Institutional Void and Stakeholder Leadership: Implementing Renewable Energy Standards in Minnesota

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Renewable portfolio standards (RPS) have become a state-level policy of choice as energy and environmental regulators seek to reduce carbon emissions, reduce exposure to fuel price volatility, and encourage economic development by creating a renewable energy industry. Experience with such instruments, however, has been mixed. Implementation challenges have prevented electric utility firms from undertaking many of the actions necessary to meet the objectives set by these policies. We argue that one of the greatest challenges presented is the hesitancy for any single actor (public or private) to take the lead in designing the rules necessary to fill the institutional void created by this command and control approach to energy policy. Governments have created a legal framework that demands action, yet the institutional leadership to effectively implement the framework is often weak and deficient. The framework is not a surrogate for the rules that would lay out the appropriate actions and prescribe the dealings between utility firms and other vested interests (transmission management, municipal government, independent power producers).

A collective action problem exists in which the individual incentives for the major players (i.e. the technically leading and dominant firm and key regulatory body) to act are insufficient to meet the demands of the policy. Each of them has reputational, political, and authoritative concerns that keep them from taking the lead in mobilizing the stakeholders who must be brought together if policy is to be effectively implemented. Prior collective action coalitions can provide indications for how a solution can be found, but their ephemeral nature and the introduction of new parties can limit their suitability for the focal problem. Using case study evidence from the state of Minnesota, we find
that the collective action problem we describe in this chapter tends to impede the implementation of renewable portfolio standards despite the new and additional certainty which has been provided by a legislated mandate.

This chapter begins by defining the problem of stakeholder leadership in industry formation. Stakeholder leadership requires overcoming what we call an “institutional void.” Relatively new industries require rules and standards of practices for them to flourish. Transaction problems abound among those involved in such an industry, one that is just emerging and is amorphous in form and configuration. Those involved need a way of organizing themselves. Self-organizing is insufficient given the complex tasks that the players in the industry face and the coordination problems they confront. The collective action problem is to work together to overcome this institutional void. Stakeholder leadership is needed in order define the rules and norms for the relations among the players in the emerging industry, so that they can work together effectively and new business models can take hold. Legitimate, taken-for-granted patterns of behavior, however, are lacking and must be forged even though it may not be in the interests of any single actor to create these norms and the standards of interaction. The incentive for each player is to avoid being a leader of the stakeholder coalition and to shift the burden onto other players. The collective benefits of acting are great, but the individual costs are perceived to be even greater. Thus, stalemate and delay take place, which results in frustration among the players with their incapacity to act in a timely fashion when time is of the essence. Nonetheless, it is necessary to note that the sense of urgency varies significantly among the relevant parties.
Whereas the second section illustrates this problem by providing a brief description of the impediments we have identified in the development of the renewable energy industry in the U.S., the third section tests this through a case study. Focusing on the state of Minnesota and the role of Northern States Power (NSP), an operating utility of Xcel Energy (Xcel), we show that the state’s attempt to expedite the renewable sector with a stringent energy policy may fall short unless stakeholder leadership is effectively exercised and the institutional void is overcome. Finally, the chapter concludes with a brief discussion of the public policy implications of this analysis.

1. The Problem

The classic case of a collective action problem presented by Olson (1965) identifies how members of a group, such as an industry, are unlikely to cooperate in group action so long as the benefits and costs of a collective good are unevenly shared by the parties. Of particular interest is the situation of non-atomistic players in a small group where there can be exploitation of the “great by the small” and it is likely that one or a few members value the collective good to such an extent that they may be willing to bear more than their share of the cost. Within the strategic management literature this propensity to tolerate free-rider behavior has been explained by firm heterogeneity and the internalization of the related costs (King and Lenox, 2000). However, the likelihood that a dominant actor will independently coordinate the collective action problem and disproportionately bear the costs assumes that they are not only in a position to do so, but that the institutional arrangements exist to support such action. When these institutional arrangements are weak or simply do not exist, then we are left with what we term an
“institutional void” whereby the likelihood decreases for the dominant player to assume collective action.

In the case of an emerging industry, as in the development of the renewable energy sector in the U.S, dominant actors may be called upon to take on the important role of stakeholder leaders and organizing the coalition of actors needed to effectively implement the policy. Generally, these firms must cradle a technology from infancy to commercialization, coordinate the necessary actions, and disproportionately bear the burdens as they wait patiently for long-term gains. Murtha, Lenway and Hart (2001) show how the birth of the flat-panel display (FPD) industry in Japan took the leadership and coordination of major firms (such as NEC, Sharp, and Toshiba). These firms had to take on the task of bringing about a significant shift in industry norms and knowledge-creation. These stakeholder leaders could not immediately appropriate benefits from the activities in which they engaged. Although they broke the deadlock to action, this process was not simple. In this case, the firms in cooperation with Japanese Ministry of International Trade and Industry (MITI) worked to develop institutional rules for collaborative efforts that were necessary to bring the new industry into existence. They overcame the institutional void that in the end permitted the industry to flourish. It is not uncommon for government agencies, such as MITI, to have an essential role in new industry creation as they generally have a responsibility for the economic development. The Federal Energy Regulatory Commission (FERC) had an important role in the creation of independent power production industry in the U.S. as it set out the rules and direction that these firms should follow in establishing their facilities (Russo, 2001; Sine and David, 2003). There are many parallels in the energy arena.
In either the case of the firm led flat panel industry or government led independent power industry, the dominant actors helped to define the rules of the game (North, 1990) that were essential to the design of the industry’s architecture. In other words, these actors not only were willing to internalize the costs to overcome potential collective action problems but they then filled the institutional void that would have otherwise made market transactions difficult. Institutional voids such as those faced by industries before they coalesce and have legitimacy make it costly for individual firms to deal with critical product, labor and capital markets because of information problems, imperfect contract enforcement, inability to enforce property rights, and flawed regulatory structures (Khanna and Palepu, 2000). Therefore, new industries are more likely to be successful only when the collective action problems are solved and institutional voids overcome. Mainly, this takes place when a dominant actor is willing to take on the role of organizing the critical stakeholders (competitors, collaborators, and others) and filling the institutional void.

