BEFORE THE MINNESOTA OFFICE OF ADMINISTRATIVE HEARINGS
600 North Robert Street
St. Paul, MN 55101

FOR THE MINNESOTA PUBLIC UTILITIES COMMISSION
121 Seventh Place East, Suite 350
St Paul, MN 55101-2147

IN THE MATTER OF THE PETITION FOR CERTIFICATES OF NEED FOR THREE 345 kV TRANSMISSION LINE PROJECTS WITH ASSOCIATED SYSTEM CONNECTIONS

Docket No. ET2,E002 et al./CN-06-1115

DIRECT TESTIMONY AND EXHIBITS OF SUSAN L. PEIRCE

ON BEHALF

OF THE MINNESOTA OFFICE OF ENERGY SECURITY

MAY 23, 2008

DIRECT TESTIMONY OF SUSAN L. PEIRCE
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I. QUALIFICATIONS

Q. Please state your name and address.

A. My name is Susan L. Peirce; my business address is 85 Seventh Place East, Suite 500, St. Paul, Minnesota 55101.

Q. What is your occupation?

A. I am a Public Utilities Rate Analyst employed by the Office of Energy Security (OES) of the Minnesota Department of Commerce.

Q. Please describe your educational background and professional experience.

A. A summary of my education and professional experience is included as OES Exhibit No. ___ (SLP-1).

II. PURPOSE OF MY TESTIMONY

Q. Please describe your responsibilities in this proceeding.

A. I am responsible for determining the Applicants' compliance with Minn. Stat. §216B.1691, the Renewable Energy Objective and Renewable Energy Standard (RES Statute). I am also responsible for estimating the amount of renewable generation and renewable capacity that will be needed by Minnesota electric utilities over the forecast period.

I am not making any recommendations regarding the forecast of total generation, or demand side management and energy conservation. OES witness, Mr. Hwikwon Ham provides testimony on the forecasting methodology used to develop the total generation

and capacity estimates, incorporating the analysis of Mr. Shaw regarding existing and planned supply of electricity in 2009, and Mr. Christopher T. Davis provides testimony on demand side management savings. Dr. Stephen Rakow evaluates alternatives to the proposed transmission lines.

My testimony focuses solely on the Applicants' compliance with the Renewable Energy Standard (RES) Statute, and provides an estimate of the renewable generation capacity necessary over the forecast period for Minnesota electric utilities to meet the RES statute.

Q. Please provide an overview of your testimony.

A. I estimate that Minnesota utilities will need to add between 3,148 MW and 4,911 MW in renewable generation capacity depending on the level of Demand-Side Management energy savings achieved, and based on a capacity factor between 30 and 40 percent for wind.

In addition, I evaluated Xcel Energy and Great River Energy's (GRE) compliance with Minn. Stat. §216B.1691 and conclude that both utilities have made a good faith effort to comply with the current goals of the Renewable Energy Standard (RES) contained in the RES Statute, and are on track to comply with the 2010 RES.

III. MINNESOTA RENEWABLE ENERGY REQUIREMENTS

Q. What are Minnesota's requirements for renewable energy generation?

A. Prior to the 2007 Legislative Session, Minnesota Stat. §216B.1691 set forth a Renewable Energy Objective (REO) that required electric utilities to make a good faith effort to

obtain 10 percent of their retail energy sales from eligible energy technologies by 2015, and to obtain 0.5 percent of their renewable energy from biomass technologies. The exception was Xcel Energy which was the only utility required to meet a 15 percent renewable energy standard. The remaining utilities were directed to "make a good faith effort" to meet the percentage requirement.

During the 2007 Legislative session, Minn. Stat. §216B.1691 (RES Statute) was amended to establish a RES in future years. The amended RES Statute requires electric utilities to make a good faith effort to generate or procure seven percent of their retail electric sales from eligible energy technologies by 2010. In addition, Minn. Stat. §216B.1691, subd. 2(a) and (b) were added to require:

> (a) Except as provided in paragraph (b), each electric utility shall generate or procure sufficient electricity generated by an eligible energy technology to provide its retail customers in Minnesota, or the retail customers of a distribution utility to which the electric utility provides wholesale electric service, so that at least the following standard percentages of the electric utility's total retail electric sales to retail customers in Minnesota is generated by eligible energy technologies by the end of the year indicated:
> (1) 2012 12 percent
> (2) 2016 17 percent
> (3) 2020 20 percent
> (4) 2025 25 percent.
>
> (b) An electric utility that owned a nuclear generating facility as of January 1, 2007, must meet the requirements of this paragraph rather than paragraph (a). An electric utility subject to this paragraph must generate or procure sufficient electricity generated by an eligible energy technology to provide its retail customers in Minnesota or the retail customers of a distribution utility to which the electric utility provides wholesale electric service so that at least the following percentages of the electric utility's total retail electric sales to retail customers in Minnesota is generated by eligible energy technologies by the end of the year indicated:

(1) 2010 15 percent
(2) 2012 18 percent
(3) 2016 25 percent
(4) 2020 30 percent

Of the 30 percent in 2020, at least 25 percent must be generated by wind energy conversion systems and the remaining five percent by other eligible energy technology.

As indicated above, under the amended RES Statute, Xcel must obtain a higher percentage of its Minnesota retail sales in a shorter timeframe than the remaining Minnesota utilities.

