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Report on the Progress of the  
Minnesota Renewable Energy Objective

Submitted to the Minnesota Legislature

by the  
Minnesota Department of Commerce



January 15, 2005

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 THE MINNESOTA RENEWABLE ENERGY OBJECTIVE

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# REPORT TO THE MINNESOTA LEGISLATURE

## Progress of the Minnesota Renewable Energy Objective<sup>1</sup> January 15, 2005

### I. INTRODUCTION

#### A. LEGISLATIVE DIRECTION TO THE COMMISSIONER OF COMMERCE

During the Minnesota Legislature's 2001 session, a statute,<sup>2</sup> the Minnesota Renewable Energy Objectives (REO), was enacted requiring each electric utility to "make a good faith effort to generate or procure electricity generated by an eligible energy technology" so that, by 2015, "ten percent of the electric energy provided to retail customers in Minnesota is generated by eligible energy technologies." (The entire text of Minnesota Statute 216B.1691 is provided as Attachment A to this report.)

Minnesota Session Law 2003, 1<sup>st</sup> Special Session, Chapter 11, Article 2, Section 3 directed the Commissioner of Commerce to provide reports to the Legislature by January 15 of each odd-numbered year, as follows:

*The commissioner shall compile the information provided to the commission under paragraph (a), and report to the chairs of the house of representatives and senate committees with jurisdiction over energy and environment policy issues as to the progress of utilities in the state in increasing the amount of renewable energy provided to retail customers, with any recommendations for regulatory or legislative action, by January 15 of each odd-numbered year.*

The information required in the report is specified in Minnesota Statutes §216B.1691, Subd. 3, Paragraph (a) which states:

*Each electric utility shall report on its plans, activities, and progress with regard to these objectives in its filings under section 216B.2422 or in a separate report submitted to the commission every two years, whichever is more frequent, demonstrating to the commission that the utility is making the required good faith effort. In its resource plan or a separate report, each electric utility shall provide a description of:*

- (1) the status of the utility's renewable energy mix relative to the good faith objective;*

<sup>1</sup> The primary analyst preparing this report was Cyndee Fang.

<sup>2</sup> Minnesota Laws 2001, Chapter 212, Article 8, Section 3; Minnesota Statutes §216B.1691. This statute was later amended in the Minnesota Sessions Laws 2003, 1<sup>st</sup> Special Session, Chapter 11, Article 2, Section 3.

- (2) efforts taken to meet the objective;
- (3) any obstacles encountered or anticipated in meeting the objective; and
- (4) potential solutions to the obstacles.

**B. UTILITIES AFFECTED BY THIS REPORT**

This reporting is required of all utilities as defined by Minnesota Statutes §216B.1691 Subdivision 1. Definitions, paragraph (b) in the following:

*"Electric utility" means a public utility providing electric service, a generation and transmission cooperative electric association, or a municipal power agency.*

From this definition, the Minnesota Public Utilities Commission (Commission) in its June 1, 2004 Order under Docket No. E999/CI-03-869 (discussed below) determined the following sixteen entities were subject to the REO:

Public Utilities Providing Electric Service

- Northern States Power Company, d/b/a Xcel Energy
- Allete – Minnesota Power
- Otter Tail Power Company
- Alliant Energy – Interstate Power and Light Company
- Northwestern Wisconsin Electric Company

Generation and Transmission Cooperative Electric Associations

- Great River Energy
- Minnkota Power Cooperative
- Dairyland Power Cooperative
- Basin Electric Power Cooperative
- East River Electric Power Cooperative
- L&O Power Cooperative

Municipal Power Agencies

- Southern Minnesota Municipal Power Agency
- Western Minnesota Power Agency/Missouri River Energy Services
- Northern Municipal Power Agency
- Minnesota Municipal Power Agency
- Central Minnesota Municipal Power Agency

### C. NOTES ON DATA IN THIS REPORT

As discussed in more detail in this report, the process of determining, for each utility, which specific renewable resources do and do not count toward the REO is still in process. Thus, the data presented in this report reflects estimates of the progress of utilities in meeting the REO based on data provided by utilities and adjusted by the Department.

The time period of data in this report is July 1, 2003 through June 30, 2004, which is the most recently available complete set of data. Data from this time period estimates the utilities' ability to meet the initial levels of the REO indicated for 2005. Future years are not discussed at this time since a number of processes, such as a system to track and trade renewable power, are still in developing phases, and these processes are expected to influence how utilities will meet the REO in future years. At this time, the focus is on ensuring that these processes are reasonably developed and fully operational to help utilities meet the REO.

## II. ORGANIZATION OF THIS REPORT

This report is organized as follows. Section III describes the proceedings that have taken place and continue to develop in proceedings before the Commission and related venues. Section IV examines the status of the utilities' renewable energy mix relative to the good faith objective, pursuant to (1) of Minnesota Statutes §216B.1691, Subd. 3, Paragraph a. Section V presents information regarding points (2) through (4) of Minnesota Statutes §216B.1691, Subd. 3, Paragraph (a), specifically:

- (2) efforts taken by utilities to meet the objective;
- (3) any obstacles encountered or anticipated by utilities in meeting the objective; and
- (4) potential solutions to the obstacles.

## III. HISTORY OF THE PROCEEDINGS

### A. LEGISLATIVE HISTORY

Beginning with Minnesota Sessions Laws 2001, Chapter 212, Article 8, Section 3, the Minnesota Legislature passed Minnesota Statute 216B.1691, setting renewable energy objectives for Minnesota's investor-owned electric utilities, generation and transmission cooperatives, and municipal power agencies. This statute required these utilities, cooperatives, and power agencies (hereinafter, "utilities") to "*make a good faith effort to generate or procure sufficient electricity generated by an eligible energy technology ... so that:*

- (1) *commencing in 2005, at least one percent of the electric utility's total retail electric sales is generated by eligible energy technologies;*

- (2) *the amount provided under clause (1) is increased by one percent of the utility's total retail electric sales each year until 2015; and*
- (3) *ten percent of the electric energy provided to retail customers in Minnesota is generated by eligible energy technologies."*

The Department notes that, due to provisions in the law that certain types of renewable energy cannot count toward the REO, renewable energy obtained under the REO is only part of the total renewable energy used to meet electricity needs of people in Minnesota. For example, the renewable energy Xcel Energy must obtain under other mandates cannot count toward Xcel's renewable energy obligation.

In 2003, the Legislature amended the statute in Minnesota Sessions Laws 2003, 1<sup>st</sup> Special Session, Chapter 11, Article 2, Section 3 as follows:

- to include certain hydrogen resources as being eligible to meet the REO,
- to include as an eligible resource "an energy recovery facility used to capture the heat value of mixed municipal solid waste or refuse-derived fuel from mixed municipal solid waste as a primary fuel,"
- to define "total retail electric sales,"
- to shorten the timeline by which biomass energy must be included (along with other requirements for specific biomass facilities),
- to require the Commission to provide a weighted scale of how energy produced by various eligible energy technologies shall count toward a utility's objective,
- to include a deadline for an initial Order to be issued by the Commission,
- to require the Commission to include criteria and standards to protect against undesirable effects on reliability and economic effects on ratepayers,
- to specify the information utilities must report to the Commission periodically,
- to require the Commissioner of Commerce rather than the Commission to provide reports to the Legislature,
- to allow the Commission to establish a program for tradable credits for electricity to facilitate compliance with the REO,
- to add combustion technology restrictions, and
- to add special requirements for Xcel.

#### *B. PROCEEDINGS BEFORE THE COMMISSION*

Beginning in June 2003, shortly after the amendments summarized above were made to the REO law, the Commission opened a docket to begin development of a record for the Commission to issue an Order, required by June 1, 2004 regarding the REO. Attachment B of this report includes the Case File Control Sheet of the Commission that lists all documents filed under the Commission's proceeding pertaining to the REO. The following summarizes that proceeding to date.

The Commission's process has been divided into several phases. The following describes the developments in these phases.

1. *Phase I*

On June 13, 2003, the Commission issued its *Notice of Comment Period on Procedures and Scope* for the renewable energy objective (REO). As indicated in Attachment B, various parties provided comments on procedural aspects of the proceeding. As indicated by the service list of interested parties, there has been broad interest from groups including environmental associations, utilities and utility investors, business groups, renewable energy developers and others. Thus, the record developed before the Commission covered a wide spectrum of stakeholders.

The procedural issues came to the Commission at its September 23, 2003 agenda meeting. The Commission did not issue an Order pursuant to that meeting, but directed its Staff to request comments on the scope of issues decided in the agenda meeting. The Commission's June 1, 2004 Order explained this approach by stating that the Commission:

...determined, after reviewing the comments filed on procedural and scoping issues, that this case had too many interdependent and sequential issues to resolve in a single Order. The Commission therefore decided to seek comments on the most fundamental issues, to address those issues in an initial Order, and then to promptly resolve remaining issues based on that decisional foundation.

The following describes the status of these proceedings.

2. *Phase II*

On January 30, 2004, the Commission issued its *Notice of Comment Period and Procedures* which listed numerous questions for parties to address. A copy of this notice is included in this report as Attachment C.

As indicated by the questions in the notice, the Commission sought comments from parties on the following general topics:

1. What public utilities are subject to the REO?
2. What clarifications and interpretations are needed to implement the REO?
3. What criteria and standards should the Commission use regarding both "good faith efforts" and "reliability impacts, economic impacts and technical feasibility"?
4. What oversight should be provided regarding implementation of the REO?

The Commission reserved the following issues for a future phase of the proceeding:

- providing for a weighted scale including multiple credits for technologies and fuels the Commission determines are in the public interest to encourage,

- determining whether specific REO criteria and standards need to be developed for Xcel that are different from those for the other covered entities, and
- developing reporting requirements and schedules.

As indicated in Attachment B, numerous parties provided comments and reply comments on the questions in the Commission's notice. These issues were brought to the Commission at its May 4, 2004 agenda meeting. Subsequently, on June 1, 2004, the Commission issued its *Initial Order Detailing Criteria and Standards for Determining Compliance with Minnesota Statute Section 216B.1691 and Requiring Customer Notification by Certain Cooperative, Municipal and Investor-Owned Distribution Utilities* (June 1, 2004 Order) on these matters, which is included in this report as Attachment D.

Shortly thereafter, several parties requested reconsideration of the Commission's June 1, 2004 Order on various issues, as detailed in Attachment E, which is the Commission's August 13, 2004 *Order After Reconsideration* of its June 1, 2004 Order. On June 22, 2004, the Commission issued a notice requesting comments on the petitions for reconsideration. On August 5, 2004, the Commission met to consider petitions for reconsideration of the June 1, 2004 Order.

On August 13, 2004, the Commission issued its Order After Reconsideration. The Commission changed one aspect of its June 1, 2004 Order, by not allowing utilities to count energy acquired under green-pricing programs to count toward the REO. The Commission affirmed all other provisions of the June 1, 2004 Order.

### 3. Phase III

On June 2, 2004, the Commission issued a *Notice of Comment Periods and Further Procedures*. This notice asked parties to respond by July 1, 2004, with reply comments by July 20, to specific questions related to weighting and to use of tradable credit prior to establishment of a system by the Commission. The notice indicated that comments on these two issues were being requested prior to other remaining issues because these issues directly affect what qualifies to meet the REO. Comments on other issues were to be requested at a later time. A copy of the notice is included in this report as Attachment F.

The issues in this phase came before the Commission at its September 21, 2004 agenda meeting.

On October 19, 2004, the Commission issued its *Second Order Implementing Minn. Stat. 216B.1691, Opening Docket to Investigate Multi-State Program for Tracking and Trading Renewable Credits, and Requesting Periodic Updates from Stakeholder Group* which is included in this report as Attachment G.

In addition to issuing findings on weighting, the Commission's October 19, 2004 Order opened a docket to investigate a multi-state tracking and trading program for tradable renewable credits, *In the Matter of a Commission Investigation into a Multi-State Tracking and Trading System for Renewable Energy Credits*, Docket No. E999/CI-04-1616. This effort is described further in Section C below.

#### 4. *Phase IV*

The following issues that were reserved for later phases of these proceedings in the January 30, 2004 Notice have yet to be addressed:

- Determine whether specific REO criteria and standards need to be developed for Xcel.
- Develop reporting requirements and schedules for resource plans and REO reports.

#### C. *TRADABLE CREDITS*

As indicated below, the Commission asked the Department of Commerce, Commission staff and interested parties to develop a system to track and trade renewable energy in the region. On January 30, 2004, the *Notice of Comment Period and Procedures* for the initial issues of the REO docket and the *Notice of Tradable Credits Workshop* was issued.

This process began on February 24, 2004, when the Commission, the Department, and the National Council on Electricity Policy sponsored the first Midwest Tradable Renewable Credits Workshop. This meeting was intended primarily to provide general background information on renewable energy credits, such as what renewable energy credits are and what benefits can be derived from their use, and on current systems and programs. Attendees at the workshop were broadly supportive of the idea of developing a regional renewable trading system. A survey was distributed to determine the needs, priorities and preferences of regional stakeholder groups.

Following this initiative, in its June 1, 2004 Order, the Commission formally indicated its support for developing a regional tracking system and formally asked:

... the Department of Commerce, Commission staff, and all other interested commentators and stakeholders to work together toward the establishment of an independent tracking system to certify, verify, and implement compliance with the renewable energy objectives. In designing the system, primary emphasis should be placed on simplicity, accuracy, transparency, and reasonableness of cost.

Soon thereafter, the Second Midwest Tradable Renewable Credits Workshop was held on June 16, 2004, in Madison, Wisconsin. At this meeting, the results of the survey were discussed and more detailed information about the function and costs of a tracking system was presented.

Following the Second Workshop, a Technical Review Committee was formed, sponsored by Powering the Plains in partnership with the Izaak Walton League of America and the Center for Resource Solutions, with major funding from the Joyce Foundation. The Technical Review Committee consists of public, private and non-governmental stakeholder participants from the multi-jurisdictional Midwest region consisting of Minnesota, Wisconsin, Iowa, North Dakota, South Dakota, and the Canadian province of Manitoba. The Committee participants represent

utility commissions, state and provincial governments, investor-owned, cooperative, and public utilities, and non-governmental organizations active in renewable energy. The purpose of the Committee is to develop the design of a regional renewable energy tracking system through as much consensus as possible that would satisfy the needs of the various jurisdictions for regulatory compliance and to encourage the development of renewable energy and a market for tradable renewable energy credits.

The Third Workshop occurred on October 26, 2004, in Madison, Wisconsin and provided an opportunity for some of the work of the Committee to be presented to the larger stakeholder group for feedback. Three primary issues were presented: (1) the design recommendations to date of the Committee for the Midwest Renewable Energy Tracking System (M-RETS), (2) the governance structure for M-RETS, and (3) the financing for M-RETS.

The Technical Review Committee continues to develop the design proposal for M-RETS. The primary unresolved issues to date are the question of governance and finance for the tracking system. In other words, it is not clear at this time: a) which regional entity would be the best host for a tracking and trading system and b) how the system will be funded. The groups that are involved in pursuing these questions continue to meet and expect to provide an update to the Commission on a quarterly basis as requested by the Commission. The benefits of a system like M-RETS are discussed further below in Section V.C Potential Solutions.

#### **IV. STATUS OF THE UTILITY'S RENEWABLE ENERGY MIX**

In preparation for this report, the Minnesota Department of Commerce (Department) sent information requests to the covered entities as identified by the Commission's June 1, 2004 Order requesting the following information:

- (1) the status of the utility's renewable energy mix relative to the good faith objective;
- (2) efforts taken to meet the objective;
- (3) any obstacles encountered or anticipated in meeting the objective; and
- (4) potential solutions to the obstacles.

The purpose of the information requests was to seek information required under Minnesota Statutes 216B.1691, subd. 3 for the period from July 1, 2003, to June 30, 2004.

The information request and the utility responses are attached as Attachments H through H13 and summary tables presented in Attachment I. The status of the utilities' "good faith efforts" is discussed below, followed by a presentation of the utility responses to (2) through (4) in Section V. Since the Minnesota REO is a two-tiered renewable objective with the first tier being an overall goal for renewable mix and the second tier a goal for biomass, the discussion of the status of the utilities' "good faith efforts" begins with the overall renewable mix and then the biomass objective.

## A. *THE RENEWABLE MIX*

As noted above, the Commission is in the process of developing reporting requirements and schedules for resource plans and REO reports. That is, the process of determining, for each utility, which specific renewable resources do and do not count toward the REO has not yet occurred. The data presented in this report reflects what utilities reported in response to information requests as adjusted by the Department to exclude renewable resources that do not appear to be eligible to count toward the REO. Thus, this information provides an estimate of the status of utilities' efforts to meet the REO, that will be revised once decisions are made in integrated resource plans or other venues regarding what does and does not count toward the REO.

Tables summarizing the information on the status of the reporting covered entities are presented in Attachment I. All information provided was for the period of July 1, 2003 through June 30, 2004. The following discusses the information in the tables in Attachment I.

The renewable resources shown in Table 1 that were excluded from being eligible for the REO were primarily the following:

- green pricing resources,
- resources specifically excluded from eligibility by the statute, such as Xcel's wind mandates,
- resources that did not meet the statutory definition of eligibility, and
- generation assigned to compliance for other regulatory purposes, such as Wisconsin's Renewable Portfolio Standard.

Across all utilities, over approximately 75 percent of renewable resources were excluded from being eligible to count toward the REO.

As shown in Tables 2 and 3, total Minnesota sales across all reporting public utilities was 61,985,503,127 kWh for the period of July 1, 2003 through June 30, 2004 with 1,596,071,917 kWh, or approximately 3 percent, of renewable resources estimated by the Department as potentially being eligible for the REO.<sup>3</sup>

<sup>3</sup> The Department's December 9, 2004 presentation to the Legislative Electric Energy Task Force (LEETF) regarding Minnesota's total use of renewable energy compared to other states indicated that, in calendar year 2003, 11 percent of the electricity Minnesotans used came from renewable energy. This REO report identifies that approximately 3 percent of the electricity Minnesotans used during July 1, 2003, to June 30, 2004, came from REO-eligible renewable energy. The Department notes that the REO-eligible energy identified in this REO report is only one component of the 11 percent figure in the LEETF presentation. The remaining amount consists of the following forms of renewable energy that are not eligible for the REO: 1) Xcel's mandated renewable energy, 2) other forms of renewable generation that do not meet the statutory definition, such as large hydro, 3) generation used to satisfy other renewable energy requirements or obligations (e.g., Wisconsin's Renewable Portfolio Standard), and 4) generation used for green pricing. In addition, adjustments were made in this REO report to data on generation from co-fired biomass facilities to count only the portion generation from REO eligible renewable fuels. Furthermore, the data in the LEETF report used the calendar year 2003 (January 1, 2003, through December 31, 2003) while the current report covers data for July 1, 2003, to June 30, 2004. Finally, the data in the current report is based on a more complete set of responses from the utilities, with data for all 16 covered entities whereas the LEETF report included information from 7 utilities since not all utilities responded in a timely manner to data requests used for the

The Department notes that, in the tables, there are some differences between the amounts of renewable generation estimated by utilities and the Department as potentially counting toward the REO. For most utilities, the differences are not in terms of the implication regarding the utility's ability to meet the REO in 2005 with the exception of one utility, SMMPA. SMMPA reported 75,000,000 kWh of green tags as being eligible to count toward the REO. However, as discussed further below, "unbundled" green tags, i.e., the renewable attributes separated from the energy by which it was generated, based on the Commission's Orders on this matter, are not currently eligible for compliance with the REO.

According to law, five primary fuels are eligible for compliance with the REO:

1. wind,
2. solar,
3. hydroelectric,
4. biomass, and
5. hydrogen.

According to data provided by utilities as shown in Table 4, only three of the five renewable resources were used by utilities in the 2003-2004 period: wind, hydro, and biomass. Of the renewable resources reported by utilities as a whole, approximately 23 percent came from wind, 27 percent came from hydro, and 49 percent came from biomass.<sup>4</sup>

#### *B. ALLOCATING RESOURCES TO MINNESOTA*

The Commission's June 1, 2004 Order (ordering paragraph 4) stated: "In meeting their renewable energy objectives, utilities may include generation from out-of-state facilities, as long as those facilities are used to serve Minnesota customers." This finding makes it necessary to allocate eligible resources used throughout the utilities' systems to Minnesota to estimate each utility's good faith efforts in meeting the REO.

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LEETF report. For additional details about the reported renewable energy generation that was excluded from REO eligibility please see Table 1 in Attachment I.

<sup>4</sup> A large percent of biomass is currently being used to meet the REO because Xcel is mainly using biomass for the 2005 REO level since its mandated wind does not meet the statutory definition of eligible generation (Xcel's size also dwarfs other utilities). Utilities that are able to obtain and count wind resources toward the REO are primarily using wind. Utilities that are able to use small hydro facilities are counting these resources as well.

The Commission's October 19, 2004 Order issued guidelines for allocating generation from system resources towards each utility's good faith efforts in meeting the REO.<sup>5</sup> However, specific decisions on the allocation of eligible system renewable resources have not been made at this time. Thus, it is not yet possible to provide definitive information about the exact level of renewable resources that would be allowed to count toward each utility's renewable energy obligation.

However, to provide a range of information, the Department used three different allocation methodologies as discussed below to estimate the amount of eligible system-wide renewable resources that would be allowed to count toward the REO.<sup>6</sup> These methods provide higher, low and mid range scenarios. The results of these methods are shown in Tables 5 through 9 in Attachment I.

1. High Range scenario: Allocate 100% of system eligible renewable generation to Minnesota. This method assumes that all generation facilities contribute to a "power pool" and that any generation within this pool is dispatchable anywhere and therefore eligible generation can be dispatched wholly to Minnesota for compliance with the REO. In other words, under this approach all eligible generation is equally weighted and assigned an allocation factor of one. This method would result in the highest level of renewable generation that could count toward the REO and thus provides a high range of renewable resources that could count toward the REO. The Department notes that, for utilities that operate in more than one state, it is unlikely that this method would fit within the guidelines set out by the Commission in its October 19 2004 Order.

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<sup>5</sup> Order point 4 of the Commission's October 19, 2004 Order stated the following:

The proper allocation of renewable resources between jurisdictions, wholesale/retail operations, competing renewable initiatives, or any other factor giving rise to a need for an allocation process, shall be determined on the basis of the facts specific to each company in individual resource plan filings or renewable energy objective filings. The Commission adopts the following guidelines as a non-binding starting point for addressing allocation issues:

- (a) Energy generated from network resources or purchase arrangements which existed prior to the establishment of the Minnesota renewable energy objectives should be credited to the renewable energy objectives on the basis of the percentage of that utility's system energy consumed in Minnesota, and then the percentage of energy consumed by its (or its members') Minnesota retail customers.
- (b) With respect to energy generated from facilities or purchase arrangements entered into after the establishment of the Minnesota renewable energy objectives, each utility has the burden of showing, in resource plan or renewable energy objectives plan filings, what percentage of the energy generated should be counted toward the renewable energy objectives. In absence of a convincing showing that all or some greater percentage than would result from allocation of such energy was acquired for purposes of the renewable energy objectives and is being used to serve Minnesota retail customers it will be credited to the renewable energy objectives on the basis of the percentage of that utility's system energy consumed in Minnesota, and then the percentage of energy consumed by its (or its members') Minnesota retail customers.
- (c) In resource plans or renewable energy objectives report proceedings, if the utility wished to propose some other allocation or assignment method, the utility would have the burden of demonstrating that some other method is more reasonable given its particular circumstances.

<sup>6</sup> The first step with all of these methods is to exclude renewable generation that is not eligible to count toward the REO. The methods pertain to various ways to allocate eligible renewable generation to the Minnesota REO.

2. Low Range scenario: Proportional allocation of eligible generation. This method assumes that generation from any given source is not dispatchable to any specific location but instead to the system as a whole and therefore that no generation can be acquired specifically for Minnesota and therefore the REO. Under this allocation scenario, all eligible generation is subject to an allocation factor equivalent to the proportion of total system retail sales which Minnesota retail sales represents. This method would result in the lowest level of renewable generation that could count toward the REO and thus provides a lower range of renewable resources that could count toward the REO. The Department notes that it is unlikely that this method would be applicable to utilities given that utilities will and have acquired resources for the explicit purpose of meeting the REO.
  
3. Mid-range scenario: Vintage-based allocation of eligible generation. This method applies the proportional allocation to all resources not acquired for the specific purpose of meeting the REO while allowing generation from utilities shown to have been acquired for the specific purpose of meeting the REO an allocation factor of one. Since it has not been determined which renewable resources were acquired to meet the REO, the Department used the proxy of vintage to determine whether renewable resources were or were not acquired to meet the REO. The proxy is as follows: all facilities that began operation prior to 2001 were allocated proportionally (assigned a value less than or equal to one) while all facilities that began operation in 2001 or later were fully allocated (assigned a value of one), under the assumption that these facilities were specifically acquired to meet the REO. This method provides a mid-range scenario between the high and low range scenarios.

Under the first high range allocation methodology, of the twelve covered entities, nine have sufficient generation to satisfy their REO obligation for 2005, most with significant surpluses. The four utilities that did not have sufficient eligible generation in the 2003-2004 period to satisfy their 2005 REO obligation are SMMPA, MRES, MMPA and CMMPA. However, MRES is only 950 kWh shy of its 2005 REO obligation. In addition, as discussed in Section V.A below, SMMPA, MMPA, and CMMPA have identified a number of efforts they are pursuing to obtain resources that could be used to meet the REO. However, as discussed in Section V.B below, CMMPA may have some difficulty pursuing those resources.

The mid-range vintage-based allocation did not change the list of utilities indicated in the high-range method to have had enough renewable resources in 2003-2004 to meet their 2005 REO.<sup>7</sup> However, under the low range method, the proportional allocation, IPL and Dairyland show a deficit based on data from 2003-2004 to meet the 2005 renewable energy objective (in addition to the deficits discussed above for SMMPA, MRES, MMPA, and CMMPA based on 2003-2004 data). However, as indicated above, this low range method is unlikely to be applicable to these utilities. Moreover, the Department notes that IPL acquired all of its renewable resources after 2001, so the Company will have an ample opportunity to make its case that it has acquired

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<sup>7</sup> The Department notes that, under the three allocation methods, MP and GRE experienced no change in the estimation of eligible generation for the REO, since both have Minnesota as 100 percent of system retail sales. Three utilities, IPL, Basin and MRES showed no change between the high range and mid-range allocation of eligible resources since all eligible resources are of vintage 2001 and later.

sufficient resources to meet the REO. The Department expects that these utilities will make a careful showing of their efforts to meet the REO when they make their filings before the Commission.

### *C. BIOMASS*

Under the REO, utilities have the goal of ensuring that 0.5 percent of the REO obligation is met by eligible biomass energy technologies by 2005, with the goal of obtaining one percent by 2010.<sup>8</sup> Tables 10 through 12 summarize the status of the utilities "good faith efforts" towards meeting the biomass objective.

Currently, six of the thirteen utilities have sufficient eligible biomass generation to meet the biomass obligation for 2005. The status of the six utilities that currently have sufficient biomass generation for the biomass objective did not change under any of the allocation methods discussed above. These six utilities are: Xcel, MP, OTP, GRE, Minnkota, and Dairyland. In addition, each of these six utilities show significant surpluses. Of the remaining seven (IPL, NVEC, Basin, SMMPA, MRES, MMPA and CMMPA) utilities, none reported eligible biomass generation for the period.

Given that almost half of the utilities currently have excess biomass power while the other half have no biomass power, the Department notes that the renewable trading system that is being developed (as discussed elsewhere in this report) would be a useful tool to help entities that have surplus biomass trade power to those entities that have not yet obtained sufficient biomass resources. Moreover, the trading system could help all utilities meet the REO objective in a manner that is more cost-effective to the overall system and capitalizes on economies of scale, where larger renewable resources are less costly to develop than smaller facilities. This issue is discussed further under the section pertaining to potential solutions.

## **V. EFFORTS, OBSTACLES AND POTENTIAL SOLUTIONS**

### *A. EFFORTS TAKEN TO MEET THE OBJECTIVE*

The majority of the utilities reported being able to meet the levels of renewable energy in the REO through 2005 by using existing resources. As indicated in the tables in Attachment I (e.g., Table 9), of the thirteen utilities, only four are currently short of their 2005 REO obligation (based on 2003-2004 data), all of which are municipal utilities: SMMPA, MRES, MMPA, and CMMPA. The Department also notes that, depending on the allocation method used, MRES may be very close to meeting its goal for 2005, based on generation from 2003-2004.

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<sup>8</sup> Minnesota Statutes 216B.1691 Renewable energy objectives, states in part:

Subd. 2. Eligible energy objectives.

(b) Of the eligible energy technology generation required under paragraph (a), clauses (1) and (2), not less than 0.5 percent of the energy must be generated by biomass energy technologies, including an energy recovery facility used to capture the heat value of mixed municipal solid waste or refuse-derived fuel from mixed municipal solid waste as a primary fuel, by 2005. By 2010, one percent of the eligible technology generation required under paragraph (a), clauses (1) and (2), shall be generated by biomass energy technologies.

The Department requested that utilities discuss various efforts they are pursuing to meet the REO. The following utilities reported the information below:

1. **Xcel** reported as a potential future resource the biomass production from an 18 MW wood-fired Itasca Power project, which is expected to begin commercial operation in 2006.
2. **Minnesota Power** identified the renewable projects listed below as having potential to help it meet the REO. MP states that all selected renewable projects would use commercial technology with significant operating experience. At least two of the projects would be at sites within Minnesota Power's system, i.e., at an existing Minnesota Power generation site or at or near a Minnesota Power customer site. Minnesota Power believes this initial project development approach will keep costs lower and respond to customer interest in renewables.
  - Crow Wing County (CWC) Landfill Gas—a proposed 800 kW unit with projected output of 7,000 MWh per year. During the past year, Minnesota Power offered to buy all output from CWC for a set energy charge. Progress toward an agreement is on hold pending CWC's evaluation of the potential to pipe the landfill gas to the nearby Trus Joist Weyerhaeuser facility as an alternative use.
  - Fond du Lac Hydro Expansion—a proposed 934 MW addition to an existing 11 MW hydroelectric facility near Duluth, Minnesota, with projected incremental output of 35,000 MWh per year. Minnesota Power is currently evaluating the impact of Federal Energy Regulatory Commission's permitting process changes to the project cost and schedule.
  - Wind Resource—for planning purposes, a 50 MW wind resource on a self-build or power purchase agreement is assumed with potential output of 175,200 MWh per year, assuming a 40 percent annual capacity factor. Development of this resource is presently in progress to determine the optimum location and implementation plan.
3. **Otter Tail Power** reported the following additional activities:
  - Power Purchase Agreement with FPL Energy: During early 2003, OTP signed a PPA with FPL Energy for the 21 MW FPL Energy North Dakota Wind II project located near Edgeley, ND. This project commenced operation in October 2003.
  - Borderline Wind: OTP also signed a PPA for the Borderline Wind project, 900 kW, near Hendricks, MN, that began operation on December 31, 2003.

- Wind and Biomass: OTP is currently working with the West Central Research and Outreach Center at the University of Minnesota-Morris on a 1.65 MW biomass project near Morris, MN, and a 660 kW wind project with the Turtle Mountain Community College located in northern North Dakota.
- Anaerobic Digestion Fueled Generation: OTP conducted a customer survey of its agricultural customers, seeking sites suitable for development of anaerobic digestion fueled generation. The survey revealed very limited opportunities for development. None of the sites met the necessary conditions that would indicate likely economic viability in accordance with guidelines developed by the U.S. Dept. of Agriculture's AgSTAR biogas program and the FarmWare software.
- Other Potential Wind and Biomass: OTP is also involved in confidential discussions on other projects that the Company states cannot be revealed at this point due to the proprietary nature of the proposals. These discussions involved both wind and biomass possibilities.

**4. Great River Energy reported the following:**

- Wind Resource: GRE states that it has sought additional renewable resources as part of two power resource Requests for Proposals (RFPs). The earlier of the two RFPs resulted in a contract with the developer of the Trimont project, which is expected to come online in 2005. With this addition, GRE states that it expects to have sufficient renewable energy to meet its obligation under the REO through approximately 2007. While no additional resources were selected from the most recent RFP, GRE expects additional resources will be developed based on another RFP, which GRE believes will be issued in sufficient time to allow development of the resource consistent with meeting the REO.

**5. Dairyland:**

- Wind Resource: Dairyland states that it added 10 MW of wind in 2004.
- Landfill gas: Dairyland states that it added 3 MW of landfill gas in 2004. In addition, Dairyland states that there is interest in developing three more landfill projects.
- Manure Digestion Program: Dairyland states that its manure digestion program is just beginning and the intention is to add 5 MW of manure digestion per year for at least four to five years.

**6. Basin:**

- Wind Resource: Basin states that it has constructed two 2.6 MW wind projects at Chamberlain, SD, and Minot North Dakota, respectively. In addition, Basin Electric has entered into power purchase agreements for 100 percent of the output from the following wind projects:
  - 40 MW Hyde County Wind Project, in South Dakota,
  - 40 MW Edgeley/Kulm Wind Project in North Dakota,
  - 0.75 MW Rosebud Sioux Tribe Wind Project in South Dakota, and
  - 0.75 MW Pipestone School Wind Project at Pipestone, Minnesota.

**7. SMMPA:**

- Wind Study: SMMPA states that it contracted with Tom Wind of Wind Utility Consulting to conduct a system-wide study of wind regimes around SMMPA member communities identifying and prioritizing least cost sites.
- Waste to Energy: SMMPA states that it has had conversations with Olmsted County regarding a Waste-to-Energy Facility.
- Wind Resource: SMMPA states that it is completing construction of four 1.65 MW wind turbines, two in Fairmont, Minnesota and two in Redwood, Minnesota with December 2004 and January 2005 commission dates.
- Biodiesel Study: SMMPA states that it is currently evaluating B20 for use in member diesels to help meet biomass requirements.

**8. MMPA:**

- Hydro Resources: MMPA is in the process of installing a 7.5MW turbine on the existing dam on the Coon Rapids River. MMPA owns the FERC license for the project and possible owners are still being investigated. A preliminary development plan is scheduled to be complete in early 2005 after which MMPA will begin to work toward attaining all the permitting requirements needed. Commercial operation is scheduled to begin in 2008. Once the dam begins operation we believe we would generate enough energy for an eligible technology to meet the renewable energy objective.
- Wind Resources: MMPA is also in the process of negotiating with Xcel energy for the right to purchase power generated by wind turbines. While the majority of this power will be made available to customers via the wind program being developed by MMPA, any unused wind power will be provided to our customers as part of our effort to reach the renewable energy objective.

## 9. CMMPA:

- Wind Resources: CMMPA states that it has entered into the following agreements, together with one or more of its member cities: 1) agreement with Blue Breezes LLC, that was started by a local farmer and supported by Winergie, with plans to install 3.3 MW nameplate of wind turbines near Blue Earth, Minnesota. 2) agreement with K & S Windpower LLC that was started by a local farmer, with plans to install 3.1 MW nameplate of wind turbines near Lake Crystal, Minnesota.
- Landfill Gas: CMMPA states that a garbage landfill site has been identified near Glencoe, Minnesota as having sufficient landfill gas to support a generator. CMMPA states that preliminary discussions have been held with the local utility, the county, the land developer, and generation manufacturer. CMMPA's stated plans are to enter into a long-term agreement to purchase the output of the generators.
- Potential Wind: CMMPA notes two areas of potential wind resources. First, CMMPA states that it has been meeting with Wolf Wind, a family interested in developing wind on family-owned land near Elk substation in southwestern Minnesota. According to CMMPA, the plans are to install five 1.6 MW wind turbines and sell the output to CMMPA under a long term agreement. Second, CMMPA states that it has received a proposal from Summit Wind LLC for the development of the Jeffers Wind Energy Center near Jeffers, Minnesota. Under this project, CMMPA would be able to purchase the output of up to 10 MW of a larger development planned for the site. The CMMPA is currently considering this proposal.

### *B. OBSTACLES ENCOUNTERED OR ANTICIPATED*

Complete responses by utilities to the questions about obstacles are provided in Attachment H. The following discussion summarizes the obstacles observed by the reporting utilities, that fell primarily into four broad categories:

1. the ability to develop the most cost-effective generation resources;
2. the uncertainty and other complications associated with state and federal production incentive programs;
3. transmission issues; and
4. regulatory issues.

The following highlights the discussion presented by the utilities on obstacles encountered or anticipated. Representative excerpts are presented below. The next section discusses possible solutions that may be considered if these concerns materialize.

1. *The Development of Cost-effective Generation Resources*

Utilities discussed the need to develop cost-effective generation resources as a potential obstacle to meeting the REO. This discussion took two forms: (1) the forced preference of renewable resources over other forms of generation, and (2) the ability to capture the gains from economies of scale for renewable energy development.

- a. Xcel stated that “wind energy is the most cost-effective resource available to meet the REO” which indicates the Company’s expectation that resources other than wind may have difficulty justifying their use given the economic effect on ratepayers compared to wind resources. However, Xcel also identified two key factors that may influence the availability of cost-effective wind resources: (1) uncertainty surrounding the renewal of the Federal Production Tax Credit and (2) availability of transmission to deliver wind energy from remote generation sites to load centers such as the Twin Cities Metro Area. Both of these issues are discussed further below.
- b. MP stated the following, with regards to the necessary development of renewable generation sources to meet the REO:

One potential obstacle to meeting the REO is the limited development of potential of utility scale renewable projects, especially due to resource availability. Wind development has and continues to mostly occur in areas with the best wind resources, southwestern Minnesota and North and South Dakota. Hydro development is realistically limited to expansions (with likely resistance to the construction of new dams). Biomass development is limited by the wood fiber market demand and the ability of current technology to use more tree species and more of the tree, leaving less wood waste for power generation. Another obstacle that limits the development of selected potential renewable projects is project cost and cost recovery issues. Finally, renewable energy law and policy also excludes Minnesota Power’s economic and efficient renewable generating assets from the definition of renewable resource.

- c. SMMPA stressed the concern that smaller entities may not be able to capture the gains from economies of scale associated with renewable development.
- d. OTP expressed specific concerns regarding the costs of developing biomass resources:

Biomass technologies are inherently expensive. Because of the typical high moisture content of the fuel, such fuel cannot be economically transported very far. This dictates smaller size

generating facilities that economically suffer due to economy of scale considerations and very high labor costs per megawatt of output.

2. *The Production Incentive Programs*

Utilities identified the uncertainty around the federal Production Tax Credit (PTC) and the Minnesota renewable energy production incentive (REPI) as obstacles to meeting the REO.

- a. OTP: The Company states that it is obvious that the federal production tax credit (PTC) is critical to the economic viability of wind development. According to OTP, without the PTC, "wind generation simply cannot be competitive with the alternative generating costs in our region." OTP concludes it is imperative that the PTC be renewed beyond 2005 to make wind more economically competitive.
- b. GRE: GRE states that, based on internal analysis GRE conducted and pricing presented under various RFPs, when the price reflects the federal PTC, wind is an economically competitive resource. However, GRE cautions that, without the tax credit the price is substantially higher and wind is not directly competitive. GRE also notes that, due to restrictions on the PTC, GRE cannot directly benefit from the PTC, which forces GRE to seek a project developer who can take advantage of the tax credits, develop the project, and sell the output to GRE under a purchased power agreement (PPA).

GRE also notes that the queue for the Minnesota production incentive is already full, preventing more small, independent developers from pursuing projects.

- c. CMMPA: CMMPA states that uncertainty about the federal and state tax incentives could affect the wind project in Lake Crystal, Minnesota.

CMMPA notes that the Federal PTC was passed in October as part of the Corporate Tax Bill to extend the tax credit for 2005. CMMPA states that the credit plays a major factor in the overall financing of a wind turbine project since the tax credit makes wind projects economically feasible. CMMPA states that, without the tax credit, no financing can be finalized.

Regarding the Lake Crystal project, CMMPA states that, when the federal bill was passed, the developer's financing was almost finished, with one major concern: the 18-month window for the Minnesota state incentive payment expires May 19, 2005. With unpredictable Minnesota winters, construction scheduling, and turbine backlog, CMMPA states there is no guarantee the developer can have the turbines operational before the state expiration date.

CMMPA also noted that the developer in the wind project in Blue Earth, Minnesota did not file in time to be included in the 100 MW receiving state incentives, but is on a waiting list. The project is on hold pending resolution on whether it could be included in the state program.

- d. SMMPA noted the restricted availability of REPI, specifically requirements that excluded small utilities.

3. *Transmission*

Utilities identified the availability of transmission as a primary obstacle.

- a. Xcel stated in part the following:

If sufficient transmission is not available, wind energy is subject to curtailment at a considerable cost to Xcel Energy and its ratepayers. Xcel Energy notes that it may not be able to cost-effectively meet its REO obligations if there is inadequate transmission from the windy areas of the state to its load centers. Xcel states that it recognize that to implement the REO, there needs to be additional transmission for wind outlet above levels that will be achieved through the existing certificate of need for Buffalo Ridge. Xcel also notes the difficulties of achieving new outlet capacity that requires upgrades on the systems of other utilities. Nonetheless, Xcel indicates it is proceeding with study work to help identify the level of investment needed to allow incremental increases in transmission capacity for wind resources in the intermediate term. In addition, Xcel states it is working with the Midwest ISO on a study of another higher voltage outlet line from this region.

- b. OTP identified the “currently constrained transmission system” as “a major obstacle to the development of any type of generation, including renewables”:

The process for obtaining interconnection approvals and network transmission service are becoming more cumbersome and lengthy, delaying projects. This adds to a greater degree of uncertainty to wind projects, where the production tax credit plays a significant role in the economics of wind. The MISO approval process can be lengthy enough so that a wind farm cannot startup prior to the expiration of the PTC, creating a significant economic risk.

- c. GRE:

GRE states that perhaps the biggest obstacle in meeting the REO is the lack of transmission. GRE notes that the existing and currently planned new transmission that could be available for delivering wind output to load is already “full.” GRE concludes that more transmission will need to be built to take advantage of prime wind resources such as in southwest Minnesota or in the Dakotas.

All else being equal, GRE states that it would prefer to purchase the output of smaller wind projects since GRE believes that doing so would provide opportunities for Minnesotans who may also be its customers.

d. Basin:

Basin states that obtaining transmission service has been and continues to be a major obstacle in developing renewable generation. Basin notes that, for wind energy, transmission issues are compounded by the fact that wind's intermittency and low capacity factor make those resources less able to bear the burden of transmission upgrades. As an example, Basin Electric states it does not yet have firm transmission service for the two 40 MW wind projects that represent the major share of its wind resources and faces increased transmission risk related to those projects.

e. SMPA identified the following issues related to transmission as being obstacles:

- the availability of transmission;
- the cost and timelines for getting MISO approval;
- the inequity of inadvertent energy charges – no special provisions to account for inherent intermittent nature of wind power; and
- the uncertainty regarding how inadvertent energy charges will be handled.

f. CMMPA:

CMMPA noted that the "Wolf Wind" project has been submitted through the MISO process to study interconnection and transmission delivery availability. However, CMMPA also states that both CMMPA and the developer are reluctant to pursue this project much farther until results from the transmission study are made available. CMMPA notes that it is not clear exactly when these results will be available nor when the project can get underway.

4. *Regulatory Issues*

Utilities identified three main primary regulatory issues: (1) what is perceived as uncertainty and reversal in regulatory definition and delays in decision-making, (2) what is perceived as the disconnect in regulatory definitions across jurisdictions, and (3) land use and permitting issues.<sup>9</sup> The following lists the concerns raised by utilities.

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<sup>9</sup> OTP identified an additional regulatory issue that posed a potential obstacle, specifically "(t)he Minnesota policy of imputing a capacity value for truly non-dispatchable energy resources such as wind, run-of-the river hydro, solar, etc." This issue, however, was recently addressed at least temporarily by the Commission at its December 16, 2004 Meeting in Docket Nos. E017/M-03-970 and E002/M-04-864 where the Commission permitted, at this time, the recovery of capacity costs of wind and requested further examination of the issue.

- a. Dairyland: Dairyland states that it has concerns with the following regulatory and definitional problems encountered in working with multiple states:
- Each state defines what can and cannot be counted differently while requiring system-wide reports using only its own definitions.
  - There are different reporting timelines. Dairyland states that some states use July-June while others use calendar years. Dairyland also states its concern about the uncertainty about whether a 2005 goal refers to calendar 2005, some other “year” that ends sometime in 2005, or a previous time period that is reported in 2005.
  - The handling of green tags varies in jurisdictions and is not well defined. Dairyland notes that there are renewable credits; but it isn’t clear whether they are separate from carbon credits, who owns them, who markets them, and how long the credits last.
  - Dairyland states that the unclear and changing definitions create uncertainty. Specific issues Dairyland notes are: what can be counted, will existing/early renewables be excluded, will they be weighted differently, and will states define, weight, or count renewable resources differently. According to Dairyland, these uncertainties create an incentive to pursue renewables only at the last possible moment to insure that they will not be excluded or are not the “wrong” type.
  - Dairyland states that all of these factors create a “reporting quagmire” for the utility.
- b. SMMPA identified the following obstacles:
- Regulatory reversals or delays in decision-making
  - Green Pricing Reversal
    - (i) SMMPA states that, from the time the 2001 legislation was passed, SMMPA developed an aggressive green pricing program with one of the lowest premiums in the country and renewable generation resources to supply it.
    - (ii) SMMPA notes that the Minnesota Public Utilities Commission’s June 1, 2004 Order placed additional customer notification requirements, beyond the statute, on those wishing to count green priced resources towards the REO. This reporting was in response to concerns raised by a number of parties about counting renewable energy obtained for green pricing programs toward the REO.

- (iii) SMMPA states that SMMPA/Members complied with the additional requirements yet the Commission reversed its decision, by its Order on Reconsideration dated August 13, 2004, thus preventing green pricing resources to count towards the REO. According to SMMPA, this series of events negated SMMPA's time and effort in this initiative.
- Tradable Renewable Credit (TRC) Program
  - (i) SMMPA states that what it perceives as the delay in developing a TRC program has limited SMMPA from taking advantage of opportunities to cost effectively develop renewable resources.
  - (ii) SMMPA states that it has acquired tags from Basin's Prairie Wind Program to use to balance out green pricing resources between projects. SMMPA selected Basin's program because SMMPA believed the Department of Commerce had accepted TRC's from Basin's program used by other Minnesota utilities.<sup>10</sup> SMMPA states that the Department of Commerce now indicates that they can't approve TRC's since that is to be done by the Commission, pursuant to law. However, SMMPA is also concerned because the Commission has only begun the development process and indicated that it could be up to two years before the process is completed. SMMPA states that the first program benchmark is in 2005 and it is unclear as to whether or not the Commission will accept SMMPA's TRCs.
- Land Use/Permitting issues: SMMPA states that many counties are now adopting ordinances with height and distance (setback) restrictions, which may limit the development of wind resources.
- c. MMPA identified the following potential obstacle for its Coon Rapids project:
  - Due to the complexity and length of time required for the development, permitting, financing and construction of a hydroelectric facility at Coon Rapids, MMPA anticipates that it will encounter obstacles that it will either have to anticipate or work through as part of the process.

### C. *POTENTIAL SOLUTIONS*

The utilities offered various potential solutions to the obstacles encountered or anticipated. Some of these potential solutions are presented in the following. In addition, the Department comments on potential solutions to the obstacles identified by the utilities.

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<sup>10</sup> The Department notes that, as indicated in the letter in Attachment J, tradable renewable credits were not approved for Basin. The letter indicates that "[r]enewable energy credits (green credits/tags) are not authorized for use, except on a pilot project basis by Missouri River Energy Services under limited circumstances with PUC staff approval." Thus, the issue SMMPA characterizes as a reversal was not, in fact, a reversal.

## 1. *Potential Solutions Identified by the Utilities*

The presentation of the utilities' comments on potential solutions parallels the presentation of the utilities' comments obstacles encountered or anticipated. Not all utilities provided potential solutions to the obstacles that they identified.

### a. *The Development of Cost-effective Generation Resources*

- MP: Minnesota Power is committed to making a good-faith effort towards meeting Minnesota's REO. Minnesota Power stated that it is identifying and evaluating customer-based projects, projects to expand and/or increase the use of Minnesota Power's existing hydro and biomass and potential new wind generation. Minnesota Power states that it intends to continue to use (as applicable) funding mechanisms to lower net cost to the customer, such as the conservation improvement program funding for renewable projects (Minnesota Statute 216B.2411), the Xcel RDF program (Minnesota Statute 116C.779) and the renewable energy production incentive to help support refurbishing and/or expanding hydroelectric facilities at existing dams as well as new wind facilities (Minnesota Statute 216C.41). MP states that these funding mechanisms also can make financially marginal projects competitive. Lastly, MP notes that the successful development of wind energy projects is subject to the renewability of the federal production tax credit.
- SMMPA: To develop cost-effective renewable resources, SMMPA states that it intends to: (a) leverage all available financial incentive programs, and (b) avoid costs of interconnecting to transmission systems by interconnecting with member distribution systems.

SMMPA provided additional comments on the State and Federal REPI programs that were tied to its comments on the development of cost-effective renewable resources. These comments are presented in the next section.

### b. *The Production Incentive Program*

- OTP: OTP has continually expressed its support of the Production Tax Credit for wind to area legislators.
- SMMPA: SMMPA provides the following suggestions.
  - 1) State REPI:
    - a) REPI availability
      - i) Consider expanding funds for REPI.
      - ii) Modernize REPI guidelines.

- (1) Consider size limits of 10 MW at one site.
- (2) Consider rule exemptions for non-profit utilities (municipals and cooperatives) taking into account their inability to form LLC's, as some private sector entities have done to obtain REPI for significantly more than 2 MW in a single location in one calendar year. The private sector's ability to obtain REPI this way puts public sector entities at a clear disadvantage and has resulted in little incentive for municipal utilities and others in the non-profit sector trying to meet their REO.

2) Federal REPI:

- a) Federal incentives remain uncertain.
  - i) Advocate for increased funding and longer timeframes.
  - ii) Advocate for tradable tax credits of taxable tradable tax credits to provide greater certainty for public sector projects.

c. *Transmission*

- Xcel: Xcel Energy states that it is leading studies to determine what transmission improvements will be necessary to support additional wind development in the southwestern part of the state. Xcel also states that it is working with other transmission providers on a study effort known as CapX 2020 which Xcel represents as being intended to develop a vision for the development of transmission infrastructure to support all the generation, including renewables based generation, that will be needed to meet the growing demand for electricity in Minnesota.
- OTP: Like Xcel, OTP states that it is participating in CapX 2020, which OTP describes as a group of Minnesota utilities working on expanding the transmission system in Minnesota to provide more transmission capability for new resources, including the consideration of the amount of generation required to comply with the REO.
- GRE: GRE Transmission also states that it is participating in the CapX 2020 project. According to GRE, the project will identify transmission needed in the region over the next 15 years and is the first step in resolving the need for additional transmission.
- Basin: Basin asserts that system-wide average pricing for transmission appears to be the most practical and feasible method for achieving significant transmission upgrades in the foreseeable future.

- SMMPA: SMMPA suggests the following.
  - 1) Transmission:
    - a) Build projects that are interconnected to member communities where SMMPA has accredited generation.
      - i) Does place SMMPA members at a disadvantage in that mitigation may be required if there is the potential that local conventional generation would be required to run—not able to reap full benefit of the investment.
      - ii) Does not allow for maximum use of the development potential at one site.
    - b) Advocate for transmission construction
      - i) Advocate for streamlined processes.
      - ii) CapX 2020 type organization to better identify who would receive the benefits of building transmission.
      - iii) Advocate MISO reform to improve process.

*d. Regulatory Issues*

- Dairyland: Dairyland states that it cannot control the regulatory processes of the various states. Dairyland’s best solution is to continue to consider all renewable assets as system-wide assets and not to dedicate them to specific states. On a system-wide basis, Dairyland states that it intends to meet the sum of all the goals of the various states without assigning specific resources to any state. Dairyland believes that other helpful steps would be:
  - a. For the various states to plan renewable resources as a region. Dairyland’s suggested approach would involve uniform definitions, reporting forms, and reporting timeframes.
  - b. Dairyland would like to see the creation of a much clearer definition of green tags, such as defining the attributes they represent, who “owns” them, who can market them, whether carbon credits can be separated from renewable credits; whether they can be sold multiple times by consecutive owners, and how long they exist.
  - c. Dairyland would like recognition that utilities plan for a system not for an individual state. Dairyland would also like streamlined and standardized reporting permitting utilities to show that they provide enough renewable energy to meet the requirements of all jurisdictions within their system rather than designating specific generators to a certain state.

- SMPA:
  - 1) Land Use/Permitting Issues:
    - a) SMPA states that it will continue to testify at planning and zoning hearing to ensure that local land use is protected without deterring renewable development.
- MMPA: Regarding MMPA's Coo Rapids Project, the utility had the following comment:

The development of the hydroelectric facility will include a public permitting process. By anticipating various parties' interests and responding to them, MMPA would expect to minimize any potential obstacle.

## 2. *A Renewable Energy Credits Tracking and Trading System*

The Department notes that expeditious development of a renewable energy credits tracking and trading system would address many of the concerns raised by the utilities. As discussed above, stakeholders have been pursuing such a system, accomplishing major milestones of obtaining agreement to move forward with surrounding states, developing the system's structure, and pursuing significant and complicated questions regarding: a) the best entity to house the system, b) the best entity to administer the system, and c) how to fund the system. The following discusses some of the benefits that could be achieved by such a system, along with specific recommendations based on what is known at this time.

As can be seen in Tables 3 and 9 of Appendix I, the majority of the utilities identified as being subject to the REO currently have a surplus of eligible renewable generation in the 2003-2004 period for meeting their 2005 objective. The current eligible generation as percentage of Minnesota retail sales of these utilities ranges from two to over five percent.<sup>11</sup> The utilities that currently do not have sufficient eligible generation to meet their 2005 generation are three of the smaller covered entities and are municipal power agencies. SMPA has in fact purchased 75,000,000 kWh equivalents of green tags. If eligible to count toward the REO, this green tag purchase would more than meet the utility's 2005 obligation and in fact represent approximately 2.7 percent of its Minnesota retail sales for the 2003-2004 period.

For example, the ability to track and trade renewable energy credits would address the following specific concerns raised by the reporting utilities:

1. The development of cost-effective renewable energy resources. A tracking and trading system for renewable energy credits is expected to facilitate the development of cost-effective renewable energy resources by: 1) reducing the cost of compliance, 2) reducing transaction costs for renewable transactions, and 3)

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<sup>11</sup> NWEC and Basin have eligible generation well over five percent of their Minnesota retail sales due to the small percentage Minnesota represents of total system retail sales, 0.29 and 6.21 percent, respectively.

providing utilities with an additional means with tradable renewable energy credits by which to meet their REO. By centralizing and standardizing the verification process for generation from renewable energy facilities, the tracking system is expected to reduce the redundancy that would be necessary otherwise for all parties in renewable transactions to verify the amount of renewable generation. It is also expected to assist in verifying the level of compliance by utilities with the REO, thereby reducing both transaction costs and compliance costs. In addition, since each unit of renewable generation from registered facilities participating in the tracking system are uniquely identified, the probability of double-counting is significantly reduced. Furthermore, the ability to trade renewable energy certificates verified by the tracking system provides utilities with the option of purchasing renewable energy credits in lieu of renewable energy and/or generation from a given facility and would therefore facilitate the ability for utilities as a group to capitalize on available economies of scale for the development of renewable energy.

2. Transmission: With the ability to trade renewable energy certificates, utilities that may be experiencing transmission constraints would have the option to purchase renewable energy credits, rather than building additional infrastructure to obtain renewable energy from constrained areas to satisfy their REO.

The presence of a renewable energy tracking system, such as M-RETS that is currently being developed by the Technical Review Committee, is critical to the effective development of a tradable renewable energy credits system. It would facilitate trading by streamlining the verification process and significantly reducing transaction costs.

One of the critical issues that needs to be addressed regarding the development of this system is the decision of how the system will be funded. The Technical Review Committee proposed guiding considerations for developing a fee structure for M-RETS which include:

1. M-RETS fee(s) should be kept as low as possible yet sufficient to cover anticipated operating costs.
2. If possible, fee(s) should be stable over the first five years to allow for proper planning by M-RETS participants and regulators.
3. All M-RETS beneficiaries, including renewable energy producers and renewable energy users, should contribute, with consideration given to keeping fees as low as practical for small users.
4. Fees should be equitable among different renewable market sectors (e.g., mandatory vs. voluntary programs or from one state to another).
5. To the extent that they are identifiable, participants causing additional system costs should pay those costs.

6. All participants should have an incentive to keep M-RETS costs low, and M-RETS costs should be at similar level with other tracking systems in the United States to discourage system switching.
7. The quantification and collection of fees should be transparent with minimum transaction costs to encourage use of the system.

The Technical Review Committee is discussing these and other principles in developing the M-RETS system. The Technical Review Committee will develop further the issue of how the system will be funded with the goal of bringing proposals to the Commission or elsewhere as needed for consideration. One option for consideration should be enabling legislation to grant assessment authority to the Commission for all participants in the tracking system.