The interrelated actions necessary for bringing together interests to establish an emerging industry is further complicated when there are multiple actors who share necessary resources, capacity, and authority, but none with exceptional clout or capacity to command. In these complex cases, a dominant firm may be unwilling to internalize the costs associated with solving the collective action problem and filling the institutional void. For instance, there may be reputational concerns for having a private firm determine the ‘rules of the game’ when the issue is politically sensitive, such as those relating to the natural environment. Similarly, there could be competitive concerns as a
dominant firm may run into obstacles created by other firms that understandably prefer
not to have the institutions designed by their competitor. This problem of who sets the
rules is not only a concern of private firms that may have the resources or capacity, but
also of government agencies and politicians that tend to have statutory authority yet few
other resources to ensure implementation. The public actors may be capable of directing
action, as in the case of FERC with the development of the IPP industry, where the public
actors had legal and regulatory authority on their side, but they may not want to be seen
as setting standards that could constrain certain industrial activities or prove politically
dangerous. An example would be a technology-discriminating policy that defines exactly
what actions or investment a firm would need to undertake to be compliant (see Yao,
1987 for a discussion of the automotive emission standards in the U.S.). Legal and
regulatory authority does not necessarily mean that public actors will take on the role of
stakeholder leader and as a responder to the institutional void. When neither private
industry nor policymakers are willing or able to take the lead in overcoming the void and
developing the institutions necessary then the collective action problem is likely to persist
and prevent, block, and delay industry development.

If there is a dominant firm, that is likely to benefit from the public policy and
emerging industry, this conundrum can leave it in a ‘catch 22’ dilemma where it is in its
best interests to promote the creation of the industry but it feels unable to act on its own
and to fill the institutional void. At this point, the problem emerges as to who makes the
rules of the game when no one wants to. The rules are a public good that belong to
everyone. They are essential. They are like highways. Without them the new industry
cannot succeed, but who will bear the cost of organizing the industry so that there are accepted rules of transacting so that this metaphorical highway gets built.

As we develop in our case study below, firms that are successful in these situations must rely on or develop an aptitude for stakeholder leadership (Sharma and Henriques, 2005). This capability does not only involve coalition building in the lobbying and design of public policy but also coalition building in its implementation as the rules for interaction in the industry must be developed. The dominant firm, in essence, must act as an institutional entrepreneur (Aldrich and Fiol, 1994), a builder of the industry itself and a leader in its legitimization. These skills do not come easily to private or public leaders who tend to be increasingly cautious about their exposure and fearful of media critique or alienating important interests. The careers of private and public leaders tend to be short-lived while playing the role of institutional entrepreneur and stakeholder leader that fills an institutional void is a long term proposition. Being the ongoing coordinator of various stakeholders in an effort to develop a consensus on how the industry will develop is not a task that most private or public leaders will want to take on because it is rarely a simple matter of being consistent with their interests. We now turn to our illustration of this problem, first by focusing generally on the U.S. renewable energy industry and then moving to the specific Minnesota case.

2. Impediments to the Creation of a Renewable Energy Industry

The creation of a utility-scale renewable energy sector in the U.S., beyond small scale and experimental projects, has been in the works for many years. Collaborative efforts between the DOE’s National Renewable Energy Laboratory, academic institutions,
private firms and electric utilities laid the basic groundwork for the development of this industry. Despite the significant initiative and investment in renewable energy technology, the investor-owned utilities (IOU’s) in the U.S. had made very little progress to include wind, biomass, solar, and other clean generating technologies in their portfolios of fuel mix technologies. This lack of adoption was despite the growth in use of such technologies in both developed and developing countries. Figure 1 illustrates how the U.S. lags far behind many other countries in the adoption of renewable energy.

The lack of initiative in adopting renewable energy sources by IOU’s came from several sources. First, the utilities were required to operate within the constraints of their regulated environments which often placed a priority on providing consumers with a reasonable price for electricity. As a result, decisions to invest in new and in most cases more costly energy sources (such as solar or wind) faced a significant external hurdle as Public Utility Commissions (PUCs) were sensitive to passing costs on to ratepayers (Fremeth and Holburn, 2008). Similarly, well organized interests, such as industrial customers or consumer advocates, would likely create opposition to increased energy costs. Second, the culture among senior executives at many utilities had been formed around the traditional generating technologies that were based on boilers and steam-powered turbines. An environmental manager at a major electric utility remarked how this much engrained culture originated in the Navy following WWII and had been instituted by the executives and engineers that had transferred their knowledge from the powering of warships to the electric industry.¹ As a result, the majority of new power plants that were built in the U.S. over the past fifty years have been nuclear plants

¹ Interview with Jim Turnure of Xcel Energy, September 2007.
followed by natural gas turbines that have both filled the demand for baseload and peak
capacity, but never replacing coal as the core technology. Finally, in addition to the cost
and organizational constraints there was considerable uncertainty in the available
renewable technology. IOUs are relatively slow moving organizations that are
responsibly to many stakeholders and prior decisions to enter new yet uncertain
technologies had backfired in the past (Lyon and Mayo, 2005).

As an emerging industry, the renewable energy sector would need to overcome
the obstacles put forth by the positions of the IOUs. Although this created a significant
hurdle there had been some initiative put forth in the mid-to-late 1990s as states had
begun to implement retail and wholesale deregulation (Delmas et al., 2007) and small and
large scale renewable energy developers were taking advantage of the qualifying facility
status provided under the *Public Utility Regulatory Policies Act* (Sine and David, 2003).
However, the legitimacy of this industry was limited due to the lack of familiarity and
credibility with the technology and many of the new players (i.e. developers, rural
business leaders, technology providers). Beginning in the late 1990s, states had begun to
mandate objectives, known generally as renewable portfolio standards (RPS) that
compelled utilities to include increasing numbers of renewable power in their generation
or procurement portfolio. These objectives varied widely throughout the U.S. (see figure
2) and acted as a ‘command-and-control’ policy that levied penalties for utilities unable
to meet its objective. A similar mandate had been discussed nationally in Congress
ranging from 10% to 15% of power sold for all utilities but had yet to pass as of the close
of the 2008 session. While criticized by some, these policies were seen as a means to “prime the pump” and enable a wider market for renewable power (Cory and Swezey, 2007). In total, these state-level policies were expected to increase the role renewable energy played in the U.S. by more than ten-fold. However, the ultimate impact of these policies was still to be determined as many of their goals were expected to only bear fruit 15 to 20 years in the future. Figure 2 illustrates the states that had adopted RPS policies as of 2007.

