

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

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I. INTRODUCTION AND BACKGROUND

Under the predominant existing paradigm, in balancing the public interest in transmission line planning and siting decisions most state regulatory authorities weigh the benefits to the customers of a specific utility system, or to the consumers in an individual state, against potential adverse consequences. This approach to transmission siting was designed to serve the model of a vertically-integrated public utility monopoly franchise, for which the primary purpose of siting was to locate infrastructure to serve the utility’s native load customers. Under this paradigm, the costs of new transmission infrastructure are typically allocated under cost-of-service ratemaking principles, based on an understanding of anticipated benefits to them. In making their decisions, siting authorities have been required to first determine the need for transmission infrastructure, usually defined in economic terms.¹

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¹ A distinction is sometimes made between lines being built to 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 paper 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

Today's commonly used siting paradigm today evolved from the traditional public utility paradigm, in which individual utilities carried out their planning activities largely in private and either used, or possessed the threat of using, their powers of eminent domain to carry out their plans for building transmission to link generation and load. In some states, utility regulators may have assumed more active roles in overseeing the process, but in others the regulatory posture was more *laissez faire*. In some states, the *laissez faire* regulatory posture was characteristic of state regulators, but 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.

The public utility paradigm morphed into the predominant current siting model because of a number of tensions that rendered it both impractical and anathema to a wide array of interests. Those tensions, from the public side included ratepayers opposed to paying for what they believed to be "excess capacity" possessed by utilities. Ratepayers demanded more transparent and participatory planning activities by monopoly utilities to whom they were captive and whose costs they were obliged to pay.² In addition, the assessment of need was expanded to include environmental concerns, such as increased resistance against building new facilities on environmental, aesthetic grounds, and from those who believed they were victimized by the asymmetry between those perceived to be bearing the environmental and social costs and those deriving the economic benefits.³ 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. Many utilities were also concerned that reviews by local land use regulators tended to emphasize local impacts over system wide benefits.

The result – the current paradigm for siting in most states -- was a compromise between public interest and consumer groups on one side and utilities on the other, to adopt what was often described as creating “one stop shopping” for building new generating plants and transmission lines, namely state siting agencies whose more 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 preempted or allowed for overruling local authorities,

system reliability. For states seeking to site lines, particularly for selling their energy, the distinction is one to keep in mind.

² 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.

³ Some came to characterize such opposition as “NIMBY(Not-In-My-Back-Yard)-ism”. 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 are an inherent aspect of siting new facilities on the interconnected grid, and, therefore, an unavoidable source of potential conflict.

and combined state powers into a single agency.⁴ Environmental stakeholders also found 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.⁵ Additionally, to the satisfaction of utilities, in many, if not all jurisdictions using the paradigm, planning and siting approval was 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 ratemaking determination of “imprudence” that might lead to recovery disallowance, for any risk other than those that related to actual construction.⁶

While the regulatory process has evolved, two critical factors remained constant over the course of the transition from the original siting paradigm to the predominant paradigm today. The first is that the cost of all new transmission facilities was generally included in the retail rate base of the utility building it. While revenues derived from “off system” (i.e. non-native load) users of the facilities may have been credited back to those captive retail ratepayers, the full risk of the residual revenue responsibility for the line was borne by them.⁷ The consequence of that widespread practice was that it made the allocation of costs a critical, even, in many cases, determinative, component of obtaining siting approval for a proposed new transmission line. It was highly improbable that a state would approve a line being built by a jurisdictional utility if the costs, or even the

⁴ Not all states adopted this paradigm. There are still 20 or so states which operate on the original paradigm. See Ashley C. Brown & Damon Daniels, *Vision Without Site, Site Without Vision*, *Electricity Journal*, October 2003, at 23. There is also an 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 political opposition of states 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.

⁵ States vary widely in regard to how agencies should balance costs and benefits of a proposed facility. Some require that agencies merely find that there is a need sufficient to justify construction of the facility. 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).

⁶ 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.

⁷ Most states simply put the full cost of the facility in rate base. 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 a minority of cases state regulators did cost allocations of the line's costs and only put the part allocated to retail ratepayers into rate base. Subsequent to the formation of RTO's, some states in regions served by the RTO's, have acquiesced to transmission being put in wholesale rate base, subject to FERC jurisdiction, and merely pass on to customers FERC transmission tariff costs incurred in delivery of bulk power to them.

residual revenue risks, were to be borne by local consumers but whose benefits were largely extra-jurisdictional. In short, there was 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, is, with some exceptions on the margin, exclusively 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 federal "backstop" role.⁸ Despite this expansion of federal authority, and continued proposals to further expand it, the power to site transmission line remains primarily, and often exclusively, a state function.⁹

The existing paradigm has only fairly recently evolved, primarily over the course of the 1970's and 1980's. Despite its relative youth, it may be 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. 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 capacity bidding and/or to participate meaningfully in the bulk power market for procurement of supply. Second, the increased policy emphasis on environmental, energy independence, and other public policy objectives, has resulted in a dramatically increased demand for renewable energy, particularly given 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.

Not surprisingly, these two developments have presented the opportunity for resource rich states to adopt economic development strategies to promote the construction of

⁸ For discussion of federal authority over transmission siting, as well as proposals to expand FERC's jurisdiction, *see infra*, Section III.C.

⁹ It should be noted those states which 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 is accurate for all states, even where there is a state siting statute.

generating plants, often wind turbines, whose output is frequently intended as much for export into other states as it is for in-state consumption. States such Wyoming, Colorado, New Mexico, and Utah, for example (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. Multistate transmission projects could: 1) foster economic development based on exports of renewable energy to the energy sink states; and 2) further 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 these four states (reliability as load increases, and improved access to renewable energy for their own jurisdictional customers). But the private money would not necessarily come to the table for the purpose of serving the needs of our jurisdictional customers alone, rather, it would come even more, to move power from the producing "source" states to the energy "sink" states.

That reality challenges the siting paradigm described above, which is more inwardly focused on the states' (or systems') own needs rather than on export potential.¹⁰ These new developments call into question the effectiveness of the paradigm as embodied in public utility law in states such as Colorado, New Mexico, Wyoming and Utah. 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 jurisdictional and non-jurisdictional benefits?

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. 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 paper proceeds in four parts. Part I, of course, is the Introduction and Background. Part II describes the existing arrangements in the States of Colorado, New Mexico, Utah, and Wyoming for siting new 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 siting laws affecting transmission. Part III discusses transmission issues related to the

¹⁰ Much of the language in this paragraph is derived from the charge given to the authors by the sponsors of the Conference.

competitive wholesale market and increased attention to climate change and highlights how federal law has expanded to accommodate some of these concerns. Part IV emphasizes the need for a new definition of the public interest which 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.