## LIST OF ATTACHMENTS

- Attachment A: Minnesota Statutes 216B.1691.
- Attachment B: Case File Control Sheet of the Minnesota Public Utilities Commission, regarding implementation of the REO and Service List for the corresponding docket (E999/CI-03-869).
- Attachment C: Commission's *Notice of Comment Period and Procedures* issued January 30, 2004.
- Attachment D: Commission's June 1, 2004 *Initial Order Detailing Criteria and Standards for Determining Compliance with Minnesota Statute Section 216B.1691 and Requiring Customer Notification by Certain Cooperative, Municipal and Investor-Owned Distribution Utilities*.
- Attachment E: Commission's August 13, 2004 *Order After Reconsideration*.
- Attachment F: Commission's June 2, 2004 *Notice of Comment Periods and Further Procedures*.
- Attachment G: Commission's October 19, 2004 *Second Order Implementing Minn. Stat. 216B.1691, Opening Docket to Investigate Multi-State Program for Tracking and Trading Renewable Credits, and Requesting Periodic Updates from Stakeholder Group*.
- Attachment H: Information request sent to the utilities by the Department for the Legislative Report. Attachments H1 through H13 contain the utilities' responses to the Department's information request.
- Attachment H1: Response from Northern States Power Company, d/b/a Xcel Energy.
- Attachment H2: Response from Allete—Minnesota Power.
- Attachment H3: Response from Otter Tail Power Company.
- Attachment H4: Response from Alliant Energy—Interstate Power and Light Company.
- Attachment H5: Response from Northwestern Wisconsin Electric Company.
- Attachment H6: Response from Great River Energy.
- Attachment H7: Response from Minnkota Power Cooperative.
- Attachment H8: Response from Dairyland Power Cooperative.
- Attachment H9: Response from Basin Electric Power Cooperative.
- Attachment H10: Response from Southern Minnesota Municipal Power Agency.
- Attachment H11: Response from Western Minnesota Power Agency/Missouri River Energy Services.
- Attachment H12: Response from Minnesota Municipal Power Agency.
- Attachment H13: Response from Central Minnesota Municipal Power Agency.
- Attachment I: Data Tables.
- Attachment J: Letter from the Deputy Commissioner to Basin on the use of Prairie Winds Resources and Credits for Minnesota Green Pricing.

Minnesota Statutes 2004, Table of Chapters

## Attachment A

## Table of contents for Chapter 216B

**216B.1691 Renewable energy objectives.**

Subdivision 1. **Definitions.** (a) Unless otherwise specified in law, "eligible energy technology" means an energy technology that:

(1) generates electricity from the following renewable energy sources: solar; wind; hydroelectric with a capacity of less than 60 megawatts; hydrogen, provided that after January 1, 2010, the hydrogen must be generated from the resources listed in this clause; or biomass, which includes an energy recovery facility used to capture the heat value of mixed municipal solid waste or refuse-derived fuel from mixed municipal solid waste as a primary fuel; and

(2) was not mandated by Laws 1994, chapter 641, or by commission order issued pursuant to that chapter prior to August 1, 2001.

(b) "Electric utility" means a public utility providing electric service, a generation and transmission cooperative electric association, or a municipal power agency.

(c) "Total retail electric sales" means the kilowatt-hours of electricity sold in a year by an electric utility to retail customers of the electric utility or to a distribution utility for distribution to the retail customers of the distribution utility.

Subd. 2. **Eligible energy objectives.** (a) Each electric utility shall make a good faith effort to generate or procure sufficient electricity generated by an eligible energy technology to provide its retail consumers, or the retail customers of a distribution utility to which the electric utility provides wholesale electric service, so that:

(1) commencing in 2005, at least one percent of the electric utility's total retail electric sales is generated by eligible energy technologies;

(2) the amount provided under clause (1) is increased by one percent of the utility's total retail electric sales each year until 2015; and

(3) ten percent of the electric energy provided to retail customers in Minnesota is generated by eligible energy technologies.

(b) Of the eligible energy technology generation required under paragraph (a), clauses (1) and (2), not less than 0.5 percent of the energy must be generated by biomass energy technologies, including an energy recovery facility used to capture the heat value of mixed municipal solid waste or refuse-derived fuel from mixed municipal solid waste as a

primary fuel, by 2005. By 2010, one percent of the eligible technology generation required under paragraph (a), clauses (1) and (2), shall be generated by biomass energy technologies. An energy recovery facility used to capture the heat value of mixed municipal solid waste or refuse-derived fuel from mixed municipal solid waste, with a power sales agreement in effect as of May 29, 2003, that terminates after December 31, 2010, does not qualify as an eligible energy technology unless the agreement provides for rate adjustment in the event the facility qualifies as a renewable energy source.

(c) By June 1, 2004, and as needed thereafter, the commission shall issue an order detailing the criteria and standards by which it will measure an electric utility's efforts to meet the renewable energy objectives of this section to determine whether the utility is making the required good faith effort. In this order, the commission shall include criteria and standards that protect against undesirable impacts on the reliability of the utility's system and economic impacts on the utility's ratepayers and that consider technical feasibility.

(d) In its order under paragraph (c), the commission shall provide for a weighted scale of how energy produced by various eligible energy technologies shall count toward a utility's objective. In establishing this scale, the commission shall consider the attributes of various technologies and fuels, and shall establish a system that grants multiple credits toward the objectives for those technologies and fuels the commission determines is in the public interest to encourage.

Subd. 3. **Utility plans filed with commission.** (a) Each electric utility shall report on its plans, activities, and progress with regard to these objectives in its filings under section 216B.2422 or in a separate report submitted to the commission every two years, whichever is more frequent, demonstrating to the commission that the utility is making the required good faith effort. In its resource plan or a separate report, each electric utility shall provide a description of:

- (1) the status of the utility's renewable energy mix relative to the good faith objective;
- (2) efforts taken to meet the objective;
- (3) any obstacles encountered or anticipated in meeting the objective; and
- (4) potential solutions to the obstacles.

(b) The commissioner shall compile the information provided to the commission under paragraph (a), and report to the chairs of the house of representatives and senate committees with jurisdiction over energy and environment policy issues as to the progress of utilities in the state in increasing the amount of renewable energy provided to retail customers, with any recommendations for regulatory or legislative action, by January 15 of each odd-numbered year.

Subd. 4. **Renewable energy credits.** (a) To facilitate compliance with this section, the commission, by rule or order,

may establish a program for tradable credits for electricity generated by an eligible energy technology. In doing so, the commission shall implement a system that constrains or limits the cost of credits, taking care to ensure that such a system does not undermine the market for those credits.

(b) In lieu of generating or procuring energy directly to satisfy the renewable energy objective of this section, an electric utility may purchase sufficient renewable energy credits, issued pursuant to this subdivision, to meet its objective.

(c) Upon the passage of a renewable energy standard, portfolio, or objective in a bordering state that includes a similar definition of eligible energy technology or renewable energy, the commission may facilitate the trading of renewable energy credits between states.

Subd. 5. **Technology based on fuel combustion.** (a) Electricity produced by fuel combustion may only count toward a utility's objectives if the generation facility:

(1) was constructed in compliance with new source performance standards promulgated under the federal Clean Air Act for a generation facility of that type; or

(2) employs the maximum achievable or best available control technology available for a generation facility of that type.

(b) An eligible energy technology may blend or co-fire a fuel listed in subdivision 1, paragraph (a), clause (1), with other fuels in the generation facility, but only the percentage of electricity that is attributable to a fuel listed in that clause can be counted toward an electric utility's renewable energy objectives.

Subd. 6. **Electric utility that owns nuclear generation facility.** (a) An electric utility that owns a nuclear generation facility, as part of its good faith effort under this subdivision and subdivision 2, shall deploy an additional 300 megawatts of nameplate capacity of wind energy conversion systems by 2010, beyond the amount of wind energy capacity to which the utility is required by law or commission order as of May 1, 2003. At least 100 megawatts of this capacity are to be wind energy conversion systems of two megawatts or less, which shall not be eligible for the production incentive under section 216C.41. To the greatest extent technically feasible and economic, these 300 megawatts of wind energy capacity are to be distributed geographically throughout the state. The utility may opt to own, construct, and operate up to 100 megawatts of this wind energy capacity, except that the utility may not own, construct, or operate any of the facilities that are under two megawatts of nameplate capacity. The deployment of the wind energy capacity under this subdivision must be consistent with the outcome of the engineering study required under Laws 2003, First Special Session chapter 11, article 2, section 21.

(b) The renewable energy objective set forth in subdivision 2 shall be a requirement for the public utility that owns the

Prairie Island nuclear generation plant. The objective is a requirement subject to resource planning and least-cost planning requirements in section 216B.2422, unless implementation of the objective can reasonably be shown to jeopardize the reliability of the electric system. The least-cost planning analysis must include the costs of ancillary services and other necessary generation and transmission upgrades.

(c) Also as part of its good faith effort under this section, the utility that owns a nuclear generation facility is to enter into a power purchase agreement by January 1, 2004, for ten to 20 megawatts of biomass energy and capacity at an all-inclusive price not to exceed \$55 per megawatt-hour, for a project described in section 216B.2424, subdivision 5, paragraph (e), clause (2). The project must be operational and producing energy by June 30, 2005.

HIST: 2001 c 212 art 8 s 3; 2002 c 398 s 3; 1Sp2003 c 11 art 2  
s 3

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Docket No.: E999/CI-03-869

court of appeals case number: A04-1742

Attachment B

## CASE FILE CONTROL SHEET

Petitioner: In the Matter of Detailing Criteria and Standards for Measuring an Electric Utility's Good Faith Efforts in Meeting the Renewable Energy Objectives Under Minn. State 216B.1691

DOC Staff: White/O'Connell

PUC Staff: Commissioners AG

Carol Clark  
David \*Janet  
Susan

NO.	DOC. DATE:	DATE REC.:	DESCRIPTION/ DOC. TYPE
0			NOTHING RECEIVED - Docket request by Janet Gonzalez on 6/10/03
1	6/13/03		NOTICE OF COMMENT PERIOD ON PROCEDURES AND SCOPE - PUC
2	06/24/03	06/24/03	COMMENTS - Myer Shark
3	6/26/03	6/27/03	REQUEST TO UPDATE SERVICE LIST (Add William L. Glahn) - Dahlen, Berg & Co.
4	06/30/03	07/01/03	COMMENTS (Ritchie J. Sturgeon) - IPLC
5	07/01/03	07/02/03	COMMENTS (Mrg Simon) - Missouri River
6	07/01/03	07/02/03	COMMENTS (Bethany M. Owen) - MP
7	07/02/03	07/02/03	JOINT COMMENTS (Elizabeth Goodpaster) - Izaak Walton League of America, Minnesotans for an Energy-Efficient Economy, the Union of Concerned Scientists, and Minnesota Center for Environmental Advocacy
8	07/02/03	07/02/03	COMMENTS (Richard R. Lancaster) - Great River Energy
9	07/02/03	07/02/03	COMMENTS (Laura Bordelon) - Minnesota Chamber of Commerce
10	07/02/03	07/02/03	COMMENTS (James A. Alders) - Xcel
11	7/2/03	7/2/03	COMMENTS - DOC
12	07/02/03 (FAX)	07/02/03	COMMENTS (Bryan Morlock) - OTP (original 7/7/03)
13	07/02/03	07/03/03	COMMENTS (Larry Johnson) - Southern Minnesota Municipal Power Agency
14	7/7/03	7/9/03	REQUEST TO UPDATE SERVICE LIST (Add Lori Frisk-

			Thompson) - Utilities Plus
15	7/9/03		REQUEST TO SERVE INITIAL COMMENTS ON SERVICE LIST AND NOTICE OF REVISED REPLY COMMENT PERIOD - PUC
16	7/9/03		NOTICE OF OFFICIAL SERVICE LIST - PUC
17	7/11/03 (Email)	7/11/03	REQUEST TO UPDATE SERVICE LIST (Add Bill Grant) - Izaak Walton League of America
18	7/11/03 (Email)	7/11/03	REQUEST TO UPDATE SERVICE LIST (Add SaGonna Thompson) - Xcel
19	7/11/03		NOTICE OF UPDATED OFFICIAL SERVICE LIST - PUC
20	7/11/03	7/14/03	REQUEST TO UPDATE SERVICE LIST (Add Carl Nelson) - The Minnesota Project
21	07/02/03	07/16/03	COMMENTS (James A. Alders) - Xcel (corrected filing, see #10)
22	07/15/03	07/17/03	SERVING OF COMMENTS - Myer Shark
23	07/17/03	07/17/03	COMMENTS (Bryan D. Morlock) - OTP
24	7/17/03 (Fax)	7/17/03	REQUEST FOR EXTENSION FOR REPLY COMMENTS REGARDING PROCEDURES AND SCOPE - Izaak Walton League of America Midwest Office (Original 7/18)
25	7/15/03	7/18/03	AFFIDAVIT OF SERVICE - Missouri River
26	7/18/03		NOTICE OF FURTHER EXTENSION OF REPLY COMMENTS PERIOD - PUC
27	7/2/03	7/18/03	REFILING OF 7/2 COMMENTS (See #11) - DOC
28	07/18/03	07/21/03	COMMENTS (Mark B. Bring) - Minnkota Power Cooperative, Inc.
29	7/21/03	7/22/03	REQUEST TO UPDATE SERVICE LIST (Add J. Drake Hamilton) - ME3
30	07/23/03	07/24/03	NOT FILING REPLY COMMENTS, WANTS TO REMAIN ON SERVICE LIST - Myer Shark
31	07/23/03	07/24/03	REPLY COMMENTS - MP
32	7/24/03	7/24/03	REPLY COMMENTS - Xcel
33	7/24/03	7/24/03	REPLY COMMENTS - DOC
34	07/24/03	07/24/03	JOINT REPLY COMMENTS - Izaak Walton League, MN for an Energy-Efficient Economy, Union of Concerned Scientists, and MN Center for Environmental Advocacy
35	07/34/03	07/24/03	REPLY COMMENTS - Minnesota Chamber of Commerce
36	7/31/03		NOTICE OF COMMISSION MEETING - PUC
37	8/5/03		NOTICE OF RESCHEDULED COMMISSION MEETING - PUC
38	9/12/03		NOTICE OF COMMISSION MEETING - PUC
39	9/12/03 (Email)	9/15/03	REQUEST TO UPDATE SERVICE LIST (Add Carl Nelson) - The Minnesota Project
40	9/11/03	9/15/03	REQUEST TO UPDATE SERVICE LIST (Add Barbara Freese and Jeffrey Paulson) - Barbara Freese
41	9/15/03		NOTICE OF UPDATED OFFICIAL SERVICE LIST - PUC

42	9/15/03 (Email)	9/15/03	REQUEST TO UPDATE SERVICE LIST (Add Matt Little) - Sierra Club)
43	9/18/03 (Email)	8/18/03	REQUEST TO UPDATE SERVICE LIST (Add Trudy Richter - MRRA; Bill Heaney) - Richardson, Richter & Associates
44	9/23/03		NOTICE OF UPDATED OFFICIAL SERVICE LIST - PUC
45	9/23/03		BRIEFING PAPERS - PUC
46	10/6/03		REQUEST TO UPDATE SERVICE LIST (Add Dr. Kelly Strebig - University of MN) - PUC
47	10/10/03		NOTICE OF UPDATED OFFICIAL SERVICE LIST - PUC
48	10/16/03 (Email)	10/16/03	REQUEST TO UPDATE SERVICE LIST (Add Jan Pepper and Renee Landwehr) - Clean Power Markets
49	12/1/03 (Email)	12/1/03	REQUEST TO UPDATE SERVICE LIST (Add Carl Nelson) - The Green Institute
50	12/22/03		NOTICE OF UPDATED OFFICIAL SERVICE LIST - PUC
51	1/9/04		REQUEST TO UPDATE SERVICE LIST (Add Douglas M. Carnival) - PUC
52	1/20/04		NOTICE OF UPDATED OFFICIAL SERVICE LIST - PUC
53	1/22/04 (Email)	1/22/04	REQUEST TO UPDATE SERVICE LIST (Replace Jim Alders with Chris Clark) - Xcel
54	1/23/04	1/26/04	REQUEST TO UPDATE SERVICE LIST (Remove Myer Shark) - Myer Shark
55	1/29/04 (Email)	1/29/04	REQUEST TO UPDATE SERVICE LIST (Add Julie Ketchum) - Waste Management
56	1/30/04 (Email)	1/30/04	REQUEST TO UPDATE SERVICE LIST (Add Peter Grills and Richard Savelkoul) - O'Neill' Grills & O'Neill
57	1/30/04		NOTICE OF COMMENT PERIOD AND PROCEDURES - PUC
58	02/03/04		NOTICE OF UPDATED OFFICIAL SERVICE LIST - PUC
59	2/3/04 (Email)	2/3/04	REQUEST TO UPDATE SERVICE LIST (Add David W. Niles) - Dahlen, Berg & Co.
60	2/5/04 (Email)	2/9/04	REQUEST TO UPDATE SERVICE LIST (Add Ken Finholdt) - Owatonna Public Utilities
61	2/11/04	2/13/04	REQUEST TO UPDATE SERVICE LIST (Add Mark Lindquist) - Minnesota Project
62	2/13/04		NOTICE OF UPDATED OFFICIAL SERVICE LIST - PUC
63	02/11/04	02/17/04	COMMENTS (Gene Kramer) - East Central Solid Waste Commission
64	02/17/04	02/19/04	COMMENTS (Bryan Adams) - Elk River Municipal Utilities
65	2/18/04	2/20/04	COMMENTS (Julie Ketchum) - National Solid Waste Management Association (original 3/3/04)
66	2/17/04	2/20/04	COMMENTS (Donald E. Kom) - CMMPA

67	2/19/04	2/20/04	REQUEST TO UPDATE SERVICE LIST (Remove Ritchie Sturgeon; add Jennifer Moore and Scot McClure) - IPL
68	2/23/04 (Email)	2/23/04	REQUEST TO UPDATE SERVICE LIST (Add Erin Jordahl-Redlin) - Clean Water Action Alliance of Minnesota
69	02/20/04	02/24/04	COMMENTS (Henry Fischer) - East Central Energy
70	02/20/04	02/24/04	COMMENTS (Douglas R. Morris) - Crow Wing County
71	2/27/04		NOTICE OF UPDATED OFFICIAL SERVICE LIST - PUC
72	02/27/04	03/01/04	COMMENTS (Richard D. Casey) - Heartland Consumers Power District of Madison, South Dakota
73	02/27/04	03/01/04	COMMENTS (Trudy Richter) - Minnesota Resource Recovery Association
74	02/27/04	03/01/04	COMMENTS (Jennifer S. Moore) - IPLC
75	02/27/04	03/01/04	COMMENTS (Richard R. Lancaser) - Great River Energy
76	03/01/04	03/01/04	COMMENTS (Elizabeth Goodpaster) - Minnesota Center for Environmental Advocacy
77	03/01/04	03/01/04	COMMENTS (Ronald M. Giteck) - RUD/AG
78	3/1/04	3/1/04	COMMENTS - DOC
79 & 80 combined		03/01/04	COMMENTS IN FORM OF PETITION - Sierra Club
	03/01/04	03/01/04	COMMENTS (Matt Little) - Sierra Club
81	03/01/04	03/01/04	COMMENTS (Judy M. Poferl) - Xcel Energy
82	03/01/04	03/01/04	COMMENTS (Derick O. Dahlen) - Minnesota Municipal Power Agency
83	02/27/04	03/01/04	COMMENTS (Mark Lindquist) - The Minnesota Project
84	03/01/04	03/01/04	COMMENTS (Laura Bordelon and William A. Blazer) - Minnesota Chamber
85	03/01/04	03/01/04	COMMENTS (Bethany M. Owen) - MP
86	03/01/04	03/01/04	COMMENTS (Annette Henkel) - Minnesota Utility Investors
87	03/01/04	03/01/04 FAX	COMMENTS (Mrg Simon) - Missouri River (Original 3/2/04)
88	03/01/04	03/02/04	COMMENTS (Mark F. Dahlberg) - Northwestern Wisconsin Electric Company
89	03/01/04 FAX	03/01/04	COMMENTS (Larry W. Johnston) - Southern Minnesota Municipal Power Agency (original 3/3/04)
90	03/01/04 (FAX)	01/01/04	COMMENTS (Mike Eggl) - Basin Electric Power Cooperative (original 3/3/04)
91	03/01/04 (FAX)	03/01/04	COMMENTS (Bryan D. Morlock) - OTP (original 03/03/04)

92	02/28/04	03/01/04	COMMENTS (Erin Jordahl- Redlin) - Clean Water Action Alliance
93	03/01/04	03/01/04	COMMENTS - John and Laura Reinhardt
94	03/01/04 FAX	03/01/04	COMMENTS (Rob Dunnette) - Olmsted County Public Service (original 03/03/04) (see #109)
95	03/02/04 (FAX)	03/03/04	COMMENTS (Renee Landwehr and Jan Pepper) - Clean Power Markets, Inc. (original 03/05/04)
96	03/01/04	03/01/04	COMMENTS (Thomas J. Zaremba) - Dairyland Power (original 03/03/04)
97	3/3/04		NOTICE OF UPDATED OFFICIAL SERVICE LIST AND REQUEST TO SERVE INITIAL COMMENTS - PUC
98	03/02/04	03/04/04	ADDITIONAL COMMENTS (see 92) - Clean Water Action Alliance
99	03/02/04	03/05/04	AMENDED AFFIDAVIT OF SERVICE - Missouri River Ennergy
100	3/5/04	3/5/04	COMMENTS (3/1/04; Served on additional parties; See #78) - DOC
101	03/05/04	03/05/04	COMMENTS (Gregory T. Oxley) - MMUA
102	03/05/04	03/08/04	EXPANDED SERVICE LIST (see 89) - Southern Municipal Power Agency
103	03/08/04	03/09/04	CERTIFICATE OF SERVICE (see 93) - Laura A. Reinhardt
104	3/9/04	3/9/04	LETTER TO THE COMMISSION - DOC
105	03/09/04	03/11/04	SUPPLEMENTAL AFFIDAVIT OF SERVICE - Missouri River
106	3/5/04	3/11/04	REQUEST TO UPDATE SERVICE LIST (Update info for Darryl Tveitbakk) - Northern Municipal Power Agency
107	3/11/04 (Email)	3/11/04	REQUEST TO UPDATE SERVICE LIST (Add Matthew J. Schuerger) - Matt Schuerger
108	3/9/04	3/15/04	COMMENTS (3/1/04 served on additional parties - See #77) (Ronald M. Giteck) - RUD/AG
109	02/27/04	03/16/04	COMMENTS - Olmsted County (same as #94, served on additional service list, see imaging)
110	03/15/04	03/18/04	AFFIDAVIT OF SERVICE - Heartland Consumers
111	3/18/04	3/22/04	CERTIFICATION OF 2/27/04 COMMENTS SERVED ON 3/3/04 SERVICE LIST (See #74) - IPL
112	3/23/04		NOTICE OF UPDATED OFFICIAL SERVICE LIST - PUC
113	04/01/04	04/02/04	REPLY COMMENTS - Great River Energy
114	04/02/04	04/05/04	REPLY COMMENTS - Missouri River
115	04/05/04	04/05/04	REPLY COMMENTS - Clean Water Action Alliance
116	04/02/04	04/05/04	REPLY COMMENTS - MP
117	04/02/04	04/05/04	REPLY COMMENTS - IPL
118	04/05/04 (FAX)	04/05/04	REPLY COMMENTS - OTP (original 4/7/04)

119	4/5/04	4/5/04	REPLY COMMENTS - DOC
120	04/05/04 (FAX)	04/05/04	REPLY COMMENTS - Clean Power Markets, Inc. (original 04/06/04)
121	04/05/04	04/05/04	REPLY COMMENTS - Sierra Club North Star Chapter (Petitions sent to DOC for official record)
122	04/05/04	04/05/04	REPLY COMMENTS - The Minnesota Project
123	04/05/04	04/05/04	REPLY COMMENTS - Minnesota Chamber of Commerce
124	04/02/04	04/05/04	REPLY COMMENTS - Minnesota Public Interest Research Group
125	04/05/04	04/05/04	REPLY COMMENTS - Minnesota Center for Environmental Advocacy
126	04/05/04	04/05/04	REPLY COMMENTS - Xcel
127	04/05/04 (FAX)	04/05/04	REPLY COMMENTS - Dairyland Power Cooperative (original 4/7/04)
128	04/05/04	04/05/04	REPLY COMMENTS - G. McNeilus Wind and GM, LLC
129	04/05/04	04/06/04	REPLY COMMENTS - Minnesota Municipal Power Agency
130	04/05/04 (FAX)	04/06/04	REPLY COMMENTS - Southern Minnesota Power Agency (original 04/07/04)
131	4/6/04 (Email)	4/6/04	REQUEST TO UPDATE SERVICE LIST (Remove Darek Dahlen) - Dahlen, Berg & Co.
132	4/7/04	4/12/04	ORIGINAL LETTER TO REPLY COMMENTS - Southern Minnesota Power Agency (See #130)
133	04/12/04	04/13/04	SECOND ROUND OF REPLY COMMENTS - MP
134	4/14/04		NOTICE OF UPDATED OFFICIAL SERVICE LIST - PUC
135	04/15/04	04/16/04	COMMENTS (Julie Ketchum) - National Solid Wastes Management Association
136	4/22/04		NOTICE OF COMMISSION MEETING - PUC
137	5/3/04	5/3/04	REQUEST TO UPDATE SERVICE LIST (Add Dean Sedgwick) - Itasca Power Company
138	5/4/04		BRIEFING PAPERS - PUC
139	5/10/04		NOTICE OF UPDATED OFFICIAL SERVICE LIST - PUC
140	5/10/04 (Email)	5/10/04	REQUEST TO UPDATE SERVICE LIST (Add Ashley Houston) - APX Inc.
141	05/13/04	05/17/04	RESPONSE - OTP
142	6/1/04		<b>INITIAL ORDER DETAILING CRITERIA AND STANDARDS FOR DETERMINING COMPLIANCE WITH MINN. STAT. § 216B.1691 AND REQUIRING CUSTOMER NOTIFICATION BY CERTAIN COOPERATIVE, MUNICIPAL, AND INVESTOR-OWNED DISTRIBUTION UTILITIES - PUC</b>
143	6/2/04		NOTICE OF COMMENT PERIODS AND FURTHER PROCEDURES - PUC
144	6/4/04	6/7/04	REQUEST TO UPDATE SERVICE LIST (Replace Bethany Owens

			with Christopher D. Anderson) - MP
145	6/8/04 (Email)	6/8/04	REQUEST TO UPDATE SERVICE LIST (Add Sandra Hofstetter - Energy Regulatory Consultant) - MN Chamber of Commerce
146	6/11/04		NOTICE OF UPDATED OFFICIAL SERVICE LIST - PUC
147	6/18/04	6/18/04	PETITION FOR RECONSIDERATION - Sierra Club (North Star Chapter)
148	06/18/04	06/18/04	PETITION FOR RECONSIDERATION, AND FOR AMENDMENT OF INITIAL ORDER - Izaak Walton League of America
149	06/21/04	06/21/04	PETITION FOR RECONSIDERATION - Minnesota Resource Recovery Association
150	06/21/04 (FAX)	06/22/04	LETTER OF ABEYANCE AND CLARIFICATION - Izaak Walton League of America
151		06/22/04	NOTICE OF COMMENT PERIOD ON ANSWERS TO PETITONS FOR RECONSIDERATION - PUC
152	06/21/04	06/23/04	COMMENTS (William Grant) - Izaak Walton League of America
153	06/28/04	06/29/04	COMMENTS (Erin Jordahl- Redlin) - Clean Water Action Alliance (Sierra Club)
154	06/28/04	06/29/04	COMMENTS (Erin Jordahl- Redlin) - Clean Water Action Alliance (Izaak Walton League of America)
155	06/28/04	06/30/04	RESPONSE - NSWMA (ORIGINAL 7/1/04)
156	06/28/04	06/30/04	REPLY - The Minnesota Project
157	06/29/04	06/30/04	RESPONSE - MP
158	06/29/04	06/30/04	COMMENTS AND RESPONSES - MP
159	06/30/04 (FAX)	07/01/04	COMMENTS (Mike Eggl) - Basin Electric Power Cooperative (Original 7/01/04)
160	06/30/04	07/01/04	COMMENTS (Jennifer S. Moore) - IP
161	06/29/04	07/01/04	COMMENTS (Julie Ketchum) - NSWMA
162	06/30/04	07/01/04	COMMENTS (Mrg Simon) - Missouri River Energy
163	06/30/04	07/01/04	ANSWER - Missouri River Energy
164	6/30/04	7/1/04	COMMENTS - DOC
165	07/01/04	07/01/04	REPLY COMMENTS - Great River Energy
166	07/01/04	07/01/04	COMMENTS (Richard R. Lancaster) - Great River Energy
167	07/01/04 (FAX)	07/01/04	COMMENTS (Bryan D. Morlock) - OTP (original 07/02/04)
168	07/01/04	07/01/04	COMMENTS (Sandra L. Hoffstetter) - Chamber of Commerce
169	07/01/04	07/01/04	ANSWERS - Chamber of Commerce
170	06/18/04	07/01/04	COMMENTS (Michelle Rosier) - Sierra Club North Star Chapter
171	07/01/04 (FAX)	07/01/04	COMMENTS (Mary Beth Peranteau) - Dairyland Power Coop. (original 07/06/04)

172	07/01/04 (FAX)	07/01/04	JOINT COMMENTS (Mark Lindquist) - The Minnesota Project and Concerned River Valley Citizens (original 7/02/04)
173	07/01/04	07/01/04	RESPONSE - Minnesota Center for Environmental Advocacy
174	07/01/04	07/01/04	COMMENTS (James Alders) - Xcel
175	07/01/04	07/01/04	RESPONSE - Xcel
176	07/01/04	07/01/04	COMMENTS (David W. Niles) - Minnesota Municipal Power Agency
177	7/1/04	7/1/04	COMMENTS - DOC
178	7/2/04 (Email)	7/2/04	REQUEST TO UPDATE SERVICE LIST (Remove Judy Pofert) - Xcel
179	07/02/04 (FAX)	07/02/04	ANSWER - Minnkota Power (original 07/06/04)
179a	7/6/04		NOTICE OF UPDATED OFFICIAL SERVICE LIST - PUC
180	7/6/04 (Email)	7/6/04	REQUEST TO UPDATE SERVICE LIST (Add Bill Neuman - CRVC; Kristen Eide- Tollefson - CURE; George Crocker - NAWO) - C.U.R.E.
181	06/18/04	07/08/04	COMMENTS (Michelle Rosier) - Sierra Club North Star Chapter
182	07/12/04	07/14/04	REQUEST BY RICHARD D. CASEY TO BE REMOVED FROM SERVICE LIST - Attorney, Lynn, Jackson schultz & Lebrun, P.C.
183	07/15/04		NOTICE OF UPDATED OFFICIAL SERVICE LIST - PUC
184	07/19/04	07/20/04	REPLY COMMENTS - Great River Energy
185	7/20/04	7/20/04	REPLY COMMENTS - DOC
186	07/20/04	07/20/04	REPLY COMMENTS - Minnesota Center for Environmental Advocacy
187	07/20/04	07/20/04	NOTICE OF COMMENT PERIODS AND FURTHER PROCEDURES - Minnesota Chamber
188	07/20/04	07/20/04	REPLY COMMENTS - The Minnesota Project
189	07/20/04	07/20/04	COMMENTS (James Alders) - Xcel
190	07/20/04 (FAX)	07/21/04	REPLY COMMENTS - Missouri River Energy Services (original 7/21/04)
191	07/20/04 (FAX)	07/21/04	REPLY COMMENTS - Dairyland Power Cooperative (ORIGINAL 7/22/04)
192	07/20/04	07/21/04	REPLY COMMENTS - Clean water Action Alliance of Minnesota
193	7/23/04		NOTICE OF COMMISSION MEETING - PUC
194	7/27/04		NOTICE OF UPDATED OFFICIAL SERVICE LIST - PUC
195	7/28/04 (Email)	7/28/04	REQUEST TO UPDATE SERVICE LIST (Remove Matt Little) - Sierra Club
196	8/4/04		REQUEST TO UPDATE SERVICE LIST (Replace Ken Finholdt with Roger Warehime - Owatonna Public Utilities) - PUC
197	8/5/04		NOTICE OF UPDATED OFFICIAL SERVICE LIST - PUC

198	8/5/04		BRIEFING PAPERS - PUC
199	8/13/04		<b>ORDER AFTER RECONSIDERATION - PUC</b>
200	9/3/04		NOTICE OF COMMISSION MEETING - PUC
201	9/8/04		REVISED NOTICE OF COMMISSION MEETING - PUC
202	09/15/04	09/16/04	<b>WRIT OF CERTIORARI - Izaak Walton League, Minnesotans for an Energy Efficient-Economy and the Minnesota Center for Environmental Advocacy</b>
203	09/16/04	09/21/04	NOTICE OF CASE FILING - Court of Appeals (Frederick K. Grittner)
204	9/21/04		BRIEFING PAPERS - PUC
205	10/06/04	10/08/04	NOTICE OF APPEARANCE - Great River Energy, Interstate Power and Light, MP, OTP, Southern Minnesota Municipal Power and Xcel
206	10/19/04		<b>SECOND ORDER IMPLEMENTING MINN. STAT. §216B.1691, OPENING DOCKET TO INVESTIGATE MULTI-STATE PROGRAM FOR TRACKING AND TRADING RENEWABLE CREDITS, AND REQUESTING PERIODIC UPDATES FROM STAKEHOLDER GROUP - PUC</b>
207	10/22/04	11/02/04	RESPONSE - PUC/AG
		11/23/04	TRANSCRIPT - Staff Briefing, Oral Arguments, Deliberations, May 4, 2004, COPY

In the Matter of Detailing Criteria  
and Standards for Measuring an  
Electric Utility's Good Faith Efforts  
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10/15/04  
E999/CI-03-869

Page 6

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STATE OF MINNESOTA PUBLIC UTILITIES COMMISSION

January 30, 2004

To: Service List

From: Burl W. Haar  
Executive Secretary

A handwritten signature in black ink, appearing to be "Burl W. Haar", is written over the printed name and title.

Re: **In the Matter of Detailing Criteria and Standards for Measuring an Electric Utility's Good Faith Efforts in Meeting the Renewable Energy Objectives (REO) Under Minn. Stat. §216B.1691**

**Docket No. E-999/CI-03-869**

**NOTICE OF COMMENT PERIOD AND PROCEDURES**

On June 13, 2003, the Minnesota Public Utilities Commission (Commission) issued a notice soliciting comments on the scope of issues to be addressed in this docket and the procedures for doing so. On July 9 and 18, 2003, the Commission issued notices on reply comment periods.

On September 23, 2003, the Commission met to consider the scope and procedural issues. The Commission directed its staff to issue a notice requesting comments on certain questions and issues. The Commission will address the following issues in the first phase of the proceeding:

- Establish a list of covered entities;
- Clarify and interpret what generation counts toward the REO and related issues;
- Detail the criteria and standards by which the Commission will measure an electric utility's efforts to meet the renewable energy objectives, including criteria and standards that protect against undesirable impacts on the reliability of the utility's system and economic impacts on the utility's ratepayers and that consider technical feasibility.

A more detailed list of issues and questions for parties to address is attached to this notice. Parties may also address other issues relevant to this inquiry.

The Commission will accept written comments on the above issues through **Monday, March 1** and reply comments through **Monday, April 5, 2004**. In reply comments, parties may also wish to address whether further information is needed before the Commission makes a decision on one or more of these issues, and if so, what further procedures would be appropriate.

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The Commission will reserve the following issues for the next phase of this proceeding:

- Determine whether specific REO criteria and standards need to be developed for Xcel.
- Provide for a weighted scale of how energy produced by various eligible energy technologies shall count toward a utility's objective, and establishes a system that gives multiple credits for technologies and fuels the Commission determines are in the public interest to encourage.
- Develop reporting requirements and schedules for resource plans and REO reports.

Questions regarding this matter may be directed to Janet González at 651-296-1336 or Susan Mackenzie at 651-296-8994.

### **NOTICE OF TRADABLE CREDITS WORKSHOP**

The Minnesota Public Utilities Commission, the Minnesota Department of Commerce and the National Council on Electricity Policy is sponsoring The Midwest Tradable Renewable Credits Workshop on **Tuesday, February 24, 2004 from 8:00 a.m. to 5:00 p.m** in the Commission's Large Hearing Room. You should have already received information about this workshop.

You can find more information on the Commission's website at [www.puc.state.mn.us](http://www.puc.state.mn.us) under "News" and may register by contacting Mani Heu at 651-296-6902 or at [mani.heu@state.mn.us](mailto:mani.heu@state.mn.us).

**This document is available in alternative formats (i.e., large print or audio tape) by calling (651) 297-4596 (voice), (651) 297-1200 (TTY), or 1-800-627-3529 (TTY relay service).**

Attachment

**QUESTIONS FOR THE FIRST PHASE OF DETAILING STANDARDS AND OBJECTIVES FOR MEASURING AN ELECTRIC UTILITY'S GOOD FAITH EFFORTS IN MEETING THE RENEWABLE ENERGY OBJECTIVES UNDER MINN. STAT. §216B.1691**

**I. *List of covered entities***

- A. Is the list below an accurate and complete list of the electric utility entities subject to the requirements of Minn. Stat. §216B.1691?**
- B. If not, what corrections or clarifications are needed?**

*Note:* Under Minn. Stat. §216B.1691, subd. 1 (b), "Electric utility" means a public utility providing electric service, a generation and transmission cooperative electric association, or a municipal power agency. Commission staff believes the following fit this definition:

*Public utilities providing electric service:*

Northern States Power Company d/b/a Xcel Energy  
Minnesota Power  
Otter Tail Power  
Interstate Power & Light Company  
Northwestern Wisconsin Electric Company

*Generation & transmission cooperative electric associations:*

Great River Energy  
Minnkota Power Cooperative  
Dairyland Power Cooperative  
Basin Electric Power Cooperative  
East River Electric Power Cooperative  
L & O Power Cooperative

*Municipal power agencies:*

Southern Minnesota Municipal Power Agency  
Missouri River Energy Services/Western Minnesota Municipal Power Agency  
Northern Municipal Power Agency  
Minnesota Municipal Power Agency  
Central Minnesota Municipal Power Agency  
Heartland Consumers Power District

II. ***Clarifications and Interpretations of the Renewable Energy Objectives***

- A. **Should generation sources outside Minnesota count towards the REO?**
- B. **Should energy generated for "green pricing" programs under Minn. Stat. §216B.169, or for other green pricing programs for retail electric consumers in Minnesota, count towards the REO? Are there other projects that would otherwise qualify as eligible technologies that should be excluded from counting?**
- C. **What biomass technologies and fuels should qualify as eligible technologies?**

*Note:* Parties may wish to look at the definitions of biomass contained in Minn. Stat. §§ 216B.2422, subd. 1 (c); 216C.051, subd. 5(g) (1); and 216B.2424, subds. 1 and 6 (f) and may want to comment specifically on whether land-fill gas, crop-based fuels such as bio-diesel, and agricultural digester technologies should be included

- D. ***Biomass percentage requirement under Minn. Stat. §216B.1691, subd. 2 (b)***
1. **Should the Commission interpret this subdivision to mean that at least one percent of the ten percent REO must be generated by biomass energy technologies by 2010, or to mean that at least one percent of total retail electricity must be generated by biomass technologies by 2010?**
  2. **Should biomass technologies be permitted to be used to meet the REO beyond the one percent minimum requirement?**
- E. **Should the phrase "hydroelectric with a capacity of less than 60 megawatts" be interpreted to apply to each unit at a plant site, or the site taken as a whole?**

*Note:* Parties may wish to look at the definition of Large Energy Facility under Minn. Stat. §216B.2421, subd. 2 (1) for possible guidance.

- F. ***Renewable Energy Credits***
1. **Should the Commission establish a renewable energy (tradable) credit system, as permitted under Minn. Stat. §216B.1691, subd. 4?**
  2. **If so, should it be coordinated with a tradable credit system permitted under Minn. Stat. §216B.169, subd, 3(b)?**
  3. **To what extent, if at all, could renewable energy trading/credit systems under the above statutes rely on "green tags" and/or other programs and products that already exist nationally or in neighboring states?**

*Note:* The February 24, 2004 Workshop may help provide insight in these matters.

### ***III. Development of Criteria and Standards***

#### ***A. Good Faith Efforts***

- 1. How should "good faith effort" be defined? Should the Commission use the same criteria and standards as are used in evaluating resource plans under Minn. Rules, Part 7843.0500, subp. 3? Are there additional or alternative standards?**
- 2. How should the criteria and standards fit with the utility's need to add capacity and/or energy? How should cost factors be considered?**
- 3. If there are inconsistencies between the REO standards and criteria and the results of a utility's resource plan, certificate of need, or other requirements, how should that be considered?**
- 4. Is it necessary or reasonable to set different criteria and standards for utilities constructing new facilities versus purchasing the energy/capacity from others (or purchasing credits if that is permitted)? What specific actions or milestones should be measured?**
- 5. How should the recognition that some resources may occur in "lumpy" increments be taken into account in measuring whether the year-by-year objectives are being met?**
- 6. How should situations arguably outside the utility's control, such as weather, contractors delay, etc. be considered?**
- 7. Are there special circumstances related to the acceleration of the biomass objectives that the Commission should take into account?**

#### ***B. Reliability, Economic Impacts and Technical Feasibility***

- 1. For reliability impacts, how should the Commission consider processes in place by MISO, MAPP, NERC, or other similar organizations? Are there other criteria and standards that should be used?**
- 2. For economic impacts on utility customers, should the Commission encourage or require competitive bidding to be used? What other methods would help ensure economic impacts are minimized? How should transmission costs and losses be considered?**

3. **What information is necessary to ensure the proposed projects are technically feasible?**
4. **How, if at all, should the pending study of wind on Xcel's system required under 2003 legislation be considered in looking at technical feasibility and reliability? Can it be generalized to other resources and utilities?**
5. **How should the Commission weigh considerations of reliability, economic impact, and feasibility when developing criteria and evaluating compliance?**

IV. *Oversight of Implementation of the Renewable Energy Objectives*

- A. **How should the Commission verify that energy counted towards the REO is generated by eligible technologies? Should the Commission require a certification and/or verification program independent of the utilities?**
- B. **How should the Commission verify that energy generated for the Minnesota REO program is not "double-counted" by also being sold as renewable energy in the wholesale market or at retail in some other jurisdiction?**
- C. **How should the Commission assure that renewable energy generated from a facility that is providing energy to more than one utility or to more than one jurisdiction is appropriately allocated?**
- D. **How should the actual kWh generated be tracked? Should the Commission allow some sort of a banking system or other mechanism to allow make-up or carry-over of energy from one time period to the next?**

STATE OF MINNESOTA)  
  )SS  
COUNTY OF RAMSEY )

AFFIDAVIT OF SERVICE

I, Margie DeLaHunt, being first duly sworn, deposes and says:

That on the 30th day of January, 2004 she served the attached  
NOTICE OF COMMENT PERIOD AND PROCEDURES.

MNPUC Docket Number: E-999/CI-03-869

XX By depositing in the United States Mail at the City of St. Paul, a true and correct copy thereof, properly enveloped with postage prepaid

XX By personal service

XX By inter-office mail

to all persons at the addresses indicated below or on the attached list:

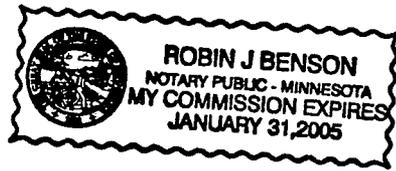
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Ann Pollack  
David Jacobson  
Susan Mackenzie  
AG  
Clark Kaml  
Janet Gonzalez  
Kathy Aslakson - DOC  
Julia Anderson - OAG  
Curt Nelson - OAG

Margie DeLaHunt

Subscribed and sworn to before me,

a notary public, this 2 day of

February, 2004  
Robin Benson  
Notary Public



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BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

LeRoy Koppendraye  
Marshall Johnson  
Ken Nickolai  
Phyllis A. Reha

Chair  
Commissioner  
Commissioner  
Commissioner

Attachment D

In the Matter of Detailing Criteria and Standards for Measuring an Electric Utility's Good Faith Efforts in Meeting the Renewable Energy Objectives Under Minn. Stat. § 216B.1691

ISSUE DATE: June 1, 2004

DOCKET NO. E-999/CI-03-869

INITIAL ORDER DETAILING CRITERIA AND STANDARDS FOR DETERMINING COMPLIANCE WITH MINN. STAT § 216B.1691 AND REQUIRING CUSTOMER NOTIFICATION BY CERTAIN COOPERATIVE, MUNICIPAL, AND INVESTOR-OWNED DISTRIBUTION UTILITIES

**PROCEDURAL HISTORY**

**I. Introduction and Factual Background**

In 2001, the Minnesota Legislature passed Minn. Stat. § 216B.1691, setting renewable energy objectives for Minnesota investor-owned electric utilities, generation and transmission cooperatives, and municipal power agencies. The statute required these utilities, cooperatives, and power agencies (hereinafter, "utilities") to make good faith efforts to generate or otherwise secure enough electricity from qualifying renewable energy technologies to represent 10% of total retail electric sales by the year 2015.

In 2003, the Legislature amended the statute to require the Commission to supervise and facilitate these good faith efforts. Among other things, the 2003 amendments required the Commission to issue an initial Order, and subsequent Orders as necessary, doing the following things:

- Detailing criteria and standards for measuring a utility's efforts to meet the renewable energy objectives and determining whether the utility has met the good faith requirement.
- Detailing criteria and standards that protect against undesirable impacts on the reliability of the utility's system.
- Detailing criteria and standards that protect against undesirable economic impacts on the utility's ratepayers.
- Detailing criteria and standards that consider technical feasibility.

- Providing for a weighted scale that determines how energy generated by different technologies counts toward a utility's objective and that grants multiple credits for technologies and fuels that the Commission finds it in the public interest to encourage.

The 2003 amendments also authorized the Commission to establish a program for tradable credits for electricity generated by eligible technologies and provided guidelines for any tradable credits system the Commission might establish.

## **II. Commission Proceedings to Date**

### **A. The Comment Process**

On June 13, 2003, the Commission issued a notice seeking comments from interested persons on the appropriate procedural framework for this case. On July 9 and 18, 2003, the Commission issued notices setting reply comment periods.

The Commission determined, after reviewing the comments filed on procedural and scoping issues, that this case had too many interdependent and sequential issues to resolve in a single Order. The Commission therefore decided to seek comments on the most fundamental issues, to address those issues in an initial Order, and then to promptly resolve remaining issues based on that decisional foundation.

On January 30, 2004, the Commission issued a notice seeking substantive comments on the issues it intended to address in the first Order in this case. Initial comments were due on March 1 and reply comments on April 5. The following persons and organizations filed comments in response to the notice:

#### *Investor-Owned Utilities*

- Interstate Power Company
- Northern States Power Company, d/b/a Xcel Energy
- Minnesota Power
- Otter Tail Power Company
- Northwestern Wisconsin Electric Company

#### *Electric Cooperatives*

- Great River Energy
- Dairyland Power Cooperative
- Basin Electric Power Cooperative
- East Central Energy

#### *Municipal Electric Entities*

- Missouri River Energy Services/Western Minnesota Municipal Power Agency
- Southern Minnesota Municipal Power Agency
- Central Minnesota Municipal Power Agency
- Minnesota Municipal Power Agency
- Minnesota Municipal Utilities Association
- Heartland Consumers Power District
- Elk River Municipal Utilities

### *State Agencies*

- Minnesota Department of Commerce
- Residential and Small Business Utilities Division of the Office of the Attorney General

### *Units of Local Government*

- East Central Solid Waste Commission
- Crow Wing County
- Olmsted County

### *Environmental/Community Organizations*

- Izaak Walton League of America-Midwest Office
- Minnesotans for an Energy-Efficient Economy
- Minnesota Center for Environmental Advocacy
- The Minnesota Project
- Communities United for Responsible Energy
- North American Water Office
- Rural Minnesota Energy Task Force
- Concerned River Valley Citizens
- North Star Chapter of the Sierra Club
- Clean Water Action Alliance
- Minnesota Public Interest Research Group

### *Other Organizations, Companies, and Individuals*

- National Solid Wastes Management Association
- Minnesota Resource Recovery Association
- Minnesota Chamber of Commerce
- Minnesota Utility Investors
- Clean Power Markets
- McNeilus Wind, LLC and GM, LLC
- Laura and John Reinhardt

#### **B. Tradable Credits Workshops**

On February 24, 2004, the Commission, the Minnesota Department of Commerce, and the National Council on Electricity Policy sponsored the Midwest Tradable Renewable Credits Workshop, an all-day conference attended by over 100 people. A second workshop, sponsored by the same organizations, is scheduled for June 16 in Madison, Wisconsin.

## **FINDINGS AND CONCLUSIONS**

### **I. The Issues**

The issues on which the Commission sought comment in the first round of substantive comments are set forth below, together with a conservation issue raised in the comments.

- Which entities are covered by the statute?
- Does energy from out-of-state facilities count toward the 10% goal?
- Which biomass technologies count as eligible technologies?
- Does the 60-megawatt cap on eligible hydro facilities apply per-unit or per-facility?
- How should the Commission factor in the recognition that some resources may occur in “lumpy” increments when measuring whether the year-by-year objectives are being met?
- Does the 1% goal for biomass technologies mean 1% of the energy generated by eligible technologies or 1% of total energy sales?
- Does energy used for green pricing programs count toward the 10% goal?
- Does energy saved through conservation count toward the 10% goal?
- What criteria and standards should be used in determining whether a utility has met the "good faith effort" statutory requirement?
- What systems and procedures are needed to track and verify compliance?

These issues will be addressed in turn.

## **II. Entities Subject to the Statute**

One of the issues on which the Commission sought comments was which entities are covered by the renewable energy objectives statute. The notice soliciting comments listed 17 entities as those probably covered and requested comments and corrections. Comments fell into three categories.

### **A. Heartland Consumers Power District**

Heartland Consumers Power District, listed in the notice, stated that it was not a covered entity because it was not a public utility or a municipal power agency under Minnesota law. No one challenged this claim, and the Commission concurs. Heartland will not be subject to the renewable energy objectives of Minn. Stat. § 216B.1691.

### **B. Northwestern Wisconsin Electric**

Northwestern Wisconsin Electric requested an exemption from Minn. Stat. § 216B.1691 on grounds that it complies with Wisconsin’s renewable portfolio standards, which are similar to Minnesota’s renewable energy objectives. Further, the company has fewer than 100 customers in Minnesota, making it potentially burdensome to comply with Minnesota-specific renewable energy requirements.

The Commission lacks the authority to grant an exemption from Minn. Stat. § 216B.1691 or any other statute. The statute does give the Commission flexibility in applying it, however, by requiring good faith efforts instead of specific outcomes and by authorizing the Commission to

determine whether utilities are acting in good faith. The Commission concludes that the company's small size and its compliance with Wisconsin's renewable portfolio standards will be significant factors in evaluating the good faith of its efforts to meet the renewable energy objectives.

### **C. Municipal Utilities**

Some commentators argued that municipal utilities, especially those that do not have full-requirements contracts with municipal power agencies (which are covered under the statute), should be subject to the renewable energy objectives statute. They emphasized the need for even-handed application of state energy policy and the importance of promoting the use of renewable technologies by self-generating municipal utilities.

Whatever the merits of including municipal utilities within the class of utilities subject to the renewable energy objectives, the Legislature has decided against it. The Commission lacks both the authority and the inclination to second-guess that decision.

### **D. Covered Entities**

The Commission finds that the entities subject to the renewable energy objectives statute are the 16 entities listed below:

#### ***Public Utilities Providing Electric Service***

- Northern States Power Company d/b/a Xcel Energy
- Minnesota Power
- Otter Tail Power
- Interstate Power & Light Company
- Northwestern Wisconsin Electric Company

#### ***Generation and Transmission Cooperative Electric Associations***

- Great River Energy
- Minnkota Power Cooperative
- Dairyland Power Cooperative
- Basin Electric Power Cooperative
- East River Electric Power Cooperative
- L & O Power Cooperative

#### ***Municipal Power Agencies***

- Southern Minnesota Municipal Power Agency
- Western Minnesota Municipal Power Agency/Missouri River Energy Services
- Northern Municipal Power Agency
- Minnesota Municipal Power Agency
- Central Minnesota Municipal Power Agency

### **III. Renewable Energy Generated Outside the State**

One of the issues on which the Commission sought comments was whether energy from out-of-state facilities should count toward meeting the renewable energy objectives.

#### **A. The Comments**

The Minnesota Project, Communities United for Responsible Energy, North American Water Office, the Rural Minnesota Energy Task Force, and Concerned River Valley Citizens argued that out-of-state generation should not count toward meeting the renewable energy objectives on grounds that in-state generation provides greater environmental and economic benefits.

These commentators were especially concerned about permitting tradable renewable credits for out-of-state generation, claiming that this could permit utilities to meet their objectives with paper transactions that did not benefit the Minnesota environment, did not contribute to in-state economic development, and did not provide protection against volatility in the price of natural gas and other fossil fuels.

Laura and John Reinhardt opposed counting out-of-state generation on grounds that this generation requires long-distance, high-voltage transmission lines, which pose issues of their own, and on grounds that small-scale, community-based generation located near load is the most environmentally-friendly alternative.

The other commentators recommended counting out-of-state generation, emphasizing cost issues and the fact that utilities secure and dispatch generating resources on a system-wide basis.

#### **B. Commission Action**

The Commission finds that out-of-state renewable generation used to serve Minnesota customers counts toward meeting utilities' renewable energy objectives, for four main reasons.

First and most compelling, the statute does not by its terms exclude out-of-state generation, nor does it articulate underlying policy goals that support excluding out-of-state generation. In fact, by specifically permitting the Commission to authorize interstate trading of renewable energy credits, the Legislature appears to have approved using out-of-state resources to meet renewable energy goals.

Second, utilities routinely rely on out-of-state generation to meet Minnesota demand, since they do plan resource acquisitions on a system-wide basis and since they increasingly serve customers in more than one state. It would be anomalous, to say the least, to permit a Minnesota utility to use out-of-state coal generation to serve Minnesota customers but not to recognize out-of-state renewable generation as a meaningful part of its portfolio.

Third, refusing to recognize out-of-state renewable generation could significantly increase the cost of meeting the renewable energy objectives, raising rates for ratepayers and perhaps causing utilities to miss the statutory 10% target.

Fourth, environmentally-friendly generation need not be sited in Minnesota to produce positive environmental benefits within the state. This generation might displace more polluting generation located within the state, for example. And more fundamentally, Minnesota's ecosystem is inextricably connected with the ecosystems of neighboring states, making regional environmental advances beneficial to Minnesotans.

Given the Commission's conclusion that out-of-state generation counts toward meeting the renewable energy objectives, the Commission need not reach the argument that excluding such energy would violate the Commerce Clause of the United States Constitution.

#### **IV. Eligible Biomass Technologies**

##### **A. The Comments**

Another issue on which comments were sought was which biomass technologies should count toward meeting the renewable energy objectives. Minnesota statutes define biomass differently for different purposes, and the renewable energy objectives statute defines it only in terms of clarifying its application to mixed municipal solid waste. The Commission solicited comments to ensure that any grounds for limiting recognition to certain technologies or fuels were adequately explored.

Nearly all commentors urged the Commission to take an inclusive approach at this stage in the development of biomass technologies. There was also no controversy about the proposal to exclude peat from the list of eligible fuels, as advocated by the Minnesota Project, Communities United for Responsible Energy, North American Water Office, the Rural Minnesota Energy Task Force, Concerned River Valley Citizens, and the North Star Chapter of the Sierra Club.

The Sierra Club also offered detailed recommendations on restricting the conditions under which whole trees, logging waste, recyclable waste paper, and crops should be treated as eligible fuels. And the Club opposed treating peat and municipal waste as eligible fuels.

##### **B. Commission Action**

The Commission finds that it is important to take an inclusive approach to counting biomass generation toward meeting the renewable energy objectives at this early stage in the development of biomass technologies. At this stage, limiting recognition to certain technologies or fuels carries the risk of stifling the research and innovation required to determine biomass's true potential as a cost-effective, environmentally sound, reliable alternative to fossil fuels.

The Commission will therefore count toward meeting the renewable energy objectives all biomass generation falling within existing statutory definitions of biomass, i.e., Minn. Stats. §§ 216B.2422, subd. 1 (c); 216C.051, subd. 7 (g) (1); 216B.2411, subd. 2(c); and §216B.2424, subs. 1 and 6 (f). To the extent that peat is arguably listed, however, the Commission will exclude it, concurring with the uncontested claims of commenting parties that peat does not regenerate quickly enough to qualify as renewable and that harvesting peat poses unacceptable risks to northern ecosystems.

#### **V. Eligible Hydroelectric Facilities**

##### **A. The Comments**

The renewable energy objectives statute lists the energy technologies that count toward meeting the renewable energy objectives; this list limits eligible hydroelectric technologies to "hydroelectric with a capacity of less than 60 megawatts."<sup>1</sup> One of the issues on which the Commission requested comment was whether the 60-megawatt cap applied to each generating unit at a hydroelectric plant or to the plant as a whole.

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<sup>1</sup> Minn. Stat. § 216B.1691, subd. 1 (a) (1).

There were commentors on both sides of the issue. Those who advocated applying the cap to individual generating units argued that historically hydroelectric power has been the most basic and reliable renewable resource and that it should receive expansive treatment in the absence of clear statutory language requiring other treatment.

Those on the other side of the issue pointed to recent controversies regarding the environmental and socioeconomic impacts of large-scale dams, claimed that the Legislature was responding to these controversies by limiting eligible hydro technologies to low-impact facilities, and argued that regulators and utilities generally deal with hydroelectric plants as a whole, not as a conglomeration of individual generating units.