3. Implementing Minnesota’s Renewable Energy Standard

This case study will focus on the role that Northern States Power (NSP), a division of Xcel Energy (Xcel), has had in the development and implementation of a far-reaching state-level environmental initiative. This policy is partly the result of the utility leveraging long standing relationships it has with outside stakeholders. Its ability to work with its stakeholders has helped to advance the cause of environmental sustainability in Minnesota. The collaborative effort in which NSP has been engaged has helped produce new policies, but the current situation will require further collaboration with stakeholders to refine these polices further so that the utility industry can move forward with its sustainability efforts. In short, there now exists something of an institutional void and

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2 The Energy Information Administration’s report “Impacts of a 10-Percent Renewable portfolio Standard” that was requested by Senator Frank Murkowski, the ranking member on the Senate Energy and Natural Resources committee.

3 NSP is the dominant electric utility in Minnesota as it provides electricity to 78% of the state’s customers. The firm dates back to the electrification of the Midwest U.S. when Henry Marison Byllesby, a protégé of Thomas Edison, established an electric power company in Stillwater, MN in 1909. The firm was renamed Northern States Power Co. in 1916. In 2000 NSP joined with New Century Energies to create the Xcel Energy holding company. Three separate utility companies operate under the Xcel brand, NSP, Public Service Company of Colorado (PSCCo), and Southwestern Public Service Co. (SPS) in Texas. Each operating company is independent of one another and has its own executive staff.
collective action problem which is hindering further efforts to create a sustainable renewable energy industry--one that we argue is essential if the state’s far-reaching renewable energy objectives are to be met.

**Formulating the State Environmental Initiative**

In February of 2007, the state of Minnesota adopted one of the most proactive and demanding energy policies in the United States. All major electric generating utilities in the state now faced a legislated requirement to generate a substantial portion of their energy from renewable sources. The main element in a series of laws aimed at reducing the state’s carbon dioxide emissions was the Minnesota Renewable Energy Standard (RES), which required that NSP generate 30% of its power from renewable sources by 2020. This policy had been well researched and recommended by the Minnesota Public Utility Commission (MPUC), which was responsible for regulating the state’s electric utilities. At the time, this was well above the demands set by the policies of other states and beyond the 10%-15% that had been debated as a national target in Washington.

With legislative backing for the measure in place, all parties compromised and the policy passed with virtually unanimous support. The collaborative effort included political representatives from the legislature and the Governor’s office, the MPUC, the Department of Commerce, the state’s electric utilities, major environmental groups, and rural economic leaders. The aligning of interests in the lead up to the adoption of this path-breaking result was crucial in its design and acceptance by stakeholders. The

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5 Besides NSP, there were four other utilities that were subject to RES legislation in Minnesota. The 11 cooperatives and municipal agencies were obliged to participate on a voluntary basis but not statutorily required.
President of NSP publicly embraced the initiative in the local media and outside of the public limelight.

Creating a Collaborative Atmosphere in Minnesota

A number of institutional factors played an important role in the development of the agreement. Under Minnesota law for open meetings and administrative processes, the Minnesota Public Utilities Commission (MPUC) made environmental concerns and rural economic development priorities in fulfilling the federal mandate to set rates. The MPUC’s ongoing commitment under state law has been to allow key environmental stakeholders to be present at important meetings and actively participate in its hearings and epitomizes the commission’s desire to ensure sustainable environmental stewardship (Dworkin et al., 2006). According to James Turnure, Environmental Manager at NSP, such access for environmentalists to bureaucratic decision making in Minnesota was quite unique. It led to a situation in which NSP negotiated openly with other groups and took their concerns seriously.

It is necessary to note that this arrangement had historical precedents. A key turning point in this history took place in the early 1990s when NSP applied for the right to store spent nuclear fuel at its Prairie Island plant. The MPUC was legally required to be inclusive in its deliberations and encouraged participation and input from the utility, key environmental groups, and other stakeholders.

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7 The rates that MPUC and other state commissions set are supposed to allow utilities to earn a “fair and reasonable” return on their assets. Federal legal precedent establishes that PUCs must set rates that enable utilities to earn a “fair and reasonable” return on “used and useful” assets, though methodologies for assessing such criteria are not specified.
Allowing continued storage of radioactive waste at Prairie Island was a controversial issue. Relationships between NSP and key stakeholder groups were frayed. A newspaper article in the *Minneapolis Star Tribune* on April 3, 1994, stated that the controversy:

> provided…good theater and a splendid view of how the political process works, or doesn't work, depending on where one stands. Throw away those dry brochures on "How a Bill Becomes a Law," and witness the real thing: Opposing packs of lobbyists, …Endless hearings and dueling scientific experts. Celebrity advocates…Daily demonstrations…even death threats.\(^{10}\)

NSP claimed that without legislative approval, it would be forced to close the Prairie Island plant, thereby putting 500 people out of work and causing electric bills to skyrocket. Environmentalists argued that continued operation of the plant was an unacceptable risk that demonstrated NSP’s failure to pursue alternative energy options. The antinuclear coalition was large and surprisingly powerful. It included such prominent local players as Robert Hentges of Faegre & Benson, a well-known law firm, and public affairs consultants Pat Forciea and Ann Mulholland. In addition, the anti-storage group had help from the Sioux and Ojibwa tribes, which had growing clout in the state legislature because of Indian gaming and casino operations. Finally, a broad coalition of anti-nuclear groups, Citizens for Nuclear Responsibility, charged NSP with trying to thwart the will of the people. However, on the other side of the issue, large labor groups in the state, including the AFL-CIO, backed NSP. They were worried both about actual jobs that might be eliminated and potential reduction in job growth that could take place if the utility raised rates.

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\(^{10}\) Prairie Island: A nuclear fight full of fears; Dane Smith, Star Tribune. Minneapolis, Minn.: Apr 3, 1994. pg. 01.A
With the AFL-CIO on NSP’s side, the utility won the right to continue to store radioactive waste at Prairie Island. Nonetheless, the concession that Citizens for Nuclear Responsibility won was that a new multimillion-dollar fund would be created which would give wind, solar and other "renewable" sources of energy a significant boost in Minnesota. Under a May 1994 agreement, the Governor of Minnesota allowed NSP to store spent nuclear fuel in above-ground dry casks in exchange for the creation of the fund, the purpose of which was to explore the potential for greater renewable energy power in the state and to build or purchase at least 825 megawatts (MW) of wind generation.

In Minnesota, this collaborative arrangement jump-started the development of wind power. From 1994 to 1998 more wind power was put in place in Minnesota than in any other state. The amount of wind power generated in Minnesota grew from 25 megawatts in 1994 to close to 900 megawatts in mid-2007.