II. EXISTING ARRANGEMENTS FOR TRANSMISSION LINE SITING AND COST ALLOCATION

Part II will examine key elements of the transmission and siting paradigm(s) employed in the four states and note critical implications of those arrangements for fostering economic development based on exports of renewable energy to the energy sink states and furthering 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.

A. INSTITUTIONAL DECISIONMAKERS AND PROCESSES

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,¹¹ all of the states allow local authorities¹² varying degrees of authority over the siting of new lines.

Colorado: All proposed new transmission lines are required to obtain local approvals. In fact, prior to making application to the Colorado Public Utilities Commission (CPUC) for the required Certificate of Public Convenience and Necessity, utilities must have notified affected local governments of the intended filing.¹³ While a CPCN may be issued by the CPUC before all local permits are obtained,¹⁴ all local permits are required prior to construction. 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.¹⁵ Local authorities have 28 days to ask applicant for additional information, if necessary.¹⁶ Final decisions by local governments must be rendered within 120 days of filing a preliminary application (a discretionary filing), or within 90 days of the filing of an

¹¹ N.M.S.A. § 62-9-1.

¹² "Local authorities" means both counties and municipalities, as applicable.

¹³ C.R.S. § 29-20-108(4)9(a).

¹⁴ *City of Fort Morgan v. Pub. Utils. Comm'n.* 159 P.3d 87 (Colo. 2007).

¹⁵ C.R.S. § 29-20-108(5)(a).

¹⁶ C.R.S. § 29-20-108(2).

application itself. Failure by local government to respond on a timely basis shall be deemed approval.¹⁷ In regard to CPCN applications, the CPUC has 60 days to approve or deny, or to ask for additional information.¹⁸ If the time period lapses without CPUC action, the CPCN is approved.¹⁹ CPUC decisions on CPCN applications are subject to judicial review by the district court on issues of law only.²⁰ It should also be noted that the state has adopted an Energy Resource Zone statute under which the regulated utilities are required to, every two years, develop plans for needed transmission and submit it to the CPUC. In addition, it mandates CPUC should issue 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.²¹ Air permits must be obtained from the Colorado Department of Public Health and the Environment (CDPHE).

Utah: Applicants for siting approval are required to seek local siting permits, as well as a CPCN by the Public Service Commission (UPSC).²² Environmental permits must be obtained from the state's Department of Environmental Quality (UDEQ). Local governments have 120 days to respond to an application. If they fail to do so, applicants may seek a review by the Utility Facility Review Board (UFRB). The state also provides that in the event an applicant and a local government are in dispute over an application, the UFRB will resolve the matter. Either the local government or the applicant may seek review if there is a dispute over the following:

1. over costs or schedule, to allow the local government to pay for extra costs;
2. if the utility believes that a condition imposed by the local government will impair safe, reliable, adequate, or efficient service;
3. for the failure of a local government to approve construction of a facility needed for requisite service quality;
4. for a failure of the local government to act on an application within the 120 day time period allowed by statute;
5. for inconsistent rulings by affected local governments where the proposed facility straddles the border between the two jurisdictions; or
6. where a facility located in one jurisdiction but is intended to exclusively serve customer outside that jurisdiction and there is a dispute over cost allocation.²³

Wyoming: All 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

¹⁷ C.R.S. § 29-20-108(2).

¹⁸ C.R.S. § 24-65, 1-108.

¹⁹ According to C.R.S. § 24-65.1-108(2), there are specific requirements for the format for the state to issue a denial, but no requirements for the format for approval. From this we infer that inaction can result in an approval but not in a denial.

²⁰ C.R.S. § 40-6-115.

²¹ C.R.S. § 40-2-126.

²² U.C. § 54-4-25(4)(a)(i).

²³ U.C. § 54-14-103

on a siting application. The second level of review is conducted by the WPSC. There are no statutory time limits for the WPSC to render a decision.²⁴ For non-utilities, the Industrial Siting Council, a body within the Department of Environmental Quality (WDEQ), carries out a second level of review.²⁵ The Council has 45 days after receiving an application and conducting a hearing, to render a decision.²⁶ All applicants must submit to an environmental review by WDEQ.²⁷

New Mexico: 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.²⁸ All applicants must file two applications with the NMPRC, one for a CPCN and a second one for a 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. The NMPSA has 9 months to decide whether to grant a CPCN, with the possibility of extending that time frame for an additional 6 months.²⁹ If an application for a location permit is filed after an application for a CPCN, the NMPRC has 90 days to decide whether or not to grant one, but if the application for a location permit is filed simultaneously with a CPCN application, the Commission has the full nine month period to decide.³⁰ The NMPSA has 6 months to rule on an application for a right of way determination.³¹ Failure to act constitutes approval.³² While New Mexico does require parties to seek local permits, if those are not approved within 240 days, their permit may be approved at the state level.³³

The responsibilities assigned to local governments in Colorado, Utah, and Wyoming might, at first glance, be expected to cause decision-making to be skewed by concerns about the local impact of proposed new transmission lines. Of course, there are a variety of reasons why localities may be unduly biased by what they perceive as adverse local impacts. An obvious one is that many people simply do not want to either have or even look at transmission lines close to their homes for a host of reasons, ranging from health

²⁴ W.S. § 37-2-213 describes 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.

²⁵ W.S. § 35-12-106 and W.S. § 35-12-102.

²⁶ W.S. § 35-12-113.

²⁷ W.S. § 35-12-106.

²⁸ N.M.S.A. § 62-9-3(I).

²⁹ N.M.S.A. § 62-9-1.

³⁰ N.M.S.A. § 62-9-3 (K)(2).

³¹ N.M.S.A. § 62-9-3.2.

³² N.M.S.A. § 62-9-1(C).

³³ Summary of State Transmission Siting Law in the Western Interconnection, p. 16, available at www.westgov.org/wieb/transmission/other/siting_chart.pdf, hereinafter Summary of Siting Law.

fears from electro-magnetic fields³⁴, aesthetics, perceived impact on crops and livestock, environmental concerns, and a variety of other reasons. Such local concerns are, of course, magnified by the asymmetry between costs and benefits noted above. Weighing costs and benefits across the entirety of a regional power market is almost certain to produce a very different result, than if weighed through the prism of a local government officials to whom the costs can be quite visible and dramatic while the benefits far less apparent and likely to be garnered by people and businesses distant from the locality where decisions are being taken and the physical effects are felt. Another potential problem with local decision-making on siting new 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. 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 litigiousness will drive those costs even higher.³⁵ The result could well be to discourage investors from committing to projects and applicants or potential applicants from building.