Q. How is the RES requirement calculated?

A. Minn. Stat. §216B.1691, subd. 2(a) states, "each electric utility shall generate or procure sufficient electricity generated by an eligible energy technology to provide its retail customers in Minnesota, or the retail customers of a distribution utility to which the electric utility provides wholesale electric service" with the required percentage of renewable generation. For utilities directly serving Minnesota customers, the RES requirement is calculated by multiplying the estimated Minnesota retail sales in kWh by the percentage of renewables required by statute to determine the utility's RES requirement. For those utilities providing wholesale service to distribution companies, the RES requirement is calculated by multiplying the Minnesota retail sales of the distribution companies to which it provides wholesale service by the statutory percentage requirement.

In 2007, the Minnesota Legislature also passed requirements that electric utilities obtain at least 1.0 percent with a goal of 1.5 percent of their retail sales from energy saving, efficiency and conservation. OES Witness Christopher T. Davis addresses the

topic of energy efficiency and conservation. Consequently, the RES requirement is determined after adjusting the retail sales forecast for the reduction resulting from energy savings and other demand side management activities.

Q. What is an eligible energy technology?

A. Minn. Stat. §216B.1691, subd. 1 defines an eligible energy technology as one that:

> Generates electricity from the following renewable energy sources: (1) solar; (2) wind; (3) hydroelectric with a capacity of less than 100 megawatts; (4) hydrogen, provided that after January 1, 2010, the hydrogen must be generated from the resources listed in this clause; or (5) biomass, which includes, without limitation, landfill gas, an anaerobic digester system, and 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.

The definition of an eligible energy technology cited above reflects a number of changes made by the 2007 Legislature. Specifically, the capacity of hydroelectric facilities eligible for RES compliance was increased from 60 to 100 megawatts, and the definition of biomass was clarified to include landfill gas, and anaerobic digester systems. Finally, a restriction on Xcel's ability to count biomass and wind generation from its Prairie Island Legislative mandates was stricken from the statute.[1] The 2007 amendments to the RES Statute render generation from these mandates eligible to count toward RES compliance.

[1] As part of the earlier Legislative authorization for additional storage for spent nuclear fuel at Xcel's Prairie Island facility, Xcel was required to obtain 825 MW of wind energy (Minn. Stat. §216B.2423) and 125 MW of biomass energy (Minn. Stat. §216B.2424).

IV. RES CAPACITY NEED

Q. How did you calculate the RES Capacity Need in this proceeding?

A. My estimate of the additional capacity needed by Minnesota electric utilities to meet RES requirements is contained in OES Exhibit Nos. ___ (SLP-2 through SLP-5) in this testimony. I based my calculations on the energy forecasts contained in OES Witness Mr. Davis' testimony for both the 1.0 percent energy forecast and 1.5 percent energy forecast. OES Exhibit No. ___ (CTD-2). I provide capacity need estimates for each of the following four scenarios:

1. Energy savings of 1 percent and a wind capacity factor of 30 percent, OES Exhibit No. ___ (SLP-2)
2. Energy savings of 1 percent and a wind capacity factor of 40 percent, OES Exhibit No. ___ (SLP-3)
3. Energy savings of 1.5 percent and a wind capacity factor of 30 percent, OES Exhibit No. ___ (SLP-4)
4. Energy savings of 1.5 percent and a wind capacity factor of 40 percent, OES Exhibit No. ___ (SLP-5)

I calculated the RES energy requirement by multiplying a utility's energy forecast by the statutory RES requirement for each year in the forecast period. Next, I subtracted out an estimate of each utility's energy obtained from 2010 renewable generation from their RES requirement to determine their RES net energy need. Finally, I converted the energy need into nameplate and accredited capacity.

Q. For which utilities did you calculate the RES requirements?

In its June 1, 2004 Order in Docket No. E999/CI-03-869,[2] the Minnesota Public Utilities Commission (Commission) identified 16 entities that are subject to Minn. Stat. §216B.1691. The entities identified in the Commission's June 1, 2004 and for whom forecast information was provided in the application include: Central Minnesota Municipal Power Agency (CMMPA); Dairyland Power Cooperative (DPC); Great River Energy (GRE); Interstate Power & Light (IPL); Minnesota Municipal Power Agency (MMPA); Minnesota Power (MP); Minnkota Power Agency (Minnkota); Missouri River Energy Services (MRES); Otter Tail Power Company (OTP); Southern Minnesota Municipal Power Agency (SMMPA); and Xcel Energy (Xcel). I calculated the RES requirement for each of the above-listed electric utilities.

Q. How did you calculate an estimate of each utility's 2010 renewable generation?

A. First, I compiled a list of existing and expected new renewable generation resources that are likely to be available to help Minnesota utilities meet the RES in 2010. My estimate of the utilities 2010 renewable generation is contained in OES Exhibit No. ___ (SLP-6). Working from each utility's response to OES IR No. 34 (OES Exhibit No. ___ (SLP-10)) which identified all the renewable generation facilities either owned or contracted by the utility, I adjusted the amount of 2006 renewable generation for generation ineligible for the Minnesota RES, and added planned additions to renewable generation capacity through 2009. Because the RES requirement is stated in terms of energy (MWh) rather

[2] *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.169*, Docket No. E999/CI-03-869, Initial Order Detailing Criteria and Standards for Determining Compliance with Minn. Stat. §216.B.1691 and Requiring Customer Notification by Certain Cooperative, Municipal, and Investor-Owned Distribution Utilities (June 1, 2004).

than capacity (MW), I estimated the amount of energy expected to be produced from planned facilities as explained later in my testimony. The Commission has addressed questions regarding the appropriate allocation of renewable energy among multiple-state Renewable Portfolio Standards (RPS), as well as the treatment of generation for green pricing programs and Renewable Energy Certificates (RECs) in Docket Nos. E999/CI-03-869 and E999/CI-04-1616.