## **B. Commission Action**

The Commission finds that the 60-megawatt cap applies to all generation at a single hydroelectric site, not to the output of each generating unit at that site.

First, this is the most logical and straightforward reading of the statute. It would be illogical for the Legislature to concern itself with the size of individual generating units at a hydroelectric facility, when the environmental effects that prompted the renewable energy statute come from the facility as a whole.

Neither would it be logical to exclude the energy from a 150-megawatt hydro plant in determining progress toward meeting the renewable energy objectives, while counting the energy from three 50-megawatt generators with the same environmental impacts. The Commission declines to find that the Legislature intended such a result.

Furthermore, the parties are correct in pointing out that regulators and utilities generally deal with hydroelectric plants as a whole, not as a conglomeration of individual generating units. In fact, Minnesota's certificate of need statute explicitly requires treating all generating units at a single site as one large energy facility. Minn. Stat. § 216B.2421. Similarly, the regulations promulgated under the federal Public Utility Regulatory Policies Act require treating all hydroelectric generators owned by the same entity and using water from the same impoundment as a single facility.<sup>2</sup>

For all these reasons, the Commission concludes that the 60-megawatt cap on eligible hydroelectric facilities applies to the entire generation site, not to individual generating units.<sup>3</sup>

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<sup>2</sup> 18 CFR 292.204 (a) (2).

<sup>3</sup> Several commentors, including the Department of Commerce, pointed out that some new, run-of-river hydroelectric technologies have such low environmental impact that even at higher capacity levels, they are more environmentally benign than traditional projects under the 60-megawatt cap. The Commission does not have the discretion to count these projects, given the statutory language, but it will apprise the chairs of the legislative policy committees that the issue has been raised and may merit legislative attention.

## VI. Treatment of Pre-existing Generation and New Generation from Eligible Technologies Added in Increments Larger than 1% Per Year

### A. Introduction

The renewable energy objectives statute requires utilities to make good faith efforts to generate or otherwise secure enough electricity from qualifying renewable energy technologies to ensure that generation from these technologies constitutes 10% of total retail electric sales by the year 2015. The statute sets an initial goal of one percent by 2005, with annual one percent increases thereafter until 2015.

The statutory language is set forth below:

Subd. 2. **Eligible energy objectives.** (a) Each electric utility shall make a good faith effort to generate or procure sufficient electricity generated by an eligible energy technology to provide its retail consumers, or the retail customers of a distribution utility to which the electric utility provides wholesale electric service, so that:

- (1) commencing in 2005, at least one percent of the electric utility's total retail electric sales is generated by eligible energy technologies;
- (2) the amount provided under clause (1) is increased by one percent of the utility's total retail electric sales each year until 2015; and
- (3) ten percent of the electric energy provided to retail customers in Minnesota is generated by eligible energy technologies.

Minn. Stat § 216B.1691, subd. 2 (a).

This juxtaposition of time frames and goals is not a model of clarity as to the treatment of pre-existing generation or new generation added in increments larger than one percent in any given year. The Commission therefore sought comments on the treatment of "lumpy" additions to a utility's qualifying portfolio and the "bankability" of qualifying generation that exceeds the initial or annual 1% goals.

### B. The Comments

Most commentators agreed that the statute requires the Commission to evaluate utilities' good faith efforts in light of the overarching 10% goal, which they see as both a state-wide goal and a utility-specific goal, and to use the 1% initial and annual goals as benchmarks to ensure steady progress along the way.

The Izaak Walton League of America - Midwest Office, Minnesotans for an Energy-Efficient Economy, the Minnesota Center for Environmental Advocacy, and the North Star Chapter of the Sierra Club, however, argued that the 10% goal was a state-wide goal irrelevant to individual utility performance. They argued that the overarching statutory goal was to *increase* each utility's renewable portfolio by 1% of retail sales per year for nine years, beginning in 2006, regardless of the amount of renewable generation in the utility's portfolio at that time.

They also argued that the 1% initial goal set for 2005 was intended to jump-start this process for utilities with few renewables and to function as the cut-off point for recognizing pre-existing renewable generation for utilities that already had significant renewable portfolios. Consistent with this theory, they contended that pre-existing renewable generation counts only toward reaching the 1% goal for 2005. After 2005, each utility must add new, qualifying generation equaling 1% of its total retail sales during each calendar year until 2015, even if those increases result in total renewable generation significantly exceeding 10% of the utility's total generation resources.

### **C. Commission Action**

The Commission concurs with the majority of the commentators that the 10% goal applies both to individual utilities and to the state as a whole and that the statute does not, by its terms or by its purpose, require that all countable generation after 2005 come from new sources. There are three main reasons for this conclusion.

#### **1. The Statutory Language**

First, the restrictive reading urged by the environmental commentators is inconsistent with a commonsense reading of the statute and at least two of its specific provisions.

The statute clearly and explicitly excludes two categories of pre-existing generation from counting toward the renewable energy objectives: (1) generation mandated by Chapter 641 of the Laws of 1994 and Commission Orders issued thereunder; and (2) generation from a refuse-derived fuel facility with a power sales agreement in effect as of May 29, 2003 and terminating on December 31, 2010. These explicit exclusions demonstrate that the statute contains no general prohibition against counting pre-existing generation; if it did, it would have not have been necessary to explicitly exclude these two examples of pre-existing generation.

Moreover, the statute clearly permits counting generation from an otherwise-excluded, refuse-derived fuel plant – even after 2005 – if the purchased power agreement includes a rate adjustment reflecting the plant's inclusion as an eligible energy technology. This willingness to include the generation of the pre-existing refuse-derived fuel plant after 2005 demonstrates that 2005 is not an absolute cut-off date for counting generation from pre-existing renewable facilities.

Further, the statute's careful attention to excluding some pre-existing resources, while remaining silent on others, severely undermines the claim that the exclusion of pre-existing resources after 2005 was simply taken for granted by the drafters of the statute.

Finally, if the statute meant to treat the 10% objective as irrelevant to individual utilities and to treat the 1% initial objective and the 1% annual increases as the only meaningful goals for individual utilities, it would say so directly, not in the convoluted manner suggested by the commentators. Treating the 10% goal as the ultimate target, both industry-wide and for individual utilities, and treating the 1% intermediate goals as benchmarks to spur and gauge compliance, is a much more straightforward and commonsense reading of the statute.

#### **2. The Significance of the Annual Objectives**

The Commission reads the statute as requiring it to evaluate utilities' good faith efforts in light of the overarching 10% goal, which applies both to utilities and to the state as a whole, and to use the 1% initial and annual goals as benchmarks to ensure steady progress along the way.

The annual goals guide the Commission in enforcing the good faith obligation. They make it clear that utilities are to stay focused, make steady progress toward the 10% goal, and account for any failure to make steady progress. They make it clear that utilities have a present, an intermediate, and a long-term obligation to make renewable generation an integral part of their portfolios. They are of a piece with longstanding state policies favoring conservation and renewable energy over fossil-fuel derived energy.<sup>4</sup>

By casting these 1% annual goals as “objectives,” however, rather than mandates, the Legislature has clearly determined that utilities and regulators need some flexibility in implementing them. Rigid insistence on equal annual increments of new renewable generation is inconsistent with the flexible approach adopted in the statute.

### **3. The Statute’s Underlying Policies**

Further, the restrictive reading of the statute urged by the environmental commentators would penalize the behavior the statute seeks to encourage, the aggressive pursuit of renewable resources. Utilities that have been diligent in adding renewable energy to their portfolios, carefully calibrating the reliability and rate effects of these new resources, could find themselves forced to add, or to defend their decision not to add, renewable generation exceeding both the 10% goal and the percentage of renewable energy reasonably consistent with optimal system operation.

The restrictive reading would also complicate – and, in all likelihood, hinder – utilities’ compliance efforts. Rigid insistence on adding qualifying generation in 1% annual increments would discourage large-scale renewable projects, however worthwhile, even assuming the availability of tradable credits, joint ownership, staged implementation, and similar devices. It would similarly discourage adding large numbers of small projects in a single calendar year, no matter how consistent those additions might be with good energy policy and the needs of the utility’s system.

The Commission is convinced that the Legislature did not intend to penalize utilities for early compliance with state policies favoring renewable resources, to stifle innovation and creativity in deploying renewable resources, or to deprive utilities of the flexibility needed to balance renewable portfolios with the needs of their service areas. The restrictive reading urged by the environmental commentators carries the potential for all these harms.

The Commission therefore concludes that the 10% overarching objective applies to both individual utilities and the state as a whole and that the 1% initial and annual objectives function both as intermediate goals and as benchmarks for evaluating individual utilities’ good faith in striving to meet the renewable energy objectives set by statute.

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<sup>4</sup> See, for example, the resource planning statute's requirement that utilities' resource plans include least-cost plans for meeting 50% and 75% of all new and refurbished capacity through conservation and renewable energy facilities. Minn. Stat. § 216B.2422, subd. 2. See the statutory prohibitions against certifying nonrenewable energy facilities or including the costs of those facilities in rates, unless the utility demonstrates that a renewable facility is not in the public interest. Minn. Stat. § 216B.2422, subd. 4. See also the certificate of need statute's prohibition against granting a certificate of need for a nonrenewable facility unless the applicant demonstrates that it has explored the possibility of using renewable generation and that the nonrenewable alternative is less expensive, including environmental costs.

## **VII. The Biomass Goal**

### **A. Introduction**

The renewable energy objectives statute sets separate goals for biomass generation, as set forth below:

(b) Of the eligible energy technology generation required under paragraph (a), clauses (1) and (2), not less than 0.5 percent of the energy must be generated by biomass energy technologies . . . . By 2010, one percent of the eligible technology generation required under paragraph (a), clauses (1) and (2), shall be generated by biomass energy technologies.

Minn. Stat. § 216B.1691, subd. 2 (b) .

The Commission sought comments on how to interpret the 0.5% and 1% goals – specifically, whether these percentages applied only to the amount of energy generated by eligible technologies or to a utility’s annual retail sales.

### **B. The Comments**

There was general agreement that the plain meaning of the statutory language was that the percentage goals for biomass-generated energy apply to the pool of energy procured or generated under the renewable energy objectives statute, not to annual retail electric sales. There was also widespread, but not universal, agreement that the Legislature had intended the percentage to apply to annual retail electric sales.

The parties were nearly evenly divided on how the Commission should proceed. Some commentators urged the Commission to apply the statute as written; others urged the Commission to effectuate what they considered to be the Legislature’s intent and apply the biomass percentages to annual retail electric sales.

### **C. Commission Action**

The Commission will enforce the statute as written. The statute is clear on its face, and the Commission lacks the authority to rewrite it to reflect its own or any other party’s understanding of legislative intent.

The Commission emphasizes, however, that the statute’s biomass percentage goals are floors only and that the Commission is charged with enforcing every provision in the renewable energy objectives statute, including the requirement that utilities make good faith efforts to include biomass-fueled generation in their renewable energy portfolios.

Finally, to ensure that state policymakers have adequate information, the Commission will apprise the chairs of the legislative policy committees that it is enforcing the statute as written, that many stakeholders believe the statute contains a drafting anomaly, and that the issue may merit legislative attention.

## **VIII. The Treatment of Energy Generated Under “Green Pricing” Programs**

### **A. Introduction**

In 2001 the Legislature passed both the renewable energy objectives statute and the “green pricing” statute,<sup>5</sup> which requires all Minnesota distribution utilities to offer their customers the opportunity to stipulate that some or all of the energy purchased or generated on their behalf will be “renewable energy or energy generated by high-efficiency, low-emissions, distributed generation such as fuel cells and microturbines fueled by a renewable fuel.”<sup>6</sup> The statute requires utilities to charge customers exercising the green pricing option the difference between the cost of purchasing or generating renewable energy and the cost of purchasing or generating nonrenewable energy.

One of the issues on which the Commission sought comments was whether energy purchased under green pricing programs should be counted toward meeting the renewable energy objectives, assuming the energy was generated by an “eligible energy technology,” as the renewable energy objectives statute requires.

### **B. The Comments**

#### **1. Comments Opposing the Inclusion of Green Pricing Energy**

Commenting parties were deeply divided on this issue. The environmental, consumer, and community organizations participating in the case, and the Residential and Small Business Utilities Division of the Office of the Attorney General, opposed counting green pricing generation toward the renewable energy objectives, chiefly on grounds that it would be deceptive and discriminatory as to green power program participants.

They argued that customers opt to participate in green pricing programs because they believe that those programs give them an opportunity to make a difference – they believe that every kilowatt hour of green power they purchase represents one less kilowatt hour of power generated with fossil fuel. These commentators argued that it would be deceptive to continue marketing green pricing programs without explaining to customers that it is possible that the power for which they are paying a premium would have been acquired by the utility anyway – and its cost reflected in all customers’ rates – as part of the utility’s obligatory good faith effort to meet the renewable energy objectives.

They also argued that it would be inequitable and discriminatory to charge green pricing customers a premium for renewable energy purchased under the green pricing program, when other customers would receive renewable energy generated or purchased under the renewable energy objectives program at standard rates.

They also argued that permitting utilities to count the same energy toward its green pricing obligations and its renewable energy objectives was illogical and constituted double-counting. And finally, these commentators argued that counting green pricing energy toward the renewable energy objectives essentially forced green pricing customers to subsidize a general obligation that the statute places on utilities and whose costs should be spread over the general body of ratepayers.

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<sup>5</sup> Minn. Stat. § 216B.169.

<sup>6</sup> Minn. Stat. § 216B.169, subd. 2 (a).

## 2. Comments Supporting the Inclusion of Green Pricing Energy

The other commentors supported counting energy purchased under green pricing programs. They pointed out that the statute does not exclude green pricing energy and that it does exclude other types of generation. They emphasized that the renewable energy objectives are only goals and that it is therefore by no means certain that renewable energy purchased under green pricing programs would have been provided to the utility's ratepayers anyway.

They also emphasized the need for a variety of tools and strategies to meet the renewable energy objectives and argued that green pricing is one of many tools utilities should be permitted to consider using.

### C. Commission Action

After careful review, the Commission concludes that utilities, with the possible exception of Xcel Energy,<sup>7</sup> may elect to count energy purchased under green pricing programs toward their renewable energy objectives, if they give customers clear and timely notice of this election and permit customers to withdraw from these programs upon reviewing the notice. The reasons for this decision are set forth below.

#### 1. The Statutory Language

First, the statute, which does specifically exclude several categories of energy from counting toward the renewable energy objectives, does not exclude energy purchased under green pricing programs. This is powerful evidence that the Legislature did not intend to exclude green pricing as a tool for meeting the renewable energy objectives.

#### 2. No Discrimination/Deception/Subsidization

Second, it is simply not true that permitting utilities to count green pricing energy renders green pricing customers' contributions illusory and the marketing of green pricing programs deceptive. The renewable energy objectives are just that – objectives. Utilities must make good faith efforts to meet these objectives, but the statute explicitly requires factoring in technical feasibility and protecting against undesirable rate and reliability impacts.

In short, utilities do not have an absolute obligation to reach the 10% goal, and there is therefore no certainty that energy purchased under green pricing programs would have been purchased anyway to meet the renewable energy objectives. The fact that the Legislature chose to enact renewable energy *objectives*, not mandates, changes the equation significantly and discredits claims that counting green pricing energy deceives, discriminates against, or takes advantage of green pricing customers.

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<sup>7</sup> The unique status and obligations of Xcel Energy under the renewable energy objectives statute will be addressed in a subsequent Order. Among other things, the statute provides that the renewable energy objectives are requirements for Xcel, subject to resource planning requirements, least-cost planning requirements, and reliability constraints. Minn. Stat. § 216B.1691, subd. 6.

Furthermore, permitting utilities to coordinate their green pricing programs with their efforts to reach the renewable energy objectives could enhance their chances of meeting the objectives, since the premium paid by green pricing customers could result in making renewable energy projects that would otherwise fail the statute's "undesirable economic impact" test financially viable.

The downside, of course, is that explaining the complex relationship between the two programs could complicate green pricing marketing efforts and reduce program participation. Those concerns, however, are best left to the utilities, who must weigh the costs and benefits of counting green pricing energy toward their renewable energy objectives obligations.

And finally, to ensure full disclosure of accurate information to green pricing customers, the Commission will require all municipal and cooperative distribution utilities served by generation and transmission cooperatives or municipal power agencies that elect to count green pricing power toward the renewable energy objectives to inform their customers of this fact and permit them to withdraw from the program. While these distribution utilities are not subject to the renewable energy objectives statute, they are subject to the green pricing statute and to the Commission's enforcement authority thereunder.

The Commission will of course place the same requirement on investor-owned utilities that choose to include green pricing energy toward meeting their renewable energy objectives.

### **3. No Double-Counting**

Finally, the Commission rejects the claim that counting energy purchased under the green pricing program toward the renewable energy objectives constitutes an impermissible "double-counting" of the same energy. As discussed above, the renewable energy objectives are goals, not discrete quotas that must be met in addition to, independently of, and separately from, the utility's other renewable energy obligations. The renewable energy objectives statute sets goals; the green pricing statute creates an independent obligation that may incidentally help meet the goal.

The green pricing statute – like the distributed generation statute<sup>8</sup>, the cogeneration and small power production statute,<sup>9</sup> and the renewable preferences in the resource planning and certificate of need statutes<sup>10</sup> – increases the use of renewable generation. In the absence of a legislative directive to the contrary, however, the Commission treats these initiatives as complementary, not competitive, enterprises, and counts renewable energy generated or purchased in response to them toward the renewable energy objectives.

## **IX. The Role of Conservation**

### **A. The Comments**

Two commentators, Laura and John Reinhardt, urged the inclusion of energy saved through conservation, energy efficiency, and load management toward meeting the renewable energy

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<sup>8</sup> Minn. Stat. § 216B.1611.

<sup>9</sup> Minn. Stat. § 216B.164.

<sup>10</sup> Minn. Stat. § 216B.2422, subd. 4 and Minn. Stat. § 216B.243, subd. 3a.

objectives. They pointed out that the renewable energy objectives statute begins with the phrase “Unless otherwise specified in law,”<sup>11</sup> and pointed to Minn. Stat. § 216C.051, subd. 7, establishing conservation and load management as the state’s highest priority in energy production and consumption, as authority for treating conservation/energy efficiency/load management as “eligible energy technologies” under Minn. Stat. § 216B.1691, subd. 1 (a).

None of the other commentors shared this view.

## **B. Commission Action**

The Commission concurs with the Reinhardtts that conservation and load management are core values of Minnesota energy policy and that the Legislature has adopted them as the state’s highest priority in electric energy production and consumption. The Commission does not concur, however, that the renewable energy objectives statute permits utilities to substitute energy saved through conservation for any part of the 10% of its generation portfolio that is to come from renewable resources. There are two reasons for this conclusion.

First, the statute explicitly lists the technologies that count toward meeting the renewable energy objectives, and conservation/energy efficiency/load management are not listed. It is inconceivable that the Legislature would have failed to list alternatives to generation if that had been its intent.

Second, including conservation/energy efficiency/load management would be inconsistent with the statute’s clear purpose. However successful conservation efforts might be, Minnesota will always require some irreducible quantity of electrical energy; the purpose of the renewable energy objectives statute is to ensure that a significant percentage of this irreducible quantity comes from renewable resources.

For all these reasons, the Commission concludes that conservation/energy efficiency/load management – critical as they are to Minnesota’s energy policy – are not eligible energy technologies under the renewable energy objectives statute.

## **X. Criteria and Standards for Meeting the “Good Faith Effort” Requirement**

On the issue of how the Commission should apply the “good faith effort” standard in evaluating compliance with the renewable energy objectives statute, the comments were thoughtful and necessarily general. The Commission shares the commentors’ conviction that, at least at this point, it would be neither helpful nor possible to set highly specific, prescriptive standards for compliance.

Instead, the Commission will focus on whether the utility’s filing demonstrates that it has committed the time, money, and other institutional resources necessary to develop a comprehensive plan for making a good faith effort to meet its renewable energy objectives.

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<sup>11</sup> Minn. Stat. § 216B.1691, subd. 1.

Specifically, utilities' filings under the statute should demonstrate the commitments listed below:

- **Demonstrated commitment to a specific plan.** Each utility must file a plan that reasonably details the steps to be taken to reach the renewable energy objectives, with an accompanying timetable.
- **Demonstrated financial commitments** to build facilities or to purchase energy to meet the renewable energy objective, including but not limited to project financing; purchase and ordering of equipment; and expenditures to hire construction firms if needed.
- **Demonstrated commitments to construction of physical infrastructure** to meet the renewable energy objectives, including but not limited to ordering equipment; hiring construction firms; and/or contracting for a Renewable energy objectives site.
- **Demonstrated legal and contractual commitments** to purchase or build the facilities to meet the renewable energy objectives, including but not limited to contracts for sites on which to build; contracts for labor and equipment; arrangements for insurance and liability etc.<sup>12</sup>
- **Demonstrated commitment to meet regulatory requirements** in timely fashion, including but not limited to federal, state, county, township and municipal permitting and any other regulatory obligations, such as filed plans for facility construction in the Commission's biennial transmission planning process under Minn. Stat. 216B.2425.
- **Demonstrated commitment to transmission access** for the Renewable energy objectives facilities, including but not limited to initiation or participation in transmission studies or provision of interconnection and transmission service for these facilities.
- **Demonstrated commitment to openness and transparency.** This requires full public access to all non-proprietary information relating to meeting the renewable energy objectives, including but not limited to actions taken for financial commitments; construction of physical infrastructure; legal and contractual commitments; compliance with regulatory requirements; and transmission access.

These filings should also demonstrate that the utility has carefully analyzed each project's technical feasibility and its potential for negative impacts on reliability and rates, including, but not limited to, addressing the following factors:

- Maintaining or improving the adequacy and reliability of utility service.
- Keeping the customers' bills and the utility's rates as low as practicable, given regulatory and other constraints.

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<sup>12</sup> In the case of contracts for purchases to meet the renewable energy objective, a check list of required items could include: request for proposals (RFP); the field of candidates to which the RFP was offered; the response to the RFP, the selection of a short list or a winning bidder; and the negotiation of the contract.

- Minimizing adverse socioeconomic effects and adverse effects upon the natural environment.
- Enhancing the utility's ability to respond to changes in the financial, social, and technological factors affecting its operations.
- Limiting the risk of adverse effects on the utility and its customers from financial, social, and technological factors that the utility cannot control.

The Legislature has authorized the Commission to fine-tune the process for evaluating good faith efforts by issuing subsequent Orders as necessary; the Commission anticipates monitoring the effectiveness of the standards set forth above and adjusting them as necessary in future Orders.

## **XI. Verification and Implementation Issues**

The Commission also sought comments on what procedures it should adopt for oversight, verification, and enforcement of utilities' compliance with their renewable energy objectives obligations. Specifically, the Commission asked how best to certify eligible facilities, verify generation and sales volumes from certified facilities, and verify the proper allocation of energy from certified facilities between utilities and between the jurisdictions of interstate utilities.

The commentors filed a wealth of suggestions, ranging from self-certification to exacting third-party verification. It was clear, however, that they shared the same interest in developing the least cumbersome and most clearly reliable verification procedures possible. It was equally clear that they were in the best position to develop these procedures, since most of them had hands-on experience with verification and allocation issues.

The Commission will therefore ask the Department, its own staff, interested commentors, and any other interested stakeholders to work together toward the establishment of an independent tracking system to certify, verify, and implement the renewable energy objectives. In designing this system, stakeholders should bear in mind the need for the system to be simple, accurate, transparent, and reasonable in cost.

## **XII. Next Steps**

Finally, with these foundational issues resolved, it is important to move expeditiously toward the filing of the first biennial renewable energy objectives reports under Minn. Stat. § 216.1691, subd. 3. The Commission will therefore delegate to its Executive Secretary the authority to issue notices, develop questions, and establish further procedures to resolve remaining issues promptly. Those issues include, but are not necessarily limited to, those set forth below:

- Reporting requirements, including content, timing, and related issues.
- Developing a weighted scale of how energy produced by various eligible energy technologies shall count toward the renewable energy objectives and establishing a system that grants multiple credits for technologies and fuels that it is in the public interest to encourage.
- The specific criteria and standards applicable to Xcel Energy under Minn. Stat. § 216B.1691, subd. 6.

- Certification, verification, and tracking systems.
- Voluntary compliance and/or reporting by municipal utilities.
- Follow-up on issues related to tradable credits.

The Commission will so order.

### ORDER

1. The utilities listed below are subject to the renewable energy objectives statute and shall comply with all requirements set forth below:

#### *Public Utilities Providing Electric Service*

- Northern States Power Company d/b/a Xcel Energy
- Minnesota Power
- Otter Tail Power
- Interstate Power & Light Company
- Northwestern Wisconsin Electric Company

#### *Generation and Transmission Cooperative Electric Associations*

- Great River Energy
- Minnkota Power Cooperative
- Dairyland Power Cooperative
- Basin Electric Power Cooperative
- East River Electric Power Cooperative
- L & O Power Cooperative

#### *Municipal Power Agencies*

- Southern Minnesota Municipal Power Agency
- Western Minnesota Municipal Power Agency/Missouri River Energy Services
- Northern Municipal Power Agency
- Minnesota Municipal Power Agency
- Central Minnesota Municipal Power Agency

2. In meeting their renewable energy objectives, utilities shall not include as eligible energy technologies, hydroelectric facilities whose capacity at a single generating site equals or exceeds 60 megawatts.
3. In meeting their renewable energy objectives, utilities may include generation from all eligible energy technologies, whenever installed, with the following exceptions:
  - A. Generation from hydrogen-fueled facilities after 2010 unless the hydrogen is generated from the resources listed in Minn. Stat. § 216B.1691, subd. 1 (a) (1), as provided in that subdivision.

- B. Generation mandated under Laws 1994, Chapter 641, or by Commission Order(s) issued thereunder prior to August 1, 2001, as provided in Minn. Stat. § 216B.1691, subd. 1 (a) (2).
  - C. Generation from an energy recovery facility used to capture the heat value of mixed municipal solid waste or refuse-derived fuel from mixed municipal solid waste, with a power sales agreement in effect as of May 29, 2003, that terminates after December 31, 2010, unless the agreement provides for rate adjustment in the event the facility qualifies as a renewable energy source, as provided in Minn. Stat. § 216B.1691, subd. 2 (b).
4. In meeting their renewable energy objectives, utilities may include generation from out-of-state facilities, as long as those facilities are used to serve Minnesota customers.
  5. In meeting their renewable energy objectives, utilities may include generation from all biomass sources falling within existing statutory definitions of biomass, i.e., Minn. Stats. §§ 216B.2422, subd. 1 (c); 216C.051, subd. 7 (g) (1); 216B.2411, subd. 2(c); and §216B.2424, subds 1 and 6 (f), with the exclusion of peat.
  6. In meeting their renewable energy objectives, utilities may elect to include generation purchased under green pricing programs established under Minn. Stat. § 169.
  7. Public utilities choosing to include energy purchased under green pricing programs toward their renewable energy objectives shall notify all their customers of this choice and shall permit existing green pricing customers to withdraw from the program if they wish.
  8. All municipal and cooperative distribution utilities served by generation and transmission cooperatives or municipal power agencies that elect to count green pricing power toward the renewable energy objectives shall inform all their customers of this fact and permit existing green pricing customers to withdraw from the program if they wish.
  9. In meeting their renewable energy objectives, utilities shall strive to ensure that at least one percent of the pool of energy generated by eligible energy technologies is generated by biomass technologies.
  10. In meeting their renewable energy objectives, utilities shall not include energy savings from conservation, energy efficiency, or load management.
  11. In their biennial filings demonstrating compliance with the renewable energy objectives, utilities shall address the following two sets of criteria, which the Commission will use in evaluating their compliance with the "good faith efforts" standard set by statute:
    - A. Demonstrated commitment to a specific plan. Each utility must file a plan that reasonably details the steps to be taken to reach the renewable energy objectives, with an accompanying timetable.
    - B. Demonstrated financial commitments to build facilities or to purchase energy to meet the renewable energy objective, including but not limited to project financing; purchase and ordering of equipment; and expenditures to hire construction firms if needed.

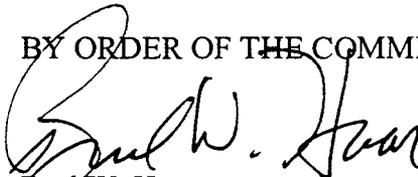
- C. Demonstrated commitments to construction of physical infrastructure to meet the renewable energy objectives, including but not limited to ordering equipment; hiring construction firms; and/or contracting for a Renewable energy objectives site.
- D. Demonstrated legal and contractual commitments to purchase or build the facilities to meet the renewable energy objectives, including but not limited to contracts for sites on which to build; contracts for labor and equipment; arrangements for insurance and liability etc.<sup>13</sup>
- E. Demonstrated commitment to meet regulatory requirements in timely fashion, including but not limited to federal, state, county, township and municipal permitting and any other regulatory obligations, such as filed plans for facility construction in the Commission's biennial transmission planning process under Minn. Stat. 216B.2425.
- F. Demonstrated commitment to transmission access for the renewable energy objectives facilities, including but not limited to initiation or participation in transmission studies or provision of interconnection and transmission service for these facilities.
- G. Demonstrated commitment to openness and transparency. This requires full public access to all non-proprietary information relating to meeting the renewable energy objectives, including but not limited to actions taken for financial commitments; construction of physical infrastructure; legal and contractual commitments; compliance with regulatory requirements; and transmission access.
- H. Demonstrated reasonable efforts to adequately consider technical feasibility and to protect against undesirable impacts on system reliability and undesirable economic impacts on ratepayers, including, but not necessarily limited to, the following factors:
  - 1. Maintaining or improving the adequacy and reliability of utility service.
  - 2. Keeping the customers' bills and the utility's rates as low as practicable, given regulatory and other constraints.
  - 3. Minimizing adverse socioeconomic effects and adverse effects upon the natural environment.
  - 4. Enhancing the utility's ability to respond to changes in the financial, social, and technological factors affecting its operations.
  - 5. Limiting the risk of adverse effects on the utility and its customers from financial, social, and technological factors that the utility cannot control.

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<sup>13</sup> In the case of contracts for purchases to meet the renewable energy objective, a check list of required items could include: request for proposals (RFP); the field of candidates to which the RFP was offered; the response to the RFP, the selection of a short list or a winning bidder; and the negotiation of the contract.

12. The Commission asks the Department of Commerce, Commission staff, and all interested commentators and stakeholders to work together toward the establishment of an independent tracking system to certify, verify, and implement compliance with the renewable energy objectives. In designing this system, primary emphasis should be placed on simplicity, accuracy, transparency, and reasonableness of cost.
13. The Commission delegates to the Executive Secretary the authority to issue notices, develop questions, and establish further procedures to resolve remaining issues promptly. Those issues include, but are not necessarily limited to, those set forth below:
  - A. Reporting requirements, including content, timing, and related issues.
  - B. Developing a weighted scale of how energy produced by various eligible energy technologies shall count toward the renewable energy objectives and establishing a system that grants multiple credits for technologies and fuels that it is in the public interest to encourage.
  - C. The specific criteria and standards applicable to Xcel Energy under Minn. Stat. § 216B.1691, subd. 6.
  - D. Certification, verification, and tracking systems.
  - E. Voluntary compliance and/or reporting by municipal utilities.
  - F. Follow-up on issues related to tradable credits.
14. This Order shall become effective immediately.

BY ORDER OF THE COMMISSION



Burl W. Haar  
Executive Secretary

(SEAL)

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STATE OF MINNESOTA)  
  )SS  
COUNTY OF RAMSEY )

AFFIDAVIT OF SERVICE

I, Amy Rodd, being first duly sworn, deposes and says:

That on the 1st day of June, 2004 she served the attached

INITIAL ORDER DETAILING CRITERIA AND STANDARDS FOR DETERMINING COMPLIANCE WITH MINN. STAT 216B.1691 AND REQUIRING CUSTOMER NOTIFICATION BY CERTAIN COOPERATIVE, MUNICIPAL, AND INVESTOR-OWNED DISTRIBUTION UTILITIES.

MNPUC Docket Number: E-999/CI-03-869

- XX By depositing in the United States Mail at the City of St. Paul, a true and correct copy thereof, properly enveloped with postage prepaid
- XX By personal service
- XX By inter-office mail

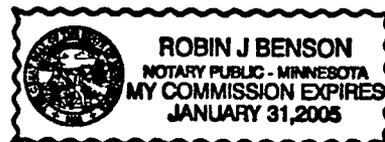
to all persons at the addresses indicated below or on the attached list:

- Commissioners
- Carol Casebolt
- Peter Brown
- Ann Pollack
- Eric Witte
- David Jacobson
- Susan Mackenzie
- AG
- Clark Kaml
- Janet Gonzalez
- Mary Swoboda
- Jessie Schmoker
- Linda Chavez - DOC
- Julia Anderson - OAG
- Curt Nelson - OAG

Amy Rodd

Subscribed and sworn to before me,  
a notary public, this 1 day of

June, 2004  
Robin Benson  
Notary Public



In the Matter of Detailing Criteria  
and Standards for Measuring an  
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In the Matter of Detailing Criteria  
and Standards for Measuring an  
Electric Utility's Good Faith Efforts  
1 Service List

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<p>Ada Water &amp; Light Dept. L. Thompson Line Supt 10 5th Avenue Ada MN 56510</p>	<p><i>Electric 200</i></p>	<p>Adrian Light &amp; Water Commission Terrance Miller Supt. PO Box 187 Adrian MN 56110</p>	<p><i>Electric 201</i></p>	<p>Agralite Cooperative Ramon Millett Asst. Mgr. East Hwy 12 PO Box 228 Benson MN 56215</p>	<p><i>Electric 100</i></p>
<p>Aitkin Public Utilities Commission Charles Tibbetts Mgr. 120 1st Street NW Aitkin MN 56431</p>	<p><i>Electric 202</i></p>	<p>Alexandria Light &amp; Power (E) Allen Crowser Gen. Mgr. 316 Fillmore PO Box 609 Alexandria MN 56308</p>	<p><i>Electric 203</i></p>	<p>Alpha Electric Dept. Linda York Clerk PO Box 97 Alpha MN 56111</p>	<p><i>Electric 204</i></p>
<p>Alvarado Electric Dept. Ken Dagoberg Supt. PO Box 935 Alvarado MN 56710</p>	<p><i>Electric 205</i></p>	<p>Anoka Water. Light Dept. D. Voss Manager 2015 1st Avenue N Anoka MN 55303</p>	<p><i>Electric 206</i></p>	<p>Arlington Electric &amp; Water Dept. Lowell Enerson 204 Shamrock Dr. Arlington MN 55307</p>	<p><i>Electric 207</i></p>
<p>Arrowhead Electric Coop., Inc. Brad Janorschke CEO PO Box 39 Lutsen MN 55612-0039</p>	<p><i>Electric 102</i></p>	<p>Austin Utilities - Electric Jerome C. McCarthy Gen. Mgr. 400 4th St. NE Austin MN 55912</p>	<p><i>Electric 208</i></p>	<p>Bagley Public Utilities Commission-elec Earl Holmstrom Superintendent 18 Main Avenue South PO Box M Bagley MN 56621</p>	<p><i>Electric 209</i></p>
<p>Barnesville Municipal Light &amp; Power Jerry Dow General Manager PO Box 550 Barnesville MN 56514</p>	<p><i>Electric 210</i></p>	<p>Baudette Municipal Light Plant G.B. Taylor, Jr. Supt. P. O. Box 548 Baudette MN 56623</p>	<p><i>Electric 211</i></p>	<p>Beltrami Electric Coop., Inc. Roger Spiry General Mgr P. O. Box 488 Bemidji MN 56601</p>	<p><i>Electric 103</i></p>
<p>Benson Water &amp; Light Dept. Robert Flaws Director of Public Works 1411 Pacific Avenue Benson MN 56215</p>	<p><i>Electric 212</i></p>	<p>Bigelow Electric Dept. P. Marco Clerk 1710 Broadway St Bigelow MN 56117</p>	<p><i>Electric 213</i></p>	<p>Biwabik Public Utilities Richard Harju Supt. PO Box A Biwabik MN 55708</p>	<p><i>Electric 214</i></p>
<p>Blooming Prairie Public Utilities Commission R.D. Kittelson General Mg 146 3rd Avenue SE PO Box 55 Blooming Prairie MN 55917</p>	<p><i>Electric 215</i></p>	<p>Blue Earth Light &amp; Water Dept. Paul LeLand Utility Manager 125 East 7th Street Blue Earth MN 56013</p>	<p><i>Electric 216</i></p>	<p>Blue Earth-Nicollet-Faribault Cooperative W.R. Hensel PO Box 8 Hwy 169 South Mankato MN 56001</p>	<p><i>Electric 104</i></p>
<p>Brainerd Water &amp; Light Dept. Walter Sjolund Supt. 1151 Highland Scenic Drive P. O. Box 373 Brainerd MN 56401-0373</p>	<p><i>Electric 217</i></p>	<p>Breckenridge Public Utilities Jeff Muehler Mgr 420 Nebraska Ave Breckenridge MN 56520</p>	<p><i>Electric 218</i></p>	<p>Brewster Electric Light &amp; Power Dept. Greg Kruse Supt. 906 3rd Avenue Brewster MN 56119</p>	<p><i>Electric 219</i></p>
<p>Brown County Rural Electric Assn. Wade Hensel Highway 4 North Sleepy Eye MN 56085</p>	<p><i>Electric 105</i></p>	<p>Brownton Municipal Light Plant Cynthia Lindeman Clerk City Hall Brownton MN 55312</p>	<p><i>Electric 220</i></p>	<p>Buffalo Municipal Electric Dept. Joseph Steffel Supt. 212 Central Avenue Buffalo MN 55313</p>	<p><i>Electric 221</i></p>
<p>Buhl Water Light Heat &amp; Bldg. Comm. John Markas Foreman P. O. Box 704 Buhl MN 55713</p>	<p><i>Electric 222</i></p>	<p>Caledonia Light &amp; Water Dept. Robert Nelson Clerk 231 East Main Street PO Box 232 Caledonia MN 55921</p>	<p><i>Electric 223</i></p>	<p>Cedar Valley Rural Electric Coop. Jerry Thompson CEO, Manager P. O. Box 70 St. Ansgar IA 50472</p>	<p><i>Electric 150</i></p>

<p>Ceylon Water &amp; Light Dept. W.F. Ditz 112 W. Main Box 328 Ceylon MN 56121</p>	<i>Electric 224</i>	<p>Chaska Water &amp; Light Dept. Mr. Steve J. Wilker City of Chaska - Utility 660 Victoria Drive Chaska MN 55318</p>	<i>Electric 225</i>	<p>City of Fairmont Ms. Gail P. Swaine, P. E. Dir. Public Works 100 Downtown Plaza PO Box 751 Fairmont MN 56031-0751</p>	<i>Electric 238</i>
<p>City of Lake City David B. Harris Public Works Director 205 West Center Street PO Box 465 Lake City MN 55041</p>	<i>Electric 261</i>	<p>City of St. Charles Arly Hannan Mayor 830 Whitewater Ave. St. Charles MN 55972</p>	<i>Electric 598</i>	<p>Clearwater-Polk Electric Coop., Inc. Michael Monsrud General Manager PO Box O Bagley MN 56621</p>	<i>Electric 107</i>
<p>CONNEXUS ENERGY R.D. Newland CEO 14601 Ramsey Blvd. Ramsey MN 55303</p>	<i>Electric 101</i>	<p>Coop. Light &amp; Power Assn. Of Lake Co, The Kevin Beardsley Gen. Mgr. 4th St. &amp; 15th Ave. PO Box 69 Two Harbors MN 55616</p>	<i>Electric 108</i>	<p>Crow Wing Cooperative Power &amp; Light Co. Bruce L. Kraemer Gen. Mgr. PO Box 507 Hwy 371 North Brainerd MN 56401</p>	<i>Electric 109</i>
<p>Dakota Electric Association Greg Miller Gen. Mgr. 4300 220th Street West Farmington MN 55024</p>	<i>Electric 111</i>	<p>Darwin Electric Dept. Carmen Buhr Clerk Box 24 Darwin MN 55324</p>	<i>Electric 227</i>	<p>Delano Municipal Utilities Commission Hal Becker Supt. 11 West Bridge Avenue Delano MN 55328</p>	<i>Electric 228</i>
<p>Detroit Lakes Public Utilities Commission (E) Curt Punt Supt. 1025 Roosevelt Avenue PO Box 647 Detroit Lakes MN 56501</p>	<i>Electric 229</i>	<p>Dundee Light &amp; Power Mary Norton City Clerk 111 N. Main St. Dundee MN 56131</p>	<i>Electric 333</i>	<p>Dunnell Light &amp; Water Janette Hybbert City Clerk PO Box 94 Dunnell MN 56127</p>	<i>Electric 334</i>
<p>East Central Energy Garry Bye CEO 412 North Main Braham MN 55006</p>	<i>Electric 112</i>	<p>East Grand Forks Water &amp; Light Dan Boyce General Manager 600 DeMers Ave. NW P. O. Box 322 East Grand Forks MN 56721-0322</p>	<i>Electric 231</i>	<p>Eitzen Public Utilities Rowland Cordes City Clerk PO Box 110 Eitzen MN 55931</p>	<i>Electric 232</i>
<p>Elbow Lake Municipal Electric Dept. Jeffrey Holsen General Manager PO Box 1079 Elbow Lake MN 56531</p>	<i>Electric 233</i>	<p>Elk River Municipal Utilities Patricia Hemza 322 King Avenue Elk River MN 55330</p>	<i>Electric 234</i>	<p>Ely Light &amp; Water Dept. Terry Jackson General Manager 209 East Chapman St. Ely MN 55731</p>	<i>Electric 235</i>
<p>Fairfax Municipal Utilities Larry Linsmeier Supt 206 South 1st Street Fairfax MN 55332</p>	<i>Electric 237</i>	<p>Federated Rural Electric Assn. R.G. Burud Hwy 71 South Box 69 Jackson MN 56143</p>	<i>Electric 114</i>	<p>Fosston Municipal Light &amp; Power Dave Larson Clerk 220 East 1st Street Fosston MN 56542</p>	<i>Electric 239</i>
<p>Freeborn-Mower Electric Coop. Ronald Steckman Gen. Mgr. Box 611 Albert Lea MN 56007</p>	<i>Electric 115</i>	<p>Gilbert Water, Light &amp; Water Dept. Gary Mackley Box 368 Gilbert MN 55741</p>	<i>Electric 240</i>	<p>Glencoe Municipal Utilities Commission Collin Engebretson Mgr 305 11th Street W Glencoe MN 55336</p>	<i>Electric 241</i>
<p>Goodhue County Coop. Electric Assn. Douglas K. Fingerson Gen Mgr 224 Main Street Zumbrota MN 55992</p>	<i>Electric 116</i>	<p>Grand Marais Public Utilities Comm. Russell Good Mgr. 15 Broadway N. PO Box 600 Grand Marais MN 55604</p>	<i>Electric 242</i>	<p>Grand Rapids Public Utilities Commission A.T. Ward General Manager Village Hall PO Box 658 Grand Rapids MN 55744</p>	<i>Electric 243</i>

<p style="text-align: right;"><i>Electric 244</i></p> <p>Granite Falls Munic. Elec. Light &amp; Water Dept. W. P. Lavin City Mgr. 885 Prentice St. Granite Falls MN 56241-1598</p>	<p>Grove City Electric Dept. Sharon Larsen Clerk City Hall PO Box 98 Grove City MN 56243</p>	<p style="text-align: right;"><i>Electric 245</i></p>	<p style="text-align: right;"><i>Electric 246</i></p> <p>Halstad Municipal Utilities David Meyer Supt. 405 2nd Ave. W. Halstad MN 56548</p>
<p style="text-align: right;"><i>Electric 152</i></p> <p>Hamlin (HD) Electric Coop. Janice Nordseth Office Mgr. Clear Lake SD 57226</p>	<p>Harmony Water &amp; Light Chris Johnson Harmony MN 55939</p>	<p style="text-align: right;"><i>Electric 247</i></p>	<p style="text-align: right;"><i>Electric 6364</i></p> <p>Hastings Public Utilities Commission James Heusser 1225 Progress Drive Hastings MN 55033</p>
<p style="text-align: right;"><i>Electric 249</i></p> <p>Hawley Public Utilities Comm. - Electric Kevin Berg PO Box 69 Hawley MN 56549-0069</p>	<p>Head Of The Lakes Coop. Garry Bye General Manager 3617 E. Baumgartner Rd. Superior WI 54880</p>	<p style="text-align: right;"><i>Electric 153</i></p>	<p style="text-align: right;"><i>Electric 250</i></p> <p>Henning Power &amp; Light D. Hagen Mgr. PO Box 55 Henning MN 56551</p>
<p style="text-align: right;"><i>Electric 251</i></p> <p>Hibbing Public Utilities-Electric James Kochevar Gen. Mgr. 19th St. &amp; 6th Ave. E PO Box 249 Hibbing MN 55745</p>	<p style="text-align: right;"><i>Electric 252</i></p> <p>Hutchinson Utilities Commission - Electric Patrick Spethman General Manager 225 Michigan St. S.E. Hutchinson MN 55350</p>	<p style="text-align: right;"><i>Electric 001</i></p>	<p style="text-align: right;"><i>Electric 001</i></p> <p>Interstate Power &amp; Light Company - Electric D. H. Berentsen Alliant Energy G0-9 200 1st Street S.E. P. O. Box 351 Cedar Rapids IA 52406-0351</p>
<p style="text-align: right;"><i>Electric 151</i></p> <p>Iowa Lakes Rural Electric Terry L. Burns Gen. Mgr. 702 S 1st St Estherville IA 51334</p>	<p style="text-align: right;"><i>Electric 117</i></p> <p>Itasca-Mantrap Coop. Electric Assn. Patrick E. O'Brien Manager PO Box 192 Park Rapids MN 56470</p>	<p style="text-align: right;"><i>Electric 117</i></p>	<p style="text-align: right;"><i>Electric 253</i></p> <p>Jackson Electric Light Dept. J. Lutz Supt 80 West Ashley St Jackson MN 56143</p>
<p style="text-align: right;"><i>Electric 254</i></p> <p>Janesville Municipal Utilities Clinton Rogers City Administrator 101 North Mott St. PO Box O Janesville MN 56048-0617</p>	<p style="text-align: right;"><i>Electric 118</i></p> <p>Kandiyohi Power Cooperative David J. George Mgr. 1311 Hwy 71 NE Willmar MN 56201</p>	<p style="text-align: right;"><i>Electric 118</i></p>	<p style="text-align: right;"><i>Electric 255</i></p> <p>Kandiyohi Public Utilities Mike Seiler PO Box 276 Kandiyohi MN 56251</p>
<p style="text-align: right;"><i>Electric 256</i></p> <p>Kasota Electric Light Dept. Rosie Sickler Clerk/Treasurer P. O. Box 218 Kasota MN 56050</p>	<p style="text-align: right;"><i>Electric 257</i></p> <p>Kasson Municipal Electric Dept. Lynne Erickson Finance Coordinator 401 - 5th St. SE Kasson MN 55944</p>	<p style="text-align: right;"><i>Electric 257</i></p>	<p style="text-align: right;"><i>Electric 258</i></p> <p>Keewatin Public Utilities Roger Heil P.O. Box 190 Keewatin MN 55753</p>
<p style="text-align: right;"><i>Electric 260</i></p> <p>Kenyon Municipal Utilities Randy Eggert Supt. 709 2nd Street Kenyon MN 55946</p>	<p style="text-align: right;"><i>Electric 106</i></p> <p>Lake Country Power Richard Lemonds General Manager Grand Rapids Service Center 2810 Elida Drive Grand Rapids MN 55744</p>	<p style="text-align: right;"><i>Electric 106</i></p>	<p style="text-align: right;"><i>Electric 262</i></p> <p>Lake Crystal Public Utilities Commission Robert Hauge City Administrator 100 E. Robinson Street PO Box 86 Lake Crystal MN 56055-0086</p>
<p style="text-align: right;"><i>Electric 263</i></p> <p>Lake Park Utilities Don Qualley Utility Supt. PO Box 239 Lake Park MN 56554</p>	<p style="text-align: right;"><i>Electric 119</i></p> <p>Lake Region Coop. Electrical Assn. David Weakland Gen. Mgr. 12 5th Ave. N. E. P. O. Box 643 Pelican Rapids MN 56572-0643</p>	<p style="text-align: right;"><i>Electric 119</i></p>	<p style="text-align: right;"><i>Electric 264</i></p> <p>Lakefield Public Utilities Jim Koep Supt. PO Box 1023 Lakefield MN 56150</p>
<p style="text-align: right;"><i>Electric 265</i></p> <p>Lanesboro Public Utilities Commission Barbara Hoyhtya City Admin. PO Box 333 Lanesboro MN 55949</p>	<p style="text-align: right;"><i>Electric 266</i></p> <p>LeSueur Municipal Utilities Rick Almich Supt. PO Box 176 LeSueur MN 56058-0176</p>	<p style="text-align: right;"><i>Electric 266</i></p>	<p style="text-align: right;"><i>Electric 267</i></p> <p>Litchfield Public Utilities Commission Mark Petsche Supt. PO Box 521 Litchfield MN 55355</p>

<p><i>Electric 268</i></p> <p>Luverne Municipal Utilities Red Arndt Utilities Coordinator 203 East Main PO Box 659 Luverne MN 56156</p>	<p><i>Electric 125</i></p> <p>Lyon-Lincoln Electric Cooperative, Inc. West Highway 14 PO Box 639 Tyler MN 56178-0639</p>	<p><i>Electric 269</i></p> <p>Mabel Public Utilities J. Narum Clerk Box 425 Mabel MN 55954</p>
<p><i>Electric 270</i></p> <p>Madelia Municipal Light &amp; Power Dept. Steve Moses Supt. 24 Abbott Avenue SW Madelia MN 56062</p>	<p><i>Electric 271</i></p> <p>Madison Municipal Utilities Harold Hodge Superintendent 109 7th Avenue Madison MN 56256</p>	<p><i>Electric 272</i></p> <p>Marshall Municipal Utilities Greg Sherman General Manager 113 South 4th Street PO Box 3575 Marshall MN 56258</p>
<p><i>Electric 335</i></p> <p>McKinley Public Utilities Dan Kodroski McKinley MN 55761</p>	<p><i>Electric 120</i></p> <p>McLeod Cooperative Power Assn. Randall Owen Gen. Mgr. 1231 Ford Avenue, PO Box 70 Glencoe MN 55336-0070</p>	<p><i>Electric 121</i></p> <p>Meeker Light &amp; Power Assn. Timothy Mergen Mgr. PO Box 522 503 East Hwy 12 Litchfield MN 55355</p>
<p><i>Electric 274</i></p> <p>Melrose Public Utilities Tracy Ekola Director 225 E First St N PO Box 216 Melrose MN 56352-0216</p>	<p><i>Electric 122</i></p> <p>Mille Lacs Electric Coop. (E) Ralph Mykkanen Gen. Mgr. PO Box 230 Aitkin MN 56431</p>	<p><i>Electric</i></p> <p>Minnesota Municipal Utilities Association Greg Oxley Government Relations 12805 Highway 55, suite 212 Plymouth MN 55441-3859</p>
<p><i>Electric 015</i></p> <p>Minnesota Power Mark Schober Controller 30 West Superior Street Duluth MN 55802</p>	<p><i>Electric</i></p> <p>Minnesota Rural Electric Association Lee Sundberg 11640 73rd Ave., North Maple Grove MN 55369</p>	<p><i>Electric 123</i></p> <p>Minnesota Valley Coop. Light &amp; Power Assn. Patrick C. Carruth Gen. Mgr. PO Box 717 Montevideo MN 56265</p>
<p><i>Electric 124</i></p> <p>Minnesota Valley Electric Cooperative Jeannie Robbins Office Manager P. O. Box 125 Jordan MN 55352</p>	<p><i>Electric 275</i></p> <p>Moorhead Public Service Dept. (E) B. Schwandt General Mg 500 Center Ave. PO Box 779 Moorhead MN 56560</p>	<p><i>Electric 276</i></p> <p>Moose Lake Water &amp; Light Comm. Leland Johnson Supt. PO Box 418 Moose Lake MN 55767</p>
<p><i>Electric 277</i></p> <p>Mora Public Utilities Commission Bob Jagusch 117 S.E. Railroad Ave. Mora MN 55051</p>	<p><i>Electric 278</i></p> <p>Mountain Iron Light &amp; Water Dept. Craig J. Wainio City Administrator 8586 Enterprise Drive South Mountain Iron MN 55768</p>	<p><i>Electric 279</i></p> <p>Mountain Lake Municipal Utilities Luayn Murphy Clerk 1015 2nd Avenue Drawer C Mountain Lake MN 56159</p>
<p><i>Electric 280</i></p> <p>Nashwauk Public Utilities Dept. E. Bolf Manager 301 Central Avenue Nashwauk MN 55769</p>	<p><i>Electric 281</i></p> <p>New Prague Utilities Commission Dennis Seuer Public Works Director 118 Central Ave. N. New Prague MN 56071</p>	<p><i>Electric 282</i></p> <p>New Ulm Public Utilities Comm. - Electric Bob Stevenson Supt. 310 1st. Street N. PO Box 355 New Ulm MN 56073</p>
<p><i>Electric 284</i></p> <p>Newfolden Electric Dept. Grace Lindquist Clerk P.O. Box 188 Newfolden MN 56738</p>	<p><i>Electric 285</i></p> <p>Nielsville Municipal Utility Stephanie Abentroth Clerk Nielsville MN 56568</p>	<p><i>Electric 126</i></p> <p>Nobles Cooperative Electric R. G. Burud Mgr. Highway 59N PO Box 788 Worthington MN 56187</p>
<p><i>Electric 286</i></p> <p>North Branch Light &amp; Power Comm. B.C. Watters Supt. PO Box 176 North Branch MN 55056</p>	<p><i>Electric 127</i></p> <p>North Itasca Electric Cooperative, Inc. J. Ortman Mgr. PO Box 227 Bigfork MN 56628</p>	<p><i>Electric 287</i></p> <p>North St. Paul Utility Dept. Jim Bowers Elec. Supt 2526 East 7th Avenue North St. Paul MN 55109</p>

<p><i>Electric 129</i> North Star Electric Cooperative, Inc. Dan Hoskins General Manager 441 St. Hwy. 172 NW P. O. Box 719 Baudette MN 56623</p>	<p><i>Electric 002</i> Northern States Power Company - Electric Mark Hervey Gen. Manager Rev. Req. 414 Nicollet Mall Minneapolis MN 55401</p>	<p><i>Electric 016</i> Northwestern Wisconsin Electric Co. Mark F. Dahlberg President PO Box 9 Grantsburg WI 54840-0009</p>
<p><i>Electric 288</i> Olivia Municipal Water &amp; Light Dept. Robert Zeug Supt. 1009 West Lincoln Avenue Olivia MN 56277</p>	<p><i>Electric 289</i> Ortonville Light &amp; Water Dept. Roman Taffe Supt. 315 Madison Avenue Ortonville MN 56278</p>	<p><i>Electric 017</i> Otter Tail Power Company Jeff Legge Controller P.O. Box 496 215 South Cascade Street Fergus Falls MN 56538-0496</p>
<p><i>Electric 290</i> Owatonna Municipal Public Utilities - Electric Thomas Kuntz General Manager 208 South Walnut PO Box 800 Owatonna MN 55060</p>	<p><i>Electric 132</i> Peoples Coop. Power Assn. Of Olmsted Frank Welter General Mgr. 3935 Hwy 14 East PO Box 339 Rochester MN 55903</p>	<p><i>Electric 292</i> Peterson Electric Dept. P. Benson PO Box 94 Peterson MN 55962</p>
<p><i>Electric 293</i> Pierz Municipal Utilities Jeff Hasert Supt. PO Box 367 Pierz MN 56364</p>	<p><i>Electric 131</i> PKM Electric Cooperative Assn. Charles Riesen Mgr. 406 North Minnesota Street PO Box 108 Warren MN 56762</p>	<p><i>Electric 294</i> Preston Public Utilities F. Nagle Admin. PO Box 657 Preston MN 55965</p>
<p><i>Electric 295</i> Princeton Public Utilities Commission John Dunham Gen. Mgr. 907 1st Street Princeton MN 55371</p>	<p><i>Electric 296</i> Proctor Public Utilities Comm. Carol Lind Commission Secretary 100 Pionk Drive Proctor MN 55810</p>	<p><i>Electric 297</i> Randall Electric Light Company Gerald Peterschick Admin. Randall MN 56475</p>
<p><i>Electric 133</i> Red Lake Electric Coop. R.M. Kennedy Mgr. PO Box 430 Red Lake Falls MN 56750</p>	<p><i>Electric 134</i> Red River Valley Coop. Power Assn. Loren Brorby Manager P. O. Box 358 Halstad MN 56548-0358</p>	<p><i>Electric 135</i> Redwood Electric Cooperative Betty Wilhelmi Office Mgr. PO Box 15 Clements MN 56224</p>
<p><i>Electric 298</i> Redwood Falls Public Utilities Charles Heins Supt. 333 S. Washington Street Redwood Falls MN 56283</p>	<p><i>Electric 136</i> Renville-Sibley Cooperative Power Dale Christensen CEO PO Box 68 Danube MN 56230</p>	<p><i>Electric 299</i> Rochester Public Utilities Larry Koshire Mgr. 4000 East River Rd NE Rochester MN 55906-2813</p>
<p><i>Electric 137</i> Roseau Electric Coop., Inc. Michael Adams Manager PO Box 100 Roseau MN 56751</p>	<p><i>Electric 300</i> Roseau Munic. Power Plant Jim Viekaryous Supt 100 2nd Avenue PO Box 307 Roseau MN 56751</p>	<p><i>Electric 301</i> Round Lake Municipal Utility Sandy Consoer Clerk PO Box 72 Round Lake MN 56167-0072</p>
<p><i>Electric 138</i> Runestone Electric Assn. William Banke, Jr. Gen. Mgr. 7th &amp; Fillmore PO Box 9 Alexandria MN 56308</p>	<p><i>Electric 302</i> Rushford Electric Dept. Larry Bartelson Admin. PO Box 430 Rushford MN 55971</p>	<p><i>Electric 303</i> Rushmore Electric Dept. Gloria Long Village Clerk PO Box 227 Rushmore MN 56168</p>
<p><i>Electric 308</i> Sauk Centre Light &amp; Power Comm. Marty Sunderman Supt. 101 South Main Street PO Box 128 Sauk Centre MN 56378</p>	<p><i>Electric 309</i> Shakopee Public Utilities Commission Lou Van Hout Mgr. 1030 East 4th Avenue Shakopee MN 55379</p>	<p><i>Electric 310</i> Shelly Electric Dept. Jodean Neil Clerk PO Box 126 Shelly MN 56581</p>

<p><i>Electric 311</i></p> <p>Sleepy Eye Public Utilities Commission David Logue Supt. 130 2nd Avenue NW Sleepy Eye MN 56085</p>	<p><i>Electric 139</i></p> <p>South Central Electric Assn. T. Malone Mgr. PO Box 150 County Road 57 West St. James MN 56081</p>	<p><i>Electric 140</i></p> <p>Southwestern Minnesota Coop. Electric Kathy Nepp Sioux Valley-Southwestern Electric PO Box 216 Accounts Payable Colman SD 57017</p>
<p><i>Electric 312</i></p> <p>Spring Grove Munic. Utility Dianne Vesterse Clerk 118 1st Ave NW Spring Grove MN 55974</p>	<p><i>Electric 314</i></p> <p>Spring Valley Public Utilities Comm. Stu Smith Supt. 104 South Section Avenue Spring Valley MN 55975</p>	<p><i>Electric 313</i></p> <p>Springfield Public Utilities Scott Johnson Supt. 14 North Marshall Avenue Springfield MN 56087</p>
<p><i>Electric 304</i></p> <p>St. Charles Light &amp; Water Dept. Kyle Karger Supt. 830 Whitewater Avenue St. Charles MN 55972</p>	<p><i>Electric 305</i></p> <p>St. James Light &amp; Water Dept. J. Becthold Supt. 124 Armstrong Blvd S St. James MN 56081</p>	<p><i>Electric 306</i></p> <p>St. Peter Municipal Utilities L.G. Geisking Dir. Public Works 227 S. Front Street St. Peter MN 56082</p>
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<p><i>Gas 6274</i></p> <p>Clarissa Eagle Bend Util Commission Kevin Hess City Administrator PO Box 215 Eagle Bend MN 56446</p>	<p><i>Gas 020</i></p> <p>Community Utility Co. Lloyd Crum, Jr. Racine MN 55967</p>	<p><i>Gas 230</i></p> <p>Duluth Water, Gas &amp; Sewage Treatment Dep Edward M. Krause Mgr. 414 West 1st. St. Duluth MN 55802</p>
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BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

LeRoy Koppendrayer  
Marshall Johnson  
Ken Nickolai  
Phyllis A. Reha

Chair  
Commissioner  
Commissioner  
Commissioner

In the Matter of Detailing Criteria and Standards for Measuring an Electric Utility's Good Faith Efforts in Meeting the Renewable Energy Objectives Under Minn. Stat. § 216B.1691

ISSUE DATE: August 13, 2004

DOCKET NO. E-999/CI-03-869

ORDER AFTER RECONSIDERATION

**PROCEDURAL HISTORY**

**I. Introduction and Factual Background**

In 2001, the Minnesota Legislature passed Minn. Stat. § 216B.1691, setting renewable energy objectives for Minnesota's investor-owned electric utilities, generation and transmission cooperatives, and municipal power agencies. The statute required these utilities, cooperatives, and power agencies (hereinafter, "utilities") to make good faith efforts to generate or otherwise secure enough electricity from qualifying renewable energy technologies to represent 10% of total retail electric sales by the year 2015.