To be fair, most local officials have a sense of fairness and public interest that will lead them to give a "fair hearing" to the applications that come before them, but there are institutional reasons to look at the 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 local impact may lead local decisionmakers to see the benefits from a new line outweighing the costs.³⁶ Another constraining factor is the tight deadlines for decision-making imposed by Utah and Colorado.³⁷ While tight deadlines might, arguably, lead to quick rejections, the transaction costs in obtaining local decisions are reduced by the short time frames allotted for them. Moreover, the existence of appellate mechanisms in all three states also tends to somewhat constrain parochialism in final outcomes, as redress from overly parochial local decisions is readily available to frustrated applicants. In fact, the existence of appellate processes may well drive local officials to use their fleeting powers to derive certain concessions from an

³⁴ It is not the intention of this paper to make any pronouncements on the health effects of EMF's associated with transmission lines. That is for scientists to determine. What is clear and indisputable, however, is that public concerns about EMF's 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..

³⁵ The costs are not simply economic or financial. Entities seeking to build transmission line must often expend considerable political and goodwill capital in order to gain needed approvals.

³⁶ 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.

³⁷ Cf. *supra* note 24 regarding time deadlines in Wyoming.

applicant they might not be able to obtain if they simply reject an application and leave their fate to the appellate body.³⁸

On balance, the more power vested in local authorities for making siting decisions, the more variables and uncertainties are introduced to the process. While a state may well have economic and environmental objectives that would be well served by the construction of a new transmission line, allowing such decisions to be taken at the local level by authorities who may well have other, often contradictory, objectives in mind, poses a high risk of leaving the state's objective unaccomplished. 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 it could be argued that the roles of local authorities in siting in Colorado, Utah, and Wyoming, are effectively only input because of the imposition of tight deadline 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. Nonutilities proposing transmission lines, along with utilities lacking contracts with customers in a state (such as out-of-state utilities), may not have qualified for the full benefits of siting approval, including the power of eminent domain. Because in-state utilities traditionally were the entities planning, proposing to build, and requesting siting for transmission lines, under the traditional paradigm and current approach most states limit the full benefits of transmission siting approval to utilities. Many laws relating to applying 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,³⁹ constitute a barrier to attracting non-utility capital to the transmission business.

In **Colorado**, it is not clear that anyone other than public utilities 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.⁴⁰ In **Utah**, anyone can apply to local governments for transmission siting permits. Utilities also 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.⁴¹ **New Mexico** permits both utilities and non-utilities to

³⁸ Footnote 36 suggests the types of concessions that are sometimes sought, although others, such as changing the precise routing of or imposing conditions, such as putting the line underground, are also common.

³⁹ See *infra*, Part III.B.

⁴⁰ C.R.S. § 40-1-103; see also Summary of Siting Law, p. 8. Summary of Siting Law only discusses the process for obtaining a CPCN for utilities, but references the broad definition of a utility in Colorado.

⁴¹ Barnes v. Lehi City, 279 P. 878 (Utah 1929).

apply for siting permits. **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.

C. NEED DETERMINATIONS

In the most common paradigm for transmission siting processes, 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. The question for siting officials to decide is if those effects, generally viewed as adverse, are outweighed by the benefits the proposed new line will bring. Those benefits, of course, are generally economic in nature. Making the task for siting officials even more complicated is, as noted above, the fundamental asymmetry found in the fact that, in most cases, the greatest adverse impact is geographically localized, while the benefits are, in general, geographically dispersed across a wide region. Some, but certainly not all, 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 a bit further below.⁴²

The initial question for siting officials, however, even before assessing the impact, is what justifies construction of the new line in the first place. Historically, vertically integrated utilities simply developed and presented their growth projections, planned facility retirements, and their plans for meeting that demand in terms of generation and transmission lines to link the plants to load centers, and submitted them to siting authorities. Beginning in the 1980's, regulators in many, although not all, states created public planning processes, often called "least cost planning" (LCP) or "integrated resource planning" (IRP), which was designed to test utility forecasts through public scrutiny and analysis. It was also often designed to encourage, if not compel, utilities to strive for greater efficiency not only in their own production and delivery operations, but to promote end use efficiency (demand side management, or 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, and/or, 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.⁴³

Because this paper 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 to native load customers, but will focus on need criteria and determinations relevant to the focus of the present problem at hand: namely economic development which may require the consideration of out-of-state or off-system benefits. It is also worth noting that

⁴² See *infra*, Part II.D. and III.B.

⁴³ 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).

all four states being discussed in this paper regulate utilities with operations in more than one state, and, have, particularly in the cases of Utah and Wyoming (with PacifiCorp) had experience with looking at benefits on a system wide, rather than single state basis. That being said, however, for purpose of this paper, 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 versus another state's native load customers. The ability of siting authorities to consider factors other than the traditional need criteria for serving native load customers, from a legal perspective may be summarized as follows:

Colorado: An applicant to site a transmission line must demonstrate need for the line to be built.⁴⁴ 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 achievement of the state's objectives in meeting its RPS in making siting decisions. In that connection, it is useful to note that there is nothing in the code to suggest that the siting authorities consider such issues 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 to that is that the CPUC is authorized to confer with or hold joint hearings with authorities of other states or any agency of the U.S. Government in connection with any matter under Title 40 (C.R.S. 40), and to enter into cooperative agreements with said entities to enforce the economic and safety laws of Colorado and the U.S.⁴⁵ There is no statutory reference to any needs 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 consideration to such needs, as long as they are reasonably related the needs of the state and/or serving Colorado consumers.

New Mexico: Although an applicant is required to demonstrate need, there is no statutory guidance in regard to multi-state considerations; the requirement that a specific application be filed for a right of way determination where the applicant is seeking a right of way whose width exceeds 100 feet, would appear to add an additional transaction burden on those who propose a larger line, one that, therefore, is more likely to have greater out of state implications.⁴⁶ The creation of the New Mexico Renewable Energy Transmission Authority (NMRETA),⁴⁷ with its objective of exporting the state's renewable energy, also suggests that at least in regard to NMRETA facilities, the legislature, while perhaps focusing primarily on the state's economic development, was clearly contemplating building lines for multi-state purposes.

⁴⁴ C.R.S. § 40-5-102.

⁴⁵ C.R.S. § 40-2-115.

⁴⁶ N.M.S.A. § 62-9-3.

⁴⁷ N.M.S.A. § 62-16A.

Utah: Applicants for siting a line must demonstrate need. There is no statutory guidance offered in regard to out of state considerations, other than the reference to facilities for "the economic benefit of such utility,"⁴⁸ a phrase that at least hints at benefits that may accrue from something other than serving native load customers. However, 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 appears at first blush. It is also interesting to contemplate what meaning should be attached to that fact that the statute refers to the benefit to the "utility," rather than the utility's customers.

Wyoming: Utility applicants for a CPCN must demonstrate need. Like the other states, however, there is little statutory guidance to siting authorities in regard to out of state (perhaps out of system in regard to multistate utilities) benefits. Wyoming has created the Wyoming Infrastructure Authority (WIA) to promote the selling of energy output produced in the state.⁴⁹ 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 to the operations of the interstate bulk power market beyond the state's boundaries.

