above, as follows:

> Under typical practices for financing electrical transmission . . . the costs of projects are paid for principally by the ratepayers in the particular area where the project is built. This policy creates a strong disincentive for utilities and their state regulators to invest in transmission that will have broader social benefits that extend beyond their jurisdictional boundaries. Thus, due to our system of cost recovery, as a nation we have underinvested in the backbone

227. The RGGI is an agreement between ten northeastern and mid-Atlantic states to curb CO_2 emissions and coordinate activities toward that goal. *See* Regional Greenhouse Gas Initiative, http://www.rggi.org/home (last visited Feb. 12, 2010); *see generally* William Funk, *Constitutional Implications of Regional CO2 Cap-and-Trade Programs: The Northeast Regional Greenhouse Gas Initiative as a Case in Point*, 27 UCLA J. ENVTL. L. & POL'Y 353 (2009) (discussing legal challenges to the RGGI).

228. *See* American Clean Energy and Security Act, H.R. 2454, 111th Cong. § 151 (2009).

> electrical grid, relative to the benefits it could provide. Moving forward, the costs of future investments in the national clean-energy smart grid will need to be shared differently, reflecting the broadly dispersed environmental and economic benefits that these projects will generate for our country.[229]

Because the primary beneficiaries are not located entirely in the state in which many transmission facilities will be built, the state ratemaking process alone will prove insufficient as a mechanism for facilitating such cost sharing.

Cost-sharing principles may need to evolve in ways that transcend individual state regulators, also presenting new governance challenges. One solution may be to encourage cost sharing as a voluntary governance principle between utilities at the regional level. The Western Electricity Coordination Council ("WECC"), formed in 2002, provides an opportunity for such coordination.[230] Through standard tariffs terms, WECC can provide a set of principles to assist state regulators in ensuring that cost-allocation principles are not overly parochial and that there is not a significant mismatch between the benefits of new transmission and those who pay for it, whether they are located in- or out-of-state.[231] Of course, a downside to such a voluntary approach is that it is only as binding as the commitments of the individual utilities that comprise the interstate agreement.

Other solutions include more formalized arrangements or an expansion of federal power. Although under current institutions such solutions may not be sufficient within the Western Interconnection (the physical portion of the grid that comprises states in the West), Independent Service Operators ("ISOs") and RTOs hold some promise as a model for cost sharing in other parts of the country. Even their cost-sharing mechanisms have proved problematic. According to the Center for American Progress, "[e]ven in RTOs and ISOs with cost-allocation mechanisms and benefits analysis, cost-allocation

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229. HENDRICKS, *supra* note 193, at 24.

230. Although WECC includes state regulators, it is primarily comprised of public and private utilities that own transmission as well as consumers in western states. *See* Western Electricity Coordinating Council, http://www.wecc.biz/About/Company/Pages/WECCMembers.aspx (last visited Feb. 12, 2010).

231. For example, WECC has a variety of standards regarding reliability and transmission planning. *See* Western Electricity Coordinating Council, Approved Standards, http://www.wecc.biz/Standards/Approved%20Standards/Forms/AllItems.aspx (last visited Feb. 12, 2010).

decisions are often protracted and contentious."[232] An RTO or ISO may be insufficient as a mechanism for cost sharing when the benefits accrue beyond the RTO or ISO to a broader set of beneficiaries. There is some reason to think that a regional governance model for cost allocation alone would be insufficient to sufficiently provide the incentives necessary to expand transmission for renewable projects.

At a minimum, widely varying results can be expected across regulatory proceedings in areas served by different ISOs and RTOs.[233] For example, FERC approved the New York ISO's process for regionally spreading the cost of new "economic" transmission projects.[234] In accepting the New York ISO's emphasis on cost savings over other considerations, including accessing "renewable generation," FERC rejected a challenge by the New York Regional Interconnect ("NYRI")—a firm proposing to build a transmission line to carry 1,200 MW from upstate New York to the New York City region.[235] FERC's approval endorsed a supermajority voting provision, which prohibited the regionalization of a transmission line's cost unless 80 percent of the New York ISO's transmission customers approve the project.[236] Following FERC's approval of this arrangement, NYRI withdrew its application to the New York Public Service Commission, suggesting that the arrangement approved by FERC allowed veto power by large transmission customers opposing the project.[237] By contrast, FERC accepted a proposal by Southwest Power Pool, Inc. to regionalize the costs of transmission for wind resources.[238] Southwest Power Pool's standard rules would assign the cost of wind directly to specific customers, rather than allocate them across the entire region.[239] This proposal allocates a more limited range of cost to

