

## Introduction

The purpose of this meeting is to discuss the need for clear state energy policy.

The landscape of the electric industry as well as the regulatory environment both state, regional, and federal have changed dramatically in the last 20 years with the result that there is a critical need for the Legislature to know of activities in other venues and their effect on legislative activities as well as the effect of the Legislature's actions on those other venues and activities.

The need for a clear, stable policy in the energy area is crucial for several reasons, including the significant impact the cost and reliability of energy supply have on the economy and welfare of the state and the industry's requirement for substantial capital investments. More importantly, substantial investments in generation and transmission are needed in the near future.

The interim work plan of the task force focused on wind energy, particularly the local economic development aspect of wind energy. Three public meetings were held over the summer – two in St. Paul and one in Pipestone.

Based on the interim work, some broader public policy issues were identified, which relate not only to wind energy generation and transmission but also to electric energy generation and transmission in general.

There will be four general topics discussed today: (1) state policy regarding the role of local economic development benefit in selecting energy generation resources; (2) the work of the Public Utilities Commission, its relationship to the Legislature and ways to improve that relationship; (3) transmission concerns that apply not only to wind but to all generation resources; and (4) the future plans of the task force.

Any Questions?

### **I. WIND AND OTHER ENERGY RESOURCES AND LOCAL ECONOMIC DEVELOPMENT.**

Do not have clear policy on role local economic benefits play in selecting wind or other generation resources.

When evaluating generation resources, a regulator (in general and simplifying things) uses three criteria of evaluation. Those criteria are: reliability of the resource, its cost (the least cost model), and its cleanliness/environmental impact/renewable fuel source characteristics. There are tensions between these criteria, and one's choice of resource is greatly affected by one's evaluation of the importance of the various criteria. For example, if one placed a high value on cleanliness, then the fact that the resource might cost more could be acceptable.

The interim work group investigated the economic development aspect of wind energy generation resource selection. Implicit in the investigation was an assumed state policy favoring small, locally owned wind energy facilities, particularly with respect to wind energy projects mandated by law. Upon investigation it appears there is no **general** state policy favoring locally owned small wind developments. To the limited extent there is a policy to encourage local economic development, it may not be the best policy to achieve the goal of local economic development. Furthermore, it is not clear what weight is to be given to local economic development benefits when evaluating a project in terms of the traditional evaluative criteria of reliability, cost, and cleanliness. This issue is further complicated by the difficulty in determining how much local economic benefit is associated with a project.

A difficulty with wind energy projects and their local economic impact has been the characterization of local economic development issues as a conflict between small and large wind developers. This is a mischaracterization that leads to some possibly flawed policy and possibly to nonattainment of the goal of maximizing local economic development, if that is a goal. Perhaps rather than focusing on smallness, the focus should be on whether projects are locally owned or owned by larger corporate or other entities that primarily do not have a local connection other than the wind facility. I'll pass out a 2003 summary of Minnesota projects. There are small projects that are locally owned, big projects that are locally owned, small projects that are not locally owned, and big projects that are not locally owned. The issue may not be large vs. small for purposes of local economic development. (Note that nowhere in the chart is there a description of the local economic development benefit of any of the projects.) The important distinction may be whether a project is locally owned vs. owned by outsiders, not the size of the project.

Why is this issue of lack of clarity important? It is important because it may result in the state attaining less than the maximum economic benefit from wind mandates and other generation projects – although it is clear there has been some local benefit. The state has mandated Xcel Energy alone to provide over 1,110 megawatts of wind. That is a \$1 billion investment. One of the hopes of the first Prairie Island mandate was to develop a wind turbine manufacturing presence in Minnesota. That has not happened. Perhaps it could have happened with more thought. Perhaps it could still happen.

State tax policy taxes wind energy generation facilities under two megawatts at a significantly lower rate than larger facilities. To the extent smaller projects are mandated, the tax revenue aspect of local benefit is reduced since small projects are taxed at a lower rate.

Wind energy generation facility construction in Minnesota has been principally driven by various state laws that mandated or facilitated either directly or indirectly their construction. An examination of those laws reveals no consistent strategy to maximize local economic development benefits, but rather the use of smallness as a surrogate for mandating local economic development benefits.

The Prairie Island legislation in 1994 required Xcel Energy to provide 225 megawatts of wind energy conversion systems within Minnesota. Two hundred additional megawatts were required without requiring they be in Minnesota. Further, an additional 400 megawatts was required due to least-cost planning without regard to whether a project was in Minnesota. No project size limitations were imposed nor was there any explicit local economic development benefit criteria imposed.

In 2003, the Legislature required the renewable development fund (funded by Xcel Energy as part of the Prairie Island dry cask storage legislation) to provide \$6 million in annual renewable energy incentives (\$4.5 million for wind) and \$1.5 million for other renewables until January 2018, subject to the restrictions in the Renewable Energy Incentive Program that has in-state ownership and project size and local ownership requirements. However, no explicit economic development benefit criteria were identified.