D. EXTERNALITIES: IMPACT ASSESSMENT AND RESOURCE MIX

It has been noted that all state siting laws require a balancing of need against the non-economic⁵⁰ effects of the proposed facility. Traditionally, there were a host of such matters to consider, most of them quite local in effect. They might include, but are 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 may vary somewhat from state to state, but in almost all jurisdictions the non-economic factors taken into account were characteristically local. NIMBY concerns, for example, seem to be consistently considered by regulators in the siting process, and often drive the process. 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 (e.g. requiring a widened right of way), putting a line underground, or, of course, in the case of damages that cannot be mitigated, can reject the line entirely. Needless to say, cost becomes a factor in considering whether or not to order mitigation, or in the selection of the precise type of mitigation required. It is also intuitively obvious that,

⁴⁸ U.C. § 54-4-26

⁴⁹ W.S. § 37-5-304.

⁵⁰ 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 paper, they are described as "non-economic."

depending on the nature of mitigation required, approvals conditional 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. In others, the limits of tolerance may be more absolutistic in nature.⁵¹ It is also likely that states with a relativistic view of tolerance for non-economic adverse consequences, are likely to have higher level of tolerance for lines they see as essential for reliability of supply to customers in their jurisdiction than they are likely to have for lines that are viewed as being primarily used to facilitate energy trading. 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), a separate permit may be required. Where that occurs, obviously, there are certain criteria that have to be met regardless of how relativistic the siting authorities may be.

E. COST ALLOCATION / RATEMAKING CONSIDERATIONS.

All four states appear to follow the common practice of state commissions in the U.S. of putting the transmission assets of jurisdictional utilities in retail rate base. 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, appears to combine transmission cost of service and wholesale wheeling revenues with other cost of service functions, i.e., generation, distribution and overheads, etc., to form a single retail rate. It appears that no distinction is made between wholesale transmission cost of service and retail transmission cost of service.⁵² To be fully precise, the transmission goes into native load rate base, most of which is retail, but some of which may be transmission dependent utilities, whose purchase of transmission services are jurisdictional to the FERC.

Beyond native load, of course, there are many users of transmission who are not native load. There are three basic ways that state regulators can, for purposes of retail rate regulation, deal with this issue of cost allocation. One is to only put in 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.⁵³ A variation on this

⁵¹ See, e.g. In the Matter of Black Hills Power and Light, Docket No. 20002-EA-94-44 at 9 (Wyoming 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).

⁵² 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>.

⁵³ 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. 2006 Colo. PUC LEXIS 692 (Colo. PUC 2006).

methodology is to exclude from retail rate base only that portion of the transmission dedicated to the service of wholesale native load. Another 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. Finally, the most common methodology, largely derived from the practice in the traditional monopoly model, is to put all prudently incurred transmission costs into retail rate base, and then, over the course of rate cases, credit back to retail consumers those revenues derived from wholesale users.

It is commonly perceived that such ratemaking practices have nothing to do with siting new lines. In fact, as we argue below, that practice has had a profound impact on siting lines throughout the U.S. 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.

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

Part III discusses transmission issues related to the deregulated wholesale market and increased attention to climate change and highlights how federal law has expanded to accommodate some of these concerns. State siting laws have not provided sufficient authority for states to expand infrastructure to accommodate either wholesale powers markets or to expand infrastructure to accommodate renewable energy resources.

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. Wholesale power markets have been largely deregulated since the mid-1990s, when FERC adopted open access policies for transmission in Order No. 888. Congress has not opposed open access principles, and all indications are that the Obama Administration will continue to embrace the open access goals adopted by the Clinton Administration and continued under the Bush Administration. In fact, promoting competition in bulk power markets has been a consistent characteristic of federal policy energy dating back to the late 1970's. It only fully evolved into open access over the course of FERC implementation of the Energy Policy Act of 1992, signed into law by first President Bush. 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 have made decisions to favor its own incumbent supply options over competitors in making transmission decisions.⁵⁴

⁵⁴ Such decisions may have been made for both efficiency-enhancing and anticompetitive reasons; only intent here is to describe the reality of the movement towards wholesale competition and its inevitable implications, not to defend it.

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.⁵⁵ If transmission is physically absent and/or priced based on the wrong economic principles, bulk power supply markets will not flourish. Physical constraints can preclude remote, non-incumbent suppliers who do not own transmission from accessing customers, especially to the extent that transmission lines are limited in scale or do not exist at all, as may be the case in many remote areas which are resource rich for purpose of renewable power development. If transmission is not appropriately priced to reflect opportunity costs in the wholesale power markets, there may not be adequate 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 anti-competitive.⁵⁶ 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.⁵⁷ 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 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. Most state siting statutes envision a determination of need based on benefits to in-state customers. If a particular state's customers may benefit, in terms of reliability or

⁵⁵ Richard J. Pierce, Jr., *A Proposal to Deregulate the Market for Bulk Power*, 72 VA. L. REV. 1183 (1986).

⁵⁶ The issue of non-discriminatory terms and conditions is not quite the same as non-discriminatory pricing. Transmission services may well be provided a a non-discriminatory basis even though some users pay more than others, as long as the differences are based on justifiable circumstances such as locational 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.

⁵⁷ 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.

price, from competitive bulk power markets, this could encompass transmission expansion for this purpose. Under existing law in most 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. 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. Second, many states limit who can apply to site a transmission line.

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. 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 multi-state 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 constituted a possible justification for whatever environmental or other degradation might occur. It also protected 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 drives 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.⁵⁸ The stark 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 into 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 paradigm 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

⁵⁸ In fact, the earlier discussion about why 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 RTO's and their constituent processes. Since the Rocky Mountain states do not have an RTO, that option is not available, so the issue of who can seek siting approval for a new transmission lines is not an insignificant one.

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, multi-state, region.

Nationally, states vary widely on how parochial their siting statutes and practices are, but at least one case from Massachusetts⁵⁹ 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 multi-state utility that served Mississippi customers because some of the beneficiaries of the line for which condemnation powers were being used were out of state.⁶⁰ 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. These are but a short sample 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 just from the reading of the states' siting statutes that the multistate markets were not the main priority of legislators in enacting them, if they were even contemplated at all. When one looks at other provisions, however, it is clear that both Wyoming in creating WIA and New Mexico in its enactment of NMRETA, were clearly contemplating multistate markets for selling energy produced in their states for purposes of economic development. For siting authorities in those two states to take economic development and interstate markets into consideration in making their decisions would not seem much of a stretch. 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. It is, of course, self evident that consideration of needs for other states by siting a line in one's own state is not a simply a selfless act of benevolence by the state taking those benefits into account. Rather, it may well be a decision taken to promote a state's economic self interest both 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 creatures of narrow statutes and cannot go beyond the precise letters of the law.