232. HENDRICKS, *supra* note 193, at 22.

233. FERC has been criticized by a number of commentators for failing to develop governing policies or principles regarding allocating the costs for new transmission. *See* Richard J. Pierce, Jr., *Completing the Process of Restructuring the Electricity Market*, 40 WAKE FOREST L. REV. 451, 483 (2005). As the two examples noted illustrate, rather than providing coherent guidance, FERC has simply accepted agreements presented by various regions without any particular regard to a consistent policy or principle.

234. New York Indep. Sys. Operator, Inc., 126 F.E.R.C. ¶ 61,320 at 13 (2009).

235. *Id.* at 6–7.

236. *Id.* at 11, 13.

237. *Id.* at 11.

238. NYRI made these same arguments for regionalization of transmission costs before FERC, which rejected them. *See id.* at 13.

239. Sw. Power Pool, Inc. 127 F.E.R.C. ¶ 61,283 (2009).

new renewable wind projects, based on nameplate capacity rather than net dependable capacity (which, of course, is quite significant for intermittent wind), and also assigns 67 percent of the cost of upgrading transmission to serve wind to the entire Southwest Power Pool region.[240] In approving this project, FERC found that the pool's "distinct treatment of these location-constrained resources is not unduly discriminatory" because renewable resource transmission expansion faces unique challenges in comparison to the expansion of transmission for more conventional sources of power generation.[241]

In regard to closer coordination in the West, it is important to keep in mind that the ability to access markets by renewable energy is not merely a function of siting new turbines and transmission lines. It also depends on dispatch protocols, which are of particular concern to wind generators given their intermittent nature. Most advocates for wind energy find that RTOs offer the simplest environment for wind generators to operate because of the way in which the markets function and dispatch protocols operate.[242] Thus, despite their shortcomings in some regards, RTOs offer real benefits. Less organized markets are more difficult terrain for renewable energy generators to do business in. Similarly, planning and defining needs across a broad geographic area will facilitate the siting process. That also appears to occur more easily in an RTO than in the absence of an RTO market, as experience in the West seems to confirm.[243] At the same time, making an artificial distinction in federal authority to preempt siting based on the existence of an RTO that also lacks any preemptive effect over state parochialism risks hobbling the development of interstate markets in renewable resources in the East. In the West, it may be worthwhile for state regulators trying to promote the use of renewable resources to rethink the costs and benefits of forming a region-wide RTO.[244]

240. *Id.* at 6 ¶ 24.

241. *Id.* at 8 ¶ 29.

242. An RTO will provide a more predicable set of commitments, backed up with the possibility of FERC enforcement.

243. Since the West lacks an RTO and has many isolated rural areas near natural resources that lack transmission infrastructure, renewables such as wind have not flourished in the region as much as the natural availability of renewable resources might support.

244. There have been a variety of reasons why RTO proposals for the West (other than in California) have failed. Some of them related to cost/benefit concerns; fears that California would "suck in" lower cost energy from elsewhere, thereby causing upward price pressure in other western states; and a desire not to

Finally, as a last resort, to the extent states and regional bodies cannot sufficiently address the issue on their own, cost sharing will increasingly become an issue of federal regulation. In part, FERC maintains that this is because it lacks sufficient legal authority to do so, and it is lobbying Congress to expand its power to more affirmatively build transmission costs into its own price-setting authority.[245] According to FERC Chairman Wellinghoff:

> Under FPA Sections 205 and 206, the Commission ensures that public utilities' (investor-owned utilities) rates, terms and conditions of transmission service in interstate commerce are just, reasonable and not unduly discriminatory or preferential. This responsibility includes allocating the costs of new transmission facilities built by public utilities. At present, the Commission has greater ability to assign such costs over broad geographic areas where there is a regional transmission organization (RTO) or independent system operator (ISO).
>
> If Congress determines that there are broad public interest benefits in developing the . . . transmission system necessary to accommodate the Nation's renewable energy potential, and therefore that the costs of transmission facilities needed to meet our renewable energy potential should be fairly spread to a broad group of energy users (for example across a region or an entire interconnection), then Congress should consider giving the Commission clear authority to allocate such transmission costs to all load-serving entities within an interconnection or part of an interconnection.[246]

FERC has not adopted an effective set of cost-sharing/allocation principles for transmission, particularly within the Western Interconnection (which lacks stronger regional approaches such as RTOs). However, such passivity on the part of federal regulators is unlikely to continue in the con-

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be an energy farm for California, which many states have, in the past, argued should site its own plants in-state. As noted elsewhere in this Article, many of these notions have changed as states seek to coordinate and build more transmission for the explicit purpose of exporting energy to such places as California. Those objectives will invariably change the assumptions that drove the results in previous cost/benefit studies. It would seem appropriate for state regulators to revisit the issue of a region-wide RTO.