In 2003, the Legislature amended the statute to require the Commission to supervise and facilitate these good faith efforts. Among other things, the 2003 amendments required the Commission to issue an initial Order, and subsequent Orders as necessary, doing the following things:

- Detailing criteria and standards for measuring a utility's efforts to meet the renewable energy objectives and determining whether the utility has met the good faith requirement.
- Detailing criteria and standards that protect against undesirable impacts on the reliability of the utility's system.
- Detailing criteria and standards that protect against undesirable economic impacts on the utility's ratepayers.
- Detailing criteria and standards that consider technical feasibility.
- Providing for a weighted scale that determines how energy generated by different technologies counts toward a utility's objective and that grants multiple credits for technologies and fuels that the Commission finds it in the public interest to encourage.

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The 2003 amendments also authorized the Commission to establish a program for tradable credits for electricity generated by eligible technologies and provided guidelines for any tradable credits system the Commission might establish.

## **II. Preliminary Proceedings and the Initial Order**

In June and July 2003, the Commission issued notices seeking initial and reply comments from interested persons on the appropriate procedural framework for developing the issues and issuing the Orders required under the renewable energy objectives statute.

The Commission determined, after reviewing the comments filed on procedural and scoping issues, that this case had too many interdependent and sequential issues to resolve in a single Order. The Commission therefore decided to seek comments on the most fundamental issues, to address those issues in an initial Order, and then to promptly resolve remaining issues based on that decisional foundation.

Some 39 persons and organizations filed comments. On June 1, 2004, the Commission issued its initial Order, which addressed and resolved the following issues:

- Which entities are covered by the statute?
- Does energy from out-of-state facilities count toward the 10% goal?
- Which biomass technologies count as eligible technologies?
- Does the 60-megawatt cap on eligible hydro facilities apply per-unit or per-facility?
- How should the Commission factor in the recognition that some resources may occur in "lumpy" increments when measuring whether the year-by-year objectives are being met?
- Does the 1% goal for biomass technologies mean 1% of the energy generated by eligible technologies or 1% of total energy sales?
- Does energy used for green pricing programs count toward the 10% goal?
- Does energy saved through conservation count toward the 10% goal?
- What criteria and standards should be used in determining whether a utility has met the "good faith effort" statutory requirement?
- What systems and procedures are needed to track and verify compliance?

### **III. Petitions for Reconsideration; Request for Abeyance and Clarification**

#### **A. Sierra Club North Star Chapter – Petition for Reconsideration or Amendment**

On June 18, 2004, the North Star Chapter of the Sierra Club filed a petition for reconsideration or amendment of the initial Order. The petition sought reconsideration of the decision to permit utilities to elect to count energy purchased under green pricing programs toward their renewable energy objectives.

#### **B. Izaak Walton League of America–Midwest Office, Minnesotans for an Energy-Efficient Economy, and Minnesota Center for Environmental Advocacy – Petition for Reconsideration and Amendment**

On June 18, 2004, these parties filed a petition for reconsideration and amendment of the initial Order. They sought reconsideration of the Order's finding that the 10% statutory goal applied to both individual utilities and the state as a whole, its findings that existing generation and generation added in increments exceeding one percent in any given year counted toward the 10% goal, and its decision to permit utilities to elect to count energy purchased under green pricing programs toward their renewable energy objectives.

#### **C. Minnesota Resource Recovery Association – Petition for Reconsideration**

The Minnesota Resource Recovery Association filed a petition for reconsideration of the initial Order's finding that the one percent biomass goal applied to the pool of energy procured or generated under the renewable energy objectives statute, not to annual retail electric sales.

#### **D. Izaak Walton League of America–Midwest Office, Minnesotans for an Energy-Efficient Economy – Request for Abeyance and Clarification**

On June 23, 2004, these two parties filed a letter asking the Commission to hold their earlier-filed petition for reconsideration in abeyance, pending action on the merits of the remaining issues in the case. They pointed out the inter-relatedness of both sets of issues and suggested that combining the two determinations might be more efficient than making separate determinations.

They also asked the Commission to clarify the meaning of ordering paragraph 4 of the initial Order, which reads as follows:

In meeting their renewable energy objectives, utilities may include generation from out-of-state facilities, as long as those facilities are used to serve Minnesota customers.

They sought confirmation of their position that out-of-state renewable facilities were being "used to serve Minnesota customers" only if they had "firm network transmission service from an out-of-state renewable generator to an in-state network customer." They suggested that this issue, too, might well be held in abeyance pending resolution of the remaining issues in the case.

#### **IV. Responses to Petitions**

The following parties filed responses, summarized below, to the petitions for reconsideration, amendment, clarification, and abeyance.

##### **A. Northern States Power Company, d/b/a Xcel Energy**

Xcel opposed all requests for reconsideration and opposed the request to clarify the meaning of “used to serve Minnesota customers” to require specific transmission arrangements. The Company claimed that the proposed clarification would in fact impose new and controversial requirements that required evidentiary development and careful policy analysis.

##### **B. Minnesota Power**

Minnesota Power opposed all requests for reconsideration and supported the initial Order as record-based, legally sufficient, and adequately explained.

##### **C. Otter Tail Power Company**

Otter Tail opposed all requests for reconsideration, stating that the initial Order was carefully considered and legally sufficient. The Company opposed the petition for clarification as seeking to go beyond clarification to establish new and controversial transmission requirements.

##### **D. Great River Energy**

Great River opposed all requests for reconsideration and opposed the request for abeyance as likely to render the case even more complex and unwieldy than its nature requires.

##### **E. Dairyland Power Cooperative**

Dairyland opposed all petitions for reconsideration. It opposed the petition for clarification as seeking to inject into this case extraneous issues that merit careful consideration on their own. It did not oppose the request for abeyance.

##### **F. Missouri River Energy Services**

Missouri River opposed the petitions for reconsideration, urged caution in defining the phrase “used to serve Minnesota customers,” and asked that there be no further comment periods should the Commission decide to grant the request for abeyance.

##### **G. Minnesota Department of Commerce**

The Department of Commerce recommended holding the reconsideration petitions in abeyance and considering their merits as the remaining issues in the case are considered and resolved.

## **H. The Minnesota Project**

The Minnesota Project supported the petition for reconsideration filed by the Sierra Club North Star Chapter, which challenged the initial Order's decision on the inclusion of green pricing energy.

The Project also supported the petition filed jointly by the Izaak Walton League of America—Midwest Office, Minnesotans for an Energy-Efficient Economy, and the Minnesota Center for Environmental Advocacy, which challenged the Order's decision to permit utilities to elect to count green pricing energy toward their renewable energy objectives, its interpretation of the 10% statutory goal, and its treatment of existing generation and generation added in increments exceeding one percent in any given year.

## **I. Clean Water Action Alliance**

The Clean Water Action Alliance supported the reconsideration petition of the Minnesota Resource Recovery Association, which challenged the initial Order's interpretation of the one percent biomass goal.

The Alliance also supported, for the reasons set forth by petitioners, the petition for reconsideration filed by the Sierra Club North Star Chapter, and the petition for reconsideration filed jointly by the Izaak Walton League of America—Midwest Office, Minnesotans for an Energy-Efficient Economy, and the Minnesota Center for Environmental Advocacy.

## **J. National Solid Wastes Management Association**

The National Solid Wastes Management Association supported the reconsideration petition of the Minnesota Resource Recovery Association, which challenged the initial Order's finding that the one percent biomass goal applied to the pool of energy procured or generated under the renewable energy objectives statute, not to annual retail electric sales.

The Association opposed the joint reconsideration petition filed by the Sierra Club North Star Chapter, and the petition for reconsideration filed jointly by the Izaak Walton League of America—Midwest Office, Minnesotans for an Energy-Efficient Economy, and the Minnesota Center for Environmental Advocacy.

## **K. Minnesota Chamber of Commerce**

The Minnesota Chamber of Commerce opposed all petitions for reconsideration as well as the request for abeyance and clarification on grounds that they offered no new evidence or insights that merited reopening the initial Order.

## **L. Minnkota Power Cooperative**

Minnkota opposed all requests for reconsideration as offering nothing new and emphasized the need to move forward expeditiously to implement the statute.

## **V. Proceedings on Reconsideration**

The petitions for reconsideration, the request for abeyance and clarification, and the parties' responses to these filings came before the Commission on August 5, 2004. Having reviewed the entire record and having heard the arguments of the parties, the Commission makes the following findings, conclusions, and Order.

### **FINDINGS AND CONCLUSIONS**

## **VI. Summary of Commission Action**

The Commission concludes that its original decision on one issue – the treatment of energy purchased under “green pricing” programs” in measuring compliance with the renewable energy objectives – must be reversed on reconsideration. The Commission finds that excluding that energy is more consistent with the public interest and the policy goals of the Public Utilities Act than including it, as the original Order permits. The Commission will therefore reverse that decision on reconsideration.

The Commission will affirm the remainder of the June 1 Order.

## **VII. The Treatment of Energy Generated Under “Green Pricing” Programs**

### **A. Introduction**

The “green pricing” statute<sup>1</sup> requires all Minnesota distribution utilities to offer their customers the opportunity to stipulate that some or all of the energy purchased or generated on their behalf will be “renewable energy or energy generated by high-efficiency, low-emissions, distributed generation such as fuel cells and microturbines fueled by a renewable fuel.”<sup>2</sup> The statute requires utilities to charge customers exercising the green pricing option the difference between the cost of purchasing or generating renewable energy and the cost of purchasing or generating nonrenewable energy.

One of the issues on which the Commission sought comments at the outset of this proceeding was whether energy purchased under green pricing programs should be counted toward meeting the renewable energy objectives, if the energy was generated by one of the “eligible energy technologies” listed in the renewable energy objectives statute.

### **B. The Parties' Positions**

Commenting parties were deeply divided on this issue. The environmental, consumer, and community organizations participating in the case, and the Residential and Small Business Utilities Division of the Office of the Attorney General, opposed counting green pricing generation toward the renewable energy objectives.

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<sup>1</sup> Minn. Stat. § 216B.169.

<sup>2</sup> Minn. Stat. § 216B.169, subd. 2 (a).

These commentators argued that it would be deceptive to continue marketing green pricing programs without explaining to customers that it was possible that the power for which they were paying a premium would have been acquired by the utility anyway – and its cost reflected in all customers’ rates – as part of the utility’s obligatory good faith effort to meet the renewable energy objectives. They also argued that it would be inequitable and discriminatory to charge green pricing customers a premium for renewable energy purchased under the green pricing program, when other customers would receive renewable energy generated or purchased under the renewable energy objectives program at standard rates.

The remaining commentators supported counting energy purchased under green pricing programs. They pointed out that the statute does not exclude green pricing energy and that it does exclude other types of generation. They emphasized that the renewable energy objectives are only goals and that it is therefore by no means certain that renewable energy purchased under green pricing programs would have been provided to the utility’s ratepayers anyway.

They also emphasized the need for a variety of tools and strategies to meet the renewable energy objectives and argued that green pricing is one of many tools utilities should be permitted to consider using.

### **C. The Initial Order**

In its initial Order the Commission concluded that utilities, with the possible exception of Xcel Energy,<sup>3</sup> could elect to count energy purchased under green pricing programs toward their renewable energy objectives, if they gave customers clear and timely notice of this election and permitted customers to withdraw from these programs upon reviewing the notice.

This decision was based on three principal grounds. First, although the Commission considered the statute ambiguous, it found that the absence of a statutory prohibition against counting green pricing energy weighed in favor of including it.

Second, the Commission rejected claims that counting green pricing energy toward the renewable energy objectives would be deceptive or discriminatory, because the renewable energy objectives were just that – objectives. Since these objectives were to be pursued with due attention to technical feasibility, rate impacts, and system reliability, it was by no means certain that green pricing energy would have been produced in any case to meet the renewable energy objectives.<sup>4</sup>

Third, the Commission rejected claims that counting green pricing energy would constitute “double-counting,” explaining that statutory initiatives promoting conservation and renewable energy are normally considered complementary, not competitive, enterprises.

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<sup>3</sup> The unique status and obligations of Xcel Energy under the renewable energy objectives statute will be addressed in a subsequent Order. Among other things, the statute provides that the renewable energy objectives are requirements for Xcel, subject to resource planning requirements, least-cost planning requirements, and reliability constraints. Minn. Stat. § 216B.1691, subd. 6.

<sup>4</sup> Minn. Stat. § 216B.1691, subd. 2 (c).

#### **D. Action on Reconsideration**

On reconsideration the Commission concludes that excluding green pricing energy in measuring utilities' compliance with the renewable energy objectives is more consistent with the public interest and the goals of the Public Utilities Act than including it.

The green pricing program is a public policy initiative established by the Legislature, embraced by the environmental community, and gaining popularity with ratepayers. It offers clear promise as a tool for increasing the use of renewable and distributed generation, heightening public awareness of clean energy issues, and facilitating public involvement in energy initiatives the Legislature has found to be critical to the state's energy future. Sustaining this program and ensuring its future viability are goals and responsibilities of this Commission. Counting green pricing energy toward the renewable energy objectives is inconsistent with these goals and responsibilities because it jeopardizes the success, effectiveness, and future of the green pricing program.

The initial Order is correct in explaining that counting green pricing energy is not inherently deceptive or discriminatory, since utilities' obligations under the renewable energy objectives statute are not absolute, but tempered by cost, reliability, and technical considerations. It is true, as the Order explains, that there is therefore no certainty that the utility would have acquired the energy purchased by green pricing customers anyway, to meet its renewable energy objectives. It is equally true, however, that the utility *might* have acquired the energy anyway, to meet its renewable energy objectives, and that is the source of the problem.

While it might not be deceptive or discriminatory to enroll ratepayers in the green pricing program after full disclosure of the complex relationship between that program and the renewable energy objectives, such disclosure would almost certainly reduce program participation. It strains credulity to suggest that ratepayers will be just as eager to pay a premium for green energy that might have been purchased anyway, as for green energy that would not have been purchased but for their payment of the premium.

Further, counting green pricing energy toward the renewable energy objectives complicates an already complex marketing task. Utilities marketing their green pricing programs have already encountered some skepticism and an appropriate insistence on strict accountability.

In Xcel's green pricing tariff docket, for example, the Minnesota Interfaith Climate Change Campaign appeared and reported that, in their experience, consumers were questioning whether utilities would in fact use the green pricing premium to purchase new renewable energy. The Campaign recommended independent verification of Xcel's green energy purchases.<sup>5</sup>

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<sup>5</sup> *In the Matter of Xcel Energy's Petition for Approval of a Renewable Energy Rider*, E-002/M-01-1479, Order Requiring Credit, Discussion, and Reports on Future Credit, Independent Verification, and True-Up, and Other Filings (September 15, 2003).

Customer confusion, too, has posed a challenge to utilities publicizing this innovative program. And the sharply divided opinions of commenting parties in this case illustrate the difficulty of arriving at one straightforward account of the program's function and purpose. Adding another layer of complexity to this program cannot help the program thrive.

Permitting utilities to count green pricing energy toward their renewable energy objectives also raises difficult administrative issues. It is not clear, for example, how to treat premiums paid by ratepayers before utilities opted to count green pricing energy. Neither is it clear whether utilities should be permitted to opt in or out of counting green pricing energy at will, at set intervals, or at one point only.

Finally, the Commission now places less weight than it did originally on the statute's failure to prohibit the inclusion of green pricing energy. The original Order assumed, as the Commission still does, that the statute provides no clear direction on the counting of green pricing energy, leaving the Commission to craft a policy that most effectively promotes the statutory goals. In the original Order the Commission gave some weight to the absence of a statutory prohibition on counting green pricing energy, noting the presence of prohibitions on counting other kinds of energy.

At hearing, however, one party noted at least one statutory provision on renewable energy – a provision permitting the use of Conservation Improvement Program funds for renewable generating facilities – that explicitly permits utilities to count the renewable energy at issue toward its renewable energy objectives.<sup>6</sup> This instance of explicit permission weakens the argument, accepted in part in the initial Order, that it goes without saying that all renewable energy generated under other statutory initiatives is countable toward the renewable energy objectives in the absence of a statutory prohibition.

In short, the statute leaves it to the Commission to determine whether counting green pricing energy toward the renewable energy objectives is consistent with the public interest and the policies underlying the Public Utilities Act. For the reasons set forth above, the Commission concludes that it is not and will reverse its original determination on reconsideration.

## **VIII. Conclusion**

For the reasons set forth above, the Commission will reverse its original determination permitting utilities to count “green pricing” energy toward their renewable energy objectives.

The Commission has examined all the post-Order petitions filed in this case and finds that, with the exception of the green pricing issue, they do not raise new issues, point to new and relevant evidence, expose errors or ambiguities in the original Order, or otherwise persuade the Commission of a need to rethink the decisions in the June 1, 2004 Order. The Commission concludes that those decisions are consistent with the facts, the law, and the public interest and will affirm the remainder of the original Order.

The Commission will so order.

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<sup>6</sup> Minn. Stat § 216B.2411, subd. 3 (a).

**ORDER**

1. Ordering paragraph 6 of the Order issued in this case on June 1, 2004 is hereby amended to read as follows:
  - F. *In meeting their renewable energy objectives, utilities shall not include generation purchased under green pricing programs established under Minn. Stat. § 169.*
2. All other provisions of the Order issued in this case on June 1, 2004 are hereby affirmed.
3. This Order shall become effective immediately.

BY ORDER OF THE COMMISSION

  
Burl W. Haar  
Executive Secretary

(SEAL)

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STATE OF MINNESOTA)  
  )SS  
COUNTY OF RAMSEY )

AFFIDAVIT OF SERVICE

I, Margie DeLaHunt, being first duly sworn, deposes and says:

That on the 13th day of August, 2004 she served the attached

ORDER AFTER RECONSIDERATION.

MNPUC Docket Number: E-999/CI-03-869

XX By depositing in the United States Mail at the City of St. Paul, a true and correct copy thereof, properly enveloped with postage prepaid

XX By personal service

XX By inter-office mail

to all persons at the addresses indicated below or on the attached list:

Commissioners  
Carol Casebolt  
Peter Brown  
Ann Pollack  
Eric Witte  
David Jacobson  
Janet Gonzalez  
Susan Mackenzie  
AG  
Clark Kaml  
Mary Swoboda  
Jessie Schmoker  
Sharon Ferguson - DOC  
Julia Anderson - OAG  
Curt Nelson - OAG

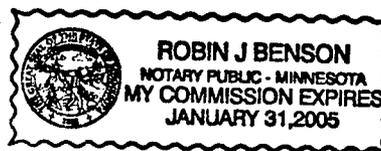
Margie DeLaHunt

Subscribed and sworn to before me,

a notary public, this 13 day of

August, 2004

Robin Benson  
Notary Public



In the Matter of Detailing Criteria  
and Standards for Measuring an  
Electric Utility's Good Faith Efforts  
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STATE OF MINNESOTA PUBLIC UTILITIES COMMISSION

June 2, 2004

To: Service List

From: Burl W. Haar  
Executive Secretary

A handwritten signature in black ink, appearing to be "Burl W. Haar", written over the printed name of the Executive Secretary.

Re: In the Matter of Detailing Criteria and Standards for Measuring an Electric Utility's Good Faith Efforts in Meeting the Renewable Energy Objectives Under Minn. Stat. §216B.1691

Docket No. E-999/CI-03-869

**NOTICE OF COMMENT PERIODS AND FURTHER PROCEDURES**

On June 1, 2004, the Commission issued its *Initial Order Detailing Criteria and Standards for Determining Compliance with Minn. Stat. §216B.1691 and Requiring Customer Notice by Certain Cooperative, Municipal, and Investor-owned Distribution Utilities* in the above-captioned docket. Among other things, the Order delegated authority to the Executive Secretary to issue notices, develop questions, and establish further procedures to resolve remaining issues promptly, including: reporting requirements, developing a weighted scale, criteria and standards applicable to Xcel, certification/verification/tracking systems, voluntary compliance by municipal utilities, and tradable credits.

Attached please find a list of questions on weighting and certain aspects of tradable credits. Initial comments on these matter are due on **Thursday, July 1, 2004** and reply comments on **Tuesday, July 20, 2004**. Comment is being requested on these two issues first, because they directly affect what may qualify to meet the REO. Comments on other remaining issues in this docket will be solicited at a later time.

Questions regarding this matter may be directed to Janet González at 651-296-1336 or Susan Mackenzie at 651-296-8994.

*This document can be made available in alternative formats (i.e., large print or audio tape) by calling (651) 297-4596 (voice), (651) 297-1200 (TTY), or 1-800-627-3529 (TTY relay service).*

Attachment (3 pages)

www.puc.state.mn.us

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1798709

**A. Weighted Scale**

Minn. Stat. §216B.1691, subd. 2 (d), directs the Commission to “*provide for a weighted scale of how energy produced by various eligible energy technologies shall count toward a utility’s objective. In establishing this scale, the Commission shall consider the attributes of various technologies and fuels, and shall establish a system that grants multiple credits toward the objectives for those technologies and fuels the commission determines is in the public interest to encourage.*”

1. The REO statute states that the Commission shall establish a system that grants multiple credits for technologies and fuels it determines are in the public interest to encourage.
  - (a) Would it be permissible under the statute for the Commission to establish a system that instead (or in addition) gives partial credit for technologies and fuels that it finds are less in the public interest to encourage?
  - (b) Would it be permissible under the statute for the Commission to find that a weight of one should be given to all technologies and fuels?
  
2. The REO statute does not provide criteria for the Commission to consider in determining what technologies and fuels are in the public interest. Minn. Stat. §216C.051, subd. 7, sets out preferred electric generation sources that the Legislative Electric Energy Task Force (LEETF) is to use in its work.
  - (a) Should these LEETF guidelines be used to help the Commission make its determinations in the REO docket?
  - (b) Are there other Minnesota statutes or other sources that could help provide guidance to the Commission?
  
3. The REO statute requires the Commission to consider the attributes of various technologies and fuels.
  - (a) What categories of attributes of the various technologies and fuels should the Commission consider in establishing a weighted scale—environmental, sustainability, social, economic, reliability, other?
  - (b) What specific attributes within the categories should be considered by the Commission?
  - (c) How should the environmental cost values established by the Commission under Minn. Stat. §216B.2422, subd. 3 be considered?
  
4. Does the statute permit the Commission to consider attributes other than those related to technology or fuel in establishing a weighted scale, such as location or vintage of facilities? If so, what attributes should be considered?
  
5. Should the Commission establish a specific weight in advance for each currently known technology and/or fuel, establish a checklist of attributes that would lead to a weight being assigned to each specific project on a case by case basis, or use some other method?

6. What specific weights should the Commission establish for each technology, fuel, attribute, and/or other factor(s)? What is your rationale for the specific weights and the overall system of weighting?
7. Is a "credit" equivalent to one kWh or MWh generated or purchased, or should it be defined in some other manner?

**B. Renewable Energy (Tradable) Credits**

Minn. Stat. §216B.1691, subd. 4, states that "*(a) To facilitate compliance with this section, the commission, by rule or order, may establish a program for tradable credits for electricity generated by an eligible energy technology. In doing so, the commission shall implement a system that constrains or limits the cost of credits, taking care to ensure that such a system does not undermine the market for those credits. (b) In lieu of generating or procuring energy directly to satisfy the renewable energy objective of this section, an electric utility may purchase sufficient renewable energy credits, issued pursuant to this subdivision, to meet its objective. (c) Upon the passage of a renewable energy standard, portfolio, or objective in a bordering state that includes a similar definition of eligible energy technology or renewable energy, the commission may facilitate the trading of renewable energy credits between states.*

1.
  - (a) In the absence of a Commission-established program for tradable renewable credits (TRCs), does Minn. Stat. 216B.1691, subd. 4, allow Minnesota utilities to acquire tradable credits to meet their REO? If so, should the Commission allow it?
  - (b) Does Minn. Stat. 216B.1691, subd. 4, allow utilities to acquire TRCs from another state if the conditions under Subdivision 4(c) have not been satisfied?
2. If permitted, would your utility expect or intend to use TRCs to meet its Minnesota REO for 2005, 2006, or 2007? What portion of your utility's annual REO would you expect to be met by the purchase of TRCs for these years?
3. Please list and describe the existing programs or other sources from which your utility would purchase TRCs to meet its REO, if permitted by the Commission. Include a description of the program or source including how facilities are certified, generation is verified, and energy is tagged. Please indicate the difference between an existing program's (or other source's) definition of eligible energy technologies and the definition of eligible energy technologies under Minn. Stat. 216B.1691.

4. Do these existing TRC programs or other sources tag the TRCs so that your utility can demonstrate to the Commission that the TRCs are from eligible energy technologies as defined under Minn. Stat. 216B.1691 and are not double counted? How would your utility demonstrate this to the Commission?
5. What other issues would the Commission need to address prior to allowing utilities to acquire TRCs from existing programs or other sources to meet the Minnesota REO in 2005, 2006, and 2007? For example, should the Commission accept TRCs with no expiration date?



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and Standards for Measuring an  
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Ken Nickolai  
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Chair  
Commissioner  
Commissioner  
Commissioner  
Commissioner

In the Matter of Detailing Criteria and Standards for Measuring an Electric Utility's Good Faith Efforts in Meeting the Renewable Energy Objectives Under Minn. Stat. § 216B.1691

ISSUE DATE: October 19, 2004

DOCKET NO. E-999/CI-03-869

DOCKET NO. E-999/CI-04-1616

In the Matter of In the Matter of a Commission Investigation into a Multi-state Tracking and Trading System for Renewable Energy Credits

SECOND ORDER IMPLEMENTING MINN. STAT. § 216B.1691, OPENING DOCKET TO INVESTIGATE MULTI-STATE PROGRAM FOR TRACKING AND TRADING RENEWABLE CREDITS, AND REQUESTING PERIODIC UPDATES FROM STAKEHOLDER GROUP

**PROCEDURAL HISTORY**

**I. Introduction and Factual Background**

In 2001, the Minnesota Legislature passed Minn. Stat. § 216B.1691, setting renewable energy objectives for Minnesota investor-owned electric utilities, generation and transmission cooperatives, and municipal power agencies. The statute required these utilities, cooperatives, and power agencies (hereinafter, "utilities") to make good faith efforts to generate or otherwise secure enough electricity from qualifying renewable energy technologies to represent 10% of total retail electric sales by the year 2015.

In 2003, the Legislature amended the statute to require the Commission to supervise and facilitate these good faith efforts. Among other things, the 2003 amendments required the Commission to issue an initial Order, and subsequent Orders as necessary, doing the following things:

- Detailing criteria and standards for measuring a utility's efforts to meet the renewable energy objectives and determining whether the utility has met the good faith requirement.

1916913

- Detailing criteria and standards that protect against undesirable impacts on the reliability of the utility's system.
- Detailing criteria and standards that protect against undesirable economic impacts on the utility's ratepayers.
- Detailing criteria and standards that consider technical feasibility.
- Providing for a weighted scale that determines how energy generated by different technologies counts toward a utility's objective and that grants multiple credits for technologies and fuels that the Commission finds it in the public interest to encourage.

The 2003 amendments also authorized the Commission to establish a program for tradable credits for electricity generated by eligible technologies and provided guidelines for any tradable credits system the Commission might establish.

## II. Commission Proceedings to Date

### A. The Initial Order and Order After Reconsideration

The Commission determined, after reviewing initial comments on procedural and scoping issues, that this case had too many interdependent and sequential issues to resolve in a single Order. The Commission therefore sought comments on threshold issues, which it resolved in an initial Order, dated June 1, 2004, and an Order after reconsideration, dated August 13, 2004. Those Orders resolved the following issues:

- ***Covered Entities*** – The June 1 Order listed the 16 entities subject to the renewable energy objectives statute.
- ***Eligible Biomass Technologies*** – The June 1 Order permitted utilities to count toward their renewable energy objectives all biomass generation falling within existing statutory definitions of biomass.<sup>1</sup>
- ***Eligible Hydroelectric Facilities*** – The June 1 Order found that the 60-megawatt statutory cap on countable hydroelectric facilities applied to all generation at a single hydroelectric site, not to each generating unit at that site.

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<sup>1</sup> The Order excluded peat, which may arguably fall within certain statutory definitions of biomass, concurring with the uncontested claims of commenting parties that peat does not regenerate quickly enough to be classified as renewable and that harvesting peat poses significant risks to northern ecosystems.

- ***Pre-existing Generation*** – The June 1 Order found that the 10% statutory goal applies to both individual utilities and the state as a whole and that the statute does not require that all countable generation after 2005 come from new sources, nor that countable generation be added in equal annual increments.
- ***The Biomass Goal*** – The June 1 Order found that the plain meaning of the statutory language was that the percentage goals for biomass-generated energy apply to the pool of energy procured or generated under the renewable energy statute, not to annual retail electric sales.
- ***The Treatment of Energy Generated Under “Green Pricing” Programs*** – The August 13, 2004 Order After Reconsideration reversed the Commission’s original decision on this issue and excluded “green pricing” energy from counting toward a utility’s renewable energy objectives.
- ***Criteria and Standards for Meeting the Statutory “Good Faith Effort” Requirement*** – The June 1 Order set standards for evaluating utility filings to determine whether the utility has committed the time, money, and other institutional resources necessary to demonstrate a good faith effort.
- ***Verification and Implementation*** – The June 1 Order asked the Department of Commerce, the Commission’s own staff, and other interested stakeholders to work together toward the establishment of an independent tracking system to certify, verify, and implement the renewable energy objectives.

The June 1 Order also delegated to the Executive Secretary the authority to issue notices, develop questions, and establish further procedures to resolve remaining issues promptly.

## **B. The Current Comment Process**

On June 2, 2004, the Executive Secretary issued a notice requesting comments on two more major issues: (1) the statutory requirement to establish a scale for weighting countable generation from different technologies; and (2) the statutory provision permitting the Commission to establish a renewable credits trading program. The following persons and organizations filed comments in response to the June 2 notice:

### ***Investor-Owned Utilities***

- Interstate Power Company
- Northern States Power Company, d/b/a Xcel Energy
- Minnesota Power
- Otter Tail Power Company

### *Electric Cooperatives*

- Great River Energy
- Dairyland Power Cooperative
- Basin Electric Power Cooperative
- Minnkota Power Cooperative, Inc.

### *Municipal Electric Entities*

- Missouri River Energy Services/Western Minnesota Municipal Power Agency
- Minnesota Municipal Power Agency

### *State Agencies*

- Minnesota Department of Commerce

### *Environmental/Community Organizations*

- Izaak Walton League of America-Midwest Office, Minnesotans for an Energy-Efficient Economy, and Minnesota Center for Environmental Advocacy, filing jointly
- The Minnesota Project, Communities United for Responsible Energy, and Concerned River Valley Citizens, filing jointly
- North Star Chapter of the Sierra Club
- Clean Water Action Alliance

### *Other Organizations, Companies, and Individuals*

- National Solid Wastes Management Association
- Minnesota Chamber of Commerce

## **FINDINGS AND CONCLUSIONS**

### **I. The Issues**

The June 2 notice posed detailed questions on two major issues: (1) how the Commission should design and implement a weighted scale for counting the energy generated by various eligible renewable technologies, as required under Minn. Stat. § 216B.1691, subd. 2 (d); and (2) whether the Commission should establish a tradable renewable credits program, as authorized under Minn. Stat. § 216B.1691, subd. 4, and if so, how that program should be structured and operated.

These issues will be addressed in turn, together with the issue of avoiding double-counting of eligible generation through proper inter-utility and inter-jurisdictional allocation procedures. The allocation issue, which is integrally related to both the weighted scale and tradable credits issues, was raised in initial comments by the Department of Commerce and analyzed by the other parties in reply comments.

## II. The Weighted Scale

### A. Introduction

The renewable energy objectives statute directs the Commission to establish a weighted scale for counting toward the renewable energy objectives the energy produced by eligible technologies. It directs the Commission to consider the attributes of various technologies and fuels in establishing the scale and directs the Commission to establish a system granting multiple credits to technologies and fuels that the Commission finds it in the public interest to encourage.<sup>2</sup>

The June 2 notice posed detailed questions about how to establish a weighted scale, including what criteria to use in assigning weights to different technologies and fuels, whether it would be permissible to assign some technologies or fuels only partial credit, and whether it would be permissible, at least for the present, to assign all eligible technologies a weight of one.

### B. The Comments

None of the commenting parties saw any significant benefit in establishing a weighted scale with multiple credits at this point in the implementation of the renewable energy objectives statute.

Most cautioned that producing any multiple-credit weighted scale at this point would require an unreasonably large investment of regulatory and stakeholder resources; that any weighted scale produced in the near-term would likely be outdated by the time it was completed; and that weighting some technologies or fuels more heavily than others carried the risk of distorting market signals and pricing structures, to the detriment of the long-term development of renewable energy.

Commenting parties also pointed out that granting only partial credit to some resources could effectively increase a utility's good faith obligation beyond the 10% statutory goal, while granting multiple credits could reduce a utility's obligation below that goal.

The only party that submitted a weighting proposal was the Department of Commerce (the Department), which recommended valuing all eligible generation at one, then discounting pre-existing generation by 50% and out-of-state generation by 25%. The Department argued that it would be superfluous to develop a scale assigning weights to different technologies and fuels based on environmental and socioeconomic factors, since that is already being done in the resource planning process, and that the only remaining factors requiring weighting were the age and location of eligible facilities.

At hearing the Department clarified that its proposal was designed more to facilitate and focus discussion than to function as a policy blueprint. The agency emphasized that its main concern was to avoid granting multiple credits for specific fuels or technologies at this time, believing that that course of action carried a serious risk of encouraging non-cost-effective decision-making at this stage in the development of renewable energy.

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<sup>2</sup> Minn. Stat. § 216B.1691, subd. 2 (d).

### C. Commission Action

The Commission finds that at this point it is not in the public interest to encourage any specific renewable fuel or technology through the use of multiple credits. In fact, multiple credits pose several serious risks at this stage in the development of state energy policy and the renewable energy industry. The Commission will therefore assign an initial value of one to all energy from eligible technologies, recognizing that subsequent developments may justify opening a proceeding to reexamine the multiple credits issue. The reasons for this decision are set forth below.

First, assigning values higher than one to specific fuels or technologies would reduce the amount of renewable generation utilities must try to acquire under the renewable energy objectives statute below the 10% goal set by the Legislature. While this creative tension between the 10% goal and multiple credits is part of the statutory structure, the Commission will not lightly sacrifice the 10% goal. To qualify for multiple credits – and thereby potentially reduce the amount of renewable energy available to Minnesota consumers – specific fuels or technologies must demonstrate a unique public policy value, which has not happened in this case.

Second, granting multiple credits to specific fuels or technologies at this point would likely distort market signals and price structures, jeopardizing the development of a robust market for renewable energy supplies. Multiple credits would handicap not just lower-weighted technologies and fuels, by discounting their value to the utility, but higher-weighted technologies and fuels, by potentially stifling efficiency and innovation.

As critical as subsidies can be to technological innovation, decisions to grant subsidies must be based on reliable economic and policy analysis showing clear public benefit. This record contains no such analysis, nor could any record obtainable at reasonable cost in the foreseeable future do so. It is simply premature to assign multiple credits to any particular renewable fuel or technology.

Third, granting multiple credits to specific fuels or technologies at this point would likely reduce the diversity of the state's renewable energy supplies, as utilities disproportionately selected fuels and technologies carrying multiple credits. Worse, favoring certain renewable technologies over others could skew research and development efforts in ways that ultimately prove to be counterproductive. It is too early in the development of renewable energy technology and too early in the life of this critical energy policy initiative to limit the sources from which utilities will draw their renewable energy supplies.

Further, the Commission concurs with the commenting parties that for the present the costs of attempting to assign multiple credits to specific fuels or technologies would far exceed the benefits. Setting multiple-credit values at this point would require a costly and comprehensive evidentiary proceeding, a detailed factual record, voluminous expert testimony, and painstaking policy and economic analysis. With so many renewable technologies still in their infancy, the outcome of that proceeding is unlikely to be reliable or helpful for any significant length of time.

Finally, the Commission appreciates the Department's creative grappling with weighted-scale issues and its resulting proposal to grant partial credit to preexisting and out-of-state resources. That proposal clearly achieved its purpose of acting as a springboard for productive discussion. The Commission will not, however, adopt the Department's proposal, since it raises troublesome legal and policy issues not offset by any significant policy or practical advantages apparent at this time.

First, it is not clear that the statute permits granting partial credit, since it speaks in terms of multiple, not fractional, credits. Second, discounting preexisting and out-of-state generation would effectively increase the renewable energy obligation of some utilities beyond the 10% goal set by the Legislature. Increasing that obligation without evidence of compelling public need or benefit gives the Commission pause. Third, discounting out-of-state generation is inconsistent with the Commission's decision on its inclusion in the June 1 Order and with the reasoned policy analysis explaining that decision.

For all the reasons set forth above, the Commission will establish a weighted scale valuing all countable generation equally at this stage in the renewable energy objectives initiative.

### **III. Tradable Renewable Credits**

#### **A. Introduction**

The renewable energy objectives statute permits the Commission to establish a program for tradable credits for electricity generated by eligible technologies, under which utilities may meet their renewable energy objectives by buying tradable credits instead of directly generating or procuring renewable energy.

The statute requires the Commission, if it establishes a tradable credit program, to implement a system that constrains or limits the price of the credits without undermining the market for them. The statute also authorizes the Commission to facilitate the interstate trading of renewable credits, if a bordering state adopts an energy standard, portfolio, or objective similar to Minnesota's renewable energy objectives initiative.<sup>3</sup>

The June 2 notice requested comments on what form any tradable credits program should take, whether and to what extent utility respondents anticipated using these credits if they became available, and whether the statute permitted utilities to use tradable credits from neighboring states prior to the establishment of any Minnesota-specific tradable renewable credit program.

#### **B. The Comments**

Everyone who addressed the issue supported developing a multi-state tradable renewable credits program. Most recommended that the Commission open a specific docket for this purpose and that it build on the work already being done on this issue by stakeholder groups.

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<sup>3</sup> Minn. Stat. § 216B.1691, subd. 4.

Only two utilities – Basin Electric Power Cooperative and Minnesota Municipal Power Agency – expressed interest in using tradable renewable credits to meet their renewable energy objectives during the 2005-2007 time frame. And opinions were divided as to whether the statute permits the use of tradable renewable credits issued under neighboring states’ programs prior to the establishment of a Minnesota program.

### **C. Commission Action**

#### **1. Investigatory Docket Opened**

The Commission concurs with the parties that it is important to fully and efficiently explore the potential for developing a workable interstate tradable renewable credits program. The best mechanism for accomplishing this is a new docket focused solely on tradable credit issues, including the recurring issue of tracking and trading credits across jurisdictions without double-counting. The Commission will open that investigatory docket as part of this Order.

The Commission also concurs with the parties that it is important to make full use of the foundational research, policy analysis, data collection, and ongoing examination of these issues conducted by stakeholder participants in the Midwest Tradable Renewable Credits Workshops.<sup>4</sup> These workshops have attracted and continue to attract a diverse group of stakeholders from the public, private, and public interest sectors, all with significant substantive and policy expertise, and all committed to working together to develop a framework for the interstate trading of renewable credits.

It is important to establish regular lines of communication with these stakeholders, both to avoid duplicating one another’s efforts and to avoid missing promising lines of inquiry. The Commission will therefore ask the group’s technical review committee, which performs the day-to-day work on tracking and trading issues, for quarterly updates on its work, as well as reports on breaking developments that might influence or inform the Commission’s investigation. The Commission will ask its staff and the staff of the Department to liaise with the committee to facilitate these communications.

#### **2. Treatment of Out-of-State Credits**

One of the questions posed to the parties in the June 2 notice was whether the renewable energy objectives statute permits utilities to use tradable credits from neighboring states prior to the establishment of a Minnesota renewable tradable credit program. The Commission concludes that it does not.

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<sup>4</sup> These workshops, which are sponsored by the Commission, the Minnesota Department of Commerce, and the National Council on Electricity Policy, have been held twice so far, in February and June of this year, and a third workshop is scheduled for October 26 in Madison, Wisconsin.

The statutory language on interstate renewable credit trading reads as follows:

**Subd. 4. Renewable energy credits.** (a) To facilitate compliance with this section, the commission, by rule or order, may establish a program for tradable credits for electricity generated by an eligible energy technology. In doing so, the commission shall implement a system that constrains or limits the cost of credits, taking care to ensure that such a system does not undermine the market for those credits.

(b) In lieu of generating or procuring energy directly to satisfy the renewable energy objective of this section, an electric utility may purchase sufficient renewable energy credits, issued pursuant to this subdivision, to meet its objective.

(c) Upon the passage of a renewable energy standard, portfolio, or objective in a bordering state that includes a similar definition of eligible energy technology or renewable energy, the commission may facilitate the trading of renewable energy credits between states.

Minn. Stat. § 216B.1691, subd. 4.

Parties made two arguments in favor of reading the statute to permit the use of out-of-state credits before a Minnesota tradable credits program is in place: (1) the statute contains no direct prohibition against counting out-of-state credits before the Commission establishes a Minnesota program; and (2) the word “facilitate” in subsection (c) carries an expansive meaning and should be read expansively. The Commission disagrees.

First, the absence of a direct prohibition against pre-program use of out-of-state credits carries little weight in light of the language of subsection (b), which explicitly links the right to use a tradable renewable credit toward the renewable energy objectives with the credit having been “issued pursuant to this section.” In the absence of a Commission-established tradable credit program, no credit can meet that test.

Second, the language in subsection (c) on facilitating “the trading of renewable energy credits between states” goes to exactly that issue – trading renewable energy credits *between states*. It does not go to individual utilities’ rights but to the Commission’s statutory right to recognize other states’ tradable credits as part of its tradable credits program, and to work with other state commissions to establish mechanisms to recognize one another’s renewable credits. “Trading credits between states” assumes that two or more states have programs issuing credits to trade.

Any expansiveness in the word “facilitate,” then, goes to the Commission’s flexibility in dealing with other states’ credits in the context of its own tradable credits program, not to utilities’ flexibility in counting unaccredited energy supplies or energy credits toward their good faith obligation under the renewable energy objectives statute.

The Commission reads subdivision 4 as a three-part whole setting forth the Commission's responsibilities and authority regarding tradable renewable credits. Subsection (a) grants the Commission the authority to establish a renewable tradable credit program if it sees fit; it also sets forth basic pricing principles. Subsection (b) grants utilities the right to use tradable renewable credits issued under the Commission's program to meet their renewable energy objectives, instead of buying or generating renewable energy. Subsection (c) permits the Commission, if it establishes a tradable renewable credits program, to determine that credits issued by other states are countable and to work with the commissions of other states to facilitate reciprocal recognition of one another's tradable credits.

For all these reasons, the Commission finds that the renewable energy objectives statute does not permit utilities to count out-of-state tradable renewable credits prior to the establishment of a tradable renewable credit program in this state.

#### **IV. Allocation Issues**

##### **A. Introduction**

In its notice soliciting comments in the first phase of this case, the Commission requested comments on how to track units of renewable energy to ensure that they were not double-counted and that they were properly allocated – between states, for utilities serving more than one state, and between retail and wholesale customers, for utilities with both retail and wholesale operations. In its Order issued in the first phase of the case, the Commission found that the commenting parties were probably in the best position to develop workable allocation, verification, and tracking procedures and urged them to collaborate in this effort:

The commentors filed a wealth of suggestions, ranging from self-certification to exacting third-party verification. It was clear, however, that they shared the same interest in developing the least cumbersome and most clearly reliable verification procedures possible. It was equally clear that they were in the best position to develop these procedures, since most of them had hands-on experience with verification and allocation issues.

The Commission will therefore ask the Department, its own staff, interested commentors, and any other interested stakeholders to work together toward the establishment of an independent tracking system to certify, verify, and implement the renewable energy objectives. . . .

*Order at 18.*

Allocation issues arise in any effort to design a weighted scale, however, and the Department, the only party to design and submit a proposed weighted scale, also submitted a proposed allocation process. Under that process, an allocation factor would be developed for each utility, based on the

percentage of the utility's total load or total energy consumed in Minnesota; that allocation factor would be used to determine the percentage of each renewable generation source that should be credited to Minnesota and counted toward the renewable energy objectives.

## **B. The Comments**

Most of the parties opposed this allocation process, pointing out that it would require multi-state utilities to treat the 10% goal as a system-wide goal instead of a Minnesota-specific goal, increasing their renewable energy obligations.

The Department responded at hearing that it concurred in a more fine-tuned set of guidelines introduced for discussion purposes by Commission staff. The parties present at hearing commended those guidelines as well. The guidelines' most helpful contribution is probably their mechanism for allocating entirely to the Minnesota jurisdiction those renewable resources that are added solely to meet Minnesota's renewable energy objectives and that are not counted toward any other renewable energy initiative.

## **C. Commission Action**

Allocation issues are typically complex and fact-specific. At this point in the process of implementing the renewable energy objectives statute, neither the Commission nor the stakeholders have enough experience to set firm rules for allocating renewable resources between jurisdictions or across wholesale/retail boundaries. At this point the surest route to fair and reasonable allocations is to resolve allocation issues in company-specific resource plan or renewable energy objective filings. Company-specific filings will permit careful evaluation of each utility's unique network and load characteristics, as well as its renewable energy obligations in other states. The Commission will therefore set utility-specific allocation factors for renewable resources in utility-specific filings.

At the same time, the Commission respects the position, expressed by some parties, that it would be helpful for the utilities to have some general guidance on allocation issues as they prepare these filings. The Commission will therefore adopt the staff-prepared guidelines as a non-binding starting point for addressing company-specific allocation issues, emphasizing that each company's allocation factor will turn on unique facts and factors that may be inadequately reflected in the guidelines.

The guidelines are set forth below:

- Energy generated from network resources or purchase arrangements which existed prior to the establishment of the Minnesota REO (Renewable Energy Objectives) should be credited to the REO on the basis of the percentage of that utility's system energy consumed in Minnesota, and then the percentage of energy consumed by its (or its members') Minnesota retail customers.

- With respect to energy generated from facilities or purchase arrangements entered into after the establishment of the Minnesota REO, each utility has the burden of showing, in resource plan or REO plan filings, what percentage of the energy generated should be counted toward the REO. In absence of a convincing showing that all or some greater percentage than would result from allocation of such energy was acquired for purposes of the REO and is being used to serve Minnesota retail customers it will be credited to the REO on the basis of the percentage of that utility's system energy consumed in Minnesota, and then the percentage of energy consumed by its (or its members') Minnesota retail customers.
- In resources plans or REO report proceedings, if the utility wished to propose some other allocation or assignment method, the utility would have the burden of demonstrating that some other method is more reasonable given its particular circumstances.

## V. Next Steps

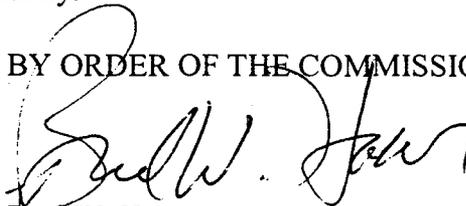
The June 2 Order delegated to the Executive Secretary the authority to issue notices, develop questions, and establish further procedures to promptly resolve the remaining issues in this case. That authority remains in effect and will be exercised to continue the work of implementing the renewable energy objectives statute.

### ORDER

1. The Commission finds that at present it is not in the public interest to assign multiple credits to any renewable technology or fuel countable toward the renewable energy objectives and therefore assigns a weight of one to all energy produced by qualifying technologies.
2. The Commission hereby opens a new docket to investigate establishing a multi-state tracking and trading program for tradable renewable credits, *In the Matter of In the Matter of a Commission Investigation into a Multi-state Tracking and Trading System for Renewable Energy Credits*, Docket No. E-999/CI-04-1616.
3. The Commission requests that the technical review committee of the stakeholder participants in the Midwest Tradable Renewable Credits Workshops provide quarterly updates on its work, as well as reports on breaking developments that might influence or inform the Commission's investigation. The Commission asks its staff and the staff of the Department to liaise with the committee to facilitate these communications.

4. The proper allocation of renewable resources between jurisdictions, wholesale/retail operations, competing renewable initiatives, or any other factor giving rise to a need for an allocation process, shall be determined on the basis of the facts specific to each company in individual resource plan filings or renewable energy objective filings. The Commission adopts the following general guidelines as a non-binding starting point for addressing allocation issues:
- (a) Energy generated from network resources or purchase arrangements which existed prior to the establishment of the Minnesota renewable energy objectives should be credited to the renewable energy objectives on the basis of the percentage of that utility's system energy consumed in Minnesota, and then the percentage of energy consumed by its (or its members') Minnesota retail customers.
  - (b) With respect to energy generated from facilities or purchase arrangements entered into after the establishment of the Minnesota renewable energy objectives, each utility has the burden of showing, in resource plan or renewable energy objectives plan filings, what percentage of the energy generated should be counted toward the renewable energy objectives. In absence of a convincing showing that all or some greater percentage than would result from allocation of such energy was acquired for purposes of the renewable energy objectives and is being used to serve Minnesota retail customers it will be credited to the renewable energy objectives on the basis of the percentage of that utility's system energy consumed in Minnesota, and then the percentage of energy consumed by its (or its members') Minnesota retail customers.
  - (c) In resource plans or renewable energy objectives report proceedings, if the utility wished to propose some other allocation or assignment method, the utility would have the burden of demonstrating that some other method is more reasonable given its particular circumstances.
5. This Order shall become effective immediately.

BY ORDER OF THE COMMISSION



Burl W. Haar  
Executive Secretary

(S E A L)

This document can be made available in alternative formats (i.e., large print or audio tape) by calling (651) 297-4596 (voice), or 1-800-627-3529 (MN relay service).

STATE OF MINNESOTA)  
  )SS  
COUNTY OF RAMSEY )

AFFIDAVIT OF SERVICE

I, Amy Rodd, being first duly sworn, deposes and says:

That on the 19th day of October, 2004 she served the attached

SECOND ORDER IMPLEMENTING MINN STAT. 216B.1691, OPENING DOCKET TO INVESTIGATE MULTI-STATE PROGRAM FOR TRACKING AND TRADING RENEWABLE CREDITS, AND REQUESTING PERIODIC UPDATES FROM STAKEHOLDER GROUP.

MNPUC Docket Number: E-999/CI-03-869 & E-999/CI-04-1616

- XX By depositing in the United States Mail at the City of St. Paul, a true and correct copy thereof, properly enveloped with postage prepaid
- XX By personal service
- XX By inter-office mail

to all persons at the addresses indicated below or on the attached list:

Commissioners  
Carol Casebolt  
Peter Brown  
Ann Pollack  
Eric Witte  
David Jacobson  
Susan Mackenzie  
AG  
Clark Kaml  
Janet Gonzalez  
Mary Swoboda  
Jessie Schmoker  
Sharon Ferguson - DOC  
Julia Anderson - OAG  
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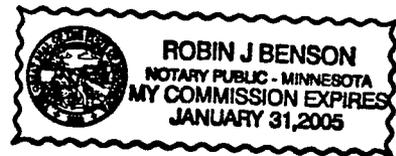
Amy Rodd

Subscribed and sworn to before me,

a notary public, this 19 day of

October, 2004

Robin J Benson  
Notary Public



In the Matter of Detailing Criteria  
and Standards for Measuring an  
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In the Matter of Detailing Criteria  
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In the Matter of Detailing Criteria  
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In the Matter of Detailing Criteria  
and Standards for Measuring an  
Electric Utility's Good Faith Efforts  
1 Service List

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Wheeler Van Sickle & Anderson SC  
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Owatonna Public Utilities  
208 South Walnut  
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In the Matter of Detailing Criteria  
and Standards for Measuring an  
Electric Utility's Good Faith Efforts  
1 Service List

Thomas J. Zaremba  
WHEELER, VAN SICKLE & ANDERSON  
Suite 801  
25 West Main Street  
Madison, WI 53703-3398

In the Matter of a Commission  
Investigation into a Multi-State  
Tracking and Trading System for  
1 Service List

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Sharon Ferguson (4)  
Docket Coordinator  
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900 NCL Tower  
445 Minnesota Street  
St. Paul, MN 55101-2130

November 23, 2004

[Contact Name]  
[Utility Name]  
[Utility Address]

RE: Minnesota Renewable Energy Objective

Dear [Contact Name]:

Enclosed is a set of information requests needed for a report required by Minnesota law. To meet the statutory requirement, the Minnesota Department of Commerce must have this information by **December 10, 2004**. This report will be provided, as required, to the Chairs of the House of Representatives and Senate Committees with jurisdiction over energy and environment policy issues, along with others including the Minnesota Public Utilities Commission. The following explains the background and basis for these information requests.

Minnesota Statutes §216B.1691 Renewable Energy Objectives, Subd. 3. Utility plans filed with Commission, Paragraph (b) states:

The commissioner [of the Minnesota Department of Commerce] shall compile the information provided to the [Minnesota Public Utilities] commission under paragraph (a), and report to the chairs of the house of representatives and senate committees with jurisdiction over energy and environment policy issues as to the progress of utilities in the state in increasing the amount of renewable energy provided to retail customers, with any recommendations for regulatory or legislative action, by January 15 of each odd-numbered year.

The attached requests seek information for the required legislative report. The information required in the report is specified in Minnesota Statutes §216B.1691, Subd. 3, Paragraph (a) which states:

Each electric utility shall report on its plans, activities, and progress with regard to these objectives in its filings under section 216B.2422 or in a separate report submitted to the commission every two years, whichever is more frequent, demonstrating to the commission that the utility is making the required good faith effort. In its resource plan or a separate report, each electric utility shall provide a description of:

- (1) the status of the utility's renewable energy mix relative to the good faith objective;
- (2) efforts taken to meet the objective;
- (3) any obstacles encountered or anticipated in meeting the objective;  
and
- (4) potential solutions to the obstacles.