Q. In calculating the RES requirements, how do you treat generation for green pricing programs?

A. In its August 13, 2004 in Docket E999/CI-03-869,[3] Order After Reconsideration 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 E999/CI-03-869, the Commission found that renewable generation purchased under green pricing programs established under Minn. Stat. §216B.169 is not eligible to be counted toward compliance with REO. That Order remains in effect despite the change in the RES Statute.

The requirement that utilities offer a green pricing program under Minn. Stat. §216B.1691 expires on January 1, 2010. At that time, utilities may choose to eliminate their green pricing programs, or continue them on a voluntary basis. Because the Commission's Order excluding green pricing programs from eligibility for RES compliance remains in effect, and the uncertainty surrounding the continuation of

[3] *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.169*, Docket No. E999/CI-03-869, Order After Reconsideration (August 13, 2004).

voluntary green pricing programs beyond the statutes sunset in 2010, I excluded generation for green pricing programs from eligibility toward RES.

Q. How do you treat energy generation from facilities placed into service prior to the establishment of the REO statute in 2001?

A. In its October 19, 2004 Order, in Docket Nos. E999/CI-03-869 and E999/CI-04-1616,[4] the Commission set forth general guidelines for addressing how renewable resources are to be allocated between jurisdictions and between wholesale and retail operations. Specifically, the Commission indicated that energy generated from resources or purchase arrangements made prior to the establishment of Minnesota's renewable energy objective in 2001 should be credited toward Minnesota's REO requirement based on the percentage of a utility's system sales to Minnesota customers. For energy generated from resources or purchase arrangements made after the establishment of Minnesota's renewable energy objective in 2001, the utility has the burden of demonstrating the percentage of generation that should be credited toward REO compliance. In the absence of a showing that some other percentage ought to be counted toward REO compliance, the percentage of a utility's system sales to Minnesota customers would serve as the default amount.

Q. How do you treat the allocation of renewable generation between multiple jurisdictions in calculating the estimate of 2010 renewable generation?

[4] *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.169*, Docket No. E999/CI-03-869; *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, 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 (October 19, 2004).

A. I reviewed the generation amounts provided by the utilities in response to OES IR No. 34 (OES Exhibit No. ___ (SLP-10)) to confirm that generation was in accordance with Commission Orders and was reasonably allocated between jurisdictions.

Q. What is a Renewable Energy Certificate (REC)?

A. A Renewable Energy Certificate or REC represents all of the attributes associated with one Megawatt Hour (MWh) of renewable energy generation. Minn. Stat. §216B.1691, subd. 4 directs the Commission as follows:

> (a) To facilitate compliance with this section, the commission, by rule or order, shall establish by January 1, 2008, a program for tradable renewable energy credits for electricity generated by eligible energy technology. The credits must represent energy produced by an eligible energy technology, as defined in subdivision 1. Each kilowatt-hour of renewable energy credits must be treated the same as a kilowatt-hour of eligible energy technology generated or procured by an electric utility if it is produced by an eligible energy technology. The program must permit a credit to be used only once. The program must treat all eligible energy technology equally and shall not give more or less credit to energy based on the state where the energy was generated or the technology with which the energy was generated. The commission must determine the period in which the credits may be used for purposes of the program.
>
> (b) In lieu of generating or procuring energy directly to satisfy the eligible energy technology objective or standard of this section, an electric utility may utilize renewable energy credits allowed under the program to satisfy the objective or standard.
>
> (c) The commission shall facilitate the trading of renewable energy credits between states.

In its October 9, 2007 Order Approving the Midwest Renewable Energy Tracking System (M-RETS),[5] the Commission adopted the M-RETS system for the tracking and trading of RECs, and ordered Minnesota utilities to participate in the system. In its December 18, 2007 Order Establishing Initial Protocols for Trading Renewable Credits in Docket No. E999/CI-04-1616,[6] the Commission established additional parameters around the trading of RECs, including setting a four-year life for purposes of compliance. I discuss the four-year life further below.

The M-RETS operating procedures define a REC as "representing all of the attributes from one MWh of electricity generation from a renewable generating unit registered with the M-RETS tracking system or a certificate imported from a compatible certificate tracking system and converted to an M-RETS Certificate." (OES Exhibit No. ___ (SLP-7)). The renewable attributes associated with one MWh include all environmental attributes, credits, benefits, emissions reductions, offsets, and allowances attributable to the renewable energy generation.

Q. How do you treat RECs for RES compliance purposes?

A. Prior to the establishment of M-RETS, the Commission did not allow REC purchases to count toward compliance with Minnesota REO Statutes. In its December 18, 2007 Order in Docket E999/CI-04-1616, the Commission established a four-year shelf life for RECs that are to be used for compliance with Minnesota RES requirements. A four-year shelf

[5] *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, Order Approving Midwest Renewable Energy Tracking System (M-RETS) under Minn. Stat. §216B.1691, Subd. 4(d) and Requiring Utilities to Participate in M-RETS. (October 9 2007)

[6] *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, Order Establishing Initial Protocols for Trading Renewable Energy Credits (December 18, 2007).

life means a REC will be eligible for use in the year of generation and for four years following the year of generation.