The potential for wind power generation in Minnesota and adjacent states was very significant. Utilities were looking for ways to add capacity to their generating systems, as other alternatives, such as coal and nuclear, were blocked for environmental or political reasons. The costs of generating electricity from wind, moreover, were dropping because of technological progress. At the time that a deal was reached to store nuclear waste, Carl Lehmann, manager of public affairs at NSP, saw no problem in finding common ground with environmentalists about the need to develop additional

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11 Big boost for renewable energy; Tom Meersman Star Tribune. Minneapolis, Minn.: May 20, 1999. pg. 01.D
12 There were also a mandate to introduce power generated by biomass and requirements for greater demand side management.
sources of energy that were environmentally sound. Environmentalists realized that wind was connected to jobs and economic development. Diane Jensen, a spokesperson for the Sustainable Energy for Economic Development coalition that helped to negotiate the agreement with NSP, started to frame the once exclusively environmentalist cause in terms of the "potential" for economic development. She pointed out that wind farms in southwestern Minnesota benefited local economies, produced jobs, and expanded the tax base.

The Prairie Island nuclear storage deal set the stage for further collaboration in Minnesota between environmentalists and the utility. The views of these historic adversaries began to converge, not completely but enough to result in important compromises. This convergence of views manifested in the “Wind Integration Study” that led to the passage of the Minnesota Renewable Energy Standard (RES). In doing this study, the Energy Reliability Administrator at the MPUC brought together major utilities, wind power and environmental advocates, and technical consultants to determine how much wind power could be included in the state’s energy mix without substantially increasing electricity costs. The conclusions of the study, the joint product of these groups, were released in December 2006. This study acted as a catalyst for the passage of RES by state government a mere two months later.

Rural economic development was an important part of the deliberations that led to the passage of the RES. The MPUC was obligated to consider it in the deliberations. Burl Haar, the executive secretary of the MPUC, saw the RES as an extension of an earlier Community Based Energy Development (CBED) program that had encouraged major

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13 Ibid.
14 The Minnesota Wind Integration study is available at www.puc.state.mn.us/docs/windrpt_vol%201.pdf.
investor owned utilities to work with small scale energy producers in rural areas.\textsuperscript{15} This experience had implications for the creation of RES, as there were existing relationships between major investor owned utilities, like NSP, and rural actors where most of the renewable energy would be harvested and the transmission infrastructure would be built. Despite these connections, the utilities and large co-ops did not share this enthusiasm for using energy policy to spur rural development. Gary Connett, Director for Environmental Stewardship at Great River Energy (GRE)\textsuperscript{16}, claimed that the idea was interesting as a concept but not fully thought through as rural partners generally lack the resources or capabilities to bring energy projects to fruition.\textsuperscript{17}

\textit{NSP’s Role}

These collaborative considerations paved the way for a demanding renewable standard in Minnesota. With the addition of holdings in Colorado and Texas, NSP’s parent company, Xcel Energy, had grown to become one of the largest utilities in the U.S.\textsuperscript{18} After it merged with New Century Energies utility of Colorado in 2000 and changed its name from NSP to Xcel, it integrated various fuel and technology types into its generation mix. It had new leadership at the top, a CEO, who was sympathetic to alternative sources of power generation. David Sparby had taken over as President and CEO at NSP in January 2007 and had risen through the ranks over twenty-five years at the utility. Sparby was a lawyer that had spent most of his time dealing with regulatory

\textsuperscript{16} Great River Energy is a generation and transmission (G&T) cooperative that provides wholesale electric service to 28 distribution co-ops that serve more than 645,000 members in Minnesota, North Dakota, and Wisconsin. While not regulated like an IOU they do mimic IOU actions due to its share size and will work towards the Minnesota RES despite not being statutorily obligated to do so.
\textsuperscript{17} Gary Connett, interview by author, Maplegrove, MN, June 2, 2008.
\textsuperscript{18} The other operating companies at Xcel were the Public Service Company of Colorado and Southwestern Public Service Company.
issues at both the state and federal levels. As a result, he was not tied to the old utility culture that was focused on boilers and turbines. He also had a deep understanding of the complexities involved in regulatory approval, the rate making process, and long term contracting with independent power producers (IPPs).

Rather than considering a future wherein it would be able to function within the status quo, management at NSP now took seriously the prospect of operating in a “carbon constrained economy, the backdrop of which would be an aging infrastructure and rapidly escalating prices for raw materials.”\(^{19}\) Internal strategic planning documents placed environmental issues on par with earnings targets and employee safety issues. See figure 3 for NSP’s priorities and mission in 2008. This document set the agenda for Spring 2008 meeting between Sparby and Xcel’s Board of Directors where he was hoping to be able to set the direction for the utility firm’s future.

The RES would have significant effects on NSP’s operations. In 2007, it had just 1035 megawatts (MW) of wind energy capacity on-line, or 9% of its total generating capacity.\(^{20}\) Despite having developed a particular skill at managing a diverse portfolio of energy types, almost tripling the amount of renewable energy used in twelve years was a daunting challenge. It would not only involve finding new sources of power, but developing the transmission lines to move the power from outlying and mostly rural regions to larger metropolitan areas. Furthermore, with wind as the preferred means of generation, NSP would need technologies to store the wind, for though wind had great

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\(^{19}\) David Sparby, President and CEO of NSP-Minnesota, interview by author, Minneapolis, MN, February 6, 2008.

\(^{20}\) Xcel Energy Renewable Energy Plan, December 10, 2007. All of this capacity was procured by purchase power agreements with small independent power producers. In 2007, NSP also had other renewable resources including: 111 MW of biomass energy capacity, 277 MW of hydro, 15 MW of landfill gas, and 100 MW of refuse derived fuel.
potential its liability was its episodic and intermittent character. A utility could not count on the wind being there when the utility most needed to generate power. The wind in Minnesota and surrounding states was most plentiful in fall and spring, while the need for it was highest in summer. NSP, therefore, had to explore ways not only to generate wind and transmit it from mostly rural to urban areas but also ways to store the power. Battery technologies existed, but they were still experimental. Despite some limited use internationally, it was unclear when these battery technologies would be ready for commercial use in the U.S. Another potential roadblock was that the supply of wind turbines was inadequate. The major suppliers were in Europe and they had large backlogs of orders that they were trying as best they could to fill.

Furthermore, no company had ever managed so much renewable power and placed this much intermittent wind on its grid before, and it was unclear how well or even if NSP could do it. It had to maintain the integrity of its service at all costs. The flow of power to customers could not be interrupted. Therefore, the predictable development of this resource was imperative to make this work and to do so in a profitable manner.