This reporting is required of all utilities as defined by Minnesota Statutes §216B.1691 Subdivision 1. Definitions, paragraph (b) in the following:

“Electric utility” means a public utility providing electric service, a generation and transmission cooperative electric association, or a municipal power agency.

From this definition, the Minnesota Public Utilities Commission in its June 1, 2004 Order under Docket No. E999/CI-03-869 determined the following sixteen entities were subject to the Minnesota Renewable Energy Objective:

Public Utilities Providing Electric Service

- Northern States Power Company, d/b/a Xcel Energy
- Minnesota Power
- Otter Tail Power
- Interstate Power and Light Company
- Northwestern Wisconsin Electric Company

Generation and Transmission Cooperative Electric Associations

- Great River Energy
- Minnkota Power Cooperative
- Dairyland Power Cooperative
- Basin Electric Power Cooperative
- East River Electric Power Cooperative
- L&O Power Cooperative

Municipal Power Agencies

- Southern Minnesota Municipal Power Agency
- Western Minnesota Power Agency/Missouri River Energy Services
- Northern Municipal Power Agency
- Minnesota Municipal Power Agency
- Central Minnesota Municipal Power Agency

Since your organization is on this list, your organization needs to provide the information listed in the attachment. We appreciate your cooperation in advance. If you have any questions about this information, please contact Kate O’Connell at 651-296-7132 or Cyndee Fang at 651-296-0417.

Sincerely,

KATE O'CONNELL  
Supervisor, Electric Planning and Advocacy

KO/CF/jl  
Attachment

**State of Minnesota**  
**DEPARTMENT OF COMMERCE**

**Utility Information Request**

Docket Number:

Date of Request: November 23, 2004

Requested From: [Contact Name]  
[Utility Name]

Response Due: December 10, 2004

Analyst Requesting Information: Cyndee Fang

Type of Inquiry:    ..... Financial                    ..... Rate of Return                    ..... Rate Design  
                         ..... Engineering                    ..... Forecasting                    ..... Conservation  
                         ..... Cost of Service                    ..... CIP                                    ..... Other:

*If you feel your responses are trade secret or privileged, please indicate this on your response.*

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Request  
No.

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- 1        To determine the status of each utility's renewable energy mix relative to the good faith objective, please provide the following information:
- (a) The utility's total retail sales defined as the kWh of electricity sold from July 1, 2003, to June 30, 2004 by an electric utility to retail customers of the utility or to a distribution utility for distribution to the retail customers of the distribution utility.
  - (b) Total electric energy (kWh) provided to Minnesota retail customers for the period July 1, 2003, to June 30, 2004.
  - (c) Total energy generated from eligible energy technologies as defined by Minnesota Statutes §216B.1691, Subd. 1(a)(1) and Commission Orders under Docket No. E999/CI-03-869.
  - (d) Total energy (kWh) generated from eligible energy technology as defined by Minnesota Statutes §216B.1691, Subd. 1(a)(1) and Commission Orders under Docket No. E999/CI-03-869 deliverable to Minnesota retail customers. Please provide the definition used for determine whether generation was deliverable to Minnesota retail customers.
  - (e) Please provide the information requested as presented in Attachment A for each of the renewable resources used in the answer to (c) and (d)

The Department is providing an electronic version of Attachment A to all organizations for which we have e-mail addresses.<sup>1</sup> The Department requests organizations to provide this information electronically, if possible. Otherwise, please fill out the information on the attached paper version.

---

<sup>1</sup> The Department does not have e-mail addresses for the following entities: East River Electric Power Cooperative; L&O Power Cooperative; Northern Municipal Power Agency; Minnesota Municipal Power Agency; Central Minnesota Municipal Power Agency. If you have not received an electronic version by Monday, November 29, 2004, please contact Cynthia Fang at 651-296-0417. To receive an electronic version of Attachment A, we encourage you to send an e-mail to Cynthia Fang at [Cynthia.Fang@state.mn.us](mailto:Cynthia.Fang@state.mn.us).

**State of Minnesota**  
**DEPARTMENT OF COMMERCE**

**Utility Information Request**

Docket Number:

Date of Request: November 23, 2004

Requested From: [Contact Name]  
[Utility Name]

Response Due: December 10, 2004

Analyst Requesting Information: Cyndee Fang

Type of Inquiry:      ..... Financial                      ..... Rate of Return                      ..... Rate Design  
                                 ..... Engineering                      ..... Forecasting                      ..... Conservation  
                                 ..... Cost of Service                      ..... CIP                      ..... Other:

*If you feel your responses are trade secret or privileged, please indicate this on your response.*

---

Request  
No.

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2      Please describe all efforts your organization has taken to meet the objective.

**State of Minnesota**  
**DEPARTMENT OF COMMERCE**

**Utility Information Request**

Docket Number:

Date of Request: November 23, 2004

Requested From: [Contact Name]  
[Utility Name]

Response Due: December 10, 2004

Analyst Requesting Information: Cyndee Fang

Type of Inquiry:      ..... Financial                      ..... Rate of Return                      ..... Rate Design  
                                 ..... Engineering                      ..... Forecasting                      ..... Conservation  
                                 ..... Cost of Service                      ..... CIP                      ..... Other:

*If you feel your responses are trade secret or privileged, please indicate this on your response.*

---

Request  
No.

---

3      Please describe any obstacles your organization has encountered or anticipates in meeting the objective.

**State of Minnesota**  
**DEPARTMENT OF COMMERCE**

**Utility Information Request**

Docket Number:

Date of Request: November 23, 2004

Requested From: [Contact Name]  
[Utility Name]

Response Due: December 10, 2004

Analyst Requesting Information: Cyndee Fang

Type of Inquiry:    ..... Financial                    ..... Rate of Return                    ..... Rate Design  
                         ..... Engineering                    ..... Forecasting                    ..... Conservation  
                         ..... Cost of Service                    ..... CIP                    ..... Other:

*If you feel your responses are trade secret or privileged, please indicate this on your response.*

---

Request  
No.

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- 4        Please describe any potential solutions under consideration by your organization to the obstacles described above.

**Attachment A: Data on Renewable Energy Sources**

Please provide the following information for all sources of renewable energy generation. Please make additional copies as needed.

<b>Generator Name</b>			
<b>Generator ID Number</b>			
<b>Location</b>			
<b>Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)</b>			
<b>Technology Type</b>			
<b>Vintage (date when generator first commences operation as month/day/year)</b>			
<b>Nameplate Capacity (MW)</b>			
<b>Accredited Capacity (MW)</b>			
<b>Owned Generation or PPA</b>			
<b>Generation Deliverable to MN (yes or no)</b>			
<b>Energy Generated from July 1, 2003 to June 30, 2004 (kWh)</b>			
<b>Eligible for MN REO (yes or no)</b>			
<b>Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.</b>			



Cyndee Fang

414 Nicollet Mall  
Minneapolis, MN 55402

Attachment H1

December 13, 2004

Alexius Hofschulte  
Minnesota Department of Commerce  
85 7<sup>th</sup> Place East, Suite 500  
St. Paul, MN 55101

DEC 13 2004

RE: RESPONSE TO DOC DATA REQUEST 1 – 4.  
DOCKET NO. E999/CI-03-869

Dear Mr. Hofschulte:

Enclosed are the original and two copies of our responses to the Department's data requests referenced above. We have also provided a copy to the Commission. If you have any questions regarding these responses, please call me at (612) 330-6228.

Sincerely,

RENEE S. THOMAS  
REGULATORY CASE SPECIALIST

Enclosures

c: Burl Haar, Minnesota Public Utilities Commission

- Non Public Document – Contains Trade Secret Data  
 Public Document – Trade Secret Data Excised  
 Public Document

Xcel Energy

Docket No.: E999/CI-03-869

Response To: MN Dept of Commerce                      Information Request No.                      1

Date Received: November 24, 2004

---

Question:

To determine the status of each utility's renewable energy mix relative to the good faith objective, please provide the following information:

- (a.) The utility's total retail sales defined as the kWh of electricity sold from July 1, 2003, to June 30, 2004 by an electric utility to retail customers of the utility or to a distribution utility for distribution to the retail customers of the distribution utility.
- (b.) Total electric energy (kWh) provided to Minnesota retail customers for the period July 1, 2003, to June 30, 2004.
- (c.) Total energy generated from eligible energy technologies as defined by Minnesota Statutes §216B.1691, Subd. 1 (a)(1) and Commission Orders under Docket No. E999/CI-03-869.
- (d.) Total energy (kWh) generated from eligible energy technologies as defined by Minnesota Statutes §216B.1691, Subd. 1 (a)(1) and Commission Orders under Docket No. E999/CI-03-869 deliverable to Minnesota retail customers. Please provide the definition used for determine whether generation was deliverable to Minnesota retail customers.
- (e.) Please provide the information requested as presented in Attachment A for each of the renewable resources used in the answer to (c) and (d)

The Department is providing an electronic version of Attachment A to all organizations for which we have e-mail addresses. <sup>1</sup> The Department requests

---

<sup>1</sup> The Department does not have e-mail addresses for the following entities: East River Electric Power Cooperative; L&O Power Cooperative; Northern Municipal Power Agency; Minnesota Municipal Power Agency; Central

organizations to provide this information electronically, if possible. Otherwise, please fill out the information on the attached paper version.

Response:

a) Xcel Energy's total retail sales to customers in our 5-state, upper Midwest service territory for the period July 1, 2003 to June 30, 2004 were 40,251,981,755 kilowatt-hours.

b) Xcel Energy's total retail sales to Minnesota customers for the period July 1, 2003 to June 30 2004 were 30,559,280,490 kilowatt-hours.

c) Using the definitions in statute and the guidelines developed by the Commission in its October 19, 2004 Order, Xcel Energy could have applied 616,083 MWhs of electric energy generated and purchased toward an REO during the period July 1, 2003 to June 30, 2004. That is 76 percent (the ratio of Minnesota sales to total sales) of our total production and purchases of 811,491 megawatt-hours.

We have not counted any portion of the 763,693 megawatt-hours produced during the period at our hydro facilities in Wisconsin in this calculation. During 2003 and 2004, Xcel Energy complied with Wisconsin RPS requirements through a provision that exempts utilities from energy requirements if 10 percent of their production capacity is renewables based. Our Wisconsin hydro facilities were used to meet the exemption and thus, energy production from Wisconsin hydro facilities was not included here. We anticipate that some portion of the energy produced at our Wisconsin hydro facilities will be eligible to be counted toward compliance with the REO in the future.

We have not counted any portion of the 22,731 megawatt-hours produced at the facilities we have associated with the Wind Source green pricing program.

We have not counted any portion of the 1,131,721 megawatt-hours that were produced at facilities that meet our wind and biomass mandates.

We have not counted the 212,424 megawatt-hours that we purchased from the Hennepin Energy Recovery Center since it does not meet the biomass definition in statute.

d) In all cases the electrical power was delivered to Xcel Energy's integrated power system and thus was part of the electrical power used to serve Minnesota customers.

e) The attached data sheets provide the energy generated or purchased data requested.

---

Response By: James Alders  
Title: Manager Regulatory Projects  
Department: Government and Regulatory Affairs  
Telephone: 612 330 6732  
Date: December 13, 2004

**Attachment A: Data on Renewable Energy Sources**

Please provide the following information for all sources of renewable energy generation. Please make additional copies as needed.

<b>Generator Name</b>	Red Wing	Wilmarth	Bayfront
<b>Generator ID Number</b>	1 & 2	1 & 2	4,5, &6
<b>Location</b>	MN	MN	WI
<b>Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)</b>	RDF	RDF	RDF
<b>Technology Type</b>			
<b>Vintage (date when generator first commences operation as month/day/year)</b>	11/26/1949	10/20/1948	?/?/1949
<b>Nameplate Capacity (MW)</b>	23	25	72
<b>Accredited Capacity (MW)</b>	22	18.4	74
<b>Owned Generation or PPA</b>	OG	OG	OG
<b>Generation Deliverable to MN (yes or no)</b>	Yes	Yes	Yes
<b>Energy Generated from July 1, 2003 to June 30, 2004 (kWh)</b>	116,357,000	111,554,000	306,244,000
<b>Eligible for MN REO (yes or no)</b>	Yes	Yes	Yes
<b>Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.</b>			

Generator Name	French Island	Hennepin Island	Apple River
Generator ID Number	1 & 2	1 thru 6	1,2,& 3
Location	WI	MN	WI <sup>1</sup>
Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)	RDF & Wood	Hydro	Hydro
Technology Type			
Vintage (date when generator first commences operation as month/day/year)	10/26/1940	?/?/1954	?/?/1907
Nameplate Capacity (MW)	25	13.5	3.25
Accredited Capacity (MW)	30	12	2.04
Owned Generation or PPA	OG	OG	OG
Generation Deliverable to MN (yes or no)	Yes	Yes	Yes
Energy Generated from July 1, 2003 to June 30, 2004 (kWh)	77,249,000	65,276,000	16,029,000
Eligible for MN REO (yes or no)	Yes	Yes	Yes
Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.			See footnote 1.

<sup>1</sup> For all NSP W Hydro during 2003 and 2004 these facilities were counted toward the capacity exemption in Wisconsin's RPS.

Generator Name	Big Falls	Cedar Falls	Chippewa Falls
Generator ID Number	1,2, & 3	1,2, & 3	1 thru 6
Location	WI	WI	WI
Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)	Hydro	Hydro	Hydro
Technology Type			
Vintage (date when generator first commences operation as month/day/year)	?/?/1922	?/?/1910	?/?/1928
Nameplate Capacity (MW)	7.78	6	21.6
Accredited Capacity (MW)	7.09	7	21.12
Owned Generation or PPA	OG	OG	OG
Generation Deliverable to MN (yes or no)	Yes	Yes	Yes
Energy Generated from July 1, 2003 to June 30, 2004 (kWh)	30,322,000	34,036,000	57,420,000
Eligible for MN REO (yes or no)	Yes	Yes	Yes
Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.	See footnote 1.	See footnote 1.	See footnote 1.

Generator Name	Cornell	Dell	Hayward
Generator ID Number	1,2,3, &4	1 thru 7	1
Location	WI	WI	WI
Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)	Hydro	Hydro	Hydro
Technology Type			
Vintage (date when generator first commences operation as month/day/year)	?/?/1913	?/?/1924	?/?/1910
Nameplate Capacity (MW)	30.8	9.5	0.2
Accredited Capacity (MW)	30.87	8.73	0.2
Owned Generation or PPA	OG	OG	OG
Generation Deliverable to MN (yes or no)	Yes	Yes	Yes
Energy Generated from July 1, 2003 to June 30, 2004 (kWh)	71,389,000	35,701,000	1,471,000
Eligible for MN REO (yes or no)	Yes	Yes	Yes
Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.	See footnote 1.	See footnote 1.	See footnote 1.

Generator Name	Holcombe	JimFalls	Lady Smith
Generator ID Number	1,2, & 3	1,2, & 3	1,2, & 3
Location	WI	WI	WI
Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)	Hydro	Hydro	Hydro
Technology Type			
Vintage (date when generator first commences operation as month/day/year)	?/?/1950	?/?/1988	?/?/1940
Nameplate Capacity (MW)	33.9	55.5	2
Accredited Capacity (MW)	35.18	56.32	3.01
Owned Generation or PPA	OG	OG	OG
Generation Deliverable to MN (yes or no)	Yes	Yes	Yes
Energy Generated from July 1, 2003 to June 30, 2004 (kWh)	85,622,000	123,157,000	9,365,000
Eligible for MN REO (yes or no)	Yes	Yes	Yes
Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.	See footnote 1.	See footnote 1.	See footnote 1.

<b>Generator Name</b>	Menomonie	Riverdale	Saxon Falls
<b>Generator ID Number</b>	1 & 2	1 & 2	1 & 2
<b>Location</b>	WI	WI	WI
<b>Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)</b>	Hydro	Hydro	Hydro
<b>Technology Type</b>			
<b>Vintage (date when generator first commences operation as month/day/year)</b>	?/?/1958	?/?/1907	?/?/1913
<b>Nameplate Capacity (MW)</b>	5.4	0.5	1.26
<b>Accredited Capacity (MW)</b>	5.38	0.61	1.5
<b>Owned Generation or PPA</b>	OG	OG	OG
<b>Generation Deliverable to MN (yes or no)</b>	Yes	Yes	Yes
<b>Energy Generated from July 1, 2003 to June 30, 2004 (kWh)</b>	24,436,000	3,216,000	8,867,000
<b>Eligible for MN REO (yes or no)</b>	Yes	Yes	Yes
<b>Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.</b>	See footnote 1.	See footnote 1.	See footnote 1.

Generator Name	St. Croix Falls	Superior Falls	Thornapple
Generator ID Number	1 thru 8	1 & 2	1 & 2
Location	WI	WI	WI
Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/ other)	Hydro	Hydro	Hydro
Technology Type			
Vintage (date when generator first commences operation as month/day/year)	?/?/1907	?/?/1917	?/?/1929
Nameplate Capacity (MW)	23.2	1.32	1.4
Accredited Capacity (MW)	24.48	1.85	1.6
Owned Generation or PPA	OG	OG	OG
Generation Deliverable to MN (yes or no)	Yes	Yes	Yes
Energy Generated from July 1, 2003 to June 30, 2004 (kWh)	102,977,000	9,693,000	7,231,000
Eligible for MN REO (yes or no)	Yes	Yes	Yes
Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.	See footnote 1.	See footnote 1.	See footnote 1.

Generator Name	Trego	WhiteRiver	Wissota
Generator ID Number	1 & 2	1 & 2	1 thru 6
Location	WI	WI	WI
Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)	Hydro	Hydro	Hydro
Technology Type			
Vintage (date when generator first commences operation as month/day/year)	?/?/1927	?/?/1907	?/?/1918
Nameplate Capacity (MW)	1.2	1	35
Accredited Capacity (MW)	1.4	0.85	37.34
Owned Generation or PPA	OG	OG	OG
Generation Deliverable to MN (yes or no)	Yes	Yes	Yes
Energy Generated from July 1, 2003 to June 30, 2004 (kWh)	7,786,000	4,365,000	103,610,000
Eligible for MN REO (yes or no)	Yes	Yes	Yes
Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.	See footnote 1.	See footnote 1.	See footnote 1.

Generator Name	Agassiz Beach LLC	Asian Children's Support	Autumn Hills LLC
Generator ID Number			
Location	Clay County	Dodge Center	Lincoln County
Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)	Wind	Wind	Wind
Technology Type	Wind	Wind	Wind
Vintage (date when generator first commences operation as month/day/year)	2/3/2001	2/1/2003	2/3/2001
Nameplate Capacity (MW)	1.98	1.9	1.98
Accredited Capacity (MW)	.6	IP-5 <sup>2</sup>	IP-1 <sup>3</sup>
Owned Generation or PPA	PPA	PPA	PPA
Generation Deliverable to MN (yes or no)	Yes	Yes	Yes
Energy Generated from July 1, 2003 to June 30, 2004 (kWh)	5,594,000	IP-5 <sup>4</sup>	IP-1 <sup>5</sup>
Eligible for MN REO (yes or no)	No	No	No
Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.	Mandate	Mandate	Mandate

<sup>2</sup> For all IP-5 references please see Interconnection Points Key at end of spreadsheet. All IP-5's for MWh equal 7.7 MWs.

<sup>3</sup> For all IP-1 references please see Interconnection Points Key at end of spreadsheet. All IP-1's for MWh equal 3.8 MWs.

<sup>4</sup> For all IP-5 references please see Interconnection Points Key at end of spreadsheet. All IP-5's for kWh equal 82,302,000 kWhs.

<sup>5</sup> For all IP-1 references please see Interconnection Points Key at end of spreadsheet. All IP-1's for kWh equal 37,721,000 kWhs.

Generator Name	Bangladesh Childrens Support LLC	Barron Light and Water Department	Bisson Windfarm LLC
Generator ID Number			
Location	Dodge Center		Pipestone
Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)	Wind	RDF	Wind
Technology Type	Wind	Steam Generation	Wind
Vintage (date when generator first commences operation as month/day/year)	2/1/2003	8/1/1986	5/31/2003
Nameplate Capacity (MW)	1.8	0.1	1.8
Accredited Capacity (MW)	IP-5	0	IP-4 <sup>6</sup>
Owned Generation or PPA	PPA	PPA	PPA
Generation Deliverable to MN (yes or no)	Yes	Yes	Yes
Energy Generated from July 1, 2003 to June 30, 2004 (kWh)	IP-5	105,000	Yes
Eligible for MN REO (yes or no)	No	Yes	Yes
Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.	Mandate		Wind Source

<sup>6</sup> For all IP-4 references please see Interconnection Points Key at end of spreadsheet. All IP-4's for MWH equal 5.9 MWs.

Generator Name	Boeve Windfarm LLC	BT Windfarm LLC	Buffalo Ridge Windfarm LLC
Generator ID Number			
Location	Pipestone	Dodge Center	Murray County
Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)	Wind	Wind	Wind
Technology Type	Wind	Wind	Wind
Vintage (date when generator first commences operation as month/day/year)	8/9/2003	8/13/2002	12/18/2003
Nameplate Capacity (MW)	1.8	1.8	1.5
Accredited Capacity (MW)	IP-4	IP-5	IP-3 <sup>7</sup>
Owned Generation or PPA	PPA	PPA	PPA
Generation Deliverable to MN (yes or no)	Yes	Yes	Yes
Energy Generated from July 1, 2003 to June 30, 2004 (kWh)	6,633,000	IP-5	2,135,000
Eligible for MN REO (yes or no)	Yes	No	No
Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.	Wind Source	Mandate	Mandate

<sup>7</sup> For all IP-3 references please see Interconnection Points Key at end of spreadsheet. All IP-3's for MWH equal 4.1 MWs.

Generator Name	Burmese Children's Support LLC	Byllesby	Chanarambie Power Partners
Generator ID Number			
Location	Dodge Center		Murray Center
Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/ other)	Wind	Hydro	Wind
Technology Type	Wind	Hydro	Wind
Vintage (date when generator first commences operation as month/day/year)	2/1/2003	6/1/1988	12/15/2003
Nameplate Capacity (MW)	1.9	1.78	85.5
Accredited Capacity (MW)	IP-5	2.6	33.5
Owned Generation or PPA	PPA	PPA	PPA
Generation Deliverable to MN (yes or no)	Yes	Yes	Yes
Energy Generated from July 1, 2003 to June 30, 2004 (kWh)	IP-5	7,648,000	172,009,000
Eligible for MN REO (yes or no)	No	Yes	No
Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.	Mandate		Mandate

Generator Name	Eau Galle Renewable Energy Co. Inc.	Fey Windfarm LLC	Florence Hills
Generator ID Number			
Location		Pipestone	Lincoln County
Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)	Hydro	Wind	Wind
Technology Type	Hydro	Wind	Wind
Vintage (date when generator first commences operation as month/day/year)	8/1/1991	9/1/2003	2/3/2001
Nameplate Capacity (MW)	0.345	1.8	1.5
Accredited Capacity (MW)		IP-4	IP-2 <sup>8</sup>
Owned Generation or PPA	PPA	PPA	PPA
Generation Deliverable to MN (yes or no)	Yes	Yes	Yes
Energy Generated from July 1, 2003 to June 30, 2004 (kWh)	1,571,000	6,467,000	IP-2 <sup>9</sup>
Eligible for MN REO (yes or no)	Yes	No	No
Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.		Mandate	Mandate

<sup>8</sup> For all IP-2 references please see Interconnection Points Key at end of spreadsheet. All IP-2's for MWh equal 5.1 MWs.

<sup>9</sup> For all IP-2 references please see Interconnection Points Key at end of spreadsheet. All IP-2's for kWh equal 53,778,000 kWhs.

Generator Name	Ford Motor Co.	GM Windfarms (GM LLC)	Garmar Foundation LLC
Generator ID Number			
Location		Dodge Center	Dodge Center
Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)	Hydro	Wind	Wind
Technology Type	Hydro	Wind	Wind
Vintage (date when generator first commences operation as month/day/year)	1/1/1985	8/13/02	8/13/02
Nameplate Capacity (MW)	5	1.8	1.8
Accredited Capacity (MW)	0	IP-5	IP-5
Owned Generation or PPA	PPA	PPA	PPA
Generation Deliverable to MN (yes or no)	Yes	Yes	Yes
Energy Generated from July 1, 2003 to June 30, 2004 (kWh)	25,218,000	IP-5	IP-5
Eligible for MN REO (yes or no)	Yes	No	No
Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.		Mandate	Mandate

Generator Name	Hadley Ridge	Hastings Utilities Dept.	Hennepin Energy Resource Recovery
Generator ID Number			
Location	Lincoln County		Minneapolis
Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)	Wind	Hydro	RDF
Technology Type	Wind	Hydro	RDF
Vintage (date when generator first commences operation as month/day/year)	2/3/2001	10/1/1987	1/1/1990
Nameplate Capacity (MW)	1.98	4.2	38
Accredited Capacity (MW)	IP-2	3.4	33.7
Owned Generation or PPA	PPA	PPA	PPA
Generation Deliverable to MN (yes or no)	Yes	Yes	Yes
Energy Generated from July 1, 2003 to June 30, 2004 (kWh)	IP-2	22,417,000	212,424,000
Eligible for MN REO (yes or no)	No	Yes	No
Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.	Mandate		Does not meet statutory definition.

Generator Name	Hope Creek	Indian Children's Support LLC	Jack River
Generator ID Number			
Location	Lincoln County	Dodge County	Lincoln County
Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)	Wind	Wind	Wind
Technology Type	Wind	Wind	Wind
Vintage (date when generator first commences operation as month/day/year)	2/3/2001	2/1/2003	2/3/2001
Nameplate Capacity (MW)	1.98	1.9	1.98
Accredited Capacity (MW)	IP-2	IP-5	IP-1
Owned Generation or PPA	PPA	PPA	PPA
Generation Deliverable to MN (yes or no)	Yes	Yes	Yes
Energy Generated from July 1, 2003 to June 30, 2004 (kWh)	IP-2	IP-5	IP-1
Eligible for MN REO (yes or no)	No	No	No
Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.	Mandate	Mandate	Mandate

Generator Name	Jessica Mills	Julia Hills	Kas Brothers Wind Farm
Generator ID Number			
Location	Lincoln County	Lincoln County	Murray County
Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)	Wind	Wind	Wind
Technology Type	Wind	Wind	Wind
Vintage (date when generator first commences operation as month/day/year)	2/3/2001	2/3/2001	12/15/2001
Nameplate Capacity (MW)	1.98	1.98	1.5
Accredited Capacity (MW)	IP-1	IP-1	0.5
Owned Generation or PPA	PPA	PPA	PPA
Generation Deliverable to MN (yes or no)	Yes	Yes	Yes
Energy Generated from July 1, 2003 to June 30, 2004 (kWh)	IP-1	IP-1	4,524,000
Eligible for MN REO (yes or no)	No	No	No
Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.	Mandate	Mandate	Mandate

Generator Name	K-Brink Wind Farm LLC	Lac Courte Orielles Bank of Lake Superior	Lake Benton 1
Generator ID Number			
Location	Pipestone	WI	Lincoln County
Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)	Wind	Hydro	Wind
Technology Type	Wind	Hydro	Wind
Vintage (date when generator first commences operation as month/day/year)	2/13/2001	12/9/1986	
Nameplate Capacity (MW)	1.8	3.1	107.25
Accredited Capacity (MW)	IP-4	3.1	31.4
Owned Generation or PPA	PPA	PPA	PPA
Generation Deliverable to MN (yes or no)	Yes	Yes	Yes
Energy Generated from July 1, 2003 to June 30, 2004 (kWh)	7,320,000	0	273,804,000
Eligible for MN REO (yes or no)	Yes	Yes	No
Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.	Wind Source		Mandate

Generator Name	Lake Benton 2	Lakota Ridge	Landfill Power Flying Cloud
Generator ID Number			
Location	Pipestone	Lincoln County	
Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)	Wind	Wind	Landfill Gas
Technology Type	Wind	Wind	CF
Vintage (date when generator first commences operation as month/day/year)	5/31/2000	5/31/1999	1/1/1995
Nameplate Capacity (MW)	103.5	11.25	4.8
Accredited Capacity (MW)	45.6	3.3	4.7
Owned Generation or PPA	PPA	PPA	PPA
Generation Deliverable to MN (yes or no)	Yes	Yes	Yes
Energy Generated from July 1, 2003 to June 30, 2004 (kWh)	317,289,000	32,365,000	10,923,000
Eligible for MN REO (yes or no)	No	No	Yes
Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.	Mandate	Mandate	

Generator Name	McHNeilus Windfarm LLC	Metro Wind	Minnesota Methane LLC
Generator ID Number			
Location	Dodge Center	Sherburne	
Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/ other)	Wind	Wind	Landfill Gas
Technology Type	Wind	Wind	CT
Vintage (date when generator first commences operation as month/day/year)	8/13/2002	3/15/2001	5/1/1994
Nameplate Capacity (MW)	1.8	0.66	3.1
Accredited Capacity (MW)	IP-5	0.1	3.1
Owned Generation or PPA	PPA	PPA	PPA
Generation Deliverable to MN (yes or no)	Yes	Yes	Yes
Energy Generated from July 1, 2003 to June 30, 2004 (kWh)	IP-5	901,000	19,633,000
Eligible for MN REO (yes or no)	No	No	Yes
Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.	Mandate	Mandate	

Generator Name	Moulten Heights Wind Power Project LLC	Muncie Power Partners LLC	NAE Shaokatan
Generator ID Number			
Location	Murray County	Murray County	Lincoln County
Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)	Wind	Wind	Wind
Technology Type	Wind	Wind	Wind
Vintage (date when generator first commences operation as month/day/year)	12/18/2003	12/18/2003	5/31/2003
Nameplate Capacity (MW)	1.5	1.5	1.65
Accredited Capacity (MW)	IP-3	IP-3	
Owned Generation or PPA	PPA	PPA	PPA
Generation Deliverable to MN (yes or no)	Yes	Yes	Yes
Energy Generated from July 1, 2003 to June 30, 2004 (kWh)	3,142,000	2,791,000	8,008,000
Eligible for MN REO (yes or no)	No	No	No
Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.	Mandate	Mandate	Mandate

Generator Name	Navitas Energy (Morraine)	Neshonoc	North Ridge Wind Farm LLC
Generator ID Number			
Location	Murray County		Murray County
Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)	Wind	Hydro	Wind
Technology Type	Wind	Hydro	Wind
Vintage (date when generator first commences operation as month/day/year)	12/22/2003	1/1/1987	12/18/2003
Nameplate Capacity (MW)	51	0.4	1.5
Accredited Capacity (MW)	10.4	0.4	IP-3
Owned Generation or PPA	PPA	PPA	PPA
Generation Deliverable to MN (yes or no)	Yes	Yes	Yes
Energy Generated from July 1, 2003 to June 30, 2004 (kWh)	54,253,000	2,008,000	3,355,000
Eligible for MN REO (yes or no)	No	Yes	No
Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.	Mandate		Mandate

Generator Name	Olsen Wind Farm	Pine Bend	Rapidan Hydro
Generator ID Number			
Location	Murray County		
Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)	Wind	Landfill Gas	Hydro
Technology Type	Wind	CT	Hydro
Vintage (date when generator first commences operation as month/day/year)	12/15/2001	3/31/1996	5/1/1984
Nameplate Capacity (MW)	1.5	12	4.6
Accredited Capacity (MW)	0.5	12	4.3
Owned Generation or PPA	PPA	PPA	PPA
Generation Deliverable to MN (yes or no)	Yes	Yes	Yes
Energy Generated from July 1, 2003 to June 30, 2004 (kWh)	4,370,000	91,158,000	7,006,000
Eligible for MN REO (yes or no)	No	No	Yes
Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.	Mandate	Mandate	

Generator Name	Ruthton Ridge Wind Farm	Salvadoran Children's Support LLC	SG (JCKD) Windfarm LLC
Generator ID Number			
Location	Murray County	Dodge Center	Dodge Center
Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)	Wind	Wind	Wind
Technology Type	Wind	Wind	Wind
Vintage (date when generator first commences operation as month/day/year)	2/3/2001	2/1/2003	8/13/2002
Nameplate Capacity (MW)	1.98	1.9	1.8
Accredited Capacity (MW)	IP-2	IP-5	IP-5
Owned Generation or PPA	PPA	PPA	PPA
Generation Deliverable to MN (yes or no)	Yes	Yes	Yes
Energy Generated from July 1, 2003 to June 30, 2004 (kWh)	IP-2	IP-5	IP-5
Eligible for MN REO (yes or no)	No	No	No
Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.	Mandate	Mandate	Mandate

Generator Name	Shaokatan Hills	Soliloque Ridge LLC	Spartan Hills
Generator ID Number			
Location	Lincoln County	Lincoln County	Lincoln County
Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)	Wind	Wind	Wind
Technology Type	Wind	Wind	Wind
Vintage (date when generator first commences operation as month/day/year)	5/31/1999	2/3/2001	2/3/2001
Nameplate Capacity (MW)	11.88	1.5	1.5
Accredited Capacity (MW)	4	IP-2	IP-2
Owned Generation or PPA	PPA	PPA	PPA
Generation Deliverable to MN (yes or no)	Yes	Yes	Yes
Energy Generated from July 1, 2003 to June 30, 2004 (kWh)	38,606,000	Ip-2	IP-2
Eligible for MN REO (yes or no)	No	No	No
Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.	Mandate	Mandate	Mandate

<b>Generator Name</b>	St. Cloud Hydro	St. Paul Cogeneration	Sun River
<b>Generator ID Number</b>			
<b>Location</b>	St. Cloud	St. Paul	Lincoln County
<b>Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)</b>	Hydro	Wood	Wind
<b>Technology Type</b>	Hydro	Wood	Wind
<b>Vintage (date when generator first commences operation as month/day/year)</b>	2/1/2003	3/25/2003	2/3/2001
<b>Nameplate Capacity (MW)</b>	6.3	25	1.98
<b>Accredited Capacity (MW)</b>	6.7	25	IP-2
<b>Owned Generation or PPA</b>	PPA	PPA	PPA
<b>Generation Deliverable to MN (yes or no)</b>	Yes	Yes	Yes
<b>Energy Generated from July 1, 2003 to June 30, 2004 (kWh)</b>	38,282,000	109,778,000	IP-2
<b>Eligible for MN REO (yes or no)</b>	Yes	No	No
<b>Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.</b>		Mandate	Mandate

Generator Name	TG Windfarm LLC	Tofteford Windfarm LLC	Tsar Nicolas
Generator ID Number			
Location	Pipestone	Pipestone	Lincoln County
Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)	Wind	Wind	Wind
Technology Type	Wind	Wind	Wind
Vintage (date when generator first commences operation as month/day/year)	5/31/2003	5/31/2003	2/3/2001
Nameplate Capacity (MW)	1.8	1.8	1.98
Accredited Capacity (MW)	IP-4	IP-4	IP-2
Owned Generation or PPA	PPA	PPA	PPA
Generation Deliverable to MN (yes or no)	Yes	Yes	Yes
Energy Generated from July 1, 2003 to June 30, 2004 (kWh)	4,159,000	4,886,000	IP-2
Eligible for MN REO (yes or no)	No	No	No
Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.	Mandate	Mandate	Mandate

Generator Name	Twin Lake Hills	Vandy South Project LLC	Viking Wind Farm LLC
Generator ID Number			
Location	Lincoln County	Murray County	Murray County
Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)	Wind	Wind	Wind
Technology Type	Wind	Wind	Wind
Vintage (date when generator first commences operation as month/day/year)	2/3/2001	12/18/2003	12/18/2003
Nameplate Capacity (MW)	1.98	1.5	1.5
Accredited Capacity (MW)	IP-2	IP-3	IP-3
Owned Generation or PPA	PPA	PPA	PPA
Generation Deliverable to MN (yes or no)	Yes	Yes	Yes
Energy Generated from July 1, 2003 to June 30, 2004 (kWh)	IP-2	3,227,000	2,980,000
Eligible for MN REO (yes or no)	No	No	No
Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.	Mandate	Mandate	Mandate

Generator Name	Vindy Power Partners LLC	Westridge Windfarm LLC	Wilson-West Windfarm LLC
Generator ID Number			
Location	Murray County	Pipestone	Murray County
Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)	Wind	Wind	Wind
Technology Type	Wind	Wind	Wind
Vintage (date when generator first commences operation as month/day/year)	12/18/2003	4/30/2003	12/18/2003
Nameplate Capacity (MW)	1.5	1.8	1.5
Accredited Capacity (MW)	IP-3	IP-4	IP-3
Owned Generation or PPA	PPA	PPA	PPA
Generation Deliverable to MN (yes or no)	Yes	Yes	Yes
Energy Generated from July 1, 2003 to June 30, 2004 (kWh)	2,928,000	4,343,000	3,125,000
Eligible for MN REO (yes or no)	No	Yes	No
Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.	Mandate	Wind Source	Mandate

Generator Name	Wind Power Partners 1993	Windcurrent Farms	Winter Spawn
Generator ID Number			
Location	Lincoln County	Pipestone	Lincoln County
Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)	Wind	Wind	Wind
Technology Type	Wind	Wind	Wind
Vintage (date when generator first commences operation as month/day/year)	10/28/1993	5/31/2003	2/3/2001
Nameplate Capacity (MW)	25	1.8	1.5
Accredited Capacity (MW)	7.2	IP-4	IP-2
Owned Generation or PPA	PPA	PPA	PPA
Generation Deliverable to MN (yes or no)	Yes	Yes	Yes
Energy Generated from July 1, 2003 to June 30, 2004 (kWh)	65,164,000	2,604,000	IP-2
Eligible for MN REO (yes or no)	No	Yes	No
Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.	Mandate	Wind Source	Mandate

Generator Name	Woodstock Windfarm		
Generator ID Number			
Location	Pipestone		
Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)	Wind		
Technology Type	Wind		
Vintage (date when generator first commences operation as month/day/year)	5/31/1999		
Nameplate Capacity (MW)	10.5		
Accredited Capacity (MW)	3.2		
Owned Generation or PPA	PPA		
Generation Deliverable to MN (yes or no)	Yes		
Energy Generated from July 1, 2003 to June 30, 2004 (kWh)	26,902,000		
Eligible for MN REO (yes or no)	No		
Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.	Mandate		

Interconnection Points Key:

<u>Location</u>	<u>Fuel or Energy Source</u>	<u>Nameplate Capacity (MW)</u>	<u>Accredited Capacity (MW)</u>	<u>Energy Generated from July 1, 2003 to June 30, 2004(kWh)</u>
North Shaokatan	Interconnection Pt. 1 (IP-1)	13.9	3.8	37,721,000
Ruthton Ridge	Interconnection Pt.2 (IP-2)	15.8	3.8	53,778,000
Viking	Interconnection Pt.3 (IP-3)	12	4.1	
West Ridge	Interconnection Pt.4 (IP-4)	16.2	5.9	
GM-LLC 1	Interconnection Pt.5 (IP-5)	18.5	7.7	82,302,000

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 Public Document

Xcel Energy

Docket No.: E999/CI-03-869

Response To: MN Dept of Commerce Information Request No. 2

Date Received: November 24, 2004

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Question:

Please describe all efforts your organization has taken to meet the objective.

Response:

We have attempted to describe our efforts to meet the Objective in our Resource Plan filed November 1, 2004. The following excerpt comes from our Resource Plan.

Xcel Energy has participated in the proceedings conducted by the Commission relating to defining and establishing criteria for the Renewable Energy Objective in Docket No. E999/CI-03-869. Xcel Energy has assessed our needs and currently plans to meet the REO according to the Commission's Order in this proceeding.

For the assessment, the Company considered existing and planned biomass generation (including landfill gas generation), Minnesota and Wisconsin hydro generation, and existing and planned wind generation. From the Strategist base case, projected energy production from all such Xcel Energy owned or purchased renewable resources were included in the assessment. The projected generation from renewable resources mandated prior to the 2001 REO legislation (825 MW of wind generation and now 110 MW of biomass generation) was then subtracted off to yield annual projections of REO-eligible renewable energy production from 2005 - 2019.

Based on the Commission's decisions in the Phase II proceeding, Xcel Energy assigned a weighting of 75 percent to the REO-eligible resources that the Company committed to prior to 2001. This represents the proportion of system generation on

the Xcel Energy North system that serves Minnesota customers. REO-eligible resources that the Company committed to after 2001 were assigned a weighting of 100 percent.

The annual projections of weighted REO-eligible renewable energy production were then compared to the Company's forecast of Minnesota retail energy sales, by year, for 2005 – 2019. Assuming that all of the wind and biomass generation presently under contract comes on line as expected (including the 300 MW mandated by the Legislature that is also included in the REO), the Company has concluded that it will generate or purchase sufficient renewable energy to meet the REO requirements through 2010. Beginning in 2011, the Company will need to acquire sufficient resources to overcome a projected REO renewable energy production deficit. Overcoming this deficit by 2015 under our Preferred Plan would require the addition of 560 MWs of wind generation (above the 1125 MW required by other sections and the 1999 Commission Order), assuming an annual capacity factor of 32%.

It is helpful to place this result in perspective. The total anticipated wind additions under this plan will reach 1200 MW, with about 340 MW needed to reach the mandated 825 MW requirement and approximately 860 MW to meet the REO. The total amount of wind on the Xcel Energy system in 2015, if we proceed to implement the REO by that date, will approach 1,700 MW or 16% of peak demand in that year (exclusive of MW added under the WindSource program).

In the REO proceeding, the Commission interpreted the current biomass-specific portion of the REO legislation to mean that the Company must produce one-half of one percent of our REO-eligible renewable energy with qualifying biomass resources by 2005, increasing to one percent of our REO-eligible energy in 2010 and beyond. In that proceeding, questions were raised whether the plain language of the statute actually reflected the intent of the Legislature when enacting the statute. However, until the next legislative session where there will be an opportunity to amend this language if desired, Xcel Energy will provide an assessment of biomass under the

existing Order and under the level that many parties including Xcel Energy anticipated.

In the biomass-specific assessments, the wood-fired portion of generation from the Bay Front plant, RDF-fired generation from the Red Wing, Wilmarth and French Island plants, and landfill gas-fired generation from the Burnsville, Flying Cloud and Pine Bend landfills were assumed to produce REO-eligible renewable biomass energy, weighted at 75 percent. The anticipated renewable energy biomass production from an 18 MW wood-fired Itasca Power project, which is expected to begin commercial operation in 2006, was weighted at 100 percent. In accordance with the REO legislation, generation to meet the biomass mandate from St. Paul Cogen, Fibrominn, and NGP were not considered REO-eligible.

Under the current interpretation of the biomass requirement for the REO, the Company is projecting it will generate at least 150 GWh/year surplus on REO-eligible biomass energy production through 2019. This assessment assumes that the wood fuel supply for Bay Front stabilizes, that Red Wing, Wilmarth and French Island continue to operate, that the landfill gas generators continue to produce as much energy as they have in the last five years, and that the Itasca Power project comes to fruition.

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Response By: Jim Alders  
Title: Manager Regulatory Projects  
Department: Government and Regulatory Affairs  
Telephone: (612) 330-6732  
Date: December 13, 2004

- Non Public Document – Contains Trade Secret Data  
 Public Document – Trade Secret Data Excised  
 Public Document

Xcel Energy

Docket No.: E999/CI-03-869

Response To: MN Dept of Commerce                      Information Request No.                      3

Date Received: November 24, 2004

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Question:

Please describe any obstacles your organization has encountered or anticipates in meeting the objective.

Response:

There are two prominent issues that will affect our ability to meet renewable energy objectives as we move forward. They are the effect of federal tax policy on the cost of wind power and timely expansion of the transmission system to deliver renewables based purchases. The following discussion of those two issues is taken from our November 1<sup>st</sup> Resource Plan filing.

In our Strategist base case, Xcel Energy included additions of wind generation designed to meet the REO deficits between 2010 and 2019. The result of meeting the REO was a delay of five to seven years in the in-service dates of 425 MW of intermediate resources, and a four-to-five year forward shift in 408 MW of peaking unit in-service dates. The PVRR increased by approximately \$95 Million over the No REO case. The Company's Preferred Plan reflects the addition of REO-driven renewable resources, shift in intermediate and peaking resource need, and the concomitant PVRR increase. Our Strategist results show that the REO case is slightly less cost effective than the case in which we simply allow wind to optimize within the model within the 15% penetration limitation.

Xcel Energy intends to meet our REO requirement, subject to the availability of cost-effective resources. Currently, wind energy is the most cost-effective resource

available to meet the REO, and our 2004 Resource Plan shows sufficient additions of wind generation to meet the requirement through 2019. There are, however, at least two factors which may influence the availability of cost-effective wind. Congress recently extended the Federal Production Tax Credit (PTC) until the end of 2005. Xcel Energy supports the PTC and will work for its continued extension. At the same time, we recognize the possibility that the PTC may not be renewed indefinitely. Although we expect the price of wind to continue to decline as technology improves, the loss of the PTC could seriously lessen the cost-effectiveness of wind.

In our 2004 Resource Plan, Xcel Energy projected wind costs of \$53/MWh for 2010 – 2015 and \$43/MWh for 2015 on and does not assume continuation of the PTC. These cost estimates are lower than what we would pay for wind in today's market without the PTC as they incorporate expected improvements in wind technology. These price assumptions also incorporate the \$5/MWh charge for ancillary service costs for wind at a 15 percent penetration level. Xcel Energy believes that this cost reasonably reflects the future price of wind generation. However, wind is not a cost effective resource compared to either the median or first sigma gas case when using today's non PTC prices. Unlike wind price assumptions in past Resource Plans that were based on actual bid prices and contracts, these values are estimates that assume technology advance in a non-PTC world. Thus, continued cost effectiveness of wind resources should be determined by actual market experience in the future.

We plan to add as much PTC qualifying wind for which there is currently planned transmission capacity between now and our next resource plan. We will also plan to add all or a portion of the 300 MW requirement from the 2003 legislation even without the PTC by 2010. In our next Resource Plan we should have a better view of meeting the REO with cost effective resources for the latter part of the planning horizon. Practically, because transmission constraints will serve as the cap on wind additions in the near and intermediate term, we will bring the issue of the cost effectiveness of wind back to the Commission if the PTC is not extended beyond either 2005 or 2006 in our next Resource Plan.

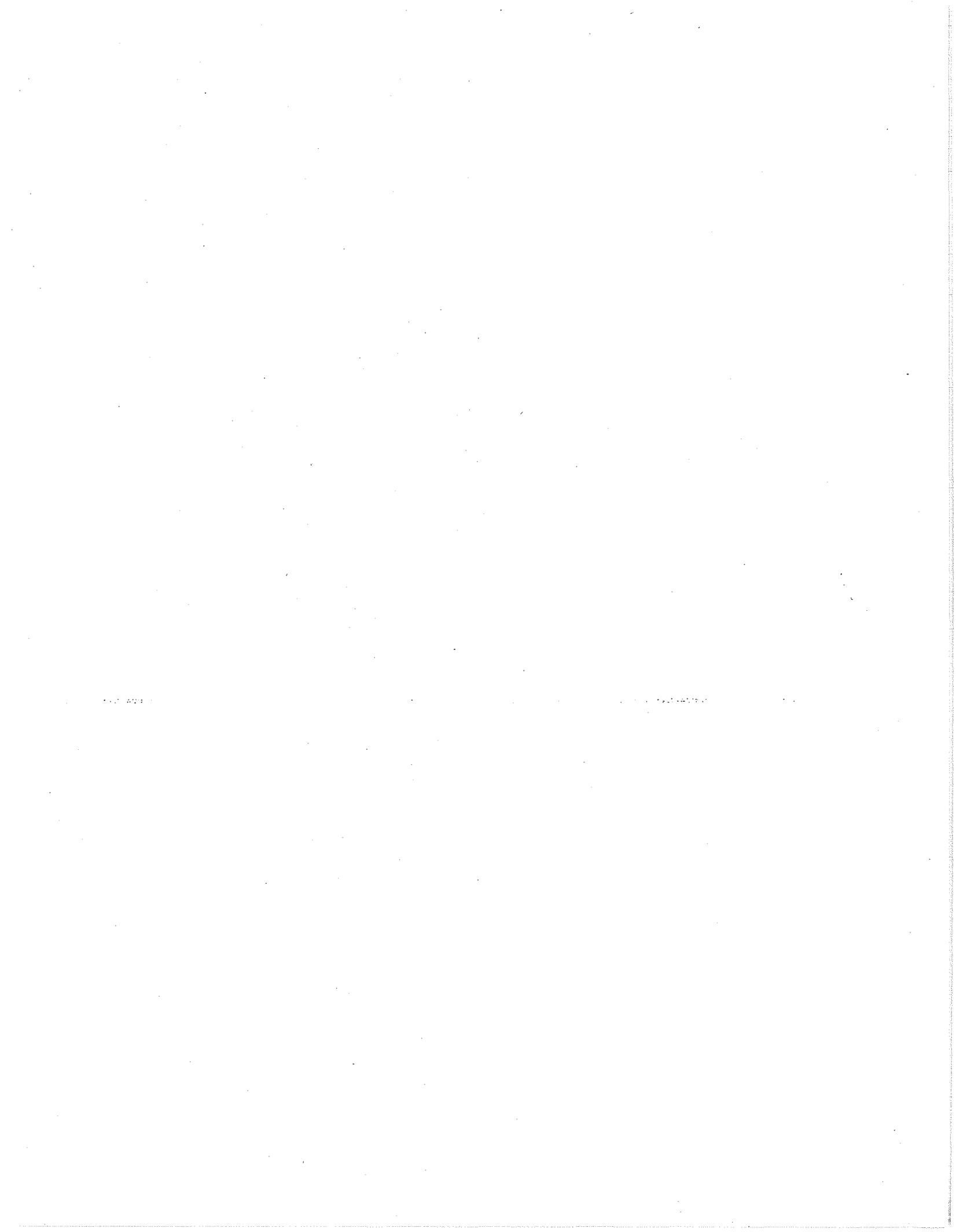
The cost-effectiveness of wind also depends on the availability of transmission to deliver wind energy from remote generation sites to load centers such as the Twin Cities Metro Area. If sufficient transmission is not available, wind energy is subject to curtailment at a considerable cost to Xcel Energy and our ratepayers. Xcel Energy may not be able to cost-effectively meet our REO obligations if there is inadequate transmission from the windy areas of the state to our load centers. We recognize that to implement the REO, there needs to be additional transmission for wind outlet above the levels that will be achieved through the existing CON for Buffalo Ridge. We also note the difficulties of achieving new outlet capacity that requires upgrades on the systems of other utilities. Nonetheless, we are proceeding with study work to help identify the level of investment needed to allow incremental increases in transmission capacity for wind resources in the intermediate term. In addition, we are working with the Midwest ISO on a study of another higher voltage outlet line from this region.

The costs of upgrading transmission includes not just the cost of constructing the needed transmission lines themselves, but also the cost of clearing constraints that may be caused on neighboring utility systems. In addition, there are timing and implementation difficulties involved. For example, the Company recognizes the need to expand import capability from the west to facilitate additional cost-effective wind on our system. To date the Company has engaged in two types of studies. First, Xcel Energy is conducting an analysis of how to increase wind outlet capacity from the Buffalo Ridge in the intermediate term. The expected solution is another 115 kV transmission line. Second, with our participation the Midwest ISO has undertaken a study for a high voltage line to create outlet capacity from the Buffalo Ridge in Minnesota and South Dakota. We do know that any new significant outlet capability from a high voltage line on Buffalo Ridge will cause the need for constraints to be eliminated on the systems of other utilities in other states. Thus, there will be a need for substantial coordination and cooperation in order to achieve this next large increment.

As we have seen throughout the years, a key impediment to this type of regional development is the need to justify local-- as opposed to regional-- benefits in order to attain cost recovery. Although we will work with other entities to gain cooperation on such projects, we believe that a fair apportionment of these costs and commensurate cost recovery is critical to developing of this type of project.

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Response By: Jim Alders  
Title: Manager Regulatory Projects  
Department: Government and Regulatory Affairs  
Telephone: (612) 330- 6732  
Date: December 13, 2004



- Non Public Document – Contains Trade Secret Data  
 Public Document – Trade Secret Data Excised  
 Public Document

Xcel Energy

Docket No.: E999/CI-03-869

Response To: MN Dept of Commerce                      Information Request No.                      4

Date Received: November 24, 2004

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Question:

Please describe any potential solutions under consideration by your organization to the obstacles described above.

Response:

Xcel Energy will continue to be an active participant in efforts to extend the federal production tax credit for renewables.

Xcel Energy is leading studies to determine what transmission improvements will be necessary to support additional wind development in the southwestern part of the state. We are also working with other transmission providers on a study effort known as CapX which is designed to develop a vision for the development of transmission infrastructure to support all the generation, including renewables based generation, that will be needed to meet the growing demand for electricity in Minnesota.

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Response By: Jim Alders  
Title: Manager Regulatory Projects  
Department: Government and Regulatory Affairs  
Telephone: (612) 330-6732  
Date: December 13, 2004



**minnesota power** / 30 west superior street / duluth, minnesota 55802-2093 / 218-723-3961 / www.allete.com

Christopher D. Anderson  
Associate General Counsel  
Fax 218-723-3955  
e-mail canderson@allete.com

December 9, 2004

**VIA FACSIMILE & U.S. MAIL**

Ms. Kate O'Connell  
MN Department of Commerce  
85 7<sup>th</sup> Place East  
Suite 500  
St. Paul, MN 55101-2198

DEC 10 2004

Re: Minnesota Renewable Energy Objectives  
Information Requests

Dear Ms. O'Connell:

Enclosed please find an original and two copies of Minnesota Power's responses to Department of Commerce Information Request Nos. 1-4 in the above-referenced matter.

Please call me at 218-723-3961 if you have any questions.

Yours truly,

A handwritten signature in black ink, appearing to read "C. D. Anderson".

Christopher D. Anderson

kl  
Enc.

c: MPUC  
OAG-RUD  
Cyndee Fang

**State of Minnesota**  
**DEPARTMENT OF COMMERCE**

Utility Information Request

Docket Number:

Date of Request: November 23, 2004

Requested From: Christopher D. Anderson  
Minnesota Power

Response Due: December 10, 2004

Analyst Requesting Information: Cyndee Fang

Type of Inquiry:    .....Financial            .....Rate of Return            .....Rate Design  
                          .....Engineering            .....Forecasting            .....Conservation  
                          .....Cost of Service            .....CIP                        .....Other:

*If you feel your responses are trade secret or privileged, please indicate this on your response.*

Request No.	
1	<p>To determine the status of each utility's renewable energy mix relative to the good faith objective, please provide the following information:</p> <p>(a) The utility's total retail sales defined as the kWh of electricity sold from July 1, 2003, to June 30, 2004 by an electric utility to retail customers of the utility or to a distribution utility for distribution to the retail customers of the distribution utility.</p> <p>(b) Total electric energy (kWh) provided to Minnesota retail customers for the period July 1, 2003, to June 30, 2004.</p> <p>(c) Total energy generated from eligible energy technologies as defined by Minnesota Statutes §216B.1691, Subd. 1(a)(1) and Commission Orders under Docket No. E999/CI-03-869.</p> <p>(d) Total energy (kWh) generated from eligible energy technology as defined by Minnesota Statutes §216B.1691, Subd. (a)(1) and Commission Orders under Docket No. E999/CI-03-869 deliverable to Minnesota retail customers. Please provide the definition used for determine whether generation was deliverable to Minnesota retail customers.</p> <p>(e) Please provide the information requested as presented in Attachment A for each of the renewable resources used in the answer to (c) and (d)</p> <p>The Department is providing an electronic version of Attachment A to all organizations for which we have e-mail addresses.<sup>1</sup> The Department requests organizations to provide this information electronically, if possible. Otherwise, please fill out the information on the attached paper version.</p>

<sup>1</sup> The Department does not have e-mail addresses for the following entities: East River Electric Power Cooperative; L&O Power Cooperative; Northern Municipal Power Agency; Minnesota Municipal Power Agency; Central Minnesota Municipal Power Agency. If you have not received an electronic version by Monday, November 29, 2004, please contact Cynthia Fang at 651-296-0417. To receive an electronic version of Attachment A, we encourage you to send an e-mail to Cynthia Fang at [Cynthia.Fang@state.mn.us](mailto:Cynthia.Fang@state.mn.us).

Response:

(a) 8,580,900 kWh

(b) 8,580,900 kWh

(c) 356,714 MWh

(d) 356,714 MWh

(Note: Of the total 356,714 MWh, 353,954 MWh of Minnesota REO eligible renewable credits were not assigned to other uses.)

Generation is assumed to be deliverable to Minnesota retail customers if it is located in and/or the required transmission arrangements have been made to deliver the generation the generation to our control area.