M-RETS' operating procedures require the registration and tracking of "whole certificates." In other words, a REC represents all the environmental attributes or green tags associated with one MWh of renewable generation. In its December 18, 2007 Order, the Commission directed utilities with Power Purchase Agreements (PPAs) that are silent or ambiguous on the ownership of green tags, including renewable attributes, to actively pursue negotiations and settlements to clarify ownership in order to be eligible to be counted towards meeting the RES requirements.

Q. Do any of the utilities have REC purchases?

A. Yes, SMMPA has made REC purchases in the past and will likely do so in the future.

Q. How did you treat SMMPA's REC purchases in the calculating RES need?

A. I included SMMPA's RECs on an ongoing basis. While any given REC would have a shelf life of four years, I assumed that SMMPA or another company purchasing a REC for a certain amount of MWh in a year would make similar ongoing purchases over the course of the forecast period.

Q. Do any of the utilities sell RECs?

A. Yes. In response to OES IR No. 41 (OES Exhibit No. ___ (SLP-8)), three utilities, CMMPA, DPC and GRE, indicated they had sold RECs in other markets. All three

identified the amount of RECs sold and indicated that they are not included in the generation reported for RES purposes.

Q. How did you treat the expiration of Power Purchase Agreements (PPAs) during the forecast period?

A. I assumed that those PPAs continued during the entire forecast period. While a particular contract between a generation owner and a utility might expire during the forecast period, the generation facilities will continue to exist, as will the utility's need to obtain a percentage of retail sales from renewable sources. Consequently, the purchase of energy from the renewable generation is likely to continue either through the renegotiation of a contract with the current purchasing utility, or from a contract with another Minnesota utility.

Q. The M-RETS operating procedures require the ownership of all environmental attributes or "green tags" associated with the renewable generation in order to be registered. How much renewable generation occurs under contracts without clear assignment of the environmental attributes to the purchaser?

A. Both IPL and Xcel have indicated that they have PPAs in which the ownership of the environmental attributes is unknown or silent. In response to IR No. 68 in Docket No. E001/RP-05-2029 (OES Exhibit No. ___ (SLP-9)), IPL listed a total of four PPAs in which its ownership of the environmental attributes was unknown. For 2006, total renewable generation at these facilities was 30,133 MWh, of which 5.21 percent or 1,570 MWh is allocated towards Minnesota.

In its March 3, 2008 compliance filing in Docket E999/CI-04-1616 (OES Exhibit No. ___ (SLP-11)), Xcel stated it had 46 PPAs that were silent on the ownership of the environmental attributes. For 2006, the total renewable generation from these PPAs was 1,191,574 MWh, of which 963,413 MWh is allocated to the Minnesota RES. On April 16, 2008, Xcel filed a miscellaneous filing with the Commission for a determination of REC ownership in the 46 PPAs in question.[7] Thus, the issue of REC ownership for these facilities may be resolved through the proceeding in the miscellaneous filing.

Q. How did you treat generation from PPAs which are silent on the ownership of environmental attributes?

A. I included the generation allocated to Minnesota from those various contracts in my calculation of the total existing generation. I included that generation for the same reasons that I assumed a PPA remained in place for the entire forecast period. That is, the renewable generation facilities remain in existence, and the generation owner will seek to sell that renewable generation. In order to sell that renewable generation to a utility participating in M-RETS, the generation owner will have to assign the renewable attributes to the purchaser.

In responding to OES Information Requests (OES Exhibit No. ___ (SLP-9)), IPL excluded generation associated with those PPAs for which its ownership of the environmental attributes was unknown, while Xcel included that generation in its calculations. To be consistent, I adjusted IPL's 2006 generation amounts to include

[7] *In the Matter of a Petition for a Determination of Entitlement to Renewable Attributes of Energy Purchases Pursuant to Renewable Energy Requirements.* Docket No. E002/M-08-440 (April 16, 2008).

1,570 MWh of generation, which represents the Minnesota allocation of renewable generation without clear ownership of environmental attributes.

Q. How did you treat renewable generation from Rochester Public Utilities?

A. I understand that Rochester Public Utilities (RPU) obtains a portion of its energy, up to a capped level, from SMMPA. In its June 1, 2004 Initial Order in Docket No. E999/CI-03-869 identifying companies required to meet Minn. Stat. §216B.1691, SMMPA, as a power agency serving a number of distribution companies, was required to comply with the REO generation, but RPU was not so required. In addition, the Applicants to this proceeding did not provide a separate energy forecast for RPU. Consequently, I did not calculate a separate RES requirement for RPU.

In response to OES IR No. 34 (OES Exhibit No. ___ (SLP-10)), RPU identified some additional sources of renewable generation. I include RPU's estimated renewable generation in the total existing renewable amounts contained in SLP-3 through SLP-6.

I invite the Applicants to clarify in rebuttal if an energy forecast for RPU is needed, and to provide the appropriate treatment of its renewable generation should it differ from my conclusions.

Q. Did you make any other adjustments to existing renewable generation?

A. Yes, two of the utilities (Xcel and MP) had renewable generation facilities that became operational in late 2006. In both cases, the amount of 2006 generation from the facilities was significantly lower than 2007 year-to-date levels. Consequently, I adjusted generation amounts from those facilities to reflect 2007 year-to-date levels.

In addition, OTP included generation from a PPA with the Potlatch cogeneration facility that ended when the unit was shut down in August 2006. I reduced OTP's renewable generation to reflect this change.