⁵⁹ Point of Pines Beach Ass'n v. Energy Facilities Siting Bd., 419 Mass. 281, 283, 285-286 (Mass. 1995).

⁶⁰ Mississippi Power & Light Co. v. Connerly, 460 So.2d 107, 113 (Miss.1984).

Looming over this issue as well is the specter of federal preemption. It seems clear, in stark political terms, that the more parochial viewpoint state siting officials take, the more likely it is that Congress will preempt their authority.⁶¹ 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 examined in this paper, only one, New Mexico, has fully preempted local authorities). It is also 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. Putting ironies aside, 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, as opposed to the more traditional weighing of local impacts vs. statewide or system wide benefits depends, in the absence of statutory change, ultimately on how much discretion the courts are willing to provide to siting officials.

Although most siting statutes do not explicitly mention economic development policy, such statutes might be on firmer ground where 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, competitive bulk power supply options 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 own state, 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 states, 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. For example, if a state is asked to 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.⁶²

⁶¹ 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.

⁶² 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

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. 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.⁶³ 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 investments 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.

While all of the states, with the possible exception of Colorado⁶⁴ permit non-utilities to apply to site transmission lines, they take a far more restrictive position in regard to the use of eminent domain to acquire the right of way.⁶⁵ In **Colorado**, only utilities are expressly granted the ability to exercise condemnation rights.⁶⁶ **New Mexico** similarly permits only public utilities to exercise eminent domain powers.⁶⁷ It should be noted, however, that the state has created the NMRETA,⁶⁸ 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

applications from utilities with an obligation to serve in-state customers. *Tampa Electric Co. v. Garcia*, 767 So.2d 428 (Fla. 2000).

⁶³ 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 (e.g., W.S. §37-1-101(a), which defines a utility as "every person that owns, operates, leases, controls, or has power to operate or control...(C) Any plant property, or facility for the generation, *transmission* (emphasis added), distribution...for the public of electricity..."). For purposes of this paper 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 paper, 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.

⁶⁴ This distinction may be less meaningful than it appears because Colorado broadly defines who may become a utility, *see supra*, note 40.

⁶⁵ For purposes of this paper, the authors use the terms, "eminent domain" and "condemnation" interchangeably and synonymously.

⁶⁶ C.R.S. § 32-12-125 and § 38-1-202.

⁶⁷ N.M.S.A. § 62-1-4.

⁶⁸ N.M.S.A. § 62-16A.

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.⁶⁹ In **Wyoming**, utilities may use condemnation, but only after obtaining a CPCN.⁷⁰ Wyoming's WIA may use eminent domain powers to acquire right of way for new transmission, although it may not use those powers to acquire existing assets.⁷¹

In terms of advancing the interests of the four 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 have positioned themselves well, from a legal point of view, to attract capital from non-traditional sources into the transmission sector. Not only does permitting non-utilities to invest in transmission open access to new capital, but it also, for reasons discussed below, 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, obviously New Mexico (renewable energy only) and Wyoming have gone a step beyond other two states, in that they have created special purpose entities with the ability to not only obtain siting permits, but also to construct facilities using lower cost public finance mechanisms.

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 is in a hybrid status because it allows for utilities to exercise eminent domain powers to build transmission, but only after receiving a CPCN. 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.⁷² Wyoming, alone among the four states discussed in the paper, follows that path, but only in a limited sense because it only applies to utilities and not to non-utilities that obtain a CPCN.

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,

⁶⁹ U.C. § 78B-6-501(8).

⁷⁰ W.S. § 1-26-815, W.S. § 1-26-816.

⁷¹ W.S. § 37-5-304.

⁷² *See, e.g.* Wis. Stat. § 32.07(1) (“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.”).

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 reach customers.⁷³ 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.⁷⁴

As with wholesale markets, apart from the occasional nod to RPS goals, most state siting statutes do not explicitly contemplate the consideration of climate change and renewable energy goals in siting. To begin, the need determination in most states does historically look to “need” for power based on specific physical definitions of what is needed. To the extent environmental impacts may be taken into account in state siting proceedings, historically these are limited to local impact type concerns or to local pollution impacts. 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, and out of state customers, whose plans are consistent with meeting environmental policy objectives. In addition, the environmental aspects of siting transmission to address climate change goals challenge the parochial, more narrowly (i.e., local) defined, interests most state siting statutes focus on. 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 of localized concerns.⁷⁵ Broader out-of-state interests in mitigating the future harms associated with the energy economy are simply beyond the scope of most state siting 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 do not appear to have any explicit reference to climate change goals as a

⁷³ 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, http://www.dallasnews.com/sharedcontent/dws/bus/stories/DN-pickenswind_15bus.ART.State.Edition1.4687df7.html.

⁷⁴ 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. “Green Power Express” gains federal rate incentives, New York Times Greenwire Blog, April 13, 2009, <http://www.nytimes.com/gwire/2009/04/13/13greenwire-green-power-express-gains-federal-rate-incenti-10514.html>. See also Matthew Wald, *Giving the Power Grid Some Backbone*, SCIENTIFIC AMERICAN, March 2009, <http://www.scientificamerican.com/article.cfm?id=giving-the-power-grid-some-backbone&page=2>.

⁷⁵ For example, New Mexico explicitly contemplates the consideration of local environmental impacts. N.M.S.A. § 62-9-3.

consideration in their transmission siting statutes or regulations. As is discussed below, 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 will siting officials view the positive non-economic characteristics of renewable energy? Certainly, from the standpoints of emissions, carbon and otherwise, national security, and of resource conservation, wind and most other renewables have a highly salutary impact. It can and should be argued that siting officials contemplating authorizing the construction of lines providing those resources access to the market place should keep that firmly in mind. It is, however, fascinating, that none of the four states have clear statutory authority for siting officials to do so.

Not a single state of the four on which this paper is focused -- and, as far as we are aware, no state nationally -- 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. No statute even references climate change, or for that matter, any out of state environmental effects in that regard. None make direct reference to the impact that a proposed line would have on the resource mix being used to generate energy, although⁷⁶, Colorado and New Mexico have a mandatory Renewable Portfolio Standards (RPS) and Utah recently enacted a voluntary one.⁷⁷ While it may promote some renewable power and climate changes 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.⁷⁸ There are no statutory admonitions to siting officials to be mindful of

⁷⁶ 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 discussion about the sale 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 SO₂, NO_X, and CO₂ emissions than if east coast states produced their own energy.

⁷⁷ C.R.S. § 40-2-124, N.M.S.A. § 62-15-1, U.C. § 54-17-602.

⁷⁸ In addition, all three states permit trading of Renewable Energy Credits or equivalent; as a result, actual renewable power not only need not be generated in the state, but need

environmental effects other than those within each state's boundaries, no mention of assisting other states 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.