**Implementing the State Environmental Initiative**

NSP embraced the RES despite these challenges. It proclaimed that RES set “the foundation for a reasonable cost and environmentally sound energy future.” It recognized the value of being a leader in renewable energy and started to tout this fact, albeit cautiously, in its marketing efforts. Its internal strategic planning documents clearly

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stated the firm’s mission was to “grow” the “core business” and “position” the company “for the environmental future.” Environmental leadership was a core business objective with equal standing to the firm’s financial objective of 5%-7% earnings growth. Sparby claimed that the state had set the firm’s strategic initiatives for it and now it just had to find some way to implement them.  

The immediate issue was how the utility would be able to accomplish its ambitious environmental and financial goals. How could it simultaneously pursue environmental stewardship and maintain its financial integrity, when there were no guarantees that these goals would be mutually reinforcing? NSP, under the RES, was not in a favored position with regard to creating renewable energy power production facilities itself. As it stood, the RES allowed small and mid-sized developers to feed renewable power into its grid, essentially forcing NSP to purchase the power, and thus not realizing the same degree of return if it actually owned the generating assets.

As a regulated utility, the incentive for NSP was to own renewable power generating assets, when it made financial sense, and to find a balance with the renewable power resources it purchased from others. Senior executives at NSP felt that it was important to participate materially in the ownership of wind generation and that such participation would be necessary in order to comply with the RES. Paul Bonavia, the President of the Utility Group at Xcel which managed the operating companies, had remarked that ownership over the generation would prevent costly renegotiation from

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23 David Sparby, President and CEO of NSP-Minnesota, interview by author, Minneapolis, MN, February 6, 2008.
24 This was an intermediary office between the utility operating companies (NSP, PSCCo, & SPS) and the holding company and worked to foster learning between the operating companies and search for efficiencies. Therefore, Sparby reported directly to Bonavia.
IPPs in the future and would have an important financial impact as capital markets view long term contracts with IPPs as imputed debt on the firm’s balance sheet. Furthermore, ownership of the renewable generating assets would allow for the efficient design of a centralized transmission grid which brought power from rural areas where it was generated to large metro regions where it was used.

Rather than responding in a disorganized and piecemeal basis to the initiatives of a large number of independent renewable generators seeking interconnection to its system, NSP desired a more coordinated, planned process that provided greater predictability over the construction of transmission lines. A rational process would more efficiently bring on board the large amounts of required renewable energy. The RES had not adequately considered these issues. The collaborative structure that had started to come into existence in Minnesota would need further elaboration and refinement. In working through these issues, its robustness would be tested. NSP was fully committed to collaboration. It now would need a mechanism for moving this collaboration beyond goal setting to implementation, but feared what such leadership may bring with it.

*The Onslaught of Interests and Investment*

Farmers with windy fields, entrepreneurs that recognized a new opportunity and major energy development corporations with the know-how and experience had all expressed interest in participating in the generation of wind power by entering the Midwest Independent System Operator’s (MISO) queue for interconnection to the

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25 Paul Bonavia, President of Utility Group, Xcel Energy, interview by author, Minneapolis, MN, February 6, 2008.
transmission network. Approved interconnections represented the first step in being able to develop a renewable energy project. If all these projects were brought on line, the RES goals for renewable energy generation would be more than met. In fact, Minnesota might be in the enviable position where it would have more than its required amount of renewable power and it could export this power to other regions. However, there was a hitch that could derail the entire process and prevent even the IOUs in Minnesota from meeting the RES objectives. Renewable energy projects could not be initiated until approval by MISO and the great demand for new development had created a backlog that was estimated to take 612 years to clear at the current rate. The MISO approval process was mandated and developed by FERC when energy projects were larger (ie. coal or natural gas plants) and undertaken by more credible and well funded actors. It is a rules-based, first in-first out queue that is blind to whom the party is requesting the interconnection to the transmission grid. According to Clair Moeller, the Vice President of Transmission Assets at MISO, the process is entirely non-discriminating even “no matter how many governors write a letter in support.”

The “Wind Integration Study” calculated that there might be a need for 12,600 MWs of wind power; however, the RES had attracted developers wishing to bring 56,000 MWs of wind generation on line. Figure 4 graphically and clearly highlights this issue. To put this into context, NSP, the largest utility in the region, owned approximately 8,400

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26 MISO is the non-profit organization that is responsible for managing the power grid and transmission of power in 15 states in the Midwest U.S. and Manitoba in Canada.
28 Clair Moeller, Vice President of MISO, interview by author, St. Paul, MN, July 21, 2008.
MW of total generating capacity of various fuel types in four states in the Midwest.\(^{29}\)

Despite being involved in the wind study, MISO had been left out of the creation of the RES and Moeller notes that much of the problems that were faced were technical and not political. He claimed that “legislation is easy to pass but making it work is a different issue altogether” and that challenge is what can bring down the entire initiative in Minnesota. Figure 5 illustrates what this means to Buffalo Ridge, a wind-rich region in southwestern Minnesota. In fact, the key interconnection in Buffalo Ridge had not been upgraded in 50 years and required a significant upgrade to interconnect the wind power projects.

The RES’ over-incenting the development of wind projects had bred conditions that could potentially lead to chaos as supply would far out-strip the legislated demand. MISO was not ready to authorize this level of construction nor were the IOUs capable of absorbing the wind generation on its existing transmission lines. If some order was not introduced, there would be bottle-necks that would prevent Minnesota from meeting its ambitious renewable energy goals. The combination of administrative backlog in the queue process and the IOU’s inability to absorb and transmit the energy generated would lead to long lead times, higher costs, duplication, litigation, and frustration for all the participants. Such an eventuality would tear asunder the harmony that had come into being with RES’s passage. MISO had made some changes to slow down the growth of the queue, such as increasing the cost to enter the queue and aggregating projects together when evaluating their potential. However, these piecemeal solutions would not settle the

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\(^{29}\) Annual Electric Generator Report (Form EIA-860), Energy Information Administration.
larger problem that the transmission grid was old and investment of unparalleled scale would be required.