Q. Are there any other potential adjustments you foresee?

A. Yes. OES Witness Mr. Shaw and I reviewed the utilities responses to OES IR Nos. 34 (OES Exhibit No. ___ (SLP-10)) and 39 (OES Exhibit No. ___ (CJS-2)) in an effort to ensure that the responses contained the same list of renewable facilities. As Mr. Shaw explains in his testimony, a number of discrepancies exist between the two responses. There were a number of facilities included in response to OES IR No. 34 which I used as the basis for my testimony, that were not included in response to OES IR No. 39, and a smaller number of facilities that were included in the response to OES IR No. 39 that were not included in response to OES IR No. 34.

Of the discrepancies, I am aware of recent Commission approval for two of the projects, Xcel's Grand Meadow Wind Project and MP's Taconite Ridge Wind Project, neither of which was included in response to OES IR No. 34. Consequently, I added generation estimates for those two projects into the totals for Xcel and MP.

Q. How did you adjust generation levels for planned facilities that are not yet in-service?

A. In response to OES Information Request No. 34 (OES Exhibit No. ___ (SLP-10)), the utilities included a list of planned facilities, along with expected nameplate capacity. For each of these planned facilities, I estimated annual MWh generation amounts using an appropriate capacity factor. For those utilities operating in multiple jurisdictions, I

allocated the estimated generation based on their Minnesota retail sales as a percentage of system sales.

Q. What is a capacity factor?

A. A capacity factor is an indication of how often a generation facility is operated, and is necessary to estimate how much energy will be produced from a given facility. Thus, if a generation unit runs at full capacity for an entire year, it would be operating for 8,760 hours to equal a 100 percent capacity factor. The capacity factor is the percentage of a generation unit's full capacity that is used over time. The capacity factor varies depending on the type of generation unit.

Q. What capacity factors did you use to estimate the amount of energy generated at planned facilities?

A. I calculated energy amounts for wind using a range of 30 to 40 percent which I understand to be a standard capacity factor range for wind turbines located in areas with a good wind resource, such as found on the Buffalo Ridge Area in southwestern Minnesota. For wind generation, I estimated generation at both a 30 percent and 40 percent capacity factor. The range of 30 to 40 percent capacity factors is consistent with the rates provided in Appendix D-6 of the Application, as well as the range provided in response to OES IR No. 36 (OES Exhibit No. ___ (SLP-13)). For planned biomass and hydro facilities, I used the capacity factors provided in Appendix D-6 of the Application, or from the utilities' response to OES IR No. 59 (OES Exhibit No. ___ (SLP-12)) on the capacity factor provided in Appendix D-6 of the Application.

Q. Is there any guarantee that the planned additional renewables will come to fruition?

A. No. Certainly plans and projects fail to materialize, and deals fall apart. To the extent that projects fail to come on-line as planned, my estimate of needed capacity to meet RES requirements would increase since utilities would have to seek additional sources of renewable generation. By including an estimate of generation from planned additions, I believe my estimate of capacity need is conservative and is within a range of reasonableness.

Q. Once you developed an estimate of 2010 renewable generation how did you determine the RES energy requirement?

A To calculate the RES amount of additional renewable energy that utilities will need in order to meet the RES in 2010, I subtracted my estimate of 2010 renewable energy generation from the estimated RES energy requirement for each year of the forecast period to determine the additional renewable energy need. A summary of the results is contained in OES Exhibit No. ___ (SLP-2 through SLP-5) in my testimony.

Q. How did you use your estimate of additional renewable energy needed to estimate the amount of renewable nameplate capacity that needs to be added to the system?

A. As suggested above, the RES requires utilities to obtain a certain percentage of their Minnesota retail energy sales from renewable sources. In other words, the RES requires utilities to obtain energy (MWh); the RES is not stated in terms of capacity (MW). Thus, to calculate the additional nameplate capacity that needs to be interconnected to the

system, the estimate of renewable energy (MWh) must be converted into renewable nameplate capacity (MW). Again, this conversion is done with the capacity factor.

Since wind is the largest renewable resource in Minnesota, I calculated the nameplate capacity need based solely on a range of capacity factors for existing wind facilities. I calculated the nameplate capacity need based on a high capacity factor of 40 percent and a low capacity factor of 30 percent. These wind capacity factors establish the same range I used to estimate planned wind generation, and are consistent with the capacity factors reported by the utilities in response to OES IR No. 36 (OES Exhibit No. ___ (SLP-13)). To obtain the capacity or megawatts of need, I divided the net RES Energy Need by the capacity factor times 8,760 hours.

I note that these assumed capacity factors are based on a presumption that future wind facilities will have similar capacity factors to existing facilities. To the extent that the capacity factors differ (say, if wind facilities are located in areas with a lower wind resource or if new turbine designs continue to use available wind sources more efficiently), more renewable generation will need to be added or subtracted from the total needed to satisfy the RES statute.

Q. Is nameplate capacity the only capacity to be considered in this proceeding?

A. No. In addition to nameplate capacity, it is necessary to estimate accredited capacity associated with the RES.

Q. What is the difference between nameplate capacity and accredited capacity?

A. Nameplate capacity represents the total capacity to be interconnected to the system. Accredited capacity reflects the amount of generation capacity that can be counted on for reliability purposes. The Mid-Continent Area Power Pool (MAPP) has generally been the organization responsible for determining accredited capacity. According to the response to OES IR No. 58, accreditation procedures are governed by Section 4.2.2 of the MAPP Generation Reserve Sharing Pool Handbook. (OES Exhibit No. ___ (SLP-14)).