(e) Reference Attachment A

## Data on Minnesota Power Renewable Energy Sources

Generator Name	HEC Unit 3	HEC Unit 4	CEC Unit 5	REC Unit 6	REC Unit 7	Blanchard HES Unit 1
Generator ID Number (Manufacturer and Serial #)	GE 6750651	West 1S72P982	ABB 8266344	EM 168158611	GE 316X340	AC 117503
Location	Duluth, MN	Duluth, MN	Cloquet, MN	Grand Rapids, MN	Grand Rapids, MN	Royalton, MN
Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)	24% Biomass / 74% Coal / 2% Natural Gas	0% Biomass / 0% Coal / 0% Natural Gas	50% Biomass / 50% Natural Gas	71% Biomass / 20% Coal / 9% Natural Gas	79% Biomass / 21% Coal	Hydro
Technology Type	Steam Turbine	Steam Turbine	Steam Turbine	Steam Turbine	Steam Turbine	Hydraulic Turbine
Vintage (date when generator first commences operation as month/day/year)	1949	1951	2001	June 1969	December 1980	February 1925
Nameplate Capacity (MW)	37.5	37.5	27.6	15	16.5	6
Accredited Capacity (MW) See Note 4	36.4	24.3	23	14	15	6
Owned Generation or PPA	Owned	Owned	Owned	Owned	Owned	Owned
Generation Deliverable to MN (yes or no)	Yes	Yes	Yes	Yes	Yes	Yes
Energy Generated from July 1, 2003 to June 30, 2004 (kWh) See Note 5	30,810	0	125,228	41,812	82,837	31,496
Eligible for MN REO (yes or no)	100% of Biomass Portion	100% of Biomass Portion	60% of Biomass Portion (See Note #2)	100% of Biomass Portion	100% of Biomass Portion	Yes
Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs. See Note 3	No assignment	No assignment	Partial Assignment to Wisconsin RPS	No assignment	No assignment	Partial Assignment to Wisconsin RPS

## Notes:

- 1) MP has a PPA for the lesser of 3,735 MWh/year or 50% of the output from the 3 unit 1.98 MW wind farm starting 1/1/03.
- 2) Only one of the two boilers that provide the energy for the generation from the unit meets the combustion standards of the Minnesota REO statute.
- 3) The assignments listed are for the 7/1/03 through 6/30/04 time period.
- 4) The accreditation values are the most applicable for the 7/1/03 through 6/30/04 time period.
- 5) Generation values for biomass units includes the conventional fuel portion.

## Data on Minnesota Power Renewable Energy Sources

Generator Name	Blanchard HES Unit 2	Blanchard HES Unit 3	Fond Du Lac HES Unit 1	Knife Falls HES Unit 1	Knife Falls HES Unit 2	Knife Falls HES Unit 3	Little Falls HES Unit 1
Generator ID Number (Manufacturer and Serial #)	AC 117504	GE 275689	GE 4095863	GE 2540354	GE 2540356	GE 2540355	GE 1560106
Location	Royalton, MN	Royalton, MN	Duluth, MN	Cloquet, MN	Cloquet, MN	Cloquet, MN	Little Falls, MN
Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)	Hydro						
Technology Type	Hydraulic Turbine						
Vintage (date when generator first commences operation as month/day/year)	February 1925	August 1988	January 1924	January 1922	January 1922	January 1922	January 1919
Nameplate Capacity (MW)	6	6	12	0.8	0.8	0.8	0.8
Accredited Capacity (MW) See Note 4	6	6	12	0.8	0.8	0.8	0.8
Owned Generation or PPA	Owned						
Generation Deliverable to MN (yes or no)	Yes						
Energy Generated from July 1, 2003 to June 30, 2004 (kWh) See Note 5	29,682	13,904	51,198	2,952	3,733	2,462	4,032
Eligible for MN REO (yes or no)	Yes						
Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs. See Note 3	Partial Assignment to Wisconsin RPS						

## Notes:

- 1) MP has a PPA for the lesser of 3,735 MWh/year or 50% of the output from the 3 unit 1.98 MW wind farm starting 1/1/03.
- 2) Only one of the two boilers that provide the energy for the generation from the unit meets the combustion standards of the Minnesota REO statute.
- 3) The assignments listed are for the 7/1/03 through 6/30/04 time period.
- 4) The accreditation values are the most applicable for the 7/1/03 through 6/30/04 time period.
- 5) Generation values for biomass units includes the conventional fuel portion.

Attachment A  
Data on Minnesota Power Renewable Energy Sources

Generator Name	Little Falls HES Unit 2	Little Falls HES Unit 3	Little Falls HES Unit 4	Little Falls HES Unit 5	Little Falls HES Unit 6	Pillager HES Unit 1	Pillager HES Unit 2
Generator ID Number (Manufacturer and Serial #)	GE 1560374	GE 2238832	GE 568345	West 729989	West 457536	GE 1012433	GE 1012432
Location	Little Falls, MN	Pillager, MN	Pillager, MN				
Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)	Hydro						
Technology Type	Hydraulic Turbine						
Vintage (date when generator first commences operation as month/day/year)	January 1919	January 1920	November 1979	January 1906	January 1906	January 1917	January 1917
Nameplate Capacity (MW)	0.8	1.1	1.2	0.4	0.4	0.8	0.8
Accredited Capacity (MW) See Note 4	0.8	1.1	1.2	0.4	0.4	0.8	0.8
Owned Generation or PPA	Owned						
Generation Deliverable to MN (yes or no)	Yes						
Energy Generated from July 1, 2003 to June 30, 2004 (kWh) See Note 5	5,804	4,046	10,630	1,371	194	4,702	3,401
Eligible for MN REO (yes or no)	Yes						
Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs. See Note 3	Partial Assignment to Wisconsin RPS						

## Notes:

- 1) MP has a PPA for the lesser of 3,735 MWh/year or 50% of the output from the 3 unit 1.98 MW wind farm starting 1/1/03.
- 2) Only one of the two boilers that provide the energy for the generation from the unit meets the combustion standards of the Minnesota REO statute.
- 3) The assignments listed are for the 7/1/03 through 6/30/04 time period.
- 4) The accreditation values are the most applicable for the 7/1/03 through 6/30/04 time period.
- 5) Generation values for biomass units includes the conventional fuel portion.

## Data on Minnesota Power Renewable Energy Sources

Generator Name	Praire River HES Unit 1	Praire River HES Unit 2	REC Unit 4	REC Unit 5	Scanlon HES Unit 1	Scanlon HES Unit 2
<b>Generator ID Number (Manufacturer and Serial #)</b>	EM 504071	EM 504045	EM 503291	EM 100021	GE 2540574	GE 2540573
<b>Location</b>	Grand Rapids, MN	Grand Rapids, MN	Grand Rapids, MN	Grand Rapids, MN	Scanlon, MN	Scanlon, MN
<b>Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)</b>	Hydro	Hydro	Hydro	Hydro	Hydro	Hydro
<b>Technology Type</b>	Hydraulic Turbine					
<b>Vintage (date when generator first commences operation as month/day/year)</b>	April 1920	April 1920	1917	1949	January 1923	January 1923
<b>Nameplate Capacity (MW)</b>	0.7	0.4	0.75	1.5	0.4	0.4
<b>Accredited Capacity (MW) See Note 4</b>	0.7	0.4	0.75	1.5	0.4	0.4
<b>Owned Generation or PPA</b>	Owned	Owned	Owned	Owned	Owned	Owned
<b>Generation Deliverable to MN (yes or no)</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>Energy Generated from July 1, 2003 to June 30, 2004 (kWh) See Note 5</b>	805	1,227	3,000	2,050	1,425	2,185
<b>Eligible for MN REO (yes or no)</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs. See Note 3</b>	Partial Assignment to Wisconsin RPS					

## Notes:

- 1) MP has a PPA for the lesser of 3,735 MWh/year or 50% of the output from the 3 unit 1.98 MW wind farm starting 1/1/03.
- 2) Only one of the two boilers that provide the energy for the generation from the unit meets the combustion standards of the Minnesota REO statute.
- 3) The assignments listed are for the 7/1/03 through 6/30/04 time period.
- 4) The accreditation values are the most applicable for the 7/1/03 through 6/30/04 time period.
- 5) Generation values for biomass units includes the conventional fuel portion.

Attachment A  
Data on Minnesota Power Renewable Energy Sources

Generator Name	Scanlon HES Unit 3	Scanlon HES Unit 4	Sylvan HES Unit 1	Sylvan HES Unit 2	Sylvan HES Unit 3	Thomson HES Unit 1	Thomson HES Unit 2
<b>Generator ID Number (Manufacturer and Serial #)</b>	GE 4020161	GE 4020162	AC	AC	AC	AC/GE SD03621583HG	AC 10887
<b>Location</b>	Scanlon, MN	Scanlon, MN	Pillager, MN	Pillager, MN	Pillager, MN	Duluth, MN	Duluth, MN
<b>Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)</b>	Hydro	Hydro	Hydro	Hydro	Hydro	Hydro	Hydro
<b>Technology Type</b>	Hydraulic Turbine	Hydraulic Turbine	Hydraulic Turbine				
<b>Vintage (date when generator first commences operation as month/day/year)</b>	January 1923	January 1923	January 1913	January 1913	January 1915	January 1907	January 1907
<b>Nameplate Capacity (MW)</b>	0.4	0.4	0.6	0.6	0.6	13	13
<b>Accredited Capacity (MW) See Note 4</b>	0.4	0.4	0.6	0.6	0.6	13	13
<b>Owned Generation or PPA</b>	Owned	Owned	Owned	Owned	Owned	Owned	Owned
<b>Generation Deliverable to MN (yes or no)</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Energy Generated from July 1, 2003 to June 30, 2004 (kWh) See Note 5</b>	2,547	1,653	3,551	3,276	1,632	60,691	33,848
<b>Eligible for MN REO (yes or no)</b>	Yes	Yes	Yes	Yes	Yes	No	No
<b>Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs. See Note 3</b>	Partial Assignment to Wisconsin RPS	No assignment	No assignment				

## Notes:

- 1) MP has a PPA for the lesser of 3,735 MWh/year or 50% of the output from the 3 unit 1.98 MW wind farm starting 1/1/03.
- 2) Only one of the two boilers that provide the energy for the generation from the unit meets the combustion standards of the Minnesota REO statute.
- 3) The assignments listed are for the 7/1/03 through 6/30/04 time period.
- 4) The accreditation values are the most applicable for the 7/1/03 through 6/30/04 time period.
- 5) Generation values for biomass units includes the conventional fuel portion.

Attachment A  
Data on Minnesota Power Renewable Energy Sources

Generator Name	Thomson HES Unit 3	Thomson HES Unit 4	Thomson HES Unit 5	Thomson HES Unit 6	Winton HES Unit 2	Winton HES Unit 3	Chandler Wind Farm
Generator ID Number (Manufacturer and Serial #)	AC 10882	GE 695295	GE 1506366	GE 6638123	AC 115121	AC 115190	See Note 1
Location	Duluth, MN	Duluth, MN	Duluth, MN	Duluth, MN	Winton, MN	Winton, MN	Murray County, MN
Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)	Hydro	Hydro	Hydro	Hydro	Hydro	Hydro	Wind
Technology Type	Hydraulic Turbine	Hydraulic Turbine	Wind Turbine				
Vintage (date when generator first commences operation as month/day/year)	January 1907	January 1914	January 1919	January 1949	August 1923	September 1923	1/1/2002
Nameplate Capacity (MW)	13	10.8	10.8	12	2	2	1.98
Accredited Capacity (MW) See Note 4	13	10.8	10.8	12	2	2	See Note 1
Owned Generation or PPA	Owned	Owned	Owned	Owned	Owned	Owned	PPA
Generation Deliverable to MN (yes or no)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Energy Generated from July 1, 2003 to June 30, 2004 (kWh) See Note 5	25,734	39,007	33,455	52,629	9,655	14,009	3,251
Eligible for MN REO (yes or no)	No	No	No	No	Yes	Yes	Yes
Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs. See Note 3	No assignment	No assignment	No assignment	No assignment	Partial Assignment to Wisconsin RPS	Partial Assignment to Wisconsin RPS	Assignment to the Green Pricing Program

## Notes:

- 1) MP has a PPA for the lesser of 3,735 MWh/year or 50% of the output from the 3 unit 1.98 MW wind farm starting 1/1/03.
- 2) Only one of the two boilers that provide the energy for the generation from the unit meets the combustion standards of the Minnesota REO statute.
- 3) The assignments listed are for the 7/1/03 through 6/30/04 time period.
- 4) The accreditation values are the most applicable for the 7/1/03 through 6/30/04 time period.
- 5) Generation values for biomass units includes the conventional fuel portion.

**State of Minnesota**  
**DEPARTMENT OF COMMERCE**

**Utility Information Request**

Docket Number:

Date of Request: November 23, 2004

Requested From: Christopher D. Anderson  
Minnesota Power

Response Due: December 10, 2004

Analyst Requesting Information: Cyndee Fang

Type of Inquiry:    ..... Financial            ..... Rate of Return            ..... Rate Design  
                         ..... Engineering            ..... Forecasting            ..... Conservation  
                         ..... Cost of Service            ..... CIP            ..... Other:

*If you feel your responses are trade secret or privileged, please indicate this on your response.*

Request No.	
2	Please describe all efforts your organization has taken to meet the objective.

Response:

**Specific plan**

Based on its energy forecast to fulfill retail customer needs, Minnesota Power has sufficient eligible renewable energy resources to meet the REO through 2009 (with renewables comprising 5 percent of retail electric sales) and has selected several renewable projects, which have been or are being evaluated, that, if implemented, would meet the REO (with renewables comprising 8 percent of retail electric sales) through 2011. During the next few years, Minnesota Power will continue efforts to secure or develop additional eligible renewable energy resources to meet the entire REO of 10 percent of retail electric sales by 2015. More specifically, Minnesota Power has a two-fold effort to pursue adding renewable power supply: 1) continuing to encourage local and/or customer initiated renewable project development; and 2) inviting renewable-based bid responses to its October 2004 Resource Request.

Minnesota Power's specific plan to demonstrate its good-faith effort has the following components:

- Maintain current renewable energy resources allowing Minnesota Power to reach approximately 5 percent of the 10 percent REO goal and the entire biomass goal;
- Continue to evaluate selected renewable projects, which if implemented, would increase Minnesota Power's renewable energy supply to 8 percent from 2007 through 2011 and at 7 percent thereafter through 2014. As applicable, Minnesota Power will use conservation improvement program funding for renewable projects (Minnesota Statute 216B.2411), the Xcel Renewable Development Fund (RDF) program (Minnesota Statute 116C.779) and

apply for Minnesota's renewable energy production incentive to help support refurbishing and/or expanding hydroelectric facilities at existing dams as well as new wind facilities (Minnesota Statute 216C.41); and

- Continue efforts to identify other enhancements to existing renewable energy resources and opportunities to add new renewable energy resources with the goal of having renewables comprise 10 percent or more of Minnesota Power's energy supply by 2015.

#### **Application of resource planning criteria**

Minnesota Power's efforts to identify and evaluate potential additions to its existing renewable energy resource base have focused primarily on customer-based projects, projects to expand and/or increase the output from Minnesota Power's existing hydro and biomass facilities and potential new wind generation. Specifics concerning these potential projects are provided by Appendix D—Future Resource Options of Minnesota Power's 2004 Resource Plan.

Minnesota Power used the existing resource planning criteria as directed by the Minnesota Public Utilities Commission (Commission) June 1, 2004, Order in the REO docket (Docket No. E-999/CI-03-869) to evaluate potential renewable projects in terms of technical feasibility, system reliability and economic impacts on ratepayers. Minnesota Power evaluated each of the following renewable projects selected as having potential to help meet the REO:

- **Crow Wing County (CWC) Landfill Gas**—a proposed 800 kW unit with projected output of 7,000 MWh per year. During the past year, Minnesota Power offered to buy all output from CWC for a set energy charge. Progress toward an agreement is on hold pending CWC's evaluation of the potential to pipe the landfill gas to the nearby Trus Joist Weyerhaeuser facility as an alternative use.
- **Fond du Lac Hydro Expansion**—a proposed 9.4 MW addition to an existing 11 MW hydroelectric facility near Duluth, Minnesota with projected incremental output of 35,000 MWh per year. Minnesota Power is currently evaluating the impact of Federal Energy Regulatory Commission permitting process changes to the project cost and schedule.
- **Wind Resource**—for planning purposes, a 50 MW wind resource on a self-build or power purchase agreement basis is assumed with a potential output of 175,200 MWh per year, assuming a 40 percent annual capacity factor. Development of this resource is presently in progress to determine the optimum location and implementation plan.

All the selected renewable projects would use commercial technology with significant operating experience. At least two of the projects would be at sites within Minnesota Power's system, i.e., at an existing Minnesota Power generation site or at or near a Minnesota Power customer site. Minnesota Power believes this initial project development approach will keep costs lower and respond to customer interest in renewables.

Minnesota Power's evaluation of the selected renewable projects, along with the other non-renewable resource options evaluated as part of Minnesota Power's resource plan, resulted in all three renewable projects being considered as potential resource options to meet future retail customer needs. All resource options evaluated were screened using the resource planning criteria that relied on Appendix D—Future Resource Options for performance, cost and emissions information.

## **Application of demonstrated commitment criteria**

Minnesota Power applied the demonstrated commitment criteria established by the Commission's June 1, 2004, Order to show the progress made on the three potential renewable projects determined to be least cost resources as presented in Appendix D—Future Resource Options: i) Crow Wing County landfill gas (at a minimum 80 percent capacity factor); ii) Fond du Lac hydro expansion (at a minimum 50 percent capacity factor); and iii) wind resource (at a minimum 40 percent capacity factor).

- 1. Demonstrated financial commitments** to build facilities or to purchase energy to meet the renewable energy objective, including but not limited to project financing; purchase and ordering of equipment; and expenditures to hire construction firms if needed.

### *Minnesota Power's Response to Fulfill this Requirement:*

Minnesota Power will continue to make financial and staff resource expenditures to develop planned renewable projects, with preference for projects within Minnesota Power's system to avoid long distance transmission. Projects greater than 10 MW will be solicited with Minnesota Power's October 2004 Resource Request. Minnesota Power will continue its financial commitment to engineering, siting and equipment estimating and working with customers interested in developing and selling renewable energy to Minnesota Power. Minnesota Power developed and provided draft power purchase offers as well as technical assistance to some of these customers to help clarify their project economics associated with selling renewable energy to Minnesota Power.

### *Specific actions taken by Minnesota Power, involving financial commitments, to secure additional renewable energy resources include:*

- Minnesota Power developed and provided Crow Wing County a power purchase offer to buy the output of the Crow Wing County landfill gas project.
  - Minnesota Power funded preliminary Fond du Lac Hydro expansion project engineering and other project development activities.
- 2. Demonstrated commitments to construction of physical infrastructure** to meet the renewable energy objectives, including but not limited to ordering equipment; hiring construction firms; and/or contracting for a renewable energy objectives site.

### *Minnesota Power's Response to Fulfill this Requirement:*

Minnesota Power plans to continue to hire outside consultants and contractors to assist with renewable project development.

### *Specific actions taken by Minnesota Power, involving physical infrastructure commitments, to secure additional renewable energy resources include:*

- Minnesota Power is not yet at the point of ordering equipment for the internally developed renewable projects. Minnesota Power does not plan to proceed with equipment orders until verification of the project economics are complete and a means of cost recovery is secured for a given project, which could be a power purchase agreement, special rate request or a general rate case.
- If Crow Wing County accepts Minnesota Power's offer to purchase energy from the Crow Wing County landfill gas project, the power purchase agreement can be used by Crow Wing County as the basis to make physical infrastructure commitments.

c) Minnesota Power initiated a wind project assessment in their system and will also invite wind based proposals of 10 MW or greater with its October 2004 Resource Request.

3. **Demonstrated legal and contractual commitments** to purchase or build the facilities to meet the renewable energy objectives, including but not limited to contracts for sites on which to build; contracts for labor and equipment; arrangements for insurance and liability etc.

*Minnesota Power's Response to Fulfill this Requirement:*

Minnesota Power initiated contracts and legal review as needed to support project development.

*Specific actions taken by Minnesota Power, involving legal and contractual commitments, to secure additional renewable energy resources include:*

a) Minnesota Power made an offer to purchase the renewable energy from the Crow Wing County landfill gas project. Negotiations are continuing.

4. **Demonstrated commitment to meet regulatory requirements** in timely fashion, including but not limited to federal, state, county, township and municipal permitting and any other regulatory obligations, such as filed plans for facility construction in the Commission's biennial transmission planning process under Minnesota Statute 216B.2425.

*Minnesota Power Response to Fulfill this Requirement:*

As is the case with all its generation, transmission and distribution projects, Minnesota Power will complete all permitting requirements and fulfill all federal, state and local regulatory requirements that apply to its renewable projects.

*Specific actions taken by Minnesota Power, involving regulatory commitments, to secure additional renewable energy resources include:*

- a) Minnesota Power understands that Crow Wing County has initiated permitting and is continuing to address siting and permitting requirements for the Crow Wing County landfill gas project.
- b) Minnesota Power initiated review of the Federal Energy Regulatory Commission permitting requirements for the Fond du Lac Hydro expansion project.

5. **Demonstrated commitment to transmission access** for the renewable energy objectives facilities, including but not limited to initiation or participation in transmission studies or provision of interconnection and transmission service for these facilities.

*Minnesota Power's Response to Fulfill this Requirement:*

Minnesota Power maintains its transmission system to support safe, reliable and comparatively low-cost electric service to all customers. Minnesota Power has evaluated transmission access issues associated with existing and planned renewable energy resources. Minnesota Power's system is available for open-access requests.

*Specific actions taken by Minnesota Power, involving transmission access commitments, to secure additional renewable energy resources include:*

- a) Minnesota Power gathered some preliminary information on the transmission needed to support Minnesota Power's renewable resources. The only renewable project that might trigger a transmission upgrade is the Fond du Lac hydro expansion project. Additional studies will be required to determine if an upgrade is required and these studies will be completed once the project economics are verified. If this project moves forward, it will need to be placed into the MISO Generator Interconnection Queue and obtain an interconnection and operating agreement prior to interconnecting to Minnesota Power's transmission system.

6. **Demonstrated commitment to openness and transparency.** This requires full public access to all non-proprietary information relating to meeting the renewable energy objectives, including but not limited to actions taken for financial commitments; construction of physical infrastructure; legal and contractual commitments; compliance with regulatory requirements; and transmission access.

*Minnesota Power's Response to Fulfill this Requirement:*

Minnesota Power maintains its efforts to provide complete and accurate information regarding all of its activities, including a good-faith effort towards meeting Minnesota's REO. This will be continued, unless the nature of the information requires trade secret, confidential or proprietary status, e.g., the pricing terms of a power purchase agreement or project costs from a renewable project with a proprietary design or financial structure. Examples of Minnesota Power's commitment to openness and fairness is its longstanding record of responsiveness to Commission information requests in providing complete and accurate information while reserving, as needed, its right to protect confidential or trade secret information. In addition, Minnesota Power willingly has and will continue to work with CMEC in their application for Xcel RDF funding for a cogeneration project.

*Specific actions taken by Minnesota Power, involving openness and transparency commitments, to secure additional renewable energy resources include:*

- a) Crow Wing County discussed the Crow Wing County landfill gas project with state permitting agencies.

**State of Minnesota**  
**DEPARTMENT OF COMMERCE**

**Utility Information Request**

Docket Number:

Date of Request: November 23, 2004

Requested From: Christopher D. Anderson  
Minnesota Power

Response Due: December 10, 2004

Analyst Requesting Information: Cyndee Fang

Type of Inquiry:    .....Financial            .....Rate of Return            .....Rate Design  
                         .....Engineering            .....Forecasting            .....Conservation  
                         .....Cost of Service            .....CIP            .....Other:

*If you feel your responses are trade secret or privileged, please indicate this on your response.*

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Request No.	
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3	Please describe any obstacles your organization has encountered or anticipates in meeting the objective.
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Response:

One potential obstacle to meeting the REO is the limited development potential of utility scale renewable projects, especially due to resource availability. Wind development has and continues to mostly occur in areas with the best wind resource, southwestern Minnesota and North and South Dakota. Hydro development is realistically limited to expansions (with likely resistance to the construction of new dams). Biomass development is limited by the wood fiber market demand and the ability of current technology to use more tree species and more of the tree, leaving less wood waste for power generation. Another obstacle that limits the development of selected potential renewable projects is project cost and cost recovery issues. Finally, renewable energy law and policy also excludes Minnesota Power's most economic and efficient renewable generating assets from the definition of renewable resource.

**State of Minnesota**  
**DEPARTMENT OF COMMERCE**

**Utility Information Request**

Docket Number:

Date of Request: November 23, 2004

Requested From: Christopher D. Anderson  
Minnesota Power

Response Due: December 10, 2004

Analyst Requesting Information: Cyndee Fang

Type of Inquiry:    .....Financial            .....Rate of Return            .....Rate Design  
                          .....Engineering            .....Forecasting            .....Conservation  
                          .....Cost of Service            .....CIP                        .....Other:

*If you feel your responses are trade secret or privileged, please indicate this on your response.*

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Request No.	
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4	Please describe any potential solutions under consideration by your organization to the obstacles described above.
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Response:

Minnesota Power is committed to make a good-faith effort towards meeting Minnesota's REO. Minnesota Power is working hard to identify and evaluate customer-based projects, projects to expand and/or increase the use of Minnesota Power's existing hydro and biomass and potential new wind generation. Minnesota Power will continue to use (as applicable) funding mechanisms to lower net cost to the customer such as the conservation improvement program funding for renewable projects (Minnesota Statute 216B.2411), the Xcel RDF program (Minnesota Statute 116C.779) and the renewable energy production incentive to help support refurbishing and/or expanding hydroelectric facilities at existing dams as well as new wind facilities (Minnesota Statute 216C.41) to make financially marginal projects competitive. Lastly, the successful development of wind energy projects is subject to the renewal of the federal production tax credit program.

December 8, 2004

Kate O'Connell  
MN Department of Commerce  
85 7<sup>th</sup> Place East, Suite 500  
St. Paul, MN 55101-2198

RE: Minnesota Renewable Energy Objective

Dear Ms. O'Connell:

Enclosed please find the responses of Otter Tail Power Company to the information requests sent on November 23, 2004. The responses have also been sent by email to Cyndee Fang.

One issue did arise as the data was developed. Otter Tail provides wholesale supplemental service to three small municipals located in Minnesota. These municipals are not part of a municipal power agency, and therefore are not covered by the REO statute. They receive the bulk of their requirements from the Western Area Power Administration, which also is not subject to the REO statute. The supplemental power provided to these municipals by Otter Tail is under a FERC approved tariff. The municipals are not obligated to purchase from Otter Tail, but can obtain their wholesale supply from others. While we believe that the sales to these municipals should not be included as part of the calculation for Otter Tail, we have included the information broken out separately from Otter Tails retail kWh sales.

If you have any questions on the information contained in the response, please contact me at 218-739-8269 or bmorlock@otpc.com.

Sincerely,

Bryan D. Morlock, P.E.  
Manager, Resource Planning

enclosure

**State of Minnesota**  
**DEPARTMENT OF COMMERCE**

**Utility Information Request**

Docket Number:

Date of Request: November 23, 2004

Requested From: Bryan Morlock  
Otter Tail Power Company

Response Due: December 10, 2004

Analyst Requesting Information: Cyndee Fang

Type of Inquiry:     .....Financial           .....Rate of Return       .....Rate Design  
                          .....Engineering       .....Forecasting       .....Conservation  
                          .....Cost of Service     .....CIP               .....Other:

*If you feel your responses are trade secret or privileged, please indicate this on your response.*

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Request  
No.

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1     To determine the status of each utility's renewable energy mix relative to the good faith objective, please provide the following information:

- (a) The utility's total retail sales defined as the kWh of electricity sold from July 1, 2003, to June 30, 2004 by an electric utility to retail customers of the utility or to a distribution utility for distribution to the retail customers of the distribution utility.

For the 7/1/2003 – 6/30/2004 time period OTP's total retail sales in MN, ND, and SD were 3,797,029,284 kWh. In the same time period, OTP also delivered 3,507,490 kW under partial requirements wholesale contracts to four municipals. Three of those municipals are located in MN, but are not covered by the REO statute.

- (b) Total electric energy (kWh) provided to Minnesota retail customers for the period July 1, 2003, to June 30, 2004.

For the 7/1/2003 – 6/30/2004 time period OTP's MN retail sales were 1,957,456,566 kWh. During that same time period OTP also delivered 3,327,743 kWh under partial requirements wholesale contracts to three municipal utilities that are not covered by the MN REO statute.

- (c) Total energy generated from eligible energy technologies as defined by Minnesota Statutes §216B.1691, Subd. 1(a)(1) and Commission Orders under Docket No. E999/CI-03-869.

The total kWh from eligible energy technologies was 99,155,757 kWh.

- (d) Total energy (kWh) generated from eligible energy technology as defined by Minnesota Statutes §216B.1691, Subd. 1(a)(1) and Commission Orders under Docket No. E999/CI-03-869 deliverable to Minnesota retail customers. Please provide the definition used for determine whether generation was deliverable to Minnesota retail customers.

All of OTP's generating resources and PPA's with resources located within the Company's service territory are covered by firm Network Transmission Service reservations documented with MISO. Under the network service, all energy from all resources is available to serve all OTP load.

OTP operates its electric system as a single entity, and all resources and costs are allocated across all customers in all three jurisdictions. It is the Company's objective to comply with the REO statute across the entire system as long as it can be done economically. So far, all of the eligible resources under the statute are part of the Company's total resource portfolio to serve all customers. The amount of eligible energy delivered to MN retail customers is simply determined by the ratio of the MN retail kWh to the total retail kWh on the OTP system.

OTP's Minnesota retail load is 51.5523% (without the municipal load) of the Company's total retail load (3,797,029,284 kWh). Thus the eligible energy technology kWh delivered to MN customers is considered to be 51.5523% of the total eligible energy technology (99,155,757 kWh), or 51,117,073 kWh. This represents 2.61% of retail sales. If the wholesale municipal load is included, Minnesota retail load is 51.5923% of the total load (3,800,536,774 kWh). Thus the eligible energy technology kWh delivered to MN customers is 51.5923% of the total eligible energy technology (99,155,757 kWh) or 51,156,736 kWh. Again, this is approximately 2.61% of retail sales.

- (e) Please provide the information requested as presented in Attachment A for each of the renewable resources used in the answer to (c) and (d)

The completed Attachment A is included for all of the resources.

The Department is providing an electronic version of Attachment A to all organizations for which we have e-mail addresses.<sup>1</sup> The Department requests organizations to provide this information electronically, if possible. Otherwise, please fill out the information on the attached paper version.

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<sup>1</sup> The Department does not have e-mail addresses for the following entities: East River Electric Power Cooperative; L&O Power Cooperative; Northern Municipal Power Agency; Minnesota Municipal Power Agency; Central Minnesota Municipal Power Agency. If you have not received an electronic version by Monday, November 29, 2004, please contact Cynthia Fang at 651-296-0417. To receive an electronic version of Attachment A, we encourage you to send an e-mail to Cynthia Fang at [Cynthia.Fang@state.mn.us](mailto:Cynthia.Fang@state.mn.us).

**State of Minnesota**  
**DEPARTMENT OF COMMERCE**

**Utility Information Request**

Docket Number:

Date of Request: November 23, 2004

Requested From: Bryan Morlock  
Otter Tail Power Company

Response Due: December 10, 2004

Analyst Requesting Information: Cyndee Fang

Type of Inquiry:    ..... Financial                      ..... Rate of Return                      ..... Rate Design  
                         ..... Engineering                      ..... Forecasting                      ..... Conservation  
                         ..... Cost of Service                      ..... CIP                      ..... Other:

*If you feel your responses are trade secret or privileged, please indicate this on your response.*

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Request  
No.

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2            Please describe all efforts your organization has taken to meet the objective.

OTP successfully worked with the City of Perham, MN and their consultant on the start-up of a municipal solid waste-fired facility that would generate electricity. This facility came on-line in 2003 and provided MSW-fueled electricity to OTP until early 2004. At that point, the facility ceased generating electricity as it instead chose to supply the steam directly to a food processing plant rather than generate electricity.

During early 2003, OTP signed a PPA with FPL Energy for the 21 MW FPL Energy North Dakota Wind II project located near Edgeley, ND. This project commenced operation in October 2003. OTP also signed a PPA for the Borderline Wind project, 900 kW, near Hendricks, MN that began operation on December 31, 2003. OTP is currently working with the West Central Research and Outreach Center at the University of Minnesota-Morris on a 1.65 MW project near Morris, MN and a 660 kW project with the Turtle Mountain Community College located in northern North Dakota.

OTP conducted a customer survey of its agricultural customers, seeking sites suitable for development of anaerobic digestion fueled generation. The survey revealed very limited opportunities for development. None of the sites met the necessary conditions that would indicate likely economic viability in accordance with guidelines developed by the U.S. Dept. of Agriculture's AgSTAR biogas program and the FarmWare software. These are available at [www.epa.gov/agstar/library](http://www.epa.gov/agstar/library).

OTP is also involved in confidential discussions on other projects that cannot be revealed at this point due to the proprietary nature of the proposals. These discussions involved both wind and biomass possibilities.

OTP's next IRP filing is due in 2005 and the Company has commenced work on the analysis for this filing. This work will determine the economic potential for further wind development on the OTP system.

**State of Minnesota**  
**DEPARTMENT OF COMMERCE**

**Utility Information Request**

Docket Number:

Date of Request: November 23, 2004

Requested From: Bryan Morlock  
Otter Tail Power Company

Response Due: December 10, 2004

Analyst Requesting Information: Cyndee Fang

Type of Inquiry:    .....Financial                    .....Rate of Return                    .....Rate Design  
                          .....Engineering                    .....Forecasting                    .....Conservation  
                          .....Cost of Service                    .....CIP                                .....Other:

*If you feel your responses are trade secret or privileged, please indicate this on your response.*

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Request  
No.

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3      Please describe any obstacles your organization has encountered or anticipates in meeting the objective.

There are several obstacles already existing or new trends we are seeing that will have an impact.

It is obvious that the federal production tax credit (PTC) is critical to the economic viability of wind development. Without the PTC, wind generation simply cannot be competitive with the alternative generating costs in our region. It is imperative that the PTC be renewed beyond 2005 to make wind more economically competitive.

On the biomass front, the high natural gas prices are driving companies to search for ways to reduce their natural gas consumption. This is especially true for some of the wood products companies. By law, they are required to install new pollution control equipment on some of their processes, which require heat input. In the past, they have used natural gas for this. They now expect to use their wood waste for this purpose, even in situations where they already have a cogeneration facility on-site. They plan to reduce or cease their production of electricity in order to use the steam heat to displace natural gas. There are other companies that use large amounts of natural gas that are now using wood to offset the use of natural gas, due to cost. The supply of wood biomass is being reduced.

Biomass technologies are inherently expensive. Because of the typical high moisture content of the fuel, such fuel cannot be economically transported very far. This dictates smaller size generating facilities that economically suffer due to economy of scale considerations and very high labor costs per megawatt of output.

The processes for obtaining interconnection approvals and network transmission service are becoming more cumbersome and lengthy, delaying projects. This adds a greater degree of uncertainty to wind projects, where the production tax credit plays a significant role in the economics of wind. The MISO approval processes can be lengthy enough so that a wind farm cannot startup prior to the expiration of the PTC, creating a significant economic risk.

MISO has issued a notice that there is such a backlog of interconnection requests for SW Minnesota and Eastern SD that any new requests may not get processed for years. This memo is available at [www.midwestiso.org/plan\\_inter/documents/Web Notice to MN SD and Iowa Energy Developers.pdf](http://www.midwestiso.org/plan_inter/documents/Web%20Notice%20to%20MN%20SD%20and%20Iowa%20Energy%20Developers.pdf).

The Minnesota policy of imputing a capacity value for truly non-dispatchable energy resources such as wind, run-of-river hydro, solar, etc. is counter-productive to those entities subject to rate regulation. Neighboring states allow 100% of wind generation through the fuel adjustment clause (cost of energy), while the MN PUC has disallowed 10% of the energy cost through the FAC. The reason cited is that this can and should be collected through a rate case. However, rate cases cost millions of dollars, consume thousands of hours of labor, and have no guarantee of recovery. A utility has to be faced with losing a significant amount of revenue due to wind generation before a rate case can be economically justified. This is an especially punitive policy since under federal law (Public Utilities Regulatory Policy Act) the utility is obligated to purchase the wind energy. The State of Minnesota needs to look at changing its policy on this point to be consistent with its legislative statutes that promote renewable energy, and surrounding states. In the absence of such a change, a utility is penalized for compliance.

In general, the currently constrained transmission system is a major obstacle to the development of any type of generation, including renewables.

**State of Minnesota**  
**DEPARTMENT OF COMMERCE**

**Utility Information Request**

Docket Number:

Date of Request: November 23, 2004

Requested From: Bryan Morlock  
Otter Tail Power Company

Response Due: December 10, 2004

Analyst Requesting Information: Cyndee Fang

Type of Inquiry:    ..... Financial                    ..... Rate of Return            ..... Rate Design  
                         ..... Engineering                ..... Forecasting                ..... Conservation  
                         ..... Cost of Service               ..... CIP                         ..... Other:

*If you feel your responses are trade secret or privileged, please indicate this on your response.*

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Request  
No.

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4            Please describe any potential solutions under consideration by your organization to the obstacles described above.

One logical item is to change the treatment of non-dispatchable technologies such as wind, run-of-river hydro, and solar generation in ratemaking. These resources should be considered as energy only resources, with 100% of the energy price allowed through the cost of energy calculation.

OTP is participating in CAPX2020, a group of Minnesota utilities working on expanding the transmission system in Minnesota to provide more transmission capability for new resources, including renewable resources. The analysis process is including the consideration of the amount of generation required to comply with the MN REO.

OTP has continually expressed its support of the Production Tax Credit for wind to area legislators.

**Otter Tail Power Company Attachment A**

**Data on Renewable Energy Sources**

Please provide the following information for all sources of renewable energy generation

<b>Generator Name</b>	Lac Qui Parle Valley School	Energy Maintenance Service	Hendricks Wind I	Border-line Wind	FPL Energy ND Wind II	Potlatch - OTP Share Only	Perham Resource Recovery Facility	Trautman Wind
<b>Generator ID Number</b>								1 & 2
<b>Location</b>	Madison, MN	Gary, SD	Hendricks, MN	Hendricks, MN	Edgeley, ND	Bemidji, MN	Perham, MN	Jamestown, ND
<b>Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)</b>	Wind	Wind	Wind	Wind	Wind	Biomass (100%)	MSW (100%)	Wind
<b>Technology Type</b>	Wind	Wind	Wind	Wind	Wind	Steam	Steam	Wind
<b>Vintage (date when generator first commences operation as month/day/year)</b>	12/1/1997	11/22/2002	12/31/2001	12/31/2003	10/1/2003	4/1/1992	1/1/2003	1/1/1985
<b>Nameplate Capacity (MW)</b>	0.225	0.09	0.9	0.9	21	6.25	4.5	0.025 each
<b>Accredited Capacity (MW)</b>	0; Customer uses most of the output, OTP just receives surpluses	0	Jul-0.144; Aug-0.130; Sep-0.336; Oct-0.178; Nov-0.367; Dec-0.388; Jan-0.260; Feb-0.339; Mar-0.304; Apr-0.199; May-0.237; Jun-0.184	Jul-0.0; Aug-0.0; Sep-0.0; Oct-0.0; Nov-0.0; Dec-0.0; Jan-0.0; Feb-0.0; Mar-0.219; Apr-0.184; May-0.112; Jun-0.188	Not Accredited by MAPP during this period due to lack of long term firm transmission approval by MISO	Jul - Oct 2003 - 5.95; Nov 2003-Jun 2004 - 5.875	1.107	0; Customer uses most of the output, OTP just receives surpluses
<b>Owned Generation or PPA</b>	PPA	PPA	PPA	PPA	PPA	PPA	PPA	PPA
<b>Generation Deliverable to MN (yes or no)</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Energy Generated from July 1, 2003 to June 30, 2004 (kWh)</b>	31,140	188,292	2,716,241	1,111,283	51,333,426	31,448,780	1,806,171	6,280
<b>Eligible for MN REO (yes or no)</b>	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
<b>Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.</b>	None	None	Used for the TailWinds Green Pricing Tariff	None	None	None	None	None



**Attachment H4:** Response from Alliant Energy—Interstate Power and Light Company.

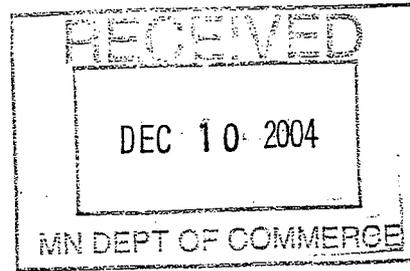
Interstate Power and Light (IPL) initially designated its response to the Department information request for this report as trade secret. IPL later agreed that the information provided was public information and is therefore made available in this report. IPL's response is presented in its original format.

Cyndee Fang



December 9, 2004

Kate O'Connell  
Department of Commerce  
85 7<sup>th</sup> Place East  
Suite 500  
St. Paul, MN 55101-2198



Interstate Power and Light Co.  
An Alliant Energy Company

Corporate Headquarters  
Alliant Tower  
200 First Street SE  
P.O. Box 351  
Cedar Rapids, IA 52406-0351

Office: 1.800.822.4348  
[www.alliantenergy.com](http://www.alliantenergy.com)

Attachment H4

Re: Interstate Power and Light Company  
Information Request Nos. 1 through 4

Dear Ms. O'Connell:

Enclosed find an original and two (2) copies of Interstate Power and Light Company's responses to Information Request Nos. 1 through 4. Information Request Nos. 1 through 4 contain Trade Secret Data; enclosed are the Public and Nonpublic versions. The Nonpublic versions of responses are marked "Trade Secret".

Very truly yours,

A handwritten signature in cursive script that reads "Jennifer S. Moore/kjf".

Jennifer S. Moore  
Regulatory Attorney

JSM/kjf  
Enclosure

**Response of  
Interstate Power and Light Company  
to  
Minnesota Department of Commerce  
Information Request No. 1**

Docket Number:

Date of Request: November 23, 2004

Response Due: December 10, 2004

Information Requested By: Cyndee Fang

Date Responded: December 9, 2004

Author: a & b - Jim Severson

c, d, & e - JP Brummond

Author's Title: Jim Severson - Utility Financial Controller

JP Brummond – Senior Energy Portfolio Consultant

Author's Telephone No.: (319) 786-7609 (Jim Severson)

(608) 458-3661 (JP Brummond)

Witness: (If other than Author)

Reference:

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**Information Request No. 1**

To determine the status of each utility's renewable energy mix relative to the good faith objective, please provide the following information:

- (a) The utility's total retail sales defined as the kWh of electricity sold from July 1, 2003, to June 30, 2004 by an electric utility to retail customers of the utility or to a distribution utility for distribution to the retail customers of the distribution utility.
- (b) Total electric energy (kWh) provided to Minnesota retail customers for the period July 1, 2003, to June 30, 2004.
- (c) Total energy generated from eligible energy technologies as defined by Minnesota Statutes §216B.1691, Subd. 1(a)(1) and Commission Orders under Docket No. E999/CI-03-869.
- (d) Total energy (kWh) generated from eligible energy technology as defined by Minnesota Statutes §216B.1691, Subd. 1(a)(1) and Commission Orders under Docket No. E999/CI-03-869 deliverable to Minnesota retail customers. Please provide the definition used for determine whether generation was deliverable to Minnesota retail customers.

- (e) Please provide the information requested as presented in Attachment A for each of the renewable resources used in the answer to (c) and (d).

The Department is providing an electronic version of Attachment A to all organizations for which we have e-mail addresses. The Department requests organizations to provide this information electronically, if possible. Otherwise, please fill out the information on the attached paper version.

**Response**

- (a) The total retail sales sold in Minnesota for the period July 1, 2003 through June 30, 2004 is 786,312,704 kWh. This number includes estimated unbilled sales for each month of the period. 
- (b) The estimated total energy to supply retail sales to Minnesota customers for the period July 1, 2003 through June 30, 2004 is 841,511,856 kWh. This estimate includes a 6.56% loss/unaccounted for factor which is the average of the previous 24 months losses/unaccounted for as a percent of total estimated energy (7.02% as a percent of retail sales.)
- (c) The total energy generated from eligible energy technologies from July 1, 2003 to June 30, 2004 was 22,969,137 kWh.
- (d) The total energy generated from eligible energy technologies and deliverable to Minnesota retail customers from July 1, 2003 to June 30, 2004 was 22,245,577 kWh. Renewable energy that is deliverable to Minnesota retail customers is defined as X percent of IPL's total renewable energy generated in Minnesota, where X is calculated by subtracting full requirements wholesale customers in Minnesota from IPL's total Minnesota load, then dividing that number by IPL's total Minnesota load. This calculation is performed in the attached spreadsheet, where X is calculated for the time frame above as 96.85%.
- (e) Attachment A is attached.
-

**Attachment A**

**Data on Renewable Energy Sources**

**Please provide the following information for all sources of renewable energy generation**

<b>Generator Name</b>	<b>Adams Wind Farm</b>	<b>Minn Wind I &amp; II</b>	<b>Sieve Windfarm</b>	<b>Wilmont Hills</b>	
<b>Generator ID Number</b>					
<b>Location</b>	near Adams, MN	near Hills, MN	near Wilmont, MN	near Wilmont, MN	
<b>Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)</b>	Wind	Wind	Wind	Wind	
<b>Technology Type</b>	1.5 MW turbines	0.95 MW turbines	0.95 MW turbine	1.5 MW turbine	
<b>Vintage (date when generator first commences operation as month/day/year)</b>	December 23, 2003	October 2002	December 26, 2002	February 22, 2002	
<b>Nameplate Capacity (MW)</b>	6	3.8	0.95	1.5	
<b>Accredited Capacity (MW)</b>	0	0	0	0	
<b>Owned Generation or PPA</b>	PPA	PPA	PPA	PPA	
<b>Generation Deliverable to MN (yes or no)</b>	Yes	Yes	Yes	Yes	
<b>Energy Generated from July 1, 2003 to June 30, 2004 (kWh)</b>	8,572,768	11,092,369	3,304,000	5,555,772	
<b>Eligible for MN REO (yes or no)</b>	yes	yes	yes	No	
<b>Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.</b>	None.	None.	None.	Used solely for the Second Nature Program (green pricing program).	

**TRADE SECRET**

**Response of  
Interstate Power and Light Company  
to  
Minnesota Department of Commerce  
Information Request No. 2**

Docket Number:

Date of Request: November 23, 2004

Response Due: December 10, 2004

Information Requested By: Cyndee Fang

Date Responded: December 9, 2004

Author: J P Brummond

Author's Title: Sr. Energy Portfolio Services & Planning Consultant

Author's Telephone No.: (608) 458-3661

Witness: (If other than Author)

Reference:

---

**Information Request No. 2**

Please describe all efforts your organization has taken to meet the objective.

**Response**

**IPL has ensured that its projected renewable portfolio in Minnesota will meet the non-biomass requirements of the Minnesota Renewable Energy Objectives (REO) through 2015. IPL has more than enough biomass generation located in Iowa to count towards its Minnesota REO. However, it now appears that IPL will not be able to trade renewable biomass credits from Iowa to Minnesota for at least a few years, so efforts have begun to source a small amount of biomass generation in Minnesota for IPL starting in 2005.**

**Response of  
Interstate Power and Light Company  
to  
Minnesota Department of Commerce  
Information Request No. 3**

Docket Number:

Date of Request: November 23, 2004

Response Due: December 10, 2004

Information Requested By: Cyndee Fang

Date Responded: December 9, 2004

Author: J P Brummond

Author's Title: Sr. Energy Portfolio Services & Planning Consultant

Author's Telephone No.: (608) 458-3661

Witness: (If other than Author)

Reference:

---

**Information Request No. 3**

Please describe any obstacles your organization has encountered or anticipates in meeting the objective.

**Response**

**IPL may encounter trouble meeting the Renewable Energy Objective (REO) in two areas. First, in order to meet the requirements of its REO past 2007 IPL will need significant renewable generation added to its Minnesota portfolio (up to 26 MW by 2016). This generation has already been accounted for from Minnesota facilities that have executed PPAs with IPL, but the facilities have not been built, so construction risk remains.**

**The second area IPL may run into trouble meeting its REO is that IPL needs to procure biomass resources for its portfolio starting in 2005. This is a new procurement effort, so procurement and construction risks remain.**

**Response of  
Interstate Power and Light Company  
to  
Minnesota Department of Commerce  
Information Request No. 4**

Docket Number:

Date of Request: November 23, 2004

Response Due: December 10, 2004

Information Requested By: Cyndee Fang

Date Responded: December 9, 2004

Author: J P Brummond

Author's Title: Sr. Energy Portfolio Services & Planning Consultant

Author's Telephone No.: (608) 458-3661

Witness: (If other than Author)

Reference:

---

**Information Request No. 4**

Please describe any potential solutions under consideration by your organization to the obstacles described above.

**Response**

**For the first obstacle described in Information Request No. 3, IPL will monitor the construction process for the two renewable facilities that should be built in 2005. If either of these facilities fails to materialize, IPL should have enough time to procure renewable energy from another site so that its Renewable Energy Objectives (REO) requirements are met past 2007.**

**For the second obstacle described in Information Request No. 3 IPL, is currently working with a renewable energy developer in Minnesota to procure a small amount of renewable biomass generation in Minnesota for at least the next few years, which will ensure that IPL meets the biomass requirements for the REO in the short-term. IPL will also be working on a long-term biomass procurement solution that will ensure its REO biomass requirements are met through 2015.**



**Northwestern  
Wisconsin Electric Company**

Phone (715) 463-5371  
FAX (715) 463-2765

104 South Pine Street • P.O. Box 9 • Grantsburg, WI 54840-0009

December 9, 2004

Attachment H5

Kate O'Connell  
Supervisor, Electric Planning and Advocacy  
85 7<sup>th</sup> Place East, Ste. 500  
Saint Paul, Minnesota 55101-2198

DEC 13 2004

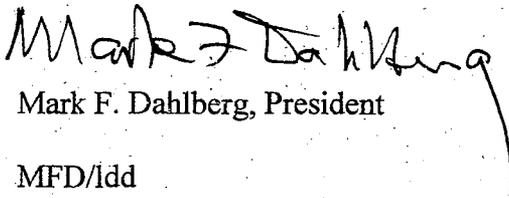
RE: Minnesota Renewable Energy Objective

Dear Mr. O'Connell:

Please find enclosed information on above subject.

Sincerely,

NORTHWESTERN WISCONSIN ELECTRIC COMPANY

  
Mark F. Dahlberg, President

MFD/idd

Enc.

**State of Minnesota**  
**DEPARTMENT OF COMMERCE**

Utility Information Request

Docket Number: \_\_\_\_\_ Date of Request: November 23, 2004

Requested From: Mark F. Dahlberg Response Due: December 10, 2004  
Northwestern Wisconsin Electric Company

Analyst Requesting Information: Cyndee Fang

Type of Inquiry:    .....Financial                    .....Rate of Return                    .....Rate Design  
                          .....Engineering                    .....Forecasting                    .....Conservation  
                          .....Cost of Service                    .....CIP                                    .....Other:

*If you feel your responses are trade secret or privileged, please indicate this on your response.*

Request No.	
1	<p>To determine the status of each utility's renewable energy mix relative to the good faith objective, please provide the following information:</p> <ul style="list-style-type: none"> <li>(a) The utility's total retail sales defined as the kWh of electricity sold from July 1, 2003, to June 30, 2004 by an electric utility to retail customers of the utility or to a distribution utility for distribution to the retail customers of the distribution utility. 183,718,793 Kwh</li> <li>(b) Total electric energy (kWh) provided to Minnesota retail customers for the period July 1, 2003, to June 30, 2004. 524,992 Kwh</li> <li>(c) Total energy generated from eligible energy technologies as defined by Minnesota Statutes §216B.1691, Subd. 1(a)(1) and Commission Orders under Docket No. E999/CI-03-869.</li> <li>(d) Total energy (kWh) generated from eligible energy technology as defined by Minnesota Statutes §216B.1691, Subd. 1(a)(1) and Commission Orders under Docket No. E999/CI-03-869 deliverable to Minnesota retail customers. Please provide the definition used for determine whether generation was deliverable to Minnesota retail customers.</li> <li>(e) Please provide the information requested as presented in Attachment A for each of the renewable resources used in the answer to (c) and (d)</li> </ul> <p>The Department is providing an electronic version of Attachment A to all organizations for which we have e-mail addresses.<sup>5</sup> The Department requests organizations to provide this information electronically, if possible. Otherwise, please fill out the information on the attached paper version.</p>

<sup>5</sup> The Department does not have e-mail addresses for the following entities: East River Electric Power Cooperative; L&O Power Cooperative; Northern Municipal Power Agency; Minnesota Municipal Power Agency; Central Minnesota Municipal Power Agency. If you have not received an electronic version by Monday, November 29, 2004, please contact Cynthia Fang at 651-296-0417. To receive an electronic version of Attachment A, we encourage you to send an e-mail to Cynthia Fang at [Cynthia.Fang@state.mn.us](mailto:Cynthia.Fang@state.mn.us).

**State of Minnesota**  
**DEPARTMENT OF COMMERCE**

Utility Information Request

Docket Number:

Date of Request: November 23, 2004

Requested From: Mark F. Dahlberg  
Northwestern Wisconsin Electric Company

Response Due: December 10, 2004

Analyst Requesting Information: Cyndee Fang

Type of Inquiry:     .....Financial           .....Rate of Return       .....Rate Design  
                         .....Engineering       .....Forecasting       .....Conservation  
                         .....Cost of Service     .....CIP               .....Other:

*If you feel your responses are trade secret or privileged, please indicate this on your response.*

Request No.	
2	<p>Please describe all efforts your organization has taken to meet the objective.</p> <p>Northwestern Wisconsin Electric Company (NWECC) has used the production from existing Wisconsin Hydro Facilities at Clam River Dam and Danbury, Burnett County, Wisconsin to supply both Wisconsin and Minnesota with the required amount of energy according to Wisconsin Law. NWECC has 98 customers in Minnesota. These are fed by two (2) distribution 7.2KV lines from Wisconsin Substations. Since Wisconsin Law allows the use of only 0.6% of total Kwh sold to be from Old Hydro (installed before January 1, 1998), NWECC has Purchased Renewable Resource Credits from other Wisconsin Utilities to make up the difference.</p>

**State of Minnesota**  
**DEPARTMENT OF COMMERCE**

**Utility Information Request**

Docket Number:

Date of Request: November 23, 2004

Requested From: Mark F. Dahlberg  
Northwestern Wisconsin Electric Company

Response Due: December 10, 2004

Analyst Requesting Information: Cyndee Fang

Type of Inquiry:     .....Financial           .....Rate of Return       .....Rate Design  
                          .....Engineering           .....Forecasting       .....Conservation  
                          .....Cost of Service       .....CIP               .....Other:

*If you feel your responses are trade secret or privileged, please indicate this on your response.*

Request No.	
3	Please describe any obstacles your organization has encountered or anticipates in meeting the objective. None so far, if NWEA is allowed to use Wisconsin Resources to supply our Minnesota customers.

**State of Minnesota**  
**DEPARTMENT OF COMMERCE**

Utility Information Request

Docket Number:

Date of Request: November 23, 2004

Requested From: Mark F. Dahlberg  
Northwestern Wisconsin Electric Company

Response Due: December 10, 2004

Analyst Requesting Information: Cyndee Fang

Type of Inquiry:    ..... Financial            ..... Rate of Return            ..... Rate Design  
                         ..... Engineering            ..... Forecasting            ..... Conservation  
                         ..... Cost of Service            ..... CIP            ..... Other:

*If you feel your responses are trade secret or privileged, please indicate this on your response.*

Request No.	
4	Please describe any potential solutions under consideration by your organization to the obstacles described above.

If NWECC is not allowed to use Renewable Resources from Wisconsin, NWECC would attempt to purchase Renewable Resources or Renewable Credits from Minnesota Utilities.

**Attachment A: Data on Renewable Energy Sources**

Please provide the following information for all sources of renewable energy generation. Please make additional copies as needed.

<b>Generator Name</b>	BLACK BROOK	CLAM RIVER DAM	DANBURY #1 & #2
<b>Generator ID Number</b>	FERC PROJ #2894	FERC PROJ.# 9185	FERC PROJ.#9184
<b>Location</b>	POLK COUNTY, WISCONSIN	BURNETT COUNTY, WI	BURNETT COUNTY, WI
<b>Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)</b>	WATER	WATER	WATER
<b>Technology Type</b>	HYDRO DAM	HYDRO DAM	HYDRO DAM
<b>Vintage (date when generator first commences operation as month/day/year)</b>	1982	UNITS # 1 & 2 - 1942 UNITS # 3 - 1967	Plant #1 - 1921 & 1927 Plant #2 - 1950
<b>Nameplate Capacity (MW)</b>	0.606	1.20	1.076
<b>Accredited Capacity (MW)</b>	0.587	1.024	1.100
<b>Owned Generation or PPA</b>	PPA	PPA	PPA
<b>Generation Deliverable to MN (yes or no)</b>	NO	YES	YES
<b>Energy Generated from July 1, 2003 to June 30, 2004 (kWh)</b>	2,373,120	5,820,800	3,595,400
<b>Eligible for MN REO (yes or no)</b>	YES	YES	YES
<b>Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.</b>	Wis. Stat. 196.378 Renewable Resources require all Utilities to provide certain amount of Renewable electric energy to all customers  SEE ATTACHED LETTER DATED MARCH 1, 2004	le Resources require all Utilities to provide certain	years 2001 & 2002: 0.5% Years 2003 & 2004: 0.85% ← Years 2005 & 2006: 1.20% Years 2007 & 2008: 1.55% Years 2009 & 2010: 1.90% Years 2011 & beyond: 2.20%



**Northwestern  
Wisconsin Electric Company**

Phone (715) 463-5371  
FAX (715) 463-2765

104 South Pine Street • P.O. Box 9 • Grantsburg, WI 54840-0009

March 1, 2004

Mr. Burl W. Haar  
Executive Secretary  
Minnesota Public Utility Commission  
121 7<sup>th</sup> Place East, Ste. 350  
Saint Paul, Minnesota 55101-2147

DEC 13 2004

**Subject: Renewable Energy Objectives, Minn Stat. 216B.1691  
Docket No. E-999/CI-03-869**

Dear Mr. Haar:

In 1999 the State of Wisconsin enacted Act 9, which created a renewable portfolio standard, requiring Electric Providers to meet certain minimum percentages of their retail sales with renewable resources. Northwestern Wisconsin Electric Company (NWEC) has very carefully followed the requirements of this law since its first year 2001. NWEC has used its total Wisconsin and Minnesota Retail Sales in the calculations of the renewable energy that is to be provided to our retail electric customers.