245. *See Wellinghoff Senate Testimony*, *supra* note 162, at 9.

246. *Id.*

text of shifting political and economic currents that favor reducing barriers to expanding the grid. FERC's failure to adopt a clear policy on the allocation of the costs of new transmission may be due to the fact that it sees its current jurisdiction as limited.[247] At the same time, the beatings FERC took from some powerful interest groups and their Congressional allies over the effort to implement standard market design during Pat Wood's tenure as Chair from 2001 to 2005 might suggest that political constraints are more significant than any legal barriers the agency now faces.[248] Whether the FERC will remain passive depends on whether, as seems quite possible, the Commission reasserts its leadership and/or whether Congress sees fit to enable, or perhaps even to mandate, a more assertive regulatory posture on the federal level because the current approaches are insufficient.[249]

The comprehensive Waxman-Markey climate bill adopted by the House of Representatives in 2009 fails altogether to address the issue of allocating the costs of transmission projects.[250] In contrast, the Bingaman bill pending in the Senate provides FERC the jurisdiction to assign the costs of new transmission projects.[251] At the same time, through the Corker Amendment the Senate bill limits FERC's ability to spread costs regionally to the extent "the costs are reasonably proportionate to measurable economic and reliability benefits."[252] Such a requirement to quantify benefits is likely to lead to protracted litigation regarding FERC's authority to regionally spread the costs associated with new renewable projects, possibly undermining some of the principles FERC has previously endorsed in approving transmission cost

247. *See* Pierce, *supra note* 233, at 484 (highlighting how states retain considerable jurisdiction over transmission under the Federal Power Act).

248. The 2001–2005 time period was a particularly tumultuous one in the politics of electricity. It coincided with the 2003 blackout in the Northeast as well as the aftermath of the California power crisis. See generally Mary Anne Sullivan et al., *Standard Market Design: What Went Wrong? What Next?*, ELECTRICITY J., July 2003, for more discussion of the controversies regarding FERC's effort to implement standard market design.

249. See generally Rossi, *supra* note 96, at 1044–48, for more discussion regarding the impact of impasses over cost allocation on building new transmission lines.

250. *See supra* Part II.C (discussing Waxman-Markey).

251. *See* American Clean Energy Leadership Act of 2009, S. 1462, 111th Cong. § 121 (2009).

252. *See id.* (proposing amendment to section 216(i)(1)(B) of the Federal Power Act, currently codified at 16 U.S.C § 824p (Supp. 2009)).

allocation on a regional basis, such as in the Southwest Power Pool.[253]

While in principle the application of cost/benefit assessment is unassailable in this context, a recent Seventh Circuit decision highlights how a judicially-imposed obligation to limit benefits to narrow "reliability" factors—perhaps even more than statutory limitation[254]—could hobble the development of new transmission lines for renewables by limiting the ability of regional bodies to spread their costs. Following a model for cost allocation that had been adopted among members of the PJM Interconnection (an RTO comprised of utilities stretching from mid-Atlantic states to midwestern states such as Illinois), FERC approved the RTO's pro rata allocation of the costs among members for new transmission of 500 kv and above.[255] Because the RTO's members span both concentrated (in its western regions, including Chicago) and unconcentrated population areas, the direct benefit of transmission may vary across distinct customer groups within the PJM Interconnection.[256] At the same time, there were recognized benefits of new 500 kv transmission to network reliability for all PJM Interconnection customers.[257] Consistent with its approach in other efforts to regionalize the cost of transmission, FERC had not attempted to quantify these benefits across all of PJM's members.[258]