Q. What rate did you use for accredited capacity?

A. In response to OES IR No. 58, the utilities provided their standard rate used for planning purposes to estimate accredited wind capacity. The rates ranged from a low of 10 percent cited by SMMPA to a high of 36 percent cited by Minnkota. Most of the utilities cited rates in the 10-15 percent range. I used a rate of 13.5 percent because it fell within the range cited by most of the utilities, and is also the rate used by Xcel which has the largest wind capacity.

Q. Please summarize your calculation of capacity need under each of the four scenarios.

A Table 1 below summarizes my calculation of the total renewable energy, nameplate and accredited capacity need in 2020 for Minnesota utilities:

Table 1: Summary of 2020 RES Energy & Capacity Need

Assumptions	2020 RES Energy Need (MWh)	2020 Nameplate Capacity Need (MW)	2020 Accredited Capacity Need (MW)
1% energy savings/ 30% wind capacity factor	12,905,297	4,911	663
1% energy savings/ 40% wind capacity factor	11,943,598	3,409	460
1.5% energy savings/ 30% wind capacity factor	11,991,713	4,563	616
1.5% energy savings/ 40% wind capacity factor	11,030,013	3,148	425

V. APPLICANTS' COMPLIANCE WITH RES REQUIREMENTS

Q. What RES requirements must be met in a certificate of need hearing?

A. Minn. Stat. §216B.243, subd. 3(10) requires applicants in a certificate of need proceeding to demonstrate compliance with RES requirements. In this proceeding, Xcel and GRE, as applicants, must demonstrate compliance with the RES statute.

Q. What are the RES requirements with which an applicant must comply?

A, Minn. Stat. §216B.1691, subd. 2 states that an electric utility "shall make a good faith effort" to obtain at least one percent of their Minnesota retail sales from eligible energy technologies by 2005. The RES Statute sets different future requirements for Xcel than for all other Minnesota utilities. As an electric utility that owned a nuclear generating facility as of January 1, 2007, Xcel is required meet the requirements set forth in Minn. Stat. §216B.1691, subd. 2(b) to obtain 15 percent of its Minnesota retail sales from renewable sources by 2010. On the other hand, GRE is required to make a good faith

effort to generate or obtain 7 percent of its Minnesota retail sales from renewable sources by 2010.

Having passed the 2005 deadline, I conclude that GRE and Xcel must show a good faith effort to have at least one percent of their Minnesota retail sales generated or procured from renewable sources. I have also reviewed the efforts each utility is making towards compliance with the goal of attaining seven percent, or 15 percent for Xcel, of its Minnesota retail sales from renewable sources by 2010.

Q. Please summarize Xcel's compliance, to date, with the RES to generate or obtain one percent of its Minnesota retail sales from renewable sources.

A. In response to OES Information Requests No. 33 and 34, (OES Exhibit No. ___ (SLP-15 and SLP-10)) Xcel provided its Minnesota retail sales in MWh along with the Minnesota RES eligible generation for 2006. The amount of Minnesota RES eligible generation reflects the exclusion of generation for green pricing programs, as well as the allocation of renewable generation to other states' Renewable Portfolio Standards (RPS) requirements. Table 2 below shows that Xcel had 32,882,516 MWh in Minnesota retail sales in 2006 of which 2,335,762 or 7.1 percent was supplied with renewable generation.

As noted earlier in my testimony, Xcel has a number of PPAs that are silent on the ownership of the environmental attributes. An argument could be made that generation from facilities without clear attribute ownership should be included in the compliance calculation even though the requirement of registering a whole certificate has only recently been adopted by the Commission as part of the M-RETS tracking system. However, because this issue is not fully resolved, I calculated Xcel's RES compliance

without the generation from PPAs without clear attribute ownership in order to note the effect on Xcel. In 2006, Xcel had 963,413 MWh of Minnesota RES eligible renewable generation from facilities with PPAs that were silent on ownership attributes. If the generation without clear ownership is excluded from RES eligible generation, the percent of Minnesota retail sales obtained from renewables falls to 4.2 percent.

Table 2: Xcel Compliance RES Requirements
Minnesota Retail Sales (in MWh)RES Renewable Generation (in MWh)

	Minnesota Retail Sales (in MWh)	RES Renewable Generation (in MWh)	Percent
2006	32,882,516	2,335,762	7.1%
Generation w/ unknown green tag ownership		963,413	
		1,372,349	4.2%

In either case, Xcel met Minn. Stat. §216B.1691, subd. 2 objective to obtain at least 1 percent of its Minnesota retail sales from renewable sources, and is therefore in compliance with the RES statute.

Q. What plans does Xcel have in place to comply with the 2010 RES standard to obtain 15 percent of its Minnesota retail sales from renewable sources?

A. Table 3 summarizes Xcel's forecast for 2010 adjusted for 1 and 1.5 percent energy-savings from demand-side management activities. As with the estimates of capacity need, I calculated planned additions using both a 30 percent capacity factor for wind, as well as a 40 percent capacity factor for wind. If all existing renewable generation, including generation from PPAs without clear environmental attribute ownership, is included in the compliance calculation, I estimate Xcel currently has plans in place to attain between

12.7 and 14.3 percent of its forecasted retail sales from renewables by 2010. If generation from PPAs without clear environmental attribute ownership are excluded from the compliance calculation, the percent of retail sales attributed to renewables falls to a range of 9.85 to 11.4 percent. Xcel continues to pursue wind and other renewable projects. As a result, I conclude that Xcel is on target to meet its 2010 RES requirement.