The Renewable Energy Objectives under Stat. 216B.1691 appears to be very similar to the Wisconsin Act No. 9. We are enclosing a copy of the Wisconsin Stat. 196.378, Renewable Resources:

1. Wisconsin Stat. 196.378 Renewable Resources
2. Public Service Commission Chapter PSC 118 Renewable Resource Credit Trading Program
3. 2003 Renewable Resource Credit Status Report
4. 2002 Renewable Resource Credit Status Report

Below is shown the Mwh Retail Sales for Wisconsin, Minnesota and total for the years 1999 through 2003:

<u>YEAR</u>	<u>WISCONSIN</u>	<u>MINNESOTA</u>	<u>TOTAL</u>
1999	142948	503	143451
2000	147506	552	148058
2001	153393	518	153911
2002	170864	505	171369
2003	175905	508	176413

COPY

For the last three (3) years, NWECA has delivered 0.5% Renewable Energy in 2001 and 2002 and 0.85% in 2003 to our Minnesota customers as well as the Wisconsin customers. We plan to deliver Renewable Resource Energy in accordance with the percentages as required by Wisconsin Law in 2004 and in the future.

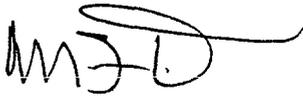
In 2003 our Hydro sources were not sufficient to provide all the Renewable Energy because they are considered "Old Hydros" as they were constructed before 1998. Therefore, we went into the market and purchased 400 Mw of Renewable Resource Credit from Wisconsin Public Service Corporation in order to meet these requirements.

NWECA petitions the Minnesota Commission to be exempt from the Minnesota Stat. 216B.1691 and use the Wisconsin Act No. 9, Stat. 196.378 to fulfill the requirement in Minnesota.

Thank you very much.

Sincerely,

NORTHWESTERN WISCONSIN ELECTRIC COMPANY



Mark F. Dahlberg, President

MFD/lo

Enc.

1 commission shall ensure in rate-making orders that a utility recovers from its  
2 ratepayers the amounts spent on programs or contributed to the fund under this  
3 subsection. The commission shall allow each utility the option of continuing to use,  
4 until January 1, 2002, the moneys that it has recovered under s. 196.374 (3), 1997  
5 stats., to administer the programs that it has funded under s. 196.374 (1), 1997 stats.  
6 The commission may allow each utility to spend additional moneys on the programs  
7 specified in sub. (2) if the utility otherwise complies with the requirements of this  
8 section and s. 16.957 (4).

9 (4) If the department notifies the commission under s. 16.957 (2) (b) 2. that the  
10 department has reduced funding for energy conservation and efficiency and  
11 renewable resource programs by an amount that is greater than the portion of the  
12 public benefits fee specified in s. 16.957 (4) (c) 2., the commission shall reduce the  
13 amount that utilities are required to spend on programs or contribute to the fund  
14 under sub. (3) by the portion of the reduction that exceeds the amount of public  
15 benefits fees specified in s. 16.957 (4) (c) 2.

16 SECTION 2334t. 196.378 of the statutes is created to read:

17 **196.378 Renewable resources. (1) DEFINITIONS.** In this section:

18 (a) "Biomass" means a resource that derives energy from wood or plant  
19 material or residue, biological waste, crops grown for use as a resource or landfill  
20 gases. "Biomass" does not include garbage, as defined in s. 289.01 (9), or  
21 nonvegetation-based industrial, commercial or household waste, except that  
22 "biomass" includes refuse-derived fuel used for a renewable facility that was in  
23 service in this state before January 1, 1998.

24 (am) "Biomass cofired facility" means a renewable facility in which biomass  
25 and conventional resources are fired together.

1 (b) "Conventional resource" means a resource that derives energy from coal, oil,  
2 nuclear power or natural gas, except for natural gas used in a fuel cell.

3 (bm) "Department" means the department of administration.

4 (c) "Electric provider" means an electric utility or retail electric cooperative.

5 (d) "Electric utility" means a public utility that sells electricity at retail. For  
6 purposes of this paragraph, a public utility is not considered to sell electricity at  
7 retail solely on the basis of its ownership or operation of a retail electric distribution  
8 system.

9 (e) "Excludable renewable energy" means the portion of an electric provider's  
10 total renewable energy that is supplied from renewable facilities that were placed  
11 in service before January 1, 1998, and that, before January 1, 1998, derived  
12 electricity from hydroelectric power, even if the output of the renewable facilities is  
13 used to satisfy requirements under federal law.

14 (f) "Nonsystem renewable energy" means the amount of electricity that an  
15 electric provider sells to its retail customers or members and that is supplied or  
16 allocated under executed wholesale purchase contracts from renewable facilities  
17 that are not owned or operated by the electric provider. "Nonsystem renewable  
18 energy" does not include any electricity that is not used to satisfy the electric  
19 provider's retail load obligations.

20 (g) "Renewable facility" means an installed and operational electric generating  
21 facility in which electricity is derived from a renewable resource. "Renewable  
22 facility" includes a facility the installation or operation of which is required under  
23 federal law, but does not include a facility the installation or operation of which is  
24 required under the laws of another state even if the installation or operation of the  
25 facility is also required under federal law.

1 (h) "Renewable resource" means any of the following:

2 1. A resource that derives electricity from any of the following:

3 a. A fuel cell that uses, as determined by the commission, a renewable fuel.

4 b. Tidal or wave action.

5 c. Solar thermal electric or photovoltaic energy.

6 d. Wind power.

7 e. Geothermal technology.

8 g. Biomass.

9 1m. A resource with a capacity of less than 60 megawatts that derives  
10 electricity from hydroelectric power.

11 2. Any other resource, except a conventional resource, that the commission  
12 designates as a renewable resource in rules promulgated under sub. (4).

13 (i) "Renewable resource credit" means a credit calculated in accordance with  
14 rules promulgated under sub. (3) (a).

15 (j) "Resource" means a source of energy used to generate electric power.

16 (k) "Retail electric cooperative" means a cooperative association organized  
17 under ch. 185 that sells electricity at retail to its members only. For purposes of this  
18 paragraph, a cooperative association is not considered to sell electricity at retail  
19 solely on the basis of its ownership or operation of a retail electric distribution  
20 system.

21 (n) "System renewable energy" means the amount of electricity that an electric  
22 provider sells to its retail customers or members and that is supplied by renewable  
23 facilities owned or operated by the electric provider.

24 (o) "Total renewable energy" means the sum of an electric provider's system and  
25 nonsystem renewable energy.

1           (2) RENEWABLE RESOURCE ENERGY. (a) Each electric provider shall provide to its  
2 retail electric customers or members total renewable energy in at least the following  
3 percentages of its total retail electric sales, either directly or through renewable  
4 resource credits from another electric provider:

5           1. By December 31, 2001, 0.5%.

6           2. By December 31, 2003, 0.85%.

7           3. By December 31, 2005, 1.2%.

8           4. By December 31, 2007, 1.55%.

9           5. By December 31, 2009, 1.9%.

10          6. By December 31, 2011, 2.2%.

11          (b) For purposes of determining compliance with par. (a):

12           1. Total retail electric sales shall be calculated on the basis of an average of an  
13 electric provider's retail electric sales in this state during the prior 3 years.

14           2. The amount of electricity supplied by a biomass cofired facility that may be  
15 counted toward satisfying the requirements of par. (a) shall be an amount equal to  
16 the product of the maximum amount of electricity that the facility is capable of  
17 generating and the ratio of the energy content of the biomass fuels to the energy  
18 content of both the biomass and conventional resources.

19           3. Any excludable renewable energy that exceeds 0.6% of an electric provider's  
20 total retail electric sales shall be excluded from the electric provider's total  
21 renewable energy.

22           4. The members of a municipal electric company, as defined in s. 66.073 (3) (d),  
23 may aggregate and allocate renewable energy among themselves.

24          (c) No later than April 15 annually, an electric provider shall submit a report  
25 to the department that describes the electric provider's compliance with par. (a).

1 Reports under this paragraph may include certifications from wholesale suppliers  
2 regarding the sources and amounts of energy supplied to an electric provider. The  
3 department may specify the documentation that is required to be included with  
4 reports submitted under this paragraph.

5 (d) The commission shall allow an electric utility to recover from ratepayers the  
6 cost of providing total renewable energy to its retail customers in amounts that equal  
7 or exceed the percentages specified in par. (a). Subject to any approval of the  
8 commission that is necessary, an electric utility may recover costs under this  
9 paragraph by any of the following methods:

10 1. Allocating the costs equally to all customers on a kilowatt-hour basis.  
11 2. Establishing alternative price structures, including price structures under  
12 which customers pay a premium for renewable energy.

13 3. Any combination of the methods specified in subds. 1. and 2.

14 (e) 1. This subsection does not apply to any of the following:

15 a. An electric provider that provides more than 10% of its summer peak demand  
16 in this state from renewable facilities.

17 b. An electric provider that provides more than 10% of its summer peak demand  
18 from renewable resources.

19 2. For purposes of calculating the percentages under subd. 1., an electric  
20 provider may include renewable facilities located in this or another state and  
21 renewable facilities located on its or another electric provider's system.

22 3. Notwithstanding subd. 1., this subsection applies to an electric provider  
23 unless the electric provider provides documentation to the commission that  
24 establishes, to the satisfaction of the commission, that the electric provider satisfies  
25 the requirements under subd. 1. a. or b.

1           (3) RENEWABLE RESOURCE CREDITS. (a) An electric provider that provides total  
2 renewable energy to its retail electric customers or members in excess of the  
3 percentages specified in sub. (2) (a) 1. to 6. may, in the applicable year, sell to any  
4 other electric provider a renewable resource credit or a portion of a renewable  
5 resource credit at any negotiated price. Alternatively, an electric provider may use  
6 a renewable resource credit or portion of a renewable resource credit in a subsequent  
7 year to establish compliance with sub. (2) (a). The commission shall promulgate  
8 rules that establish requirements for the use of a renewable resource credit,  
9 including calculating the amount of a renewable resource credit.

10           (b) The commission may promulgate rules that establish requirements and  
11 procedures for a sale under par. (a).

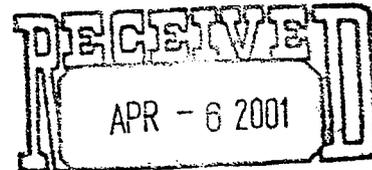
12           (4) RULES. The commission may promulgate rules that designate a resource,  
13 except for a conventional resource, as a renewable resource in addition to the  
14 resources specified in sub. (1) (h) 1. and 1m.

15           (5) PENALTY. Any person who violates sub. (2) or any wholesale supplier who  
16 provides an electric provider with a false or misleading certification regarding the  
17 sources or amounts of energy supplied to the electric provider shall forfeit not less  
18 than \$5,000 nor more than \$500,000. Forfeitures under this subsection shall be  
19 enforced by action on behalf of the state by the attorney general. A court imposing  
20 a forfeiture under this subsection shall consider all of the following in determining  
21 the amount of the forfeiture:

22           (a) The appropriateness of the forfeiture to the person's or wholesale supplier's  
23 volume of business.

24           (b) The gravity of the violation.

1           (c) Whether a violation of sub. (2) is due to circumstances beyond the violator's  
2 control.".



N.W. ELECTRIC CO.  
Grantsburg, WI 54840

BEFORE THE  
PUBLIC SERVICE COMMISSION OF WISCONSIN

Rules and Procedures for Implementing a Renewable Portfolio  
Standard Pursuant to 1999 Wisconsin Act 9

1-AC-192

**ORDER OF THE PUBLIC SERVICE COMMISSION  
ADOPTING EMERGENCY RULES**

The Public Service Commission of Wisconsin adopts an emergency rule to create PSC 118, Wis. Admin. Code, relating to the use of renewable resource credits.

**Analysis Prepared by the Public Service Commission of Wisconsin**

Statutory authority: ss. 196.02(3), 196.378(3), and 227.11, Stats.

Statute interpreted: s. 196.378, Stats.

1999 Wis. Act 9 created a renewable portfolio standard, requiring electric providers to meet certain minimum percentages of their retail sales with renewable resources. The minimum percentage gradually increases as follows:

Year 2001:	0.5 percent of total retail electric sales.
Year 2003:	0.85 percent of total retail electric sales.
Year 2005:	1.2 percent of total retail electric sales.
Year 2007:	1.55 percent of total retail electric sales.
Year 2009:	1.9 percent of total retail electric sales.
Year 2011:	2.2 percent of total retail electric sales.

In lieu of providing renewable energy to its customers, an electric provider can purchase a renewable resource credit. Under s. 196.378(3)(a), Stats., the Commission must “promulgate rules that establish requirements for the use of a renewable resource credit, including the amount of a renewable resource credit.” This rule addresses the requirements and procedures for the use

Docket 1-AC-192

of renewable resource credits, during the interim period before the date when an identical permanent rule takes effect (the likely effective date of this permanent rule is May 1, 2001, depending on its actual date of publication in the Wisconsin Administrative Register).

This rule establishes a renewable resource credits trading program and describes the minimum criteria for renewable facilities to be eligible for creation of credits in the trading program. The rule also describes the duties of a program administrator, who supervises and implements the trading program. The program administrator is required to create a trading account for participating electric providers and to award renewable resource credits to the account of an electric provider of energy, from a certified renewable facility, that exceeds its minimum requirement. The program administrator must retire renewable resource credits upon their use to satisfy an electric provider's minimum renewable energy requirement.

#### **Fiscal Estimate**

A fiscal estimate is attached to this order.

#### **Statement of Emergency**

1999 Wis. Act 9, Section 9141(2zt)(a) allows the Commission to promulgate an emergency rule creating an RRC trading program without making a finding of emergency.

#### **Environmental Analysis**

This is a Type III action under s. PSC 4.10(3), Wis. Adm. Code. No unusual circumstances suggesting the likelihood of significant environmental consequences have come to

Docket 1-AC-192

the Commission's attention. Neither an environmental impact statement under s. 1.11, Stats., nor an environmental assessment is required.

**Order of Adoption**

Pursuant to ss. 196.02(3), 196.378(3), and 227.11, Stats., the Commission creates ch. PSC 118, Wis. Admin. Code. The attached emergency rule takes effect upon publication.

Dated at Madison, Wisconsin, April 3, 2001

By the Commission:

Lynda L. Dorr  
Lynda L. Dorr  
Secretary to the Commission

LLD:CAS:ljv:G\Order\pending\1-AC-192 Emergency Rules

Attachments

ORIGINAL       UPDATED  
 CORRECTED       SUPPLEMENTAL

**FISCAL ESTIMATE**

DOA-2048 N(R10/96)

**Subject**

Renewable Resource Credit Program Rules (Emergency Rules)

**Fiscal Effect**

State:  No State Fiscal Effect

Check columns below only if bill makes a direct appropriation or affects a sum sufficient appropriation.

Increase Costs - May be possible to Absorb Within Agency's Budget  Yes  No

- Increase Existing Appropriation       Increase Existing Revenues
- Decrease Existing Appropriation       Decrease Existing Revenues
- Create New Appropriation

Decrease Costs

Local:  No local government costs

- 1.  Increase Costs  
 Permissive       Mandatory
- 2.  Decrease Costs  
 Permissive       Mandatory

- 3.  Increase Revenues  
 Permissive       Mandatory
- 4.  Decrease Revenues  
 Permissive       Mandatory

5. Types of Local Governmental Units Affected:
- Towns       Villages       Cities
  - Counties       Others \_\_\_\_\_
  - School Districts       WTCS Districts

**Fund Sources Affected**

GPR     FED     PRO     PRS     SEG     SEG-S

**Affected Ch. 20 Appropriations**

20.155(l)(g)

**Assumptions Used in Arriving at Fiscal Estimate**

1999 Wis. Act 9 created a renewable portfolio standard requiring electric providers to meet certain minimum percentages of their retail sales with renewable resources. An electric provider may purchase or sell renewable resource credits following the rules developed for the program and by adhering to the determinations of the Commission on what is an allowable renewable resource credit (RRCs).

The rules provide for the program to be managed by a program administrator. The program administrator selected by competitive bid would establish an e-commerce site for trading and tracking the buying and selling of RRC credits. There would not be a cost to the state for the program administrator's work. The assumption is that the PSC would establish a four to five year contractual relationship with an administrator. The administrator would recover their initial startup investment and the cost of processing and tracking fees by charging buyers and sellers a nominal transaction fee. The PSC has not determined what that fee would be, but has discussed the general costs of this effort with two potential bidders who provide similar services to other states. It appears from these discussions that the initial work to set up the e-commerce web site and develop the software to track the transactions would cost approximately \$150,000. Annual program costs could be in the neighborhood of \$50,000 per year to run the program. However, the minimum percentage for 2001 and 2002 of 0.5 percent of total retail electric sales will probably mean that transactions to buy credits will be minimal because most of the Wisconsin utilities can meet this initial percentage

There are other possibilities that are under consideration for the program to pay for the cost. One such possibility is that some, or all of the initial start up costs of the program would be paid from the public benefits program. A second is that the annual cost of such a program could be negated by using in-house staff to track the buying and selling of RRC's. The latter consideration would require the PSC to pay an on-going software rental charge to the vendor who develops the software. Estimates of this fee appear to be approximately \$50,000 per year depending on the system configuration. Payment of the up-front costs using the public benefits fund may or may not be an option. Department of Administration staff are reviewing this issue to determine if it is a viable option considering the state statutes adopted for the public benefits program.

**Long-Range Fiscal Implications**

Agency/Prepared by: (Name & Phone No.)

PSC/Gordon Grant 267-9086

Authorized Signature/Telephone No.



Date

03/19/01

**SECTION 1.** PSC 118 is created to read:

**CHAPTER PSC 118  
RENEWABLE RESOURCE CREDIT TRADING PROGRAM**

**PSC 118.01 Scope.** This chapter applies to each electric provider that creates an RRC or uses an RRC to meet the requirements of s. 196.378(2)(a), Stats.

**PSC 118.02 Definitions.** The definitions specified in s. 196.378, Stats., apply to this chapter. In addition, in this chapter:

- (1) "Certified renewable facility" means an electric generating facility that the commission certifies has met the definition of a renewable facility.
- (2) "Compliance period" means a calendar year, beginning January 1, during which an electric provider is required to deliver renewable energy under s. 196.378(2)(a), Stats.
- (3) "Commission" means the public service commission.
- (4) "Designated representative" means the person authorized by the electric provider to register a renewable facility with the program administrator, or to purchase or sell RRCs.
- (5) "Exempt electric provider" means an electric provider that has met the exemption requirements of s. 196.378(2)(e), Stats.
- (6) "MWh" means megawatt-hour.
- (7) "Program administrator" means the person responsible for carrying out the administrative responsibilities related to the renewable resource credit trading program.
- (8) "RRC" means a renewable resource credit.
- (9) "Renewable energy" means energy that is supplied by a renewable facility.
- (10) "Renewable resource credit" means one MWh of renewable energy from a certified renewable facility that is physically metered and meets the requirements of ss. PSC 118.03 and 118.04.
- (11) "Retail customer" means a customer of an electric provider that resides in Wisconsin and purchases electricity at retail.

(12) "RRC account" means the account that the program administrator maintains in order to track the creation, sale, transfer, purchase, and retirement of an RRC by a program participant.

(13) "RRC trading program" means the process of creating, selling, transferring, purchasing, and retiring RRCs.

**PSC 118.03 Facilities eligible for creating renewable resource credits.** (1) An electric provider may create an RRC only if the renewable facility that is the source of the electric provider's renewable energy meets all of the following requirements:

(a) The energy output of the renewable facility is physically metered and the accuracy of the metering is subject to verification by the program administrator.

(b) The renewable facility registers with, and is certified by, the commission under s. PSC 118.05.

(c) 1. The renewable facility is owned or operated by the electric provider, which sells the renewable energy to its retail customers or members; or

2. The renewable facility supplies or allocates its energy under an executed wholesale purchase contract to the electric provider, which sells the renewable energy to its retail customers or members.

(2) Any portion of a renewable facility serving an exempt electric provider in any compliance period, is not eligible to create RRCs during that compliance period.

(3) (a) An electric provider may use the excludable renewable energy of a renewable facility that complies with sub. (1) to create an RRC, except that any excludable renewable energy exceeding 0.6% of the electric provider's retail electric sales is not eligible to create an RRC.

(b) A biomass co-fired facility may only use the renewable portion of its energy production, based on the relative energy content of the fuels, to create RRCs in the applicable reporting period.

**PSC 118.04 Creation and transfer of renewable resource credits.** (1) The program administrator shall administer a trading program for RRCs.

(2) (a) Beginning on January 1, 2001, an RRC is created only when an electric provider exceeds its minimum percentage requirement under s. 196.378(2)(a), Stats. If an electric provider selling electric energy at wholesale has an obligation to meet the electricity needs of the

wholesale customer's firm native load, until the electric provider has a wholesale purchase tariff approved by FERC after the effective date of these rules, the percent of the electric provider's energy that is produced by a certified renewable facility shall be allocated to the wholesale customer and is not eligible to meet the electric provider's minimum percentage requirement.

(b) An electric provider may meet all or part of its minimum percentage requirement by purchasing RRCs. An electric provider may use renewable energy purchased at wholesale to create RRCs in the same manner as renewable energy that the electric provider generates itself. Energy metered for the purpose of creating an RRC may not be used to meet an electric provider's minimum percentage requirement under s. 196.378 (2) (a), Stats., other than through the retirement of its associated RRC.

(c) By February 15 of each year, every electric provider that participates in the RRC trading program by creating an RRC shall report to the program administrator the amount of renewable energy it generated or purchased, and sold at retail, from each certified renewable facility during the preceding year.

(d) Within 10 days after receiving a report from an electric provider under par. (c), the program administrator shall record the amount of metered MWh sold at retail that is reported for each certified renewable facility. The program administrator shall, after an electric provider has met its annual minimum percentage requirement, credit the electric provider's RRC account with the number of RRCs created.

(e) Renewable energy that would meet the definition of an RRC under s. PSC 118.02(10), except that it consists of less than one MWh, shall constitute a fraction of an RRC. A fractional RRC may not be smaller than 0.01 MWh.

(f) Two or more electric providers may jointly purchase or sell an RRC.

(3) When an RRC is credited to an electric provider's account under sub. (2), the account owner may sell or transfer the RRC to another electric provider. Any person selling or transferring an RRC shall report the sale or transfer to the program administrator within 10 days of the transaction. The program administrator shall then credit the RRC account of the new owner and debit the RRC account of the prior owner. An RRC may continue to be sold or traded only if each seller or transferor reports the transaction to the program administrator within 10 days of its consummation.

(4) When an electric provider uses an RRC to comply with the minimum percentage requirements of s. 196.378 (2) (a), Stats., the program administrator shall retire the RRC.

(5) Subject to commission approval, the program administrator may establish any procedure necessary to ensure that the creation, sale, transfer, purchase and retirement of RRCs are accurately recorded.

**PSC 118.05 Certification of renewable facilities.** (1) (a) An electric provider may only use the energy of a certified renewable facility for creation of an RRC.

(b) The program administrator may not award an RRC before the date that the commission certifies a renewable facility, but the program administrator may award an RRC for energy that a certified renewable facility produced subsequent to the date the commission received the request for certification.

(2) To obtain commission certification, the electric provider generating or purchasing energy from a renewable facility, or a designated representative, shall provide the following registration information in a format approved by the commission:

(a) The renewable facility's location, owner, technology, date placed in service, and rated capacity.

(b) Information that demonstrates the renewable facility meets the resource eligibility criteria under s. PSC 118.03.

(c) Any other information the commission determines to be necessary.

(3) The commission shall inform both the program administrator and the electric provider, or its designated representative, whether it has certified a renewable facility for which it has received an application under sub. (2).

(4) The program administrator shall create an RRC account for each owner of an RRC.

(5) The commission may make on-site visits to any certified unit of a renewable facility to determine its compliance with this chapter and with s. 196.378, Stats., and may decertify any unit that it finds not to be in compliance.

(6) The program administrator may not create RRCs for energy produced by a decertified renewable facility.

**PSC 118.06 Renewable resource credit program administrator.** (1) The commission shall, using a competitive process, contract with a program administrator.

(2) The program administrator shall:

(a) Identify annually the amount of renewable energy each participating electric provider must sell to its retail customers to comply with the minimum percentage requirements of s. 196.378 (2) (a) and (b), Stats.

(b) Create an RRC account to track RRCs for each participating electric provider and other owner of RRCs.

(c) Credit RRCs to RRC accounts under s. PSC 118.04 (2).

(d) Retire RRCs under s. PSC 118.04(4).

(e) Maintain program information on an internet website for traders and the public in general.

(f) Audit certified renewable facilities, when necessary, to verify the accuracy of metered production data.

(g) Perform any other function designated by the commission.

(3) The program administrator may create an exchange procedure for purchasing and selling RRCs.

(4) (a) Annually, the program administrator shall report to the commission the costs incurred in operating the RRC trading program and recommend an assessment of these costs to electric providers that hold RRC accounts. The program administrator shall base part of this proposed assessment of costs on the number of each electric provider's RRC transactions, the size of these transactions, or both. These factors shall determine how a majority of the costs are assessed.

(b) The commission shall review the cost allocation that the program administrator proposes under par. (a) and approve or modify this allocation. The commission shall assess these costs to each electric provider, pursuant to s. 196.85(1) and (1m)(a), Stats.

**EFFECTIVE DATE:** This rule shall take effect on the first day of the month following publication in the Wisconsin administrative register, as provided in s. 227.22(2) (intro.), Stats.

(End)



*Public Service Commission of Wisconsin*

**Renewable Resource Credit Program**

**2002 RRC STATUS REPORT**

**Northwestern Wisconsin Elec Co**

2002 Retail Sales	171,369.0 MWh
1999-2001 Average Sales	148,827.0 MWh
<hr/>	
Excludable Hydro (In Service Before 1/1/98)	12,832.0 MWh
<hr/>	
Qualified Renewables:	
- Lesser of Excludable Hydro or 0.6% of Ave. Sales	893.0 MWh
- Wind, Biomass, Solar, New Hydro	0.0 MWh
Total Qualified Renewables	893.0 MWh
RPS Requirement (0.5% of Average Sales)	744.1 MWh
<hr/>	
This Year's RRC Surplus	148.9 MWh
RRC Transfers to other Electric Providers (Sales)	(0.0 MWh)
RRC Transfers from other Electric Providers (Purchases)	0.0 MWh
Previous Year's RRC Surplus	0.0 MWh
Current RRC Status	148.9 MWh
<hr/>	
Qualified Renewables as a percentage of Average Sales	0.600%

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*Public Service Commission of Wisconsin*

## Renewable Resource Credit Program

### 2003 RRC STATUS REPORT

Northwestern Wisconsin Elec Co

2003 Retail Sales	176,413.00 MWh
2000-2002 Average Sales	158,040.33 MWh
<hr/>	
Excludable Hydro (In Service Before 1/1/98)	10,406.00 MWh
<hr/>	
Qualified Renewables:	
- Lesser of Excludable Hydro or 0.6% of Ave. Sales	948.24 MWh
- Wind, Biomass, Solar, New Hydro	0.00 MWh
Total Qualified Renewables	948.24 MWh
<hr/>	
RPS Requirement (0.85% of Average Sales)	1,343.34 MWh
<hr/>	
This Year's RRC Surplus	-395.10 MWh
RRC Transfers to other Electric Providers (Sales) <i>Centuria</i>	(12.86 MWh)
RRC Transfers from other Electric Providers (Purchases)	400.00 MWh
Previous Years' RRC Surplus	293.41 MWh
Current RRC Status	285.45 MWh
<hr/>	
Qualified Renewables as a percentage of Average Sales	0.600%

n/rrc/RRCHistoryReportViewOptions

6/4/20

WI PSC RRC -- RRCStatusReport

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**GRE's Response  
State of Minnesota  
Department of Public Service  
Utility Information Request**

Docket Number:  
Date of Request: November 23, 2004  
Response Due: December 10, 2004  
Analyst Requesting Information: Cyndee Fang

Request No. 1

To determine the status of each utility's renewable energy mix relative to the good faith objective, please provide the following information:

- a. The utility's total retail sales defined as the kWh of electricity sold from July 1, 2003 to June 30, 2004 by an electric utility to retail customers of the utility or to a distribution utility for distribution to the retail customers of the distribution utility.
- b. Total electric energy (kWh) provided to Minnesota retail customers for the period July 1, 2003 to June 30, 2004.
- c. Total energy generated from eligible energy technologies as defined by Minnesota Statutes §216B.1691, Subd. 1(a)(1) and Commission Orders under Docket No. E999-CI-03-869.
- d. Total energy (kWh) generated from eligible energy technology as defined by Minnesota Statutes §216B.1691, Subd. 1(a)(1) and Commission Orders under Docket No. E999/CI-03-869 deliverable to Minnesota retail customers. Please provide the definition used to determine whether generation was deliverable to Minnesota retail customers.
- e. Please provide the information requested as presented in Attachment A for each of the renewable resources used in the answer to c. and d.

The Department is providing an electronic version of Attachment A to all organizations for which we have e-mail addresses. The Department requests organizations to provide this information electronically, if possible. Otherwise, please fill out the information on the attached paper version.

Response

- a. 10,408,968,000 kWh (GRE's sales to its distribution member cooperatives)
- b. Same as response to a. Greater than 99% of GRE's customers and load is located in Minnesota.

- c. 200,005,339 kWh as included in response to e.
- d. Same as response to c. Deliverability to Minnesota retail customers is based on all these resources being located in Minnesota and various transmission arrangements for delivering the output of all resources to GRE's load.
- e. This information is provided electronically in a separate file.

Submitted by: Stan Selander 763 241 2446

**State of Minnesota  
Department of Public Service**

**Utility Information Request**

Docket Number:  
Date of Request: November 23, 2004  
Response Due: December 10, 2004  
Analyst Requesting Information: Cyndee Fang

Request No. 2

Please describe all efforts your organization has taken to meet the objective.

Response

GRE began its efforts to add renewable resources to its portfolio of resources before the renewable energy objective legislation was passed. GRE's Chandler wind project began operation in 1999.

The modification to the REO statute expanding the list of eligible technologies to include refuse derived fueled resource allows GRE to count the output of its Elk River Station towards meeting the renewable energy objective.

Under its PURPA obligation to purchase power from renewable projects the output of 2 additional small wind projects (McNeilus and Christopher) is available for meeting the REO.

GRE has sought additional renewable resources as part of two power resource RFPs. The earlier of the two RFPs resulted in a contract with the developer of the Trimont project, which is expected to come on line in 2005.

The combination of these resources is expected to provide sufficient renewable energy to meet GRE's obligations under the REO through approximately 2007.

No additional renewable resources were selected from the most recent (2004) RFP. GRE expects additional renewable resources will be developed based on another RFP, which will be issued in sufficient time to allow development of the resource consistent with meeting the REO.

Submitted by: Stan Selander 763 241 2446

**State of Minnesota  
Department of Public Service**

**Utility Information Request**

Docket Number:  
Date of Request: November 23, 2004  
Response Due: December 10, 2004  
Analyst Requesting Information: Cyndee Fang

Request No. 3

Please describe any obstacles your organization has encountered or anticipates in meeting the objective.

Response

Based on the internal analysis GRE has conducted and the pricing presented under various RFPs, when the price reflects the federal production tax credit (PTC), wind is an economically competitive resource. Without the tax credit the price is substantially higher and wind is not directly competitive.

Due to restrictions on the PTC GRE cannot directly benefit from the PTC and do a wind project at a competitive price. This forces GRE to have a project developer who can take advantage of the tax credits develop the project and sell the output to GRE under a purchased power agreement (PPA).

Perhaps the biggest obstacle in meeting the REO is the lack of transmission. The existing and currently planned new transmission that could be available for delivering wind output to load is already "full". More transmission will need to be built in order to take advantage of prime wind resources such as in southwest Minnesota or in the Dakotas.

All else being equal, GRE would prefer to purchase the output of smaller wind projects. Doing so would provide opportunities for Minnesotans who may also be our customers. The queue for the Minnesota production incentive is already full, preventing more, small, independent developers from pursuing projects.

Submitted by: Stan Selander 763 241 2446

**State of Minnesota  
Department of Public Service**

**Utility Information Request**

Docket Number:  
Date of Request: November 23, 2004  
Response Due: December 10, 2004  
Analyst Requesting Information: Cyndee Fang

Request No. 4

Please describe any potential solutions under consideration by your organization to the obstacles described above.

Response

GRE Transmission is participating in the CapX 2020 project. The project will identify the additional transmission needed in the region over the next 15 years and is the first step in resolving the need for additional transmission.

Assuming a more level playing field at some point in the future with respect to the current production tax credit situation, GRE could become more interested in owning and operating its own wind resources. GRE may acquire some wind rights to assure it can preserve the option to develop wind resources where and when it might choose or need to do so

Submitted by: Stan Selander 763 241 2446

Attachment A: Data on Renewable Energy Sources							
	A	B	C	D	E	F	G
1 Generator Name	Chandler	Moulton	Champepadan	McNeilus	Christopher	Elk River Station	Elk River Landfill
2 Generator ID Number	NO0201	NO0202	NO0203				
3 Location	Murray County, MN	Murray County, MN	Murray County, MN	Mower County, MN	Jackson County, MN	Sherburn county, MN	Sherburn county, MN
4 Fuel or Energy Source (if biomass, please specify percentage of fuel biomass/other)	Wind	Wind	Wind	Wind	Wind	Refused Derived Fuel	Landfill Gas
5 Technology Type	Horizontal axis wind turbine (HAWT)	HAWT	HAWT	HAWT	HAWT	steam turbine	Internal combustion engine gen set
6 Vintage (date when generator first commences operation mm/dd/yy)	Nov-99	Dec-02	Dec-02	Feb-03	Dec-03	~1990	Nov-02
7 Nameplate Capacity (MW)	1.98	1.98	1.98	5.7	5.7	37.8	2.4
8 Accredited capacity (MW)*	0.1	0	0	0	0	37.8	NA
9 Generation Deliverable to MN Energy Generated July 1, 2003	Yes	Yes	Yes	Yes	Yes	Yes	Yes
10 to June 30, 2004 (kWh)	6,816,582	6,632,289	6,952,836	13,193,231	10,997,627	177,694,000	20,449,148
11 Eligible for MN REO	Yes	Yes	Yes	Yes	Yes	Yes	Yes
12 Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.	A portion of the output is assigned for green pricing and sales to others. The net available to GRE is reflectd in column L to the right	A portion of the output is assigned for green pricing and sales to others. The net available to GRE is reflectd in column L to the right	A portion of the output is assigned for green pricing and sales to others. The net available to GRE is reflectd in column L to the right	A portion of the output is assigned for green pricing and sales to others. The net available to GRE is reflectd in column L to the right	N/A	N/A	None
* Intermittent resources achieve permanent accreditation based on 3 years operating history							
Capacity Factor	39.3%	38.2%	40.1%	26.4%	22.0%	53.7%	97.3%

Attachment A: Data on Renewables				
	I	J	K	L
	Total Generation	Sold under green pricing	Sold to others	Available towards REO
1 Generator Name				
2 Generator ID Number				
3 Location				
4 Fuel or Energy Source (If biomass, please specify percentage of fuel biomass/other)				
5 Technology Type				
6 Vintage (date when generator first commences operation mm/dd/yy)				
7 Nameplate Capacity (MW)				
8 Accredited capacity (MW)*				
9 Generation Deliverable to MN Energy Generated July 1, 2003 to June 30, 2004 (kWh)	242,735,713	12,452,160	9,829,066	220,454,487
10 Eligible for MN REO				
11 Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.				22,045,448,669
12				
* Intermittent resources achieve pe Capacity Factor				

Request No. 1

- (a) Minnkota Power Cooperative, Inc.: 2,904,706,064 kWh  
Northern Municipal Power Agency: 479,860,019 kWh
- (b) Minnkota Power Cooperative, Inc.: 1,423,061,418 kWh  
Northern Municipal Power Agency: 385,265,486 kWh
- (c) Joint system: approximately 37,959,170 kWh
- (d) Minnkota and NMPA contend that all of the approximately 37,959,170 kWh generated from eligible energy technologies is deliverable to Minnesota retail customers. Approximately 85% of the energy from eligible energy technology is generated within the boundaries of the State of Minnesota and is likely consumed near the generation source.

However, Minnkota and NMPA recognize that the Public Utilities Commission on October 19, 2004, adopted non-binding general guidelines on allocation of renewable resources between jurisdictions, dependent on whether or not the resources existed prior to establishment of the renewable energy objective (REO).

In that regard, approximately 85% of the joint system's renewable resources existed prior to the establishment of the REO. The remaining 15% was acquired after establishment of the REO. Approximately 53% of the joint system's retail customer load is in Minnesota.

- (e) Information requested is presented in Attachment A.

Request No. 2

Minnkota and NMPA have continued to offer a green pricing program (Infinity Wind Energy) and to advertise the program at least once annually.

The joint system continues to devote resources to facilitating customer-owned renewable generation.

The joint system provides a 10% premium above avoided cost for renewable generation.

Request No. 3

The joint system is not yet capacity deficit and has not yet reached the point at which investment in new generation is fiscally prudent. The joint system has attempted to protect against economic impacts on the system's ratepayers.

Request No. 4

Minnkota is presently studying additional generation options as part of its resource planning. Wind energy has a role in these studies, along with traditional baseload generation.

**Attachment A**

**Data on Renewable Energy Sources**

**Please provide the following information for all sources of renewable energy generation**

<b>Generator Name</b>	Potlatch	TRF Hydro	Infinity
<b>Generator ID Number</b>			
<b>Location</b>	Bemidji	Thief River Falls	Petersburg & Valley City, ND
<b>Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)</b>	Biomass	Hydro	Wind
<b>Technology Type</b>	steam boiler	turbine	Wind
<b>Vintage (date when generator first commences operation as month/day/year)</b>	1992	1927	2002
<b>Nameplate Capacity (MW)</b>	11.5 MW	500 KW	900 KW
<b>Accredited Capacity (MW)</b>	5,587 KW (Minnkota share under PPA)	N/A	325 KW (P) 323 (VC)
<b>Owned Generation or PPA</b>	PPA	owned	owned
<b>Generation Deliverable to MN (yes or no)</b>	yes	yes	yes
<b>Energy Generated from July 1, 2003 to June 30, 2004 (kWh)</b>	31,448,780	698,600	5,811,790
<b>Eligible for MN REO (yes or no)</b>	yes	yes	yes
<b>Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.</b>	N/A	N/A	N/A

# DAIRYLAND'S RESPONSE TO STATE OF MINNESOTA DEPARTMENT OF COMMERCE UTILITY INFORMATION REQUEST

Attachment H8

1a. kWh sold to Distribution Cooperatives

7/1/03-6/30/04

3,938,978,620

1b. kWh sold to Minnesota Distribution Cooperatives

7/1/03-6/30/04

737,462,789

1c. Renewable kWh

7/1/03-6/30/04

Hydro           49,054,000

Wind            18,771,000

Landfill        1,000,813

Total kWh      68,825,813

1d. Dairyland considers all of the energy above to be deliverable to Minnesota customers. Dairyland plans on a system-wide basis for its delivery of electricity. Thus energy from any source is considered to be available to any customer.

1e. See attached document. Dairyland plans for resources on a system-wide basis. Dairyland anticipates having sufficient renewable resources to meet all state goals in our system-wide territory. The following table is an illustration of this.

State requirement (05)	kWh required 7/03 to 6/04
Available DPC Renewable kWh (04)	68,825,813
Minnesota 1% goal for 05	7,374,628
Wisconsin 1.2 % goal for 05	32,771,751
Green Energy Program Sales 12 months (Thru 11/04)	3,921,200
Remaining Available	24,758,234

Note: Illinois and Iowa do not have specific 05 goals

Thus, Dairyland meets the '05 state requirements with '04 renewable energy production. And that '04 production counts no energy from a 10 MW wind farm, 8 months of energy from a 7.5 MW wind farm, 3 months of energy from a 3 MW landfill, and none of the manure digestion that Dairyland will add in '05.

2. Dairyland is aggressively pursuing renewable energy sources. In 2004, it has added 10 MW of wind and 3 MW of landfill gas. Dairyland's manure digestion program is just

beginning and the intention is to add 5 MW of manure digestion per year for at least the next 4 to 5 years. There is interest in developing three more landfill projects. As with all resources, these are system-wide assets that are not specifically designated for Minnesota's goal but rather will be applied to meet the goals of multiple states as necessary. Dairyland anticipates having sufficient renewable resources to meet all state goals in our system-wide territory.

3. The major obstacles encountered by Dairyland are not the generation of power from renewable resources but rather the regulatory and definitional problems encountered in working with multiple states.

a. Each state defines what can and cannot be counted differently while requiring system-wide reports using only its own definitions.

b. There are different reporting timelines. Some states use July-June while others use calendar years. Even these "years" are uncertain. Does a 2005 goal refer to calendar 2005? some other "year" that ends sometime in 2005? A previous time period that is reported in 2005?

c. The handling of green tags varies and is not well defined. There are renewable credits; but are they separate from carbon credits? Who owns them and who markets them? How long do the credits last?

d. The unclear and changing definitions create uncertainty. What can be counted? Will existing/early renewables be excluded? Will they be weighted differently? Will different states define, weight, or count differently? This creates an incentive to pursue renewables only at the last possible moment to insure that they will not be excluded or are not the "wrong" type.

e. All of these factors create a reporting quagmire for the utility.

4. Dairyland cannot control the regulatory processes of the various states. It's best solution is to continue to consider all renewable assets as system-wide assets and to not dedicate them to specific states. On a system-wide basis, Dairyland will meet the sum of all the goals of the various states without assigning specific resources to any state. Other helpful steps would be:

a. For the various states to plan renewable as a region. This would involve uniform definitions, reporting forms, and reporting timeframes.

b. The creation of a much clearer definition of green tags. What attributes do they represent and who "owns" them; who can market them; can carbon credits be separated from renewable credits; can they be sold multiple times by consecutive owners; how long do they exist?

c. Recognition that utilities plan for a system not for an individual state. Streamline and standardize reporting permitting utilities to show that they provide enough renewable energy to meet the requirements of all jurisdictions within their system rather than designating specific generators to a certain state.



Generator Name	Chandler Wind Farm	Chandler Wind Farm	McNeilus Wind Farm	McNeilus Wind Farm
Generator ID Number	2	3	1	2
Location	Chandler, Minn.	Chandler, Minn.	Adams, Minn.	Adams, Minn.
Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)	Wind	Wind	Wind	Wind
Technology Type	Wind turbine	Wind turbine	Wind turbine	Wind turbine
Vintage (date when generator first commences operation as month/day/year)	1/1/1999	1/1/1999	10/27/2003	6/24/2004
Nameplate Capacity (MW)	0.66	0.66	7.5	9.9
Accredited Capacity (MW)	0	0	0	0
Owned Generation or PPA	PPA	PPA	PPA	PPA
Generation Deliverable to MN (yes or no)	Yes	Yes	Yes	Yes
Energy Generated from July 1, 2003 to June 30, 2004 (kWh)	=====>	=====>	16,501,000	
Eligible for MN REO (yes or no)	Yes	Yes	Yes	Yes
Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.	See Text	See Text	See Text	See Text

**BASIN ELECTRIC  
POWER COOPERATIVE**

1717 EAST INTERSTATE AVENUE  
BISMARCK, NORTH DAKOTA 58503-0564  
PHONE 701-223-0441  
FAX: 701/224-5336

Attachment H9

December 10, 2004

Ms. Cynthia Fang  
Minnesota Department of Commerce  
85 7th Place East, Suite 500  
Saint Paul, MN 55101-2198

Re: Department of Commerce Report -- Minnesota Renewable Energy Objective

Dear Ms. Fang:

In response to the Department's letter of November 23, 2004, requesting renewable energy information, Basin Electric Power Cooperative (BEPC) is providing the requested information on behalf of Basin Electric and its Class A Members serving member cooperatives and Class A Members serving retail consumers in the state of Minnesota. Those members are:

- **East River Electric Power Cooperative, Madison, SD**
- **L&O Power Cooperative, Rock Rapids, Iowa**
- **Minnesota Valley Cooperative Light and Power Association, Montevideo, MN**

East River and L&O, in turn, supply power to the following cooperatives in Minnesota:

- **Sioux Valley-Southwestern Electric Cooperative, Colman, SD**
- **Renville-Sibley Cooperative Power Association, Danube, MN**
- **Traverse Electric Cooperative, Wheaton, MN**
- **Lyon-Lincoln Electric Cooperative, Tyler, MN**

To respond to your request, we have completed the reporting forms provided in the November 23, 2004 letter. Those forms are enclosed.

Sincerely,

/s/

Ron Rebenitsch  
Manager of Member Marketing

rr:mev

Enclosures

cc: Jeff Nelson                      Pat Carruth  
Curt D. Dieren                      Wayne Backman



- (c) Total energy generated from eligible energy technologies as defined by Minnesota Statutes §216B.1691, Subd. 1(a)(1) and Commission Orders under Docket No. E999/CI-03-869.

**Response: 236,494,323 kWh from wind energy**

- (d) Total energy (kWh) generated from eligible energy technology as defined by Minnesota Statutes §216B.1691, Subd. 1(a)(1) and Commission Orders under Docket No. E999/CI-03-869 deliverable to Minnesota retail customers. Please provide the definition used for determine whether generation was deliverable to Minnesota retail customers.

**Response: 236,494,323 kWh from wind energy was delivered to the regional grid to which the Minnesota consumers are connected, via the above-referenced cooperatives**

- (e) Please provide the information requested as presented in Attachment A for each of the renewable resources used in the answer to (c) and (d)

**Response: See Attachment A below**

The Department is providing an electronic version of Attachment A to all organizations for which we have e-mail addresses.<sup>1</sup> The Department requests organizations to provide this information electronically, if possible. Otherwise, please fill out the information on the attached paper version.

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<sup>1</sup> The Department does not have e-mail addresses for the following entities: East River Electric Power Cooperative; L&O Power Cooperative; Northern Municipal Power Agency; Minnesota Municipal Power Agency; Central Minnesota Municipal Power Agency. If you have not received an electronic version by Monday, November 29, 2004, please contact Cynthia Fang at 651-296-0417. To receive an electronic version of Attachment A, we encourage you to send an e-mail to Cynthia Fang at [Cynthia.Fang@state.mn.us](mailto:Cynthia.Fang@state.mn.us).

**State of Minnesota**  
**DEPARTMENT OF COMMERCE**

**Utility Information Request**

Docket Number:

Date of Request: November 23, 2004

Requested From: Ronald Harper

Response Due: December 10, 2004

Basin Electric Power Cooperative

Analyst Requesting Information: Cyndee Fang

Type of Inquiry:     .....Financial           .....Rate of Return       .....Rate Design  
                          .....Engineering           .....Forecasting           .....Conservation  
                          .....Cost of Service       .....CIP                   .....Other:

***If you feel your responses are trade secret or privileged, please indicate this on your response.***

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Request  
No.

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- 2 Please describe all efforts your organization has taken to meet the objective.

***Response: As part of our development of renewable energy resources on behalf of our membership, Basin Electric has constructed two 2.6 MW wind projects at Chamberlain, SD and Minot, ND, respectively. In addition, Basin Electric has entered into power purchase agreements for 100% of the output from the following wind projects:***

- 40 MW Hyde County Wind Project, in SD***
- 40 MW Edgeley/Kulm Wind Project in ND,***
- 0.75 MW Rosebud Sioux Tribe Wind Project in SD***
- 0.75 Pipestone School Wind Project at Pipestone, MN***

***We also purchase renewable energy from a number of very small consumer wind projects.***

***Basin Electric has established a Green Tag Rate for all of its members in 9 states, including Minnesota. This Green Tag Rate provides for the sale of Green Tags (also referred to as renewable energy credits, or RECs) to its members. Each Green Tag represents the environmental attributes of 1 MWH of renewable energy. The members are able to purchase these Green Tags, to meet their both their green pricing programs needs and their REO needs. (Note: Green Tags used for green pricing programs are not used for the REO and vice versa).***

**State of Minnesota**  
**DEPARTMENT OF COMMERCE**

**Utility Information Request**

Docket Number:

Date of Request: November 23, 2004

Requested From: Ronald Harper

Response Due: December 10, 2004

Basin Electric Power Cooperative

Analyst Requesting Information: Cyndee Fang

Type of Inquiry:    .....Financial            .....Rate of Return            .....Rate Design  
                          .....Engineering            .....Forecasting            .....Conservation  
                          .....Cost of Service        .....CIP                        .....Other:

***If you feel your responses are trade secret or privileged, please indicate this on your response.***

---

Request  
No.

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3        Please describe any obstacles your organization has encountered or anticipates in meeting the objective.

***Response: Obtaining transmission service has been and continues to be a major obstacle in the development of renewable generation. For wind energy, transmission issues are compounded by the fact that wind's intermittency and low capacity factor make those resources less able to bear the burden of transmission upgrades. As an example, Basin Electric does not yet have firm transmission service for the two 40 MW wind projects that represent the major share of its wind resources and faces increased transmission risk related to those projects.***

**State of Minnesota**  
**DEPARTMENT OF COMMERCE**

**Utility Information Request**

Docket Number:

Date of Request: November 23, 2004

Requested From: Ronald Harper

Response Due: December 10, 2004

Basin Electric Power Cooperative

Analyst Requesting Information: Cyndee Fang

Type of Inquiry:    .....Financial                    .....Rate of Return            .....Rate Design  
                          .....Engineering                    .....Forecasting                .....Conservation  
                          .....Cost of Service                    .....CIP                            .....Other:

***If you feel your responses are trade secret or privileged, please indicate this on your response.***

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Request  
No.

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4

Please describe any potential solutions under consideration by your organization to the obstacles described above.

***Response: System wide average pricing for transmission appears to be the most practical and feasible method for achieving significant transmission upgrades in the foreseeable future.***

Attachment A							
Data on Renewable Energy Sources							
Please provide the following information for all sources of renewable energy generation							
	CWP	MWP	HWP	EWP	RWP	PWP	Misc
Generator Name	PraireWinds Energy in Motion - Chamberlain Wind Project (CWP)	PraireWinds Energy in Motion - Minot Wind Project (MWP)	PraireWinds- Energy in Motion - Hyde County Wind Project (HWP), owned by FPL Energy,	PraireWinds- Energy in Motion - Edgeley/Kulm Wind Project (EWP), owned by FPL Energy,	PraireWinds- Energy in Motion - Rosebud Wind Project (RWP), owned by Rosebud Sioux Tribe SD	PraireWinds- Energy in Motion - Pipestone Wind Project (PWP), owned by Pipestone School MN	PraireWinds- Energy in Motion - 19 Small Wind Turbines, owned by private individuals in SD & MN
Generator ID Number	4009						
Location	The site northeast of Chamberlain SD (two miles north along State Highway 50, and two miles east on 244th Street.	The site south of Minot 12 miles south on US Highway 83 and intersection of 205th Avenue SE	10 miles south of Highmore SD on Highway 47	Lamoure County ND, several miles west of Edgeley ND on Highway 13	Near the Rosebud Casino on the Rosebud Sioux Reservation	Pipestone County MN, 1401 - 7th Street SW, Pipestone, MN 56164	Various
Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)	Wind	Wind	Wind	Wind	Wind	Wind	Wind
Technology Type	Wind Turbines, 2 each Nordex 1.3 MW	Wind Turbines, 2 each Nordex 1.3 MW	Wind Turbines, 27 each General Electric 1.5 MW	Wind Turbines, 27 each General Electric 1.5 MW	Wind Turbine, 1 each NEG Micon 0.750 MW	Wind Turbine, 1 each NEG Micon 0.750 MW	
Vintage (date when generator first commences operation as month/day/year)	07-Jan-02	01-Feb-03	01-Oct-03	01-Oct-03	01-Mar-03	01-Dec-03	01-Jan-03





SOUTHERN MINNESOTA  
MUNICIPAL POWER AGENCY

*Bringing power to your life.*

DEC 14 2004  
~~XXXXXXXXXX~~

December 13, 2004

Kate O'Connell  
Supervisor, Electric Planning and Advocacy  
Minnesota Department of Commerce  
85 7<sup>th</sup> Place, East, Suite 500  
St. Paul, MN 55101-2198

SUBJECT: MINNESOTA RENEWABLE ENERGY OBJECTIVE DATA REQUEST

Dear Kate:

On Friday, December 10, 2004, I forwarded to you, via email, a completed REO Utility Information Request. Please find attached a hard copy of that same information. That information includes:

- Request No. 1 – Data items (a) – (e) and the data requested in Attachment A.
- Request No. 2 – Actions SMMPA has taken relative to meeting the objective.
- Request No. 3 – A description of obstacles we have encountered in meeting the objective, and...
- Request No. 4 – Potential solutions relative to the obstacles encountered.

We have tried to be brief in short bulleted statements. Should you have questions or require additional information, please contact me at 507.292.6440.

Sincerely,

Larry Johnston  
Director of Corporate Development, Agency Relations  
& Officer of Legislative & Regulatory Affairs

LWJ:rsg:2k4006  
cc: Dan Hayes  
Attachments Enclosed



## REO Utility Information Request

December 10, 2004

Request No. 1 To determine the status of each utility's renewable energy mix relative to the good faith objective, please provide the following information:

- (a) The utility's total retail sales defined as the kWh of electricity sold from July 1, 2003, to June 30, 2004 by an electric utility to retail customers of the utility or to a distribution utility for distribution to the retail customers of the distribution utility.
  - a. **2,714,070,325 kWh**
- (b) Total electric energy (kWh) provided to Minnesota retail customers for the period July 1, 2003 to June 30, 2004.
  - a. **2,714,070,325 kWh**
- (c) Total energy generated from eligible energy technologies as defined by Minnesota Statutes § 216B.1691, Subd. 1(a)(1) and Commission Orders under Docket No. E999/CI-030869.
  - a. **5,768,722 kWh**
- (d) Total energy (kWh) generated from eligible energy technologies as defined by Minnesota Statutes § 216B.1691, Subd. 1(a)(1) and Commission Orders under Docket No. E999/CI-030869 deliverable to Minnesota retail customers. Please provide the definition used for determining whether generation was deliverable to Minnesota retail customers.
  - a. **5,768,722 kWh**
- (e) Please provide the information requested as presented in Attachment A for each of the renewable resources used in the answer to (c) and (d).

<b>Attachment A</b>		
<b>Data on Renewable Energy Sources</b>		
<b>Please provide the following information for all sources of renewable energy generation</b>		
<b>Generator Name</b>	Fairmont Phase I	Prairie winds
<b>Generator ID Number</b>		
<b>Location</b>	Fairmont, MN	North Dakota, South Dakota
<b>Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)</b>	Wind	Wind
<b>Technology Type</b>	Wind Turbines	Wind Turbines
<b>Vintage (date when generator first commences operation as month/day/year)</b>	3/17/2004	Jan., Feb., Mar. 2004
<b>Nameplate Capacity (MW)</b>	1900 kW	80 MW
<b>Accredited Capacity (MW)</b>	Not accredited	
<b>Owned Generation or PPA</b>	Owned	TRC
<b>Generation Deliverable to MN (yes or no)</b>	Yes	N/A
<b>Energy Generated from July 1, 2003 to June 30, 2004 (kWh)</b>	5,768,722	75,000,000
<b>Eligible for MN REO (yes or no)</b>	Yes	Yes
<b>Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.</b>	All 5,768,722 kWh was allocated to SMMPA Member green pricing program	All to be applied toward REO



Request No. # 2 Please describe all efforts your organization has taken to meet the objective

- Green pricing program kicked off in December of 2000. Took first supply during the 2001 session from a PPA from a wind power developer. Received delivery of green energy under a contract provision that stipulated an alternative source of wind power if the turbine could not be constructed on time. Turbine was never constructed, and contract was terminated. Subsequently SMMPA decided that building and owning was the appropriate strategy to get wind power built and delivered.
- Contracted with Tom Wind of Wind Utility Consulting to conduct a system wide study of wind regimes around SMMPA member communities identifying and prioritizing least cost sites.
- Developed a soy diesel testing program in May of 2001 to determine the impacts of a Koch refining product, US Soy Diesel, on low speed engines used for peaking activities in member communities (Blooming Prairie test site – APPA DEED Grant)
  - First known effort to evaluate in non-transportation low speed engines in the country.
  - Abandoned testing program once MN passed the law which would make biodiesel (B2) a requirement by 2005 or sooner.
- Provided details on SMMPA REO strategy in 2003 IRP. Filing was based upon an assumption that the REO was a capacity based initiative, similar to the NSP orders to build X MW of wind. Subsequent to the completion of the plan, the 2003 Legislative session redefined the requirement as an energy based requirement.
- Implemented a least cost strategy that avoided transmission constraints by developing renewable generation adjacent and interconnected to SMMPA member communities.