It is interesting to note that 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 the four states, and they may not be unique, appear to be in a bit of a time warp associated with the old model of vertically integrated monopolies, indifference to the sources of energy, and to only 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 leeway they will be provided by the courts, or how much new direction they will be given by their legislators. Certainly, there are public policy reasons for doing so, but siting decisions are governed by statutes passed by legislative bodies, by how siting officials administer those statutes, and by how courts interpret them.

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 for FERC to expand transmission in limited regions of the country facing transmission constraints. 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.

In 2005, Congress amended the Federal Power Act, 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.⁷⁹ According to these amendments, the 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.”⁸⁰ In compliance with the 2005 Energy Policy Act, DOE completed its study of

not be delivered at all to the actual purchaser of the energy with green attributes or possibly even into the state’s borders.

⁷⁹ 16 U.S.C. § 824p(a)(1) & (b) (2006).

⁸⁰ 16 U.S.C. § 824p(a)(2). Section 216(a)(4) provides specifics as to what the Secretary *may* consider in designating the corridors. 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. It may also 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.” Section 216(a)(4)(B) also allows the Secretary to consider whether

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.⁸¹

Although the scope of FERC's backstop authority limited geographically exclusively to the designated corridors, there are also limits on when FERC can exercise it within the NIETCs. According to the statute, construction permits for transmission within NIETCs can be issued by federal regulators, irrespective of the traditional state authority over transmission siting, if one of three sets of conditions are met. First, the 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 facilities," or cannot "consider the interstate benefits expected to be achieved by the proposed construction or modification of transmission facilities in the State [.]". Second, the 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." Third, the FERC can override the state if a state commission with authority to approve the facility has either withheld approval for more than one year, or has conditioned its approval so that the construction will not "significantly reduce transmission congestion in interstate commerce" or is not economically feasible.

If one of these criteria is satisfied, still more conditions must obtain before the FERC may override a State commission. Specifically, the facilities must be used for the transmission of electric energy in interstate commerce; the contemplated construction must be "consistent with the public interest"; it must be expected to "significantly reduce transmission congestion in interstate commerce and protect [] or benefit [] consumers"; it

"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]" (emphasis added).

⁸¹ 72 Fed. Reg. 25,838 (May 7, 2007). In October, 2007, the DOE issued its final designations of the corridors. 72 Fed. Reg. 193, 56992 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 March 13, 2008). The filing of this lawsuit is interesting because it points out a schism among environmentalists in regard to building new transmission. At the risk of being a bit simplistic, the schism is between those whose focus is primarily on air quality (including carbon emissions) 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) who are concerned about the proliferation of generators (including wind turbines) and transmission lines across the landscape. Air quality advocates want to see more wind generation and other renewable resources and want to assure that there is sufficient transmission to link "clean energy" to load centers. Air and water quality advocates, on the other hand, prefer to see generation built closer to load centers find barriers to the construction of power lines useful in the achievement of their policy objectives. Thus, one group of environmentalists prefer to facilitate the construction of more transmission, while another seeks to restrict it.

must be “consistent with sound national energy policy” and expected to “enhance energy independence;” and finally, it must be expected to “maximize, to the extent reasonable and economical, the transmission capabilities of existing towers or structures.” To date, FERC has yet to exercise its backstop authority in any single case.

Despite Congress’ 2005 expansion of transmission siting authority in 2005, there is considerable concern among federal regulators, climate change interest groups, renewable energy advocates, and many members of Congress that FERC authority over transmission may not be sufficient to allow siting approval in certain areas of the country. 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 NIETC’s. According to FERC Chairman Jon Wellinghoff, “We need a National Policy commitment to develop the extra-high voltage 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.”⁸² In addition, *Piedmont Environmental Council v. FERC*, a recent case decided by the U.S. Court of Appeals for the Fourth Circuit, interprets FERC’s siting authority narrowly. Specifically, that case interpreted 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.⁸³ As Chairman Wellinghoff has stated, “[the] court’s ruling is a significant constraint on the Commission’s already-limited ability to approve appropriate projects to transmit energy in interstate commerce.”⁸⁴ 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 – seems to involve a denial within one year and it is unclear the extent to which any of the other criteria 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 appeal.

In response to such concerns, several proposals pending before Congress would further expand FERC’s authority. Senate Majority Leader Reid’s bill would allow DOE would designate “national renewable energy zones,” based on locations that are capable of generating more than 1000 MW of renewable energy. His approach basically retains the primary role of states, while giving FERC enhanced “backstop” authority in such areas.⁸⁵ Senator Bingaman proposed an alternative bill, which would replace state transmission

⁸² Testimony of Acting Chairman Jon Wellinghoff, Federal Energy Regulatory Commission, Before the Committee on Energy and Natural Resources, U.S. Senate, Hearing on Legislation Regarding Electric Transmission Lines, March 12, 2009, at 2.

⁸³ *Piedmont Environmental Council v. FERC*, 558 F.3d 304 (4th Cir. 2009) (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.”).

⁸⁴ Wellinghoff Senate testimony, *supra* note 82, at 6.

⁸⁵ Clean Renewable Energy and Economic Development Act, S. 539.

siting altogether with regional siting entities operating in conjunction with the Department of Interior.⁸⁶

In the meantime, the House of Representatives has adopted landmark climate change legislation (the “Waxman-Markey” bill) that endorses 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. These principles, which FERC would need to develop, will “facilitate the deployment of renewable and other zero-carbon and low-carbon 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...”⁸⁷ Other provisions expand FERC’s backstop authority but the primary scope of the expansion of federal authority in Waxman-Markey is limited to Western Interconnection states and does not expand FERC’s power over transmission for Eastern Interconnection states, ERCOT or Alaska or Hawaii. Under the Waxman-Markey bill, if a state fails to approve the construction and routing within one year of 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;⁸⁸ this overrules the effects of the Fourth Circuit’s *Piedmont* decision but it is expressly limited in application to states in the Western U.S. Elsewhere, the existing backstop authority of Section 216, with minor modifications, will remain in effect.

IV. EVOLVING THE “PUBLIC INTEREST” TO NEW MARKET CONDITIONS

Part IV emphasizes the need for a new definition of the public interest which 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

⁸⁶ Siting of Interstate Transmission Facilities, S. ____, available at http://energy.senate.gov/public/_files/END09589_xml.pdf

⁸⁷ The American Clean Energy and Security Act of 2009 (ACES), H.R. 2454, commonly known as the Waxman-Markey bill), at section 151 to be codified as § 216A of the FPA.

⁸⁸ Id. at § 216B.

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. 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, multi-state 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 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, if officials determine that new statutory authority is essential to revise the determinations of need, and then it should be sought.