Table 3: Xcel Compliance with 2010 RES Requirements

	2010 forecasted Minnesota Retail Sales (in MWh) With 1.0% DSM	2010 forecasted Minnesota Retails Sales (in MWh) With 1.5% DSM
Forecast MN Retail Sales	33,761,524	33,592,316
2006 Renewable Generation (MWh)	2,335,762	2,335,762
Planned additions:		
Wind @30% cap. factor	1,952,812	1,952,812
Total MN RES Eligible	4,288,574	4,288,574
As a % if Retail Sales	12.70%	12.77%
Planned additions:		
Wind @ 40% capacity factor	2,470,152	2,470,152
Total MN RES Eligible	4,805,914	4,805,914
As a % of Retail Sales	14.23%	14.31%
2006 Generation excluding PPAs w/ silent attribute ownership	1,372,349	1,372,349
Planned additions:		
Wind @ 30% cap. Factor	1,952,812	1,952,812
Total MN RES Eligible	3,325,161	3,325,161
As a % if Retail Sales	9.85%	9.90%
Planned additions:		
Wind @ 40% cap. Factor	2,470,152	2,470,152
Total MN RES Eligible	3,842,501	3,842,501
As a % if Retail Sales	11.38%	11.44%

Q. What is your understanding of the process Xcel must undertake to ensure that PPAs without clear attribute ownership are available to the Company for RES compliance?

A. On April 16, 2008, Xcel filed a petition requesting a Commission determination of its ownership of all environmental attributes or RECs associated with the generation obtained from the PPAs in question. Xcel argues, among other points, that these contracts were entered into for the purpose of obtaining renewable generation to satisfy various state regulatory requirements.

Q. What are your conclusions regarding GRE's compliance with RES requirements in 2006.

A. For 2006, GRE had retail sales of 10,860,872 MWh of which 296,167 MWh or 2.7 percent was from renewable sources which are eligible for the Minnesota RES. Consequently, GRE has met its requirement to obtain at least 1 percent of its Minnesota retail sales from renewable sources.

Q. What plans does GRE have in place to comply with the 2010 objective to obtain 7 percent of its Minnesota retail sales from renewable sources?

A. Table 4, below, summarizes GRE's forecasted retail sales with a 1 percent and 1.5 percent energy savings from demand-side management activities. Assuming a 30 percent capacity factor for planned additions results in an estimate that approximately 5.7 percent of GRE's forecasted 2010 Minnesota retail sales will be obtained from renewable sources. Assuming a 40 percent capacity factor for wind results in estimated compliance rate of approximately 6.9 percent in 2010. I conclude that GRE is on track to comply with its 2010 renewable objective to obtain 7 percent of its Minnesota retail sales from renewable sources.

Table 4: Estimate of GRE's 2010 RES Compliance

	2010 forecasted Minnesota Retail Sales (in MWh) With 1.0% DSM	2010 forecasted Minnesota Retail Sales (in MWh) With 1.5% DSM
Forecast MN Retail Sales	14,454,814	14,381,969
2006 Renewable Generation (MWh)	296,167	296,167
Planned additions:		
Wind @30% cap. factor	522,972	522,972
Total MN RES Eligible	819,139	819,139
As a % if Retail Sales	5.67%	5.70%
Planned additions:		
Wind @ 40% capacity factor	697,296	697,296
Total MN RES Eligible	993,463	993,463
As a % of Retail Sales	6.87%	6.91%

VI. SUMMARY OF RECOMMENDATIONS

Q. Please summarize your recommendations.

A. I recommend the following:

- Find Xcel and GRE in compliance with Minn. Stat. §216B.1691.
- Find an estimated capacity need for Minnesota electric utilities for renewable generation of between 3,148 MW and 4,911 MW by 2020.

Q. Does this conclude your testimony?

A. Yes.

Docket No. ET2,E002/CN-06-1115
OES Exhibit No. ___ (SLP-1)

Susan L. Peirce
Minnesota Department of Commerce
85 Seventh Place East, Suite 500
St. Paul, Minnesota 55101

Professional Background

Public Utilities Rate Analyst in the Electric and Telecommunications Units, Minnesota Department of Commerce. 1991 – Present.

Provide analysis on various electric and telecommunications industry issues.

Testimony in Contested Case Proceedings:

- E002/GR-05-1428 Xcel Energy General Rate Case. Testified on rate design issues.
- E001/GR-05-748. Interstate Power & Light Company General Rate Case. Provided written testimony on rate design
- P421/C-96-1540, US WEST Generic Cost case. Testifed on OSS issues.
- P421/M-97-371, AT&T Wireless Services, Inc.'s Petition for arbitration with US WEST Communications, Inc.
- P421,466/M-96-1097, Sprint Communications Company L.P.'s Petition for arbitration with US WEST Communications, Inc. Testified on service quality and rate of return.
- P421,442/M-96-855, P5321,421/M-096-909, P3167,421/M-96-729, Petition by MCI Metro, MFS Commmunications, and AT&T for arbitration with US WEST Communications, Inc. Testified on service quality and rate of return.

Community Faculty Member, Metropolitan State University, 1990 - 1994.

Taught courses in the principles of Micro and Macreconomics.