- Developed 2 – 950 kW turbines interconnected to Fairmont MN, commissioned March 2003.
- Developed an aggressive green pricing program. Strategy of developing and interconnecting with member communities and aggressively pursuing state and federal REPI provided SMMPA with a 1¢ per kWh premium tying it with 3 other utilities, out of over 500 utility green pricing programs, for the lowest green pricing premium in the country.
  - Aggressive marketing to residential consumers.
  - Developed commercial marketing program.
  - Provided input to the MPUC regarding the statutory basis and importance of allowing green pricing renewable investment to count towards the REO.
  - When MPUC issued an order requiring those utilities, that intended to count green pricing program investment towards the REO, to notify their customers, SMMPA member utilities immediately communicated to their customers that intent.
  - When the MPUC reversed its earlier ruling and ruled that green pricing resources could not count towards the REO, we canceled marketing materials currently in production.
- Provided comments and testimony to Southern Minnesota counties currently in the development of wind turbine ordinances.
- Have engaged in discussions with FPL Energy regarding potential project participation should there be regional projects being developed and there is assured transmission availability and deliverability.
- Olmsted County Waste To Energy Facility (OWEF). OWEF is a qualifying facility (QF) under PURPA located in Rochester. Under the SMMPA Power Sales Agreement, SMMPA/RPU purchases the energy from this QF. When the law changed making OWEF a qualifying renewable resource for the REO, we began conversations with OWEF to adjust payment with OWEF to reflect the law and value of the renewable resource. Those negotiations, headed up by Rochester Public Utilities are underway.
- Acquired 75,000 MWh of Tags from Basin Electric's Prairie Wind program. (Selected because the Prairie wind program tags were used in other utilities programs for green pricing.)
- Completing construction of 4 - 1.65 MW turbines 2 in Fairmont (1 to be commissioned in December of 2004, the other to be commissioned in January of 2005) and 2 in Redwood Falls (1 to be commissioned in December of 2004, the other to be commissioned in January of 2005).
- Currently evaluating B20 for use in member diesels to help meet our biomass requirements.

Request No. 3

**Please describe any obstacles your organization has encountered or anticipates in meeting the objective.**

- 1) Developing cost effective renewable resources.
  - a) Typically cost more to develop renewables than conventional resources.
  - b) Smaller entities have difficulty in achieving economies of scale in developing projects.
- 2) Regulatory reversals or delays in decision-making
  - a) Green Pricing Reversal
    - i) From the time the 2001 legislation was passed, SMMPA developed an aggressive green pricing program with one of the lowest premiums in the country and renewable generation resources to supply it.
    - ii) MPUC placed additional customer notification requirements, beyond the statute, on those wishing to count green priced resources towards the REO.

- o SMMMPA/Members complied with the additional requirements yet the MPUC subsequently reversed its decision to allow green pricing resources to count towards the REO, negating SMMMPA's time & effort in this initiative.
  - b) Tradable Renewable Credit Program (TRC)
    - i) Delay in developing a TRC program has limited SMMMPA from taking advantage of opportunities to cost effectively develop renewable resources.
    - ii) Acquired Tags from Basin Electric's Prairie Wind Program to use to balance out green pricing resources between projects. Basin Electric's program was selected because the DOC had accepted TRC's from Basin's program used by other MN utilities. The DOC now indicates that they can't approve TRC's that is to be done by the MPUC. The MPUC has only begun the development process and indicated that it could be up to two years before the process is completed. The first program benchmark is in 2005 and it is unclear as to whether or not the MPUC will accept our TRCs.
- 3) State REPI
- a) Restricted REPI availability
    - i) Small utilities need REPI. Not able to develop projects on the scale of Xcel or FPL Energy.
    - ii) REPI requirements.
      - (1) No more than 2MW under common ownership within 5miles in the same calendar year needs to be revised.
        - o Developed when large turbines were 660kW. Now only allows for one turbine – no construction or erection economies of scale can be achieved. Requires multiple crane mobilizations at \$40K each. Discourages SMMMPA from building wind projects – SMMMPA would likely have built more than two 950 kW turbines if Fairmont Phase I if it had not restricted by REPI rules.
        - o Public entities like SMMMPA cannot form multiple LLC's to get around common ownership issues like private developers.
- 4) Federal REPI
- a) Federal incentives remain uncertain.
    - i) Delays in renewals – Program that ended Sept 30, 2003 only recently extended. Funding variability- funds,appropriated annually.
    - ii) Insufficient fund to cover all requests
- 5) Transmission
- a) Availability of transmission.
  - b) Cost and timelines for getting MISO approval.
  - c) Inequity of inadvertent energy charges – no special provisions to account for inherent intermittent nature of wind power.
  - d) Uncertainty regarding how inadvertent energy charges will be handled
- 6) Land Use/Permitting issues
- a) Many counties now adopting ordinances with height and distance (setback) restrictions which may limit the development of wind resources

**Please describe any potential solutions under consideration by your organization to the obstacles described above.**

- 1) Developing cost effective renewable resources.
  - a) Leverage all available financial incentive programs.
  - b) Avoid cost of interconnecting to the transmission system by interconnecting with member distribution systems. Revise REPI rules (please see #3 below)
- 2) Regulatory reversals or delays in decision-making
  - a) Green Pricing Reversal
    - i) No solution. We question the formal requirement that all utilities offer green pricing program. All signals are that entire rate base should pay for any renewable development.
  - b) Tradable Renewable Credit Program (TRC)
    - i) Institute an interim program to allow at a minimum, purchase of TRC's from entities that have had their TRC's approved previously.
    - ii) Don't over complicate the development of the program. Need a simple tracking system to ensure that credits are not sold more than once.
- 3) State REPI
  - a) REPI availability
    - i) Consider expanding funds for REPI.
    - ii) Modernize REPI guidelines.
      - (1) Consider size limits of 10MW at one site.
      - (2) Consider rule exemptions for non-profit utilities (municipals and cooperatives) taking into account their inability to form LLC's, as some private sector entities have done to obtain REPI for significantly more than 2 MW in a single location in one calendar year. The private sector's ability to obtain REPI this way puts public sector entities at a clear disadvantage and has resulted in little incentive for municipal utilities and others in the non-profit sector trying to meet their REO.
- 4) Federal REPI
  - a) Federal incentives remain uncertain.
    - i) Advocate for increased funding and longer timeframes.
    - ii) Advocate for tradable tax credits or taxable tradable tax credits to provide greater certainty for public sector projects.
- 5) Transmission
  - a) Build projects that are interconnected to member communities where we have accredited generation.
    - i) Does place SMMPA at a disadvantage in that mitigation may be required if there is the potential that local conventional generation would be required to run – not able to reap the full benefit of the investment.
    - ii) Does not allow for maximum utilization of the development potential at one site.
  - b) Advocate for transmission construction
    - i) Advocate for streamlined processes
    - ii) CapX 2020 type organization to better identify who would receive the benefits of building transmission.
    - iii) Advocate MISO reform to improve the process.
- 6) Land Use/Permitting issues
  - a) We will continue to testify at planning and zoning hearing to ensure that local land use is protected without deterring renewable development.



**COPY**

3724 West Avera Drive  
PO Box 88920  
Sioux Falls, SD 57109-8920  
Telephone: 605.338.4042  
Fax: 605.978.9360  
[www.mrenergy.com](http://www.mrenergy.com)

Attachment H11

December 13, 2004

VIA EMAIL AND U.S. MAIL

DEC 15 2004

Ms. Cyndee Fang  
Public Utilities Rate Analyst  
Minnesota Department of Commerce  
85 7th Place East, Suite 500  
St. Paul, MN 55101-2198

Re: Minnesota Renewable Energy Objective November 23, 2004, Information Request

Dear Cyndee:

The information you requested to prepare for the Department's report to the legislature on the renewable energy objective (REO) is contained in this letter and enclosed attachment, and also is sent via email for your convenience. Missouri River Energy Services is prepared for the 2005 effective date of the REO and is making a good faith effort to meet the objective in the future.

**Request No. 1:** To determine the status of each utility's renewable energy mix relative to the good faith objective, please provide the following information:

- a) The utility's total retail sales defined as the kWh of electricity sold from July 1, 2003, to June 30, 2004, by an electric utility to retail customers of the utility or to a distribution utility for distribution to the retail customers of the distribution utility.

**Response:** 1,584,775,000 kWh

- b) Total electric energy (kWh) provided to Minnesota retail customers for the period of July 1, 2003, to June 30, 2004.

**Response:** 805,570,000 kWh

- c) Total energy generated from eligible energy technologies as defined by Minnesota Statutes § 216B.1691, Subd. 1(a)(1) and Commission Orders under Docket No. E999/CI-030-869.

**Response:** See Attachment A, Data on Renewable Energy Sources of Western Minnesota Municipal Power Agency

- d) Total energy (kWh) generated from eligible energy technology as defined by Minnesota Statutes 216B.1691. Subd. 1(a)(1) and Commission Orders under Docket No. E999/CI-03-869 deliverable to Minnesota retail customers. Please provide the definition used for determining whether generation was deliverable to Minnesota retail customers.

**Response:** See Attachment A, Data on Renewable Energy Sources of Western Minnesota Municipal Power Agency

**Request No. 2:** Please describe all efforts your organization has taken to meet the objective.

**Response:** Missouri River Energy Services (MRES) obtains non-hydro renewable energy from sources in Worthington and Moorhead, Minnesota. Western Minnesota Municipal Power Agency (Western Minnesota) has installed and owns wind generation at a site west of Worthington, Minnesota. The entire output of that generation is sold to MRES and MRES purchases all of the output of that wind generation. The Western Minnesota wind generation consists of two 900 kW turbines (Worthington Wind I) installed in July 2002 and two 950 kW turbines (Worthington Wind II) installed in December 2003. These turbines were installed by Western Minnesota to provide renewable generation to member utilities and to meet Minnesota's renewable energy objective (REO) and green pricing program. MRES also contracts for the output of two 750 kW turbines that were installed and are owned by Moorhead Public Service, Moorhead, Minnesota.

For the last two years, MRES has been gathering information to determine where additional generation could be installed in a timely and cost-effective manner in order to meet the REO in the future.

**Request No. 3:** Please describe any obstacles your organization has encountered or anticipates in meeting the objective.

**Response:** MRES has identified several challenges it faces in obtaining additional renewable energy generation to serve its member municipal utilities. In the efforts of MRES to meet Minnesota's renewable good faith effort, we have identified the following major obstacles to additional development of renewable resources:

- a) Higher costs: MRES anticipates it will experience higher costs to future development of renewable energy resources because federal and state incentives are lacking. The federal renewable energy production incentive (FED REPI) is not available to public power entities such as MRES and efforts to obtain a comparable federal incentive for non-taxable entities have been unsuccessful to date. Further, the Minnesota renewable energy production incentive (MN REPI) has reached the maximum

allowable participation level and additional funding for state incentives is doubtful. Without such financial incentives for wind energy development, MRES analysis indicates that it is no longer possible to construct additional wind resources without creating a cost impact to consumer versus serving consumers with traditional resources. As a not-for-profit public power entity serving and governed by not-for-profit municipal utilities, raising the cost of power supply is a major obstacle.

- b) No biomass projects: The lack of biomass projects in the region makes it nearly impossible to meet the biomass objective component of the statute. The development of biomass technology is still in its early stages, resulting in the construction of few viable projects. In addition, the costs of such projects also are substantially higher than conventional generation or wind generation, creating yet another obstacle to investment by public power not-for-profit utilities such as MRES and its member municipal utilities.
- c) Lack of transmission: The region lacks adequate transmission to facilitate the addition of new generation. Furthermore, the cost to construct such facilities in relation to the typical size of renewable energy projects makes construction of needed facilities on a project-by-project basis cost prohibitive.
- d) Lack of green tags: Another significant challenge to meeting the REO in the future, and to additional investment in renewable energy in Minnesota and the region, is the absence of an existing ability to use renewable energy certificates (green tags) to be used to meet the REO. The absence of such a market also is likely to drive up the cost of renewable generation.
- e) Minnesota-only bias: The statutory provision that imposes prerequisites to the use of renewable energy generated outside the state creates another burden. The possible inability to utilize renewable energy that is generated outside the state of Minnesota to meet the good faith objective results in a greater reluctance to build out-of-state generation that would otherwise provide a more economical resource.

**Request No. 4:** Please describe any potential solutions under consideration by your organization to the obstacles described above.

**Response:** MRES is exploring alternatives to overcome the obstacles described above. MRES is in the process of completing its current resource plan, which will include an evaluation of the renewable energy options for meeting the growing needs of the member municipal utilities of MRES. There are several examples of our efforts to overcome these obstacles. For example, MRES is exploring a purchased power agreement with a developer for wind resources as one way to overcome the financial disincentive created by the unavailability of the federal production tax incentive to public power entities. MRES continues its analysis to determine the best location in the region to construct additional wind resources, both in terms of addressing transmission needs and in terms of evaluating the wind resources. This includes efforts to collect wind data and possible transmission in close proximity to the existing Watertown (SD) Power Plant, which is

owned by Western Minnesota. MRES also is actively participating in regional discussions to develop a renewable energy credit tracking system in an effort to encourage the creation of a regional system that will facilitate the use of green tags to help meet the REO objective.

I believe you will find this information helpful in preparing the Department's report to the legislature for the upcoming session. Should you have any questions, you may contact me at 605.338.4042 or [mrgsimon@mrenergy.com](mailto:mrgsimon@mrenergy.com).

Sincerely,



Mrg Simon  
Manager, State Governmental Relations

enclosure

c: Kate O'Connell, Supervisor, Electric Planning and Advocacy,  
Department of Commerce

**Attachment A**

**Energy Sources of Western Minnesota Municipal Power Agency  
 Providing information for all sources of renewable energy generation**

Worthington Wind I	Worthington Wind II	Worthington Wind II	Zephyr	Freedom
4	5	6	8	9
Worthington, MN	Worthington, MN	Worthington, MN	Moorhead, MN	Moorhead, MN
Wind	Wind	Wind	Wind	Wind
Wind Turbine Gen.	Wind Turbine Gen.	Wind Turbine Gen.	Wind Turbine Gen.	Wind Turbine Gen.
7/11/2002	12/19/2003	12/19/2003	May-99	Oct-01
0.9	0.95	0.95	0.75	0.75
0	0	0	0	0
PPA	PPA	PPA	PPA	PPA
Yes	Yes	Yes	Yes	Yes
2,920,715	1,864,113	1,696,776	1,585,181	1,513,769
Yes	Yes	Yes	Yes	Yes
0	0	0	1,585,181	1,513,769

January 10, 2005

Kate O'Connell  
Supervisor, Electric Planning and Advocacy  
Minnesota Department of Commerce  
85 7th Place East, Suite 500  
Saint Paul, MN 55101-2198

Subject: Minnesota Renewable Energy Objective

Dear Ms. Connell:

Enclosed is all the information pertaining to Minnesota Municipal Power Agency's (MMPA) effort to meet the renewable objective, as requested by the Minnesota Department of Commerce. We apologize for the delay in getting this information to you but we did not receive this document before receiving your letter dated January 5<sup>th</sup>, 2005. We have tried to respond as quickly as possible and hope that this information can still be incorporated in the Legislative report. To avoid this in the future, please note our address and send any correspondence to my attention.

Thank you for your time and patience. Again, we apologize for any inconvenience caused by this delay. If you have any questions or concerns about the information provided please feel free to contact Rohit Menon at [rohit.menon@dahlen-berg.com](mailto:rohit.menon@dahlen-berg.com) or call him at (612) 252-6538.

Very truly yours,

Dahlen, Berg & Co.  
Agent for MMPA

Kip M. Fox

Attachment

**State of Minnesota**  
**DEPARTMENT OF COMMERCE**

Utility Information Request

Docket Number: \_\_\_\_\_ Date of Request: November 23, 2004  
Requested From: Yuliya Khon Response Due: December 10, 2004  
Minnesota Municipal Power Agency

Analyst Requesting Information: Cyndee Fang

Type of Inquiry:    .....Financial                    .....Rate of Return            .....Rate Design  
                          .....Engineering                .....Forecasting                .....Conservation  
                          .....Cost of Service               .....CIP                            .....Other:

*If you feel your responses are trade secret or privileged, please indicate this on your response.*

Request No.
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To determine the status of each utility's renewable energy mix relative to the good faith objective, please provide the following information:

(a) The utility's total retail sales defined as the kWh of electricity sold from July 1, 2003, to June 30, 2004 by an electric utility to retail customers of the utility or to a distribution utility for distribution to the retail customers of the distribution utility.

**Ans. 2,302,721 MWh**

(b) Total electric energy (kWh) provided to Minnesota retail customers for the period July 1, 2003, to June 30, 2004.

**Ans. 2,302,721 MWh**

(c) Total energy generated from eligible energy technologies as defined by Minnesota Statutes §216B.1691, Subd. 1(a)(1) and Commission Orders under Docket No. E999/CI-03-869.

**Ans. 0 MWh**

(d) Total energy (kWh) generated from eligible energy technology as defined by Minnesota Statutes §216B.1691, Subd. 1(a)(1) and Commission Orders under Docket No. E999/CI-03-869 deliverable to Minnesota retail customers. Please provide the definition used for determine whether generation was deliverable to Minnesota retail customers.

**Ans. 0 MWh**

(e) Please provide the information requested as presented in Attachment A for each of the renewable resources used in the answer to (c) and (d)

**Ans. As we do not, at present, have any renewable resources Attachment A has been left blank.**

The Department is providing an electronic version of Attachment A to all organizations for which we have e-mail addresses.<sup>1</sup> The Department requests organizations to provide this information electronically, if possible. Otherwise, please fill out the information on the attached paper version.

<sup>1</sup> The Department does not have e-mail addresses for the following entities: East River Electric Power Cooperative; L&O Power Cooperative; Northern Municipal Power Agency; Minnesota Municipal Power Agency; Central Minnesota Municipal Power Agency. If you have not received an electronic version by Monday, November 29, 2004, please contact Cynthia Fang at 651-296-0417. To receive an electronic version of Attachment A, we encourage you to send an e-mail to Cynthia Fang at [Cynthia.Fang@state.mn.us](mailto:Cynthia.Fang@state.mn.us).

**State of Minnesota**  
**DEPARTMENT OF COMMERCE**

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Request No.	
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2	Please describe all efforts your organization has taken to meet the objective.
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The Minnesota Municipal Power Agency (MMPA) has undertaken a couple of projects through which we aim to meet the renewable objective:

- a) MMPA is in the process of installing a 7.5MW turbine on the existing dam on the Coon Rapids River. MMPA owns the FERC license for the project and possible owners are still being investigated. A preliminary development plan is scheduled to be complete in early 2005 after which MMPA will begin to work toward attaining all the permitting requirements needed. Commercial operation is scheduled to begin in 2008. Once the dam begins operation we believe we would generate enough energy for an eligible technology to meet the renewable energy objective.
- b) MMPA is also in the process of negotiating with Xcel energy for the right to purchase power generated by wind turbines. While the majority of this power will be made available to customers via the wind program being developed by MMPA, any unused wind power will be provided to our customers as part of our effort to reach the renewable energy objective.

**State of Minnesota**  
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                          ..... Cost of Service       ..... CIP                   ..... Other:

*If you feel your responses are trade secret or privileged, please indicate this on your response.*

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Request  
No.

3 Please describe any obstacles your organization has encountered or anticipates in meeting the objective.

MMPA has not encountered any obstacles as of yet in meeting the objective. However, we believe that any potential obstacle will involve the Coon Rapids project.

Coon Rapids Project:

Due to the complexity and length of time required for the development, permitting, financing and construction of a hydroelectric facility at Coon Rapids, MMPA anticipates that it will encounter obstacles that it will either have to anticipate or work through as part of the process. It is not possible to detail potential obstacles at this juncture of the project.

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                          .....Cost of Service            .....CIP                        .....Other:

*If you feel your responses are trade secret or privileged, please indicate this on your response.*

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Request  
No.

4 Please describe any potential solutions under consideration by your organization to the obstacles described above.

Coon Rapids Dam

The development of the hydroelectric facility will include a public permitting process. By anticipating various parties' interests and responding to them, MMPA would expect to minimize any potential obstacle.

The project at the Coon Rapids Dam is seen as a win-win development as the dam does not currently have electric generation and is therefore an under utilized renewable resource.

**Attachment A: Data on Renewable Energy Sources**

Please provide the following information for all sources of renewable energy generation.

Please make additional copies as needed.

<b>Generator Name</b>			
<b>Generator ID Number</b>			
<b>Location</b>			
<b>Fuel or Energy Source (if Biomass, please specify percentage of fuel biomass/other)</b>			
<b>Technology Type</b>			
<b>Vintage (date when generator first commences operation as month/day/year)</b>			
<b>Nameplate Capacity (MW)</b>			
<b>Accredited Capacity (MW)</b>			
<b>Owned Generation or PPA</b>			
<b>Generation Deliverable to MN (yes or no)</b>			
<b>Energy Generated from July 1, 2003 to June 30, 2004 (kWh)</b>			
<b>Eligible for MN REO (yes or no)</b>			
<b>Specify any assignment of renewable generation towards any other renewable energy requirement or obligation, such as green pricing, RPS in another state, any other mandate or regulation or voluntary programs.</b>			

Central MN Municipal Power Agency  
 Response to Dept of Commerce  
 For MN Renewable Energy Objective

## Request Number 1

- (a) 576,495,143 kWh
- (b) 516,974,120 kWh
- (c) 480,000 kWh
- (d) 456,000 kWh Difference between (c) and (d) resulted from the use of some of the energy to provide delivery losses to the transmission provider.
- (e) Information is attached below

Generator Name	Contract with Great River Energy
Generator ID	Not Applicable
Location	Wind Resources on the GRE system
Fuel	Wind
Technology Type	Wind Turbine
Nameplate Capacity	Not Applicable (contracted 40 MWh/month)
Accredited Capacity	Not Applicable
Generation Deliverable to MN	Yes
Energy Generated from July1, 2003 to June 30, 2004 (kWh)	480,000 kWh
Eligible for MN REO	Yes
Specify any assignment of renewable generation towards any other renewable energy requirement or obligation. . . .	none

## Request No. 2

1. At present we have signed an agreement and are purchasing Green Tags from Missouri River Energy Service. To date we are meeting 100% of the requests made by retail customers within our member cities for green pricing programs.
2. CMMPA, together with one of our member cities has signed an agreement with Blue Breezes LLC. This LLC, started by a local farmer and supported by Winergie, has plans to install 3.3 MW nameplate of wind turbines near Blue Earth, MN.
3. CMMPA, together with one of our member cities has signed an agreement with K & S Windpower LLC. This LLC, started by a local farmer, has plans to install 3.1 MW nameplate of wind turbines near Lake Crystal, MN.
4. A garbage landfill site has been identified near Glencoe, MN as having sufficient gas to support. Preliminary discussions have been help with the local utility, the county, the land developer, and generation manufacturer. Plans are to enter into a long-term agreement to purchase the output of the generators.
5. CMMPA has been meeting with Wolf Wind, a family interested in developing wind on family-owned land near Elk substation in Southwestern, MN. Plans are to install (5) 1.6 MW wind turbines and sell the output to CMMPA under a long term agreement.
6. CMMPA has received a proposal from Summit Wind, LLC for the development of the Jeffers Wind Energy Center near Jeffers, MN. Under this project, CMMPA would be able to purchase the output of up to 10 MW of a larger development planned for the site. The CMMPA is currently considering this proposal.

### Request No. 3

CMMPA has run into several obstacles in our efforts to acquire renewable to meet or objective in a timely manner. However, we still plan to meet these objectives. I will briefly summarize some of these obstacles:

1. In the case of the "Blue Earth" project. The developer did not file in time to be included in the 100 MW receiving state incentives, but rather is on a waiting list. The project is on hold pending a possible inclusion in the state program.
2. In the case of the "Lake Crystal" project. The Federal Production Tax Credit (PTC) was passed in October as part of the Corporate Tax Bill. This extends the tax credit for 2005. This credit is a major- major part in the overall financing of a wind turbine project. The tax credit makes wind projects economically feasible. Without this tax credit, no financing can be finalized. When the bill was passed, the developer's financing was almost finished, with one major concern. The 18 month window for the state incentive payment expires May 19, 2005. With the unpredictable Minnesota winters, construction scheduling, and turbine backlog there is no guarantee the developer can have them operational before the state expiration date. Jeremy at the state energy department feels there is a good chance that the state incentive will be extended, but isn't a guarantee. The state incentive payment is a state statute and cannot be changed unless the governor or the state legislature extends it. If the incentive is extended, Jeremy feels the projects on the waiting list will probably file lawsuits and fight the decision. Since the state and federal governments fail to communicate, it has really put the developer and us in a bind.
3. In the case of the "Wolf Wind" project. This project has been submitted through the MISO process to study interconnection and transmission delivery availability. The developer and CMMPA are reluctant to pursue this project much farther until results from the transmission study are made available. It is not sure exactly when these results will be available and when to project can get underway.

### Request No. 4

1. We are supporting the "Lake Crystal" Developer in his request for an extension of the state incentive payment.
2. We are in discussions with a municipal in Iowa to purchase wind from a project that has already been completed.

## Attachment I

Table 1 shows the shows the adjusted eligible renewable generation reported by the respective entities as part of the utilities' good faith efforts towards meeting the Minnesota REO for each of the reporting covered entities and the reported renewable generation that was excluded from REO eligibility.

**Table 1: Total System Adjusted Eligible Renewable Resources and Reported Renewable Generation Excluded from REO Eligibility<sup>12</sup> (July 1, 2003 to June 30, 2004)**

	Adjusted Eligible Renewable Resources in kWh	Reported Renewable Generation Excluded from REO Eligibility
<i>Investor-Owned Utilities</i>		
Xcel	595,832,599	3,941,279,401
MP	353,953,850	251,374,300
OTP	99,155,757	2,716,241
IPL	22,969,136	5,555,772
NWEC	10,227,710	1,561,610
<b>Total Investor-Owned Utilities</b>	<b>1,082,139,053</b>	<b>4,202,487,324</b>
<i>Cooperative Utilities</i>		
GRE	220,454,487	22,281,226
Minnkota	37,959,170	-
Dairyland	32,132,862	36,692,951
Basin	214,851,595	21,642,728
<b>Total Cooperative Utilities</b>	<b>505,398,114</b>	<b>80,616,905</b>
<i>Municipal Utilities</i>		
SMMPA	0	80,768,722
MRES	8,054,750	4,411,550
MMPA	0	-
CMMPA	480,000	-
<b>Total Municipal Utilities</b>	<b>8,534,750</b>	<b>85,180,272</b>
<b>Total All Utilities</b>	<b>1,596,071,917</b>	<b>4,368,284,501</b>

<sup>12</sup> The following forms of reported renewable generation were excluded from REO eligibility: 1) Xcel's mandated renewable energy (approximately 46 percent of total system reported renewable generation), 2) other forms of renewable generation that do not meet the statutory definition, such as large hydro, (approximately 8 percent), 3) generation used to satisfy other renewable energy requirements or obligations (e.g., Wisconsin's Renewable Portfolio Standard) (approximately 13 percent for the Wisconsin RPS and approximate 2 percent sold to other parties), 4) generation used for green pricing (approximately 1 percent), and 5) adjustments were made to generation from co-fired biomass facilities to count only the portion generation from eligible renewable fuels (approximately 4 percent). Regarding the exclusion of large hydro, OTP and Minnkota did not report their generation from large hydro for this report. Regarding the adjustment to generation from co-fired biomass facilities, most utilities for this report did report only the generation from the portion attributable to eligible renewable fuels. This adjustment was specific only to co-fired biomass generation from Xcel.

Table 2 identifies the total system retail sales, total Minnesota retail sales and Minnesota as a percentage of system retail sales for each reporting entity for the reported period.

**Table 2: Total System and Minnesota Retail Sales in kWh (July 1, 2003 to June 30, 2004)**

	Total System Retail Sales	Total Minnesota Retail Sales	Minnesota as Percentage of System Retail Sales
<b><i>Investor-Owned Utilities</i></b>			
Xcel	40,251,981,755	30,559,280,490	75.92%
MP	8,580,900,000	8,580,900,000	100.00%
OTP	3,797,029,284	1,957,456,566	51.55%
IPL	15,551,688,810	841,511,856	5.41%
NWEC	183,718,793	524,992	0.29%
<b><i>Total Investor-Owned Utilities</i></b>	<b>68,365,318,642</b>	<b>41,939,673,904</b>	<b>61.35%</b>
<b><i>Cooperative Utilities</i></b>			
GRE	10,408,968,000	10,408,968,000	100.00%
Minnkota	2,904,706,064	1,423,061,418	48.99%
Dairyland	3,938,978,620	737,462,789	18.72%
Basin <sup>13</sup>	9,774,122,800	383,612,000	3.92%
East River*	2,118,537,000	273,937,000	12.93%
L&O*	209,638,698	94,187,085	44.93%
<b><i>Total Cooperative Utilities</i></b>	<b>29,354,951,182</b>	<b>13,321,228,292</b>	<b>45.38%</b>
<b><i>Municipal Utilities</i></b>			
SMMPA	2,714,070,325	2,714,070,325	100.00%
MRES	1,584,775,000	805,570,000	50.83%
MMPA	2,302,721,000	2,302,721,000	100.00%
CMPA	576,495,143	516,974,120	89.68%
NMPA**	479,860,019	385,265,486	80.29%
<b><i>Total Municipal Utilities</i></b>	<b>7,178,061,468</b>	<b>6,339,335,445</b>	<b>88.32%</b>
<b><i>Total All Utilities</i></b>	<b>105,378,191,311</b>	<b>61,985,503,127</b>	<b>58.82%</b>

\*As reported by Basin.

\*\*As reported by Minnkota.

<sup>13</sup> Basin reported on behalf of East River, L&O and Minnesota Valley Power and Light. Minnesota Valley Power and Light was not listed as a covered entity for the REO and therefore, the numbers associated were not included.

Table 3 shows adjusted eligible generation as a percentage of Minnesota retail sales for the period. On average, utilities in the 2003-2004 period reported that 2.57 percent of their energy came from renewable power. Consistent with Table 5, investor-owned and cooperative utilities had sufficient renewable resources in the 2003-2004 period to meet their 2005 REO levels, while municipal utilities did not have sufficient resources in 2003-2004 to meet their 2005 REO levels.

**Table 3: Total System Adjusted Eligible Renewable Resources from Utilities as Percentage of Minnesota Retail Sales (July 1, 2003 to June 30, 2004)<sup>14</sup>**

	Minnesota Retail Sales in kWh	Adjusted Eligible Renewable Generation in kWh	Eligible Generation as percentage of MN Retail Sales
<b><i>Investor-Owned Utilities</i></b>			
Xcel	30,559,280,490	595,832,599	1.95%
MP	8,580,900,000	353,953,850	4.12%
OTP	1,957,456,566	99,155,757	5.07%
IPL	841,511,856	22,969,136	2.73%
NWEC	524,992	10,227,710	1948.16% <sup>15</sup>
<b><i>Total Investor-Owned Utilities</i></b>	<b>41,939,673,904</b>	<b>1,082,139,053</b>	<b>2.58%</b>
<b><i>Cooperatives Utilities</i></b>			
GRE	10,408,968,000	220,454,487	2.12%
Minnkota	1,808,326,904	37,959,170	2.10%
Dairyland	737,462,789	32,132,862	4.36%
Basin	751,736,085	214,851,595	28.58%
<b><i>Total Cooperative Utilities</i></b>	<b>13,706,493,778</b>	<b>505,398,114</b>	<b>3.69%</b>
<b><i>Municipal Utilities</i></b>			
SMMPA	2,714,070,325	0	0.00%
MRES	805,570,000	8,054,750	1.00%
MMPA	2,302,721,000	0	0.00%
CMMPA	516,974,120	480,000	0.09%
<b><i>Total Municipal Utilities</i></b>	<b>6,339,335,445</b>	<b>8,534,750</b>	<b>0.21%</b>
<b><i>Total All Utilities</i></b>	<b>61,985,503,127</b>	<b>1,596,071,917</b>	<b>2.57%</b>

<sup>14</sup> The Department's December 9, 2004 presentation to the Legislative Electric Energy Task Force (LEETF) regarding Minnesota's usage of renewable energy in comparison to other states indicated that, in calendar year 2003, 11 percent of the electricity Minnesotans used came from renewable energy. This REO report identifies that 3 percent of the electricity Minnesotans used during July 1, 2003, to June 30, 2004 came from REO-eligible renewable energy. The Department notes that the REO-eligible energy identified in this REO report is one component of the 11 percent figure in the LEETF presentation. The remaining amount consists of the following forms of renewable energy that are not currently eligible for the REO: 1) Xcel's mandated renewable energy, 2) other forms of renewable generation that do not meet the statutory definition, such as large hydro, 3) generation used to satisfy other renewable energy requirements or obligations (e.g., Wisconsin's Renewable Portfolio Standard), 4) generation used for green pricing. In addition, adjustments were made in this REO report to data on generation from co-fired biomass facilities to count only the portion generation from eligible renewable fuels. Furthermore, the data in the LEETF report used the calendar year 2003 (January 1, 2003, through December 31, 2003) while the current report covers data for July 1, 2003, to June 30, 2004. Finally, the data in the current report is based on a more complete set of responses from the utilities, with data for all 16 covered entities, whereas the LEETF report included information from 7 utilities since not all utilities responded in a timely manner to data requests used for the LEETF report. For additional details about the reported renewable energy generation that was excluded from REO eligibility please see Table 1 in Attachment I.

<sup>15</sup> Minnesota retail sales constitute 0.29% of NWEC's total system retail sales, therefore, NWEC's unallocated eligible renewable generation dwarfs the Company's total Minnesota retail sales. The percentage of eligible generation to NWEC's total system retail sales is 5.57%.

Table 4 shows the breakdown of total system reported eligible renewable generation by primary fuel.

**Table 4: Breakdown of Total System Reported Renewable Generation from Reporting Utilities (July 1, 2003 to June 30, 2004) by Fuel<sup>16</sup>**

	Wind	Hydro	Biomass
<b><i>Investor-Owned Utilities</i></b>			
Xcel	0%	28.44%	71.56%
MP	0%	60.42%	39.58%
OTP	53.12%	13.34%	33.54%
IPL	100.00%	0%	0%
NWEC	0%	100.00%	0%
<b><i>Total Investor-Owned Utilities</i></b>	<b>6.97%</b>	<b>37.89%</b>	<b>55.28%</b>
<b><i>Cooperative Utilities</i></b>			
GRE	20.23%	0%	89.88%
Minnkota	89.19%	10.72%	0.09%
Dairyland	27.27%	71.27%	1.45%
Basin	100.00%	0%	0%
<b><i>Total Cooperative Utilities</i></b>	<b>60.48%</b>	<b>9.84%</b>	<b>45.63%</b>
<b><i>Municipal Utilities</i></b>			
SMPMA	0%	0%	0%
MRES	100.00%	0%	0%
MMPA	0%	0%	0%
CMMPA	100.00%	0%	0%
<b><i>Total Municipal Utilities</i></b>	<b>100.00%</b>	<b>0%</b>	<b>0%</b>
<b><i>Total All Utilities</i></b>	<b>23.19%</b>	<b>27.41%</b>	<b>49.40%</b>

<sup>16</sup> The generation on which Table 4 is based has not been fully adjusted to account for all deductions necessary for generation assigned to green pricing and the Wisconsin RPS. Some utilities did not assign generation from specific facilities to satisfy those programs but instead reported those assignments as a deduction from total reported renewable generation. These deductions were not addressed in this table to preserve the integrity of the representation of the relationship between the primary fuels reported.

Table 5 identifies, for the 2003-2004 period, the MN REO obligation, adjusted eligible generation and subsequent difference for each covered entity. A negative number in the "Difference" column indicates that the utility had enough renewable resources in 2003-2004 to meet its 2005 REO level. All investor-owned and cooperative utilities have sufficient renewable resources, while municipal utilities do not currently have levels of renewable resources sufficient to meet the 2005 REO levels.

**Table 5: Minnesota REO Obligation and System Adjusted Eligible Renewable Resources in kWh (July 1, 2003 to June 30, 2004)**

	<b>Total Minnesota Retail Sales</b>	<b>2005 Minnesota REO Obligation</b>	<b>High Range Adjusted Eligible Generation</b>	<b>Difference</b>
<i>Investor-Owned Utilities</i>				
Xcel	30,559,280,490	305,592,805	595,832,599 <sup>17</sup>	(505,898,195)
MP	8,580,900,000	85,809,000	353,953,850 <sup>18</sup>	(268,239,794)
OTP	1,957,456,566	19,574,566	99,155,757	(79,581,191)
IPL	841,511,856	8,415,119	22,969,136	(14,554,018)
NWEC	524,992	5,250	10,227,710 <sup>19</sup>	(10,222,460)
<b>Total, Investor-Owned Utilities</b>	<b>41,939,673,904</b>	<b>419,396,739</b>	<b>1,082,139,053</b>	<b>(662,742,314)</b>
<i>Cooperative Utilities</i>				
GRE	10,408,968,000	104,089,680	220,454,487	(116,364,807)
Minnkota	1,808,326,904	18,083,269	37,959,170	(19,875,901)
Dairyland	737,462,789	7,374,628	32,132,862 <sup>20</sup>	(24,758,235)
Basin	751,736,085	7,517,361	214,851,595 <sup>21</sup>	(207,334,234)
<b>Total Cooperative Utilities</b>	<b>13,706,493,778</b>	<b>137,064,938</b>	<b>505,398,114</b>	<b>(368,333,176)</b>

<sup>17</sup> Xcel reported 616,083,000 kWh of eligible generation. This difference is the result two factors: (1) the determination of eligible percentage of biomass and (2) the application of the Commission guidelines for the allocation of system resources. Xcel initially reported the assignment of 100 percent of the generation of its biomass facilities to the REO. The Department reduced the generation from some of these facilities to represent the percentage of renewable fuel used at the facility. When the Department applied the allocation guidelines without the adjustment on the biomass facilities, the allocated eligible generation differed only slightly.

<sup>18</sup> MP notes that there may be excess generation from its Chandler Hills facility that is current assigned wholly to green pricing that may be eligible for the REO. In addition, in MP's information request response (Attachment H2 of this report) there is some discrepancy in the units reported for generation. The Department confirmed with the Company that the appropriate units should have been MWhs and the numbers presented by the Department incorporate that change. In addition, MP identified its assignment of Minnesota REO eligible renewable generation to the Wisconsin RPS as 2,760 MWh.

<sup>19</sup> NWEC reported 11,789,320 kWh of eligible generation. The difference, 1,561,610 kWh, is the result of the assignment of renewable energy towards compliance with the Wisconsin RPS program. The Department notes that NWEC identified in its information request response (Attachment H5 of this report) generation from its Black Brook facility as not being deliverable to Minnesota. However, the Department was informed by the Company that generation from the Black Brook facility did deliver to the NWEC system and consequently the deliverability of generation from this facility was not different than the deliverability as defined for the other NWEC facilities or as defined by the other utilities. Therefore, the generation from the Black Brook facility received the same treatment as other NWEC facilities for this report.

<sup>20</sup> Dairyland reported 68,825,813 kWh of eligible generation. The difference, 36,692,951 kWh, is the result of the assignment of renewable energy towards compliance with the Wisconsin RPS program and for green pricing programs.

<sup>21</sup> Basin reported 236,494,323 kWh of eligible generation. The difference, 21,642,728 kWh, is the result of sales of green tags.

**Table 5: Minnesota REO Obligation and System Adjusted Eligible Renewable Resources in kWh (July 1, 2003 to June 30, 2004) (Contd)**

	<b>Total Minnesota Retail Sales</b>	<b>2005 Minnesota REO Obligation</b>	<b>High Range Adjusted Eligible Generation</b>	<b>Difference</b>
<i>Municipal Utilities</i>				
SMMPA	2,714,070,325	27,140,703	0 <sup>22</sup>	27,140,703
MRES	805,570,000	8,055,700	8,054,750	950
MMPA	2,302,721,000	23,027,210	0	23,027,210
CMMPA	516,974,120	5,169,741	480,000	4,689,741
<b>Total Municipal Utilities</b>	<b>6,339,335,446</b>	<b>63,393,354</b>	<b>8,534,750</b>	<b>54,858,604</b>
<b>Total All Utilities</b>	<b>61,985,503,127</b>	<b>619,855,031</b>	<b>1,596,071,917</b>	<b>(976,216,886)</b>

<sup>22</sup> SMMPA reported 80,768,722 kWh of eligible generation. The difference is the result of 5,768,722 kWh assigned to green pricing programs and 75,000,000 kWh equivalents of green tag purchase that currently are not eligible for the REO.

Table 6 shows the adjusted eligible generation allocated by an allocation factor that represents the proportion of Minnesota retail sales to total system retail sales.

**Table 6: REO Obligation and Eligible Generation Allocated by Lower Range Method (July 1, 2003 to June 30, 2004)**

	<b>Minnesota REO 2005 Obligation</b>	<b>Adjusted Eligible Generation</b>	<b>Allocation Factor</b>	<b>Low Range Allocated Eligible Generation</b>
<b><i>Investor-Owned Utilities</i></b>				
Xcel	305,592,805	595,832,599	75.92%	452,355,753
MP	85,809,000	353,953,850	100.00%	353,953,850
OTP	19,574,566	99,155,757	51.55%	51,117,090
IPL	8,415,119	22,969,136	107.02%	24,581,570
NWEC	5,250	10,227,710	0.29%	29,227
<b><i>Total Investor-Owned Utilities</i></b>	<b>419,396,740</b>	<b>1,082,139,053</b>		<b>858,698,794</b>
<b><i>Cooperative Utilities</i></b>				
GRE	104,089,680	220,454,487	100.00%	220,454,487
Minnkota	18,083,269	37,959,170	53.43%	20,281,060
Dairyland	7,374,628	32,132,862	18.72%	6,015,973
Basin	7,517,361	214,851,595	6.21%	13,345,539
<b><i>Total Cooperative Utilities</i></b>	<b>137,064,938</b>	<b>505,398,114</b>		<b>260,097,059</b>
<b><i>Municipal Utilities</i></b>				
SMMPA	27,140,703	0	100.00%	0
MRES	8,055,700	8,054,750	50.83%	4,094,376
MMPA	23,027,210	0	100.00%	0
CMPA	5,169,741	480,000	89.68%	430,442
<b><i>Total Municipal Utilities</i></b>	<b>63,393,354</b>	<b>8,534,750</b>		<b>4,524,818</b>
<b><i>Total All Utilities</i></b>	<b>619,855,031</b>	<b>1,596,071,917</b>		<b>1,123,320,672</b>

Table 7 shows the adjusted eligible generation if allocated with the mid-range scenario using a differentiation based on the vintage of the resources such that the generation from all pre-2001 resources are allocated based on the proportion of Minnesota retail sales to total system retail sales, and generation from all 2001 and later resources receive an allocation of 100 percent. Since CMMPA's eligible generation is based on the purchase of wind energy from GRE, the vintage of the facility is unknown and therefore this allocation is not presented.<sup>23</sup>

**Table 7: Renewable Generation Facility Allocated by Mid-Range Scenario: (July 1, 2003 to June 30, 2004)**

	Generation from Pre-2001 Facilities	Generation from 2001 and later Facilities	Allocation Factor	Allocation based on Mid-Range Scenario
<b><i>Investor-Owned Utilities</i></b>				
Xcel	557,550,599	38,282,000	75.92%	461,574,082
MP	353,916,282	37,568	100.00%	353,953,850
OTP	44,716,585	54,439,172	51.55%	77,491,608
IPL	0	22,969,136	5.41%	22,969,136
NWEC	10,227,710	0	0.29%	29,227
<b>Total Investor-Owned Utilities</b>	<b>966,411,176</b>	<b>115,727,876</b>		<b>916,017,902</b>
<b><i>Cooperative Utilities</i></b>				
GRE	162,229,356	58,225,131	100.00%	220,454,487
Minnkota	32,147,380	5,811,790	53.43%	22,987,691
Dairyland	14,631,049	17,501,813	18.72%	20,241,065
Basin	0	214,851,595	6.21%	214,851,595
<b>Total Cooperative Utilities</b>	<b>209,007,785</b>	<b>296,390,329</b>		<b>478,534,838</b>
<b><i>Municipal Utilities</i></b>				
SMMPA	N/A	N/A	100.00%	N/A
MRES	0	8,054,750	50.83%	8,054,750
MMPA	0	0	100.00%	0
CMMPA	N/A	N/A	89.68%	N/A
<b>Total Municipal Utilities</b>	<b>0</b>	<b>8,054,750</b>		<b>8,054,750</b>
<b>Total All Utilities</b>	<b>1,175,418,961</b>	<b>420,172,956</b>		<b>1,402,607,490</b>

<sup>23</sup> SMMPA reported green tags for compliance with the REO which are not currently eligible and therefore the vintage-based allocation is reported as N/A rather than 0.

Table 8 compares the REO obligation with the three allocation methods discussed in Section IV.B: high range, low range, and mid-range.

**Table 8: Status of Good Faith Efforts under Various Allocation Scenarios (July 1, 2003 to June 30, 2004)**

	<b>2005 REO Obligation</b>	<b>High Range: Unallocated Eligible Generation</b>	<b>Low Range: Allocated Eligible Generation</b>	<b>Mid-Range Scenario: Generation Allocated based on pre/post 2001</b>
<i>Investor-Owned Utilities</i>				
Xcel	305,592,805	595,832,599	452,355,753	461,574,082
MP	85,809,000	353,953,850	353,953,850	353,953,850
OTP	19,574,566	99,155,757	51,117,090	77,491,608
IPL	8,415,119	22,969,136	1,242,875	22,969,136
NWEC	5,250	10,227,710	29,227	29,227
<b>Total Investor-Owned Utilities</b>	<b>419,396,740</b>	<b>1,082,139,053</b>	<b>858,698,794</b>	<b>916,017,902</b>
<i>Cooperative Utilities</i>				
GRE	104,089,680	220,454,487	220,454,487	220,454,487
Minnkota	18,083,269	37,959,170	20,281,060	22,987,691
Dairyland	7,374,628	32,132,862	6,015,973	20,241,065
Basin	7,517,361	214,851,595	13,345,539	214,851,595
<b>Total Cooperative Utilities</b>	<b>137,064,938</b>	<b>505,398,114</b>	<b>260,097,059</b>	<b>478,534,838</b>
<i>Municipal Utilities</i>				
SMMPA	27,140,703	0	0	N/A
MRES	8,055,700	8,054,750	4,094,376	8,054,750
MMPA	23,027	0	0	0
CMMPA	5,169,741	480,000	430,442	N/A
<b>Total Municipal Utilities</b>	<b>63,393,354</b>	<b>8,534,750</b>	<b>4,524,818</b>	<b>8,054,750</b>
<b>Total All Utilities</b>	<b>619,855,031</b>	<b>1,596,071,917</b>	<b>1,123,320,672</b>	<b>1,402,607,490</b>

Table 9 shows the difference between the utilities obligation for 2005 and the adjusted eligible generation under the three allocation scenarios discussed in Section IV.B above: (1) high range bound unallocated eligible generation, (2) low range: the proportional allocation based on the Minnesota proportion of the system retail sales, and (3) mid-range scenario: the vintage based allocation where all pre-2001 resources are proportionally allocated as in (2) and all 2001 and later resources are wholly allocated (receive an allocation factor of one). Negative numbers indicate the utility had enough biomass generation in 2003-2004 to meet the 2005 REO level.

**Table 9: Difference Between Obligation for 2005 and Eligible Generation Under Various Allocation Scenarios (July 1, 2003 to June 30, 2004)**

	<b>High Range Scenario: Unallocated Eligible Generation</b>	<b>Low Range Scenario: Allocated Eligible Generation</b>	<b>Mid-Range Scenario: Generation Allocated based on Vintage</b>
<b><i>Investor-Owned Utilities</i></b>			
Xcel	(290,239,794)	(146,762,948)	(155,981,277)
MP	(268,144,850)	(268,144,850)	(268,144,850)
OTP	(79,581,191)	(31,542,524)	(57,917,042)
IPL	(14,554,018)	7,172,244	(14,554,018)
NWEC	(10,222,460)	(23,977)	(23,977)
<b><i>Total Investor-Owned Utilities</i></b>	<b>(662,742,314)</b>	<b>(439,302,055)</b>	<b>(496,621,163)</b>
<b><i>Cooperative Utilities</i></b>			
GRE	(116,364,807)	(116,364,807)	(116,364,807)
Minnkota	(19,875,901)	(2,197,791)	(4,904,422)
Dairyland	(24,758,235)	1,358,655	(12,866,437)
Basin	(207,334,234)	(5,828,178)	(207,334,234)
<b><i>Total Cooperative Utilities</i></b>	<b>(368,333,177)</b>	<b>(123,032,121)</b>	<b>(341,469,900)</b>
<b><i>Municipal Utilities</i></b>			
SMMPA	27,140,703	27,140,703	N/A
MRES	950	3,961,324	950
MMPA	23,027,210	23,027,210	23,027,210
CMMPA	4,689,741	4,739,299	N/A
<b><i>Total Municipal Utilities</i></b>	<b>54,858,604</b>	<b>58,868,537</b>	<b>23,028,160</b>
<b><i>Total All Utilities</i></b>	<b>(976,216,886)</b>	<b>(503,468,640)</b>	<b>(815,062,903)</b>

Table 10 shows the difference between each utility's biomass obligation under the REO and the unallocated system adjusted eligible biomass generation for the reporting period. A negative number in the "Difference" column indicates that the utility had enough biomass resources in 2003-2004 to meet its 2005 REO level.

**Table 10: Biomass Obligation for 2005 and System Adjusted Eligible Biomass Generation from Reporting (July 1, 2003 to June 30, 2004)<sup>24</sup>**

	<b>Biomass Obligation</b>	<b>High Range Adjusted Eligible Biomass</b>	<b>Difference</b>
<b><i>Investor-Owned Utilities</i></b>			
Xcel	1,527,964	426,406,599	(424,878,635)
MP	429,045	140,090,550	(139,661,505)
OTP	97,873	33,254,951	(33,157,078)
IPL	42,076	0	42,076
NWEC	26	0	26
<b><i>Total Investor-Owned Utilities</i></b>	<b>2,096,984</b>	<b>599,752,100</b>	<b>(597,655,116)</b>
<b><i>Cooperative Utilities</i></b>			
GRE	520,448	198,143,148	(197,622,700)
Minnkota	90,416	31,448,780	(31,358,364)
Dairyland	36,873	1,000,813	(963,940)
Basin	37,587	0	37,587
<b><i>Total Cooperative Utilities</i></b>	<b>685,324</b>	<b>230,592,741</b>	<b>(229,907,417)</b>
<b><i>Municipal Utilities</i></b>			
SMMPA	135,704	0	135,704
MRES	40,279	0	40,279
MMPA	115,136	-	115,136
CMMPA	25,849	0	25,849
<b><i>Total Municipal Utilities</i></b>	<b>316,967</b>	<b>0</b>	<b>316,967</b>
<b><i>Total All Utilities</i></b>	<b>3,099,275</b>	<b>830,344,841</b>	<b>(827,245,566)</b>

<sup>24</sup> The data for Tables 10 through 12 regarding eligible biomass resources assumes that all biomass resources would count toward the Minnesota REO rather than being assigned to other obligations, specifically the Wisconsin RPS and green pricing programs. It is assumed that other, non-biomass renewable resources would be used to meet the requirements of these other programs. This assumption pertains to data on the following utilities: Minnesota Power Company, North Western Wisconsin Electric Company, Great River Energy, Dairyland Power Cooperative, and Basin Electric Power Cooperative. The data for Northern States Power d/b/a Xcel Energy has been adjusted to remove biomass energy that is required for Minnesota mandates.

Table 11 shows the low range proportionally allocated adjusted eligible biomass generation. A negative number in the "Difference" column indicates the utility had enough biomass resources in 2003-2004 to meet its 2005 REO level.

**Table 11: Biomass Obligation for 2005 and Low Range Scenario Allocated Eligible Biomass Generation (July 1, 2003 to June 30, 2004)**

	<b>Biomass Obligation</b>	<b>Adjusted Eligible Biomass</b>	<b>Allocation Factor</b>	<b>Low Range Allocated Biomass</b>	<b>Difference</b>
<b><i>Investor-Owned Utilities</i></b>					
Xcel	1,527,964	426,406,599	75.92%	323,727,635	(322,199,671)
MP	429,045	140,090,550	100.00%	140,090,550	(139,661,505)
OTP	7,873	33,254,951	51.55%	17,143,698	(17,045,825)
IPL	42,076	0	107.02%	0	42,076
NWEC	26	0	0.29%	0	26
<b>Total Investor-Owned Utilities</b>	<b>2,096,984</b>	<b>599,752,100</b>		<b>480,961,883</b>	<b>(478,864,899)</b>
<b><i>Cooperative Utilities</i></b>					
GRE	520,448	198,143,148	100.00%	198,143,148	(197,622,700)
Minnkota	90,416	31,448,780	53.43%	16,802,649	(16,712,232)
Dairyland	36,873	1,000,813	18.72%	187,374	(150,501)
Basin	37,587	0	6.21%	0	37,587
<b>Total Cooperative Utilities</b>	<b>685,324</b>	<b>230,592,741</b>		<b>215,133,171</b>	<b>(214,447,846)</b>
<b><i>Municipal Utilities</i></b>					
SMMPA	135,704	0	100.00%	0	135,704
MRES	40,279	0	50.83%	0	40,279
MMPA	115,136	0	100.00%	0	115,136
CMPA	25,849	0	89.68%	0	25,849
<b>Total Municipal Utilities</b>	<b>316,967</b>	<b>0</b>		<b>0</b>	<b>316,967</b>
<b>Total All Utilities</b>	<b>3,099,275</b>	<b>830,344,841</b>		<b>696,095,054</b>	<b>(692,995,779)</b>

Table 12 shows the biomass obligation and the mid-range vintage-based allocation of adjusted eligible biomass generation. A negative number in the "Difference" column indicates the utility had enough biomass in 2003-2004 to satisfy the 2005 REO level.

**Table 12: Biomass Obligation for 2005 and Vintage-based Allocation of Eligible Biomass Generation (July 1, 2003 to June 30, 2004)**

	<b>Biomass Obligation</b>	<b>Pre-2001 Biomass Generation</b>	<b>2001 and later Biomass Generation</b>	<b>Mid-range Scenario: Generation Allocated based on Vintage</b>	<b>Difference between mid-range allocation and Obligation</b>
<b><i>Investor-Owned Utilities</i></b>					
Xcel	1,527,964	426,406,599	0	323,727,635	(322,199,671)
MP	429,045	140,052,982	37,568	140,090,550	(139,661,505)
OTP	97,873	31,448,780	1,806,171	18,018,746	(17,920,873)
IPL	42,076	-	-	-	42,076
NWEC	26	-	-	-	26
<b>Total Investor-Owned Utilities</b>	<b>2,096,984</b>	<b>597,908,361</b>	<b>1,843,739</b>	<b>481,836,931</b>	<b>(479,739,947)</b>
<b><i>Cooperative Utilities</i></b>					
GRE	520,448	177,694,000	20,449,148	198,143,148	(197,622,700)
Minnkota	90,416	31,448,780	-	16,802,649	(16,712,232)
Dairyland Basin	36,873	-	1,000,813	1,000,813	(963,940)
	37,587	-	-	-	37,587
<b>Total Cooperative Utilities</b>	<b>685,324</b>	<b>209,142,780</b>	<b>21,449,961</b>	<b>215,946,610</b>	<b>(215,261,285)</b>
<b><i>Municipal Utilities</i></b>					
SMMPA	135,704	-	-	-	135,704
MRES	40,279	-	-	-	40,279
MMPA	115,136	0	0	0	115,136
CMMPA	25,849	-	-	-	25,849
<b>Total Municipal Utilities</b>	<b>316,967</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>316,967</b>
<b>Total All Utilities</b>	<b>3,099,275</b>	<b>807,051,141</b>	<b>23,293,700</b>	<b>697,783,541</b>	<b>(694,684,266)</b>

November 9, 2004

Ron Rebenitsch  
Basin Electric Power Cooperative  
1717 East Interstate Ave  
Bismarck, ND 58503-0564

Dear Mr. Rebenitsch,

In accordance with Minnesota Statutes 216B.169 *Renewable and high-efficiency energy rate options*, I have reviewed Basin Electric's green pricing certification letter for the following wind facilities and certified them for use in Minnesota green pricing programs:

Chamberlain Project - two 1300 kW Nordex N60 turbines  
Edgeley/Kulm Project - 27 1500 kW General Electric turbines  
Hyde County Project - 27 1500 kW General Electric turbines  
Minot Wind Project - two 1300 kW Nordex N60 turbines  
Pipestone School District Project - one 750 kW NEG Micon turbine  
Rosebud Sioux Tribe Project - 450 kW of 750 kW NEG Micon turbine

I would like to clarify that green pricing transactions in Minnesota need to be made through traditional bundled electricity transactions. Renewable energy credits (green credits/tags) are not authorized for use, except on a pilot project basis by Missouri River Energy Services under limited circumstances with PUC staff approval.

Minnesota statute designates the Minnesota Public Utilities Commission the authority to establish a credit trading system among generators and utilities in Minnesota. The Department is designated the authority to certify generation sources and verify that sales are not double-counted.

Stakeholder discussions are currently underway to develop a regional certification, verification, and tracking system in the upper Midwest. More information is available from the Great Plains Institute ([www.gpisd.net](http://www.gpisd.net)), which is coordinating the process.

Department staff is available throughout the year if you have any further questions or concerns regarding green pricing issues (Mike Taylor, [mike.taylor@state.mn.us](mailto:mike.taylor@state.mn.us), 651-296-6830).

Sincerely,

Edward Garvey  
Deputy Commissioner Energy and Telecommunications