The renewable energy objective law passed in 2001 had no general provision relating to project size or ownership for wind energy generation or other renewable facilities, nor does it require a calculation of local economic development benefit. In 2003, the law was amended to impose an obligation on Xcel to deploy an additional 300 megawatts of wind energy conversion systems by 2010. One hundred of the megawatts must be comprised of systems of two MW or less. To the extent technically feasible and economical, these 300 megawatts of wind energy capacity are to be distributed geographically throughout the state. Xcel may own, operate, and construct up to 100 MW of this capacity but may not construct any of the facilities under two MW. Again, there are no specific economic development benefit requirements. Again, small size and geographic dispersion are surrogates for economic development benefit.

The state renewable energy production incentive program is principally a state program providing incentive payments to wind energy conversion systems and to anaerobic digester systems and several hydroelectric projects. The program is funded by a general fund standing appropriation and amounts to about \$4.8 million a year. The program has been amended many times with the goal of assuring that the size of wind projects is small and that they are locally owned. These amendments were done somewhat tardily as several larger, nonlocally owned projects swallowed up a large share of the 100 MW program. Again, there are no specific economic development goals or requirements but the surrogate of smallness and local ownership is used for that purpose.

The interim work group heard testimony and received reports that large projects achieve economy of scale (making them cheaper per unit of energy produced) and that the larger projects add more reliability to the system in terms of forecasting the need for other generation resources. These are positive attributes for large projects. However, state policy in some instances mandates smaller, scattered projects because it is perceived that this is the way to achieve more local benefit. Yet there is no convincing evidence that this is the case. It is possible it is the case but it has not been proven. It seems reasonable to explore whether large projects which have these other positive attributes could also be the best model for local economic development.

In summary, a decision must be made as to whether and to what extent local economic development benefit should be used to select generation resources. If it is decided that development benefits are to be considered, then those benefits that are to be counted and a way of measuring them must be devised so that projects can be compared. Then it must be decided to what extent that local economic development benefit will affect a project decision when weighing the criteria of reliability, cost, and cleanliness.

### **Recommendation**

To articulate a clear policy regarding local economic benefits it is necessary to fully describe and understand the economic benefits that can be attributed to a project. That is not an exact science. Nor is there, as the interim work group found with respect to wind projects, complete data available on the economic development returns of wind projects. We need to get that information. The task force may wish to explore and perhaps fund research in this area.

Once a clear policy based on the agreed economic benefit is developed, it must be fit into the other elements that are used in selecting projects--cost, reliability, and environmental/renewable characteristics. This process could result in legislation giving general direction concerning local economic benefits and their role in selecting generation resources, if any.

The interim work plan may have somewhat put the cart before the horse in examining ways to encourage local investment in wind projects without first determining the best model for delivering local economic benefits.

Any questions?

## Public Utilities Commission

The Public Utilities Commission has a key role in the shaping and implementation of state energy policy. The commission has an expert staff and a formal process to decide on issues such as certificate of need for power plants.

The goal of this segment of the agenda is to initiate discussion about ways for the Legislature and the public utilities commission to work together to develop and implement clear energy policy.

Since 1994 the Legislature has frequently engaged in making specific policy with respect to electric energy rather than general policies.

The specific policies include storage of nuclear waste, mandating specific biomass generation projects, providing for a specific target for renewable energy specific wind mandates, and specific mention of the Mesaba generation project.

These specific legislative mandates occur in the context of a long range statutorily mandated planning process. They also occur in the context of a changing regulatory environment and electric industry structure. The focus on energy policy, especially for transmission but with generation as well, has become regional and national in nature making it more difficult to fit particular state decisions into a general state, regional, or national energy strategy.

The specific legislative mandates have led to a series of uncertainties principally because they are so specific and sometimes don't fit neatly with other things happening in the energy area.

For example, the biomass mandates have been amended numerous times and the mandate has still not been fulfilled in the sense that plants are up and running after 10 years.

The renewable energy objective law required extensive commission interpretation and the law is currently subject to a court challenge the result of which could significantly affect the meaning of the law.

There have been comments that the meaning of the laws related to the Mesaba energy project is extremely uncertain. There have already been disagreements over some of the more minor provisions of the law relating to Mesaba, for example a provision related to the renewable development fund was interpreted in a way that was not satisfactory to the Mesaba project proponents.

The commission has done a good job in trying to ascertain legislative intent and administer these specific mandates. However, it has been a difficult task and hopefully a way can be found so that the commission and legislature can work together to make the intent of laws and the underlying policy more clear.

Two of the commissioners are here to testify. They are somewhat constrained in that they are not free to comment extensively on particular cases. They are free to discuss their duties and express opinions on how they can work with the Legislature to make and implement clear energy policy that is coordinated with regional and federal policy and the needs of the public and industry.