The Seventh Circuit reversed and remanded FERC's approval of the PJM Interconnection cost-allocation formula for new high-voltage transmission.[259] Writing for the panel, Judge Richard Posner concluded that "FERC is not authorized to approve a pricing scheme that requires a group of utilities to pay for facilities from which its members derive no benefits, or benefits that are trivial in relation to the costs sought to be shifted to its members."[260] Although Judge Posner was careful to suggest that there is no need to calculate benefits "to the last penny," he also highlighted that merely asserting "*some* benefit" is insufficient.[261] An effort needs to be made to either quantify such benefits or to conclude that the benefits are roughly

253. Sw. Power Pool, Inc., 127 F.E.R.C. ¶ 61,283 (2009).
254. *See* Ill. Commerce Comm'n v. FERC, 576 F.3d 470, 476–77 (7th Cir. 2009).
255. *Id.* at 474.
256. *Id.* at 474–75.
257. *Id.* at 475.
258. *Id.*
259. *Id.* at 477–78.
260. *Id.* at 476.
261. *Id.* at 477.

commensurate with a utility's share of sales in the entire PJM region.[262]

Judge Richard Cudahy issued a strong dissent to this part of the panel's opinion, observing:

> [I]t is not possible to realistically determine for each utility and with reference to each major project the likelihood that rate-simplification will reduce litigation, or to calculate the precise value of not having to cover the costs of power failures and of not paying costs associated with congestion, and all this over the next forty to fifty years. Concerns about the real value to individual utilities of the stability and efficiency provided by improvements to the backbone grid are answered by their voluntary participation in the power pool and its collaborative "RTEP" (or regional transmission expansion planning) process. Rate-making based on cost causation is assured by this process, since universal cost-sharing is recommended only when developments are found to benefit the integrated system as a whole.[263]

Judge Cudahy reasoned that imposing a precise quantification of benefits, or even rough proportionality, is inconsistent with past practice in regional grid pricing to address issues such as cascading outages, and not required by any of FERC's rules or precedents or the statutory language of the FPA.[264]

Whether imposed by courts or by Congress, a mandate to precisely quantify the benefits to reliability of transmission grid expansion upfront as a predicate to cost allocation can pose a troubling regulatory requirement. *Illinois Commerce Commission v. FERC* did not require absolute precision in allocating costs.[265] However, FERC's unwillingness to articulate clear cost-allocation principles that can be applied consistently, as illustrated by the disparate results in SPP and NYISO, as well as the common historic practice of states simply putting all transmission assets into retail rate base and the lack of any coherent principles of policies governing cost allocation, may have made judicial intervention of some sort almost inevitable. While it is not yet clear what the full implications of the Seventh Circuit decision or the Corker Amendment (if it ultimately becomes law) will be, FERC's deferring to regional

262. *Id.*
263. *Id.* at 479 (Cudahy, J., dissenting).
264. *Id.* at 480–81 (Cudahy, J., dissenting).
265. *See id.* at 477 (stating that there is no requirement for agency to quantity benefits "to the last penny").

agreements, rather than articulating a coherent policy rationale for its cost allocation decisions, could well result in a series of precedents that could effectively narrow the agency's discretion to review transmission rates under the "just and reasonable" principle. Even more limiting, it could enhance opportunities for judicial second-guessing of agency judgments, or Congressional intervention regarding the network benefits of projects for reliability. Given the many challenges the industry today faces, transmission policy and applicable cost-allocation principles should include such goals as energy security, promoting the diversification of power generation, and pollutant emission reductions in addition to economic objectives. Such goals are best balanced by regulators and are highly difficult, if not impossible, to quantify with any meaningful precision over a forty- to fifty-year project life span.

CONCLUSION

As states assess the public interest against the backdrop of changed conditions presented by wholesale competition and heightened attention to climate change, regulators face the challenge of evolving a new understanding of the public interest beyond its traditional meaning in state regulatory proceedings—especially if they are to succeed in harnessing new natural resources for energy production. Both legal and governance barriers exist to the expansion of the transmission infrastructure that is necessary to harness these resources. States must overcome these barriers if they are to retain their relevance as regulatory authorities in the new environment. The legal and political challenges are significant, but the opportunities to develop new opportunities for economic growth related to renewable power are even greater for natural resource-rich states. Regulators will need to approach siting from a more general regional perspective. Moreover, the issue of cost allocation cannot be left to the traditional approach of state regulators, and will need to be addressed in a manner that explicitly reflects the benefits to be derived from new transmission assets, both user-specific and more general. Even if pending federal proposals are adopted into law, state utility law will need to evolve beyond its parochial traditions to a new understanding of what the public interest in new transmission infrastructure entails.