For NSP the problem was exacerbated by the fact that it had not really entered MISO’s queue with projects of its own. This is because the main role to which it had been assigned was to be the receptacle of the power generated by others, not the originator of that power itself. Despite an obligation to purchase wind power and develop transmission lines, the utility had little control over wind power generation and would not see a significant return on the investments which were being made in this area. The incentives in the system were not well-aligned for NSP to optimally participate in the process. The company was at the mercy of the market and those who had acted quickly and opportunistically to enter the MISO queue. This result was the natural outgrowth of electric utility deregulation which tried to limit existing utilities’ role to the transmission, distribution, and marketing of power as well as to encourage independent power producers (IPPs) to compete with one another to provide this power. Despite not being in the queue and seeing limited return from renewable energy investment, NSP would have an important role to play if a solution to this backlog would be found. The utility has experience in siting and constructing new transmission lines and had recently led a consortium of interests to build CAPX 2020 that was a multi-stage project that laid out 1,600 miles of transmission lines. But gaining approval for new transmission lines can take 5 to 25 years to get through the bureaucratic process and the RES objectives required significant action in the next decade. Moeller had remarked how the political horizon and the transmission project horizon are mismatched and that real leadership would be
required to get over this hurdle.\textsuperscript{30} He recommended that a “coalition of willing” interests may be needed for the necessary action, but bringing such groups together could be a challenge.

\textit{New Interests in Minnesota}

A real challenge for the creation of the coalition that Moeller had recommended was that the composition of vested interests had changed dramatically. In a short period the parties that had supported the Prairie Island deal and the RES were now joined by new energy developers and a variety of vocal special interests.

NSP had seen the renewable energy developers as partners in the development of the emerging industry. Sparby was comfortable with the arrangement and believed that there was “enough room for everybody to play”; however, the power purchase agreements that NSP was required to develop with the developers were treated as debt on NSP’s books by bond rating agencies. This situation was not ideal for NSP considering its reliance on public financial markets.\textsuperscript{31} Similarly, these developers had a very different timeline than that of the IOUs as they were in on short-term basis and had little incentive to work on improving the state’s transmission grid.

The renewable energy developers in Minnesota included many very large firms such as NAVITAS (owned by the Spanish energy conglomerate GAMESA), Florida Power & Light, PPM, EnXco, and Invergys. According to Wanda Davies, Director of

\textsuperscript{30} Clair Moeller, Vice President of MISO, interview by author, St. Paul, MN, July 21, 2008.

\textsuperscript{31} Specifically, these contracts are viewed as imputed debt on NSP’s balance sheet and are based on the size, type and provisions of a purchase power contract. This raises costs for customers as NSP faces higher debt costs and is required to make the appropriate changes to its capital structure. In 2006 NSP-Minnesota had over $2.5 billion in long term debt and a S&P credit rating of BBB+. 
Development at NAVITAS, Minnesota became extremely attractive place for operations once the RES was passed and that it helped convince her company to move from Illinois and Wisconsin. Of particular importance to NAVITAS was the higher average price of power that the RES would bring as it would force utilities to pay a higher price for power and that the MPUC would allow these costs to be passed on to customers.²² Many of these developers have positions in MISO’s queue and treat them as ‘lottery tickets’ that if they come up they can be quite lucrative and the more positions you have the better positioned you are. However, these developers have little to no role in improving the MISO process or investing in the transmission grid. What we observe from this is that developers clearly play an important role in the emerging renewable energy market and teaching IOUs how the industry and technology works, but they are less inclined to participate in the collaborative relationship which Sparby once perceived.

Restructuring the Market

In the winter of 2008, senior executives at NSP, drawing on ideas that once had been considered by officials from the state Department of Commerce, crafted a new plan. The plan was to use the collaborative relationships that had been instrumental in the development of RES to restructure the Minnesota energy market to better support the development of renewable energy. NSP’s blueprint, entitled the “Central Corridor Concept,” was designed to better manage the movement of renewable energy from outlying regions of the state toward the metropolitan areas where it would be consumed.³³ The plan envisioned three energy development corridors that would better link the urban center of Minneapolis-St. Paul to the northwest, southwest, and southeast

³³ A similar approach had been adopted in Colorado and Texas.
regions of the state, where most wind and other alternative energy sources were found. Figure 6 depicts NSP’s plan.

The first step in the plan was to collaborate with key governmental and non-governmental stakeholders to promote the creation of the “energy development zones” in three regions of the state. These zones would be hotbeds of wind generation, biofuel production, and related research and development. As a result, the plan would foster significant economic development in rural communities and thus NSP could expect support from political and business interests in these areas.

The second step would be the construction of a transmission network that would be able to deliver the power from these outlying regions to the load center in Minneapolis-St. Paul.34 A decision to upgrade the power lines was needed in order to incorporate the massive amounts of wind power that were to come online in the next 15 years. Use of such lines could be expected to carry 10,000 MW of wind power to urban centers. This was necessary to create predictability in a system that was previously lacking such certainty. Moreover, this part of the plan would be essential for the stringent RES policy to be successful; for without it, NSP, and for that matter the other utilities, would be unable to sell the requisite amount of wind power to consumers. Finally, this part of the plan would piggyback on the idea of state transportation corridors, another politically salient issue. This aspect of the plan would allow NSP to nurture a more rational approach to bring on wind projects. For this element of the plan, NSP could hope for collaborative support from other utilities that would be able to also take advantage of the transmission lines and environmental groups that would recognize the necessity of

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34 This element of the plan was an enhancement of a prior investment in transmission that was named CAPX 2020 that was being jointly conducted with the other utilities in Minnesota.
this investment to reduce carbon emissions. All of these groups had been essential in the
earlier development of RES and the Prairie Island agreement. Therefore, the MPUC
would likely approve this necessary and prudent investment in the firm’s rate base.

The final step of the plan would take place in urban centers. NSP would create
“urban energy production corridors” that not only enhanced the urban transmission
network, but also lined the proposed light rail lanes in Minneapolis-St. Paul with solar
panels. This urban initiative would be complemented with the installation of advanced
metering and smart grid devices at commercial locations that could be used to enhance
energy conservation efforts. Energy customers living in the city would be an active
participant in a newly restructured energy system focused on environmentally sustainable
sources of energy. Linking the plan to the transportation and light rail expansion debate
that was taking place in Minnesota, NSP could avoid costly problems in the future by
assisting in the development of this public infrastructure program. By incorporating an
urban element to the plan NSP could expect greater support from public-at-large. Greater
public support had direct implications on the degree of political support that the firm
could expect from the state government.

Political support for the proposed plan was critical and executives at NSP were
more than happy to allow the politicians leading the effort to take the credit. NSP wanted
a win for everyone in the implementation of Minnesota’s ambitious sustainable energy
plan--a win that built on the collaborative spirit that achieved in the formulation of the
state’s policies. However, it did not perceive it to be in its interests to take extraordinary
steps to mobilize the stakeholders needed to make this plan become a reality. Sparby and
others at NSP were overly concerned with the appearance of heavy-handed self-serving
behavior. The Central Corridor plan presented a new direction for the firm and perhaps the entire Midwest energy market, but it was not NSP’s primary responsibility. Further, it had a series of pending or upcoming regulatory decisions on electricity pricing, nuclear waste storage, and generating plant re-powering that took priority as they would have an immediate impact on firm performance. As a newly minted President and CEO, Dave Sparby had to place present concerns over those in the future and his regulatory experience gave him insight into how the MPUC would have the “final word on what the firm will be no matter its mission statement”.35 Therefore, managing these relationships and finding a way to make it appear that NSP is considering the needs of the region as a whole and not just itself was essential.