One possible approach is to not require an applicant to demonstrate need at all.⁸⁹ 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 anyone would take the risk of constructing, or even proposing, a line if they were not convinced of the economic opportunity it presented. Thus, unless the line is being proposed by a utility for 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 the consumers' and in the public 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), the issue of siting ought to be completely separate from the question of inclusion 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

⁸⁹ 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 be waived or modified, it would still have the burden of demonstrating why that request should be granted.

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.

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 on 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 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 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. Fuel mix on the aggregate system or grid

was historically not a particular consideration in the siting of transmission lines. Many states have embraced so-called “renewable portfolio standards” (“RPS”), or explicit goals for the adoption of renewable technologies for the generation of electric power. It is well recognized that the success of such renewable goals will depend 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. Historically, however, transmission siting proceeding have not focused much, if at all, on overall fuel mix beyond emphasizing fuel diversification as a means to promotion 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. As we argue above, 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.

In addition, state siting statutes have traditionally been focused on local land use concerns and conventional pollutants that impose local harms. It is well recognized that climate change challenges this traditional environmental regulation paradigm. 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 is focused on out-of-jurisdiction, not in-jurisdiction, harms.⁹⁰ To be sure, some of the states have been leaders in the implementation of climate change legislation;⁹¹ however, energy and transmission siting in particular requires states to reassess their traditional paradigm.

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. New Mexico has been a leader in this regard, adopting in 2007 H.B. 188, the New Mexico Renewable Energy Transmission Authority Act. 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.⁹² According to a state agency document at least 30% of any new transmission capacity

⁹⁰ Jonathan B. Wiener, *Think Globally, Act Globally: The Limits of Local Climate Change Policies*, 155 U. PA. L. REV. 1961 (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.”).

⁹¹ 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 (2006).

⁹² N.M.S.A. 1978 § 62-16A-1 et seq.

must be for renewable derived electricity.⁹³ 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.⁹⁴ 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.⁹⁵

These states seem to focus predominantly on promoting state-focused goals and to the extent such laws allow consideration of out-of-state benefits in siting transmission they appear to remain the exception and not the rule. Consuming states, such as California, see their main goal as diversifying resources beyond traditional fossil fuels and sparking development of new energy startups. Producing states, such as New Mexico, see their main goal as encouraging economic development of a renewable energy sector and in developing particular rural areas. There may be obstacles if consumer and producer interests are not aligned, and in many instances producer interests are not sufficiently strong in the renewable sector to support legislative reform.

Moreover, even where individual states have reformed transmission siting laws, in many instances the effectiveness of transmission reforms will depend on states that have adhered to traditional models of the public interest. A 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. While, a physical matter, Arizona and other states may not wish to treat transmission as nothing but a conduit for out of state interests, and out of state electrons will likely be intermingled onto a grid that benefits Arizona customers, 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.

⁹³ New Mexico Energy, Minerals and Natural Resources Department, 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>.

⁹⁴ Details on the inter-agency California Renewable Energy Transmission Initiative can be found at <http://www.energy.ca.gov/reti/index.html>.

⁹⁵ Implementing details on the Texas plan can be found at <http://www.puc.state.tx.us/rules/subrules/electric/25.174/25.174ei.cfm>. The relevant statutory provisions are in the Texas Public Utility Regulatory Act, §39.904.

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

C STATE STATUTORY/REGULATORY INERTIA AND LEGAL BARRIERS

Many of the barriers, although not all, to siting lines that would improve competitiveness on the western bulk power markets, 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 underdiscussed – 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 benefit from new transmission will not be the same customers who would bear the costs under traditional rate regulation.

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.⁹⁶ 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, meaning 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 compensatory to the local utility.⁹⁷ That possibility turns what is already an incentive to reject the line into a virtual economic mandate to do so for Arizona siting officials.⁹⁸

⁹⁶ 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 paper, it is important to note that in some states, only utilities are eligible to apply, so their participation would be mandatory. For an example of where this is the case, at least in regard to generation, please note the *Garcia* case in Florida, which is cited above. 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.

⁹⁷ 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 based on not wanting to use up political capital and good will to get the project approved.

⁹⁸ 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

Looking at the same issue from selling state, in the case of the example, New Mexico, if the NMPRC intended to put the interconnections to generation for export, into the rate base of a jurisdictional utility, when, in fact, the facility will be used primarily to export power out of state and provide the utility's customers little benefit, there would be significant opposition to the siting of the line from customers who are effectively being asked to subsidize the export of power. While the example is purely hypothetical, the possibility of it occurring, perhaps with other states as the players, is not insignificant⁹⁹.

Setting aside the question of correct price signals and traditional regulatory adages like the "cost causer should pay," and looking at this issue only from the siting perspective, the allocation of costs among users will have an enormous impact on the siting processes.¹⁰⁰ Imposing costs on non-beneficiaries will make siting lines in state located between sellers and buyers, already a difficult task, even more problematic, and may even have similar consequences in the selling state. While putting transmission used primarily for the export of a state's resources in the retail rate base, may make provide financial comfort for the utilities undertaking the construction, that benefit may well be offset by the opposition of those being asked to bears 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.

Apart from whether transmission is included in retail rate base, there is of course 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, of course, 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

environmental impact, although many suspect 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. One can only imagine the situation if Arizonans were also being asked to pay for the line as well. So. Ca. Edison, Case No. 130 (Az. Corp. Comm. June 6, 2007), <http://images.edocket.azcc.gov/docketpdf/0000073735.pdf>. The same line was approved by the California Public Utilities Commission. So. Cal. Edison, Decision 07-01-040 (Cal. P.U.C. Jan. 25, 2007), http://docs.cpuc.ca.gov/published/FINAL_DECISION/64017.htm.

⁹⁹ 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. For more detail on this, *see supra* note 1.

¹⁰⁰ The issues of price signals and cross subsidies for renewables, or any other resource, are not being set aside in this paper because the authors believe them to be insignificant. They are important, but they are simply beyond the scope of this paper, which is focused on siting issues.

construction of more transmission even more than have siting problems. For the most part, however, the inability to resolve cost allocation issues has surfaced more in the context of the of where the utilities, or, perhaps, other investors, cannot come to agreement among themselves as to who should bear what portion of the costs associated with a proposed line. The result of that stalemate is far more likely to be that the line is never proposed than that it encounters problems being sited. Where the utilities are in agreement, however, but their customers are not, and it is those customer who are likely to be called upon to pay, that is likely to result in an application being made, but encountering strong resistance in the siting process.

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 siting a line. In regions with RTO's, there is a recognized framework for joint planning and trying to resolve cost allocation disputes. 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 work 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 groups established, at least, in part, to resolve cost allocations issues in transmission. Utah and Wyoming are in the footprint of the Northern Tier Transmission Group (NTTG), while Colorado and New Mexico are part of WestConnect. It is important that, for each of the states, 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 lesser value to have arrangements with some states, are among utilities in some states, if those states or companies only cover some of the market region in which energy will be traded. Generally speaking, the larger to footprint for resolving cost allocation issues, the fewer seams or other distortions one will encounter in trading.