NSP’s hesitancy to take a leadership position in restructuring the market despite its ambitious plan was accompanied by instability among the key government actors that could lead such action. In January of 2008, Governor Tim Pawlenty (Rep.) set up the Office of Energy Security (OES) within the Department of Commerce that would oversee larger concerns and coordinate energy and climate issues throughout the administration. Pawlenty was very keen on developing a renewable energy industry in the state and saw the political benefit that it could create in both the urban center and rural communities. The OES’ mandate would also foster easier access to energy information and technical assistance that was deemed essential for market development. Initially in charge of this office was Ed Garvey, a former MPUC commissioner who had extensive experience working with the key players in the Minnesota energy market. Garvey saw his role as implementing the laws that were already on the books. He preferred an “ambiguous

35 David Sparby, President and CEO of NSP-Minnesota, interview by author, Minneapolis, MN, February 6, 2008.
working environment” and was willing to let the system “hang loose but not collapse”. As well, he was overly concerned with “screwing things up” and took a very high level perspective on the key issues such as transmission investment and the MISO queue. This working style and approach to key investments in the state frustrated many people at NSP who felt a more rational approach was necessary for action. Despite NSP’s willingness to allow the OES to take credit for the central corridor program, it would appear that it would not come under Garvey’s leadership. As a result, government leadership to streamline necessary investment and develop the rules of interaction would be lacking.

If leadership was not going to come from the key bureaucratic agency or the renewable project developers then an alternative could be to partner with environmentalists to help promote the central corridor project. The Izaak Walton League, a key environmental group in the Midwest, had played an important role in brokering the Prairie Island nuclear waste deal and had actively participated in the Wind Integration study that provided the technical support for the RES. The group had been led by Bill Grant, who took a pragmatic approach to environmental issues and recognized the necessity for new transmission investment if renewable power would be able to come on line. Grant had already well-established linkages to NSP and had an NSP construction hat hanging in his office for facility inspections. However, Grant was nervous over the influx of new parties into the Minnesota energy debate and was especially concerned with development groups like Florida Power & Light that took a much less cooperative

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approach to development. He believed that the cooperative approach used in the past would be a good model for the future, but brokering this deal would be much more difficult as diverse groups need to be “cut into the deal”.

To further complicate the issue, transmission line siting (such as NSP’s Central Corridor idea) had a controversial past in Minnesota among environmentalists as the late former Senator Paul Wellstone had come to prominence in the 1970s in a battle to prevent new transmission lines from being built. As a result, the issue had been divisive in the environmental community and Grant’s Izaak Walton League was not representative of other environmental interests. New groups had used the media to gain prominence and to wage their battle against investment in the transmission grid and utility-scale renewable energy development. In a February 2009 interview on Minnesota Public Radio, Jeremy Chipps, a member of the Citizens Energy Task Force, questioned the necessity of large scale investment in transmission and what it would mean for his picturesque backyard in La Crescent, Minnesota (Stachura, 2009). He then went on to compare renewable energy developers and IOUs to door-to-door salesmen that shop around needless products. Chipps states, in reference to the corporate interests, “He’s quite burly. He says, ‘here I’d like to show you my new vacuum.’ I say wait a minute, we had one here last week, and we told him to get stuffed. ‘Oh, but this is much better, it goes much further and until you see it.’ I said look, get lost.” The Citizens Energy Task Force is one of several civil society groups in Minnesota that promotes environmental issues and renewable power but vehemently opposes the transmission investments that

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37 Bill Grant, Associate Executive Director of the Izaak Walton League of America- Midwest Office, interview by author, St. Paul, MN, February 13, 2009.
38 Groups with similar mandates include: North American Water Office, Institute for Self-Reliance, and Legalectric.
would be necessary. Further, these groups suspect that the transmission lines would not be used solely for wind-generated power but could open the door to interconnections with new coal burning power plants. Figure 6 illustrates a leaflet that the group distributes to represent their position. This group, like others, distrusts private interests and the linkages that exist between firms and government. They had no role in the coalitions of the past in Minnesota, are not represented by more pragmatic environmental groups, and would likely benefit from greater delay that would result as the rules wait to be developed.

Neither the government leaders, renewable developers, nor various public interest players in civil society seemed willing to risk coming forward to help organize and coordinate the actors and overcome the collective action problems that hindered implementation of NSP’s ambitious initiative. All groups had a vested interest in seeing renewable energy developed and for the most part felt strongly in purveying a public good in the cleaner natural environment that would result. Nonetheless, the inability for a coalition to come together as in the past posed a serious threat to the entire project. The result was the existence of an institutional void that threatened the achievement of the RES goals and the development of an emerging renewable energy industry in Minnesota. Table 1 highlights the differences in position and how differences in objective, sense of urgency, and entry into the issue.

4. Implications

This case illustrates the key but often forgotten point that the collaborative efforts among public groups (firms, customers, special interests) do not end at the creation of
environmentally sustainable objectives. It is not enough for public participation, through institutional forces and cooperative relationships, to be at the foundation of environmental policies. While this is essential for getting the process going, in order to move the process along collaborative ties must continue as events evolve and new developments take place. In sum, a policy’s success is contingent on continued collaboration during implementation and not just policy formulation. During implementation the institutional void and collective action issues just grow and unless someone is willing to step in and take on the mantel of leading the various stakeholders and coordinating their efforts then a stalemate is likely occur and there will be an inconvenient delay precisely at a time when the project needs to continue to move along.

For the implementation of the RES to succeed and Minnesota to become a dominant player in renewable energy production, NSP needs to apply the lessons it has learned about stakeholder leadership from the past. A number of lessons stand out from Minnesota’s experience:

1. Business interests, other utilities, independent power producers, MISO, and politicians/bureaucrats need to recognize that the current need for collaboration is based on the lack of predictability in the current system and that there is a need for a more rational approach. This recognition must lead them to action that will overcome the institutional void.

2. The conditions for collaboration must be motivated by convergence around technical facts. This is hard to do since interests color these interpretations.

3. The issues have to be structured in a way that state officials are given appropriate legal authority. This may be derived from actions by the governor or another party that
has the power to knit together implementation of RES. Without adequate legal authority all the parties are constrained.

4. Implementation depends on more than ad hoc muddling. A *clear schedule* must be in place to account for the RES’ timetable and builds predictability into the process. A schedule often is the start in the path to overcoming the institutional void.

As it stands, NSP’s success in restructuring the energy market in Minnesota is still a work in process. What is certain is that the success of the state’s environmental sustainability objectives will be contingent on further collaborative efforts to overcome what has become a sticky collective action issue.

These lessons, we believe, are general ones that will have to be learned and applied throughout the U.S. as a nascent renewable energy industry is forming. Instructional voids will arise. This is inevitable. There will be serious collective action problems and stakeholder leadership will have to be exerted when it may not in the interests of any of the players to come forward and assume this role.
5. References


Figure 1: Global Renewable Energy Adoption – Growth Rate in KwH for 1997-2006

![Graph showing growth rate in KwH for different countries from 1997 to 2006.]

Figure 2: Renewable Portfolio Standards in U.S.

![Map showing states with Renewable Portfolio Standards (RPS) and Renewables Mandates as of 2007.]

**Figure 3: NSP Strategic Planning Documents – Winter 2008**

*Xcel Energy Strategic Plan*

- **Corporate Scorecard December 2007**
  - Enhance Environmental Performance¹
  - Improve Employee Safety
  - Meet Earnings Target¹

- **Operational Excellence December 2007**
  - SAIDI
  - UOR
  - Safety
  - Customer Satisfaction

**Key Strategic Initiatives**

- Achieve Objectives of Renewable Development Plan
- Meet Regional Transmission Requirement
- Repower Generating Facilities
- Improve Efficiency and Infrastructure
- Create a Diverse and Engaged Workforce

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¹ Figures rounded for presentation purposes.
Figure 4: Market Response to Minnesota RES

Figure 5: Anticipated growth in Wind power development in Buffalo Ridge, Minnesota
Figure 5: Elements of the Corridor Plan
ARE YOU CONCERNED ABOUT THE CAP-X 2020 HIGH-VOLTAGE TRANSMISSION LINE BEING PLANNED THROUGH MINNESOTA?

CITIZENS ENERGY TASK FORCE

GOALS OF CETF:

1) To stop the Cap-X high voltage power lines unless the utilities can prove they are needed and cost-effective;

2) To change the practice of eminent domain by utilities so that property owners are treated fairly and offered fair value for any land taken for power lines or other utility infrastructure;

3) To emphasize the importance of conservation to reduce the demand for energy and reduce the need to build high voltage power lines;

4) To promote clean, renewable energy and reduce the likelihood that high voltage power lines will support the construction and operation of coal plants in Minnesota and neighboring states;

5) To promote community-based renewable generation throughout Minnesota not only to reduce environmental impacts and costs of power plants and power lines, but to strengthen Minnesota’s rural economy;

6) To minimize the environmental harm of constructing power lines, including climate change impacts, damage to aesthetics and natural features, effects of electromagnetic fields and adverse impacts to farms and property;

SUPPORT THE PROMOTION OF CLEAN RENEWABLE ENERGY.

YOU BELIEVE citizens should have an influence on what type of energy is produced for Minnesota’s energy needs and how far it travels.

ADD YOUR VOICE to the CapX public hearing in your community. Speak up and write - your opinions matter.

ADD YOUR VOICE to change the unfair eminent domain law, which exempts utilities from laws helping landowners to get a fair price in eminent domain.

WE NEED YOUR HELP to raise money, inform citizens and get the word out.

THIS IS YOUR OPPORTUNITY to have a voice in Minnesota’s energy future and to impact whether or not these lines will be built.

PLEASE GIVE NOW.

SEND A DONATION TO:
Citizen’s Energy Task Force
P. O. Box 601
Castle Rock, MN. 55010

PLEASE INCLUDE YOUR EMAIL to receive updates about when and where you can speak up, write letters or volunteer.

For more information, contact:
Bev Topp:
eurekatopp@gmail.com
952-469-4859

Atina Difflley:
atinago@frontiernet.net
952-469-1855

DID YOU KNOW THAT UTILITIES ARE EXEMPT FROM PROTECTIONS THAT ENSURE LANDOWNERS CAN GET A FAIR PRICE IN EMINENT DOMAIN? EVEN STATE AND COUNTY GOVERNMENTS ARE NOT EXEMPT!
MINN. STAT. §117.189

The permitting process is happening through this summer. Testimony and public input are starting in just a few weeks. To be effective in the legal proceedings we need to provide expert testimony, evidence and informed citizen input.

WE NEED YOUR SUPPORT NOW.

CETF has hired Paula Maccabee, a public interest advocate and independent attorney who is highly experienced in Public Utility Commission processes and has a successful history dealing with utilities on behalf of landowners. We have become a legal party in the process which determines if the Cap-X power lines are needed and, if they are needed, how they will be built.

TELL YOUR NEIGHBORS – SPREAD THE WORD
### Table 1: Positions of Key Players

<table>
<thead>
<tr>
<th>Participant</th>
<th>Connection</th>
<th>Objective</th>
<th>Sense of Urgency</th>
<th>Entry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xcel Energy</td>
<td>Dominant Utility</td>
<td>ROE, compliance, Environmental Performance.</td>
<td>Mid</td>
<td>Founding (1994)</td>
</tr>
<tr>
<td>office of energy</td>
<td>Regulatory Agency</td>
<td>Coordinates energy and climate issues.</td>
<td>?</td>
<td>Post-RES (2007)</td>
</tr>
<tr>
<td>Unregulated rural Co-op</td>
<td>Cost savings of coop members.</td>
<td>Mid</td>
<td>Pre-RES (2005)</td>
<td></td>
</tr>
<tr>
<td>Key Environmental Interest</td>
<td>Sustainable development.</td>
<td>High</td>
<td>Founding (1994)</td>
<td></td>
</tr>
<tr>
<td>Citizens Energy Task Force</td>
<td>Key Rural Interest</td>
<td>No new transmission &amp; Rural economic development. Minimize Environmental Harm.</td>
<td>High</td>
<td>Late (May 2008)</td>
</tr>
<tr>
<td>Wind Developers</td>
<td>Marketing and development of wind energy. LT contracts with IOUs.</td>
<td>Low</td>
<td>Post-RES (2007)</td>
<td></td>
</tr>
</tbody>
</table>