In specific regard to the states of Colorado, New Mexico, Utah, and Wyoming there are a variety of changes in law and/or regulation that would greatly facilitate the states achieving their 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. Others include the following:

1. Facilitate the siting application process through state preemption of local government decisionmaking powers in the siting process. New Mexico has, as noted, already preempted local authorities. 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 decisionmaking powers.
2. Facilitation of the process would also be served by creating a single, uniform process for siting. New Mexico, which has preempted local governments, has, nonetheless, complicated the process by requiring separate applications for need determinations, location approvals, and right of way width determinations. It is not

clear that any interest is being served by that complexity. In Wyoming, there are separate processes for siting depending on whether the applicant is a utility or not. There is no apparent public purpose for that distinction.¹⁰¹ Several of the state require environmental analysis to be done by state environmental regulators, a perfectly reasonable requirement, as long as it is folded into a single decisionmaking process, rather than constituting a separate proceeding.

3. All potential investors should be permitted to submit applications for approving the siting of transmission. It appears that there are no artificial barriers to that possibility in three of the states, but is not clear that anyone other than utilities can apply in Colorado. It is reasonable to establish such qualifications as financial capabilities, ability to comply with applicable environmental, safety, financial, and reliability standards, but limiting eligibility to apply to utilities unnecessarily limits access to capital markets and reinforces the market power of incumbent utilities.

4. In all of the states eminent domain flows from status as a public utility. For the same reasons as enumerated in item 3 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, 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, so it goes part, but only a part, of the way in recognizing that eminent domain as an outcome of the siting process. Eminent domain should be given for limited purposes and never to bestow undue advantage on any party or class of parties.¹⁰²

5. Transmission ought, at least on a prospective basis, not be included in 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 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

¹⁰¹ 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.

¹⁰² It is important to note that the advantages that accrue from being able to exercise eminent domain powers are not limited to the actual exercise of them. In fact, as many utilities well know, it is often preferable to not actually have to flex that muscle. That being said, however, the negotiating dynamics of acquiring property, and most probably the resulting price, can be very heavily influenced by the fact that a seller is aware of the fact that the buyer possesses the power to condemn its property in the absence of a mutually acceptable, consensual agreement.

being imposed on local cu imposed on a subset of potential users of the line. Transmission costs ought to be borne by all users by passing in the rates set by the FERC.¹⁰³

6. The four states, as noted, despite being neighbors, and being in the same Rocky Mountain market area, are in two different footprints for purposes of allocating transmission costs. That unnecessarily 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. The net effect over the long run is likely to be reduced market access for those states seeking to export energy.

D. GOVERNANCE BARRIERS

In addition to state-based legal barriers, there are broader governance barriers – at the levels of regional governance and federalism -- to the evolution of the public interest to accommodate new transmission siting issues.¹⁰⁴ A heightened role for regional coordination seems inevitable, as the Markey-Waxman bill envisions. However, the precise form of regional governance bodies and the role states will play in the regional governance process seems quite uncertain. The uncertainty associated with governance decisions in planning and siting transmission – i.e., 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.

A purely state-led approach to coordination, such as the Regional Greenhouse Gas Initiative in the Eastern U.S., may provide a model. However, this approach 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. As an alternative, a top down regional planning and siting process, which is led by federal principles such as those endorsed in Markey-Waxman, may produce a more uniform set 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 engendered a sufficient common purpose in cooperation among its stakeholders to overcome the strong incentives an individual state may face in

¹⁰³ There are a variety of other reasons for adopting such a policy, but they are beyond the scope of this paper. For further discussion see Ross Baldick, Ashley Brown, James Bushnell, Susan Tierney & Terry Winter, *A National Perspective on Allocating the Costs of New Transmission Investment: Practice and Principles* (September, 2007).

¹⁰⁴ While a full discussion of these issues is beyond the scope of this paper, 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.

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 associated with 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 benefit that extend beyond their jurisdictional boundaries. Thus, due to our system of cost recovery, as a nation we have underinvested in the backbone electrical grid, relative to the benefit 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.¹⁰⁵

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. 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.

Other solutions include more formalized arrangements or an expansion of federal power. Although under current institutions they may not be a sufficient solution within the Western Interconnection, 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, "Even in RTOs and ISOs with cost-allocation mechanisms and benefits analysis, cost-allocation decisions are often protracted and contentious."¹⁰⁶ An RTO or ISO may be insufficient as a mechanism for

¹⁰⁵ CENTER FOR AMERICAN PROGRESS, WIRED FOR PROGRESS: BUILDING A NATIONAL CLEAN ENERGY SMART GRID 24 (February 2009).

¹⁰⁶ Id. at 22.

cost sharing where the benefits accrue beyond the RTO or ISO to a broader set of beneficiaries.

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 dependent of siting new turbines and transmission lines. It is also dependent to dispatch protocols, something which is or particular concern to wind generators because of their intermittent nature. Most advocates for wind energy find that RTO's offer the simplest environment for wind generators to operate because of the way in which the markets function and dispatch protocols operate. Thus, despite their shortcomings in some regards, RTO's 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. It may be worthwhile for state regulators trying to promote the use of renewable resources in the west to rethink the costs and benefits of forming a regionwide RTO.¹⁰⁷

Finally, as a last resort, if states and regional bodies cannot sufficiently address the issue on their own cost-sharing may 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. 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 the 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

¹⁰⁷ 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 related 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 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 paper, 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 regionwide RTO.

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 of a part of an interconnection.¹⁰⁸

While FERC has not taken initiative in articulating an effective set of cost sharing/allocation principles for transmission, particularly within the Western Interconnection, it may not, in the context of shifting political and economic currents that favor reducing barriers to expanding the grid, FERC's remarkable passivity in regard to allocating the costs of new transmission may be due to the fact that it sees its current jurisdiction as limited, or, perhaps, more likely, because it sees itself as politically constrained and exhausted from the beatings it 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 2005.¹⁰⁹ 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.¹¹⁰

V. CONCLUSION

As states assess the public interest in the evolving new environments presented by wholesale competition and heightened attention to climate change, regulators face the challenge of evolving a new understanding of the public interest – 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 states such as Wyoming, Colorado, New Mexico, and Utah.

¹⁰⁸ Wellinghoff Senate Testimony, *supra* note 82, at 9.

¹⁰⁹ 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. For more discussion of the controversies regarding FERC's effort to implement standard market design see Mary Anne Sullivan, Joseph C. Bell & John R. Lilyesstrom, *Standard Market Design: What Went Wrong? What Next?*, ELECTRICITY JOURNAL, July 2003, at 11.

¹¹⁰ For more discussion regarding the impact of impasses over cost allocation on building new transmission lines, see the paper referenced in footnote 103, *supra*.