Associate Economist, Norwest Corporation, 1988 - 1991.

Responsible for analyzing the impact of economic conditions on various industries and assessing industry risk. Managed a database of international, national and regional economic statistics.

International Credit Analyst, Norwest Bank Minneapolis, 1985 - 1988.

Prepared written credit reviews including ratio and cashflow analysis for Latin American private and public sector customers. Followed and assessed the impact of debt restructurings. Managed credit administration database.

Education

M.A. in Economics, University of Nebraska - Lincoln.
B.S. in Economics, Nebraska Wesleyan University, Lincoln, Nebraska.

Estimated RES Capacity Need:
Net 1.0% Energy Forecast and 30% Wind Capacity Factor

Summary							
Year	Net 1.0% Energy Forecast (MWh)	RES Requirement (%)	RES Gross Energy Need (MWh)	RES Energy Online (MWh)	RES Net Energy Need (MWh)	RES Nameplate Capacity Need (MW)	RES Accredited Capacity Need (MW)
	From OES Exhibit CTD-2	Statutory Percentage	Column 1 * Column 2	INPUT	Column 3 - Column 4	Column 5 / (0.3 * 8,760)	Column 6 * 0.135
	1	2	3	4	5	6	7
2010	71,602,528	7%/15%	7,713,099	7,032,641	680,458	259	35
2011	72,705,686	7%/15%	7,819,556	7,032,641	786,915	299	40
2012	73,713,688	12%/18%	10,913,044	7,032,641	3,880,404	1,477	199
2013	74,598,058	12%/18%	11,036,846	7,032,641	4,004,205	1,524	206
2014	75,463,439	12%/18%	11,157,841	7,032,641	4,125,201	1,570	212
2015	76,373,574	12%/18%	11,284,543	7,032,641	4,251,902	1,618	218
2016	77,348,298	17%/25%	16,000,727	7,032,641	8,968,087	3,413	461
2017	78,236,215	17%/25%	16,176,615	7,032,641	9,143,974	3,479	470
2018	79,184,319	17%/25%	16,364,524	7,032,641	9,331,884	3,551	479
2019	80,182,356	17%/25%	16,560,239	7,032,641	9,527,598	3,625	489
2020	81,223,780	20%/30%	19,937,938	7,032,641	12,905,297	4,911	663

Estimated RES Capacity Need:
Net 1.5% Energy Forecast and 30% Wind Capacity Factor

Summary							
Year	Net 1.5% Energy Forecast (MWh)	RES Requirement (%)	REO Gross Energy Need (MWh)	RES Energy Online (MWh)	RES Net Energy Need (MWh)	RES Nameplate Capacity Need (MW)	RES Accredited Capacity Need (MW)
	From OES Exhibit CTD-2	Statutory Percentage	Column 1 * Column 2	INPUT	Column 3 - Column 4	Column 5 / (0.3 * 8,760)	Column 6 * 0.135
	1	2	3	4	5	6	7
2010	71,256,699	7%/15%	7,675,354	7,032,641	642,713	245	33
2011	72,014,179	7%/15%	7,744,196	7,032,641	711,556	271	37
2012	72,677,736	12%/18%	10,758,553	7,032,641	3,725,912	1,418	191
2013	73,220,379	12%/18%	10,831,499	7,032,641	3,798,858	1,446	195
2014	73,747,195	12%/18%	10,902,135	7,032,641	3,869,494	1,472	199
2015	74,321,450	12%/18%	10,978,914	7,032,641	3,946,273	1,502	203
2016	74,962,949	17%/25%	15,503,375	7,032,641	8,470,735	3,223	435
2017	75,521,076	17%/25%	15,610,668	7,032,641	8,578,028	3,264	441
2018	76,142,686	17%/25%	15,730,684	7,032,641	8,698,043	3,310	447
2019	76,817,063	17%/25%	15,859,130	7,032,641	8,826,489	3,359	453
2020	77,537,766	20%/30%	19,024,354	7,032,641	11,991,713	4,563	616

Estimated RES Capacity Need:
Net 1% Energy Forecast and 40% Wind Capacity Factor

Summary							
Year	Net 1.0% Energy Forecast (MWh)	RES Requirement (%)	RES Gross Energy Need (MWh)	RES Energy Online (MWh)	RES Net Energy Need (MWh)	RES Nameplate Capacity Need (MW)	RES Accredited Capacity Need (MW)
	From OES Exhibit CTD-2	Statutory Percentage	Column 1 * Column 2	INPUT	Column 3 - Column 4	Column 5 / (0.4 * 8,760)	Column 6 * 0.135
	1	2	3	4	5	6	7
2010	71,602,528	7%/15%	7,713,099	7,994,340	-281,241	(80)	-11
2011	72,705,686	7%/15%	7,819,556	7,994,340	-174,784	(50)	-7
2012	73,713,688	12%/18%	10,913,044	7,994,340	2,918,704	833	112
2013	74,598,058	12%/18%	11,036,846	7,994,340	3,042,506	868	117
2014	75,463,439	12%/18%	11,157,841	7,994,340	3,163,501	903	122
2015	76,373,574	12%/18%	11,284,543	7,994,340	3,290,202	939	127
2016	77,348,298	17%/25%	16,000,727	7,994,340	8,006,387	2,285	308
2017	78,236,215	17%/25%	16,176,615	7,994,340	8,182,274	2,335	315
2018	79,184,319	17%/25%	16,364,524	7,994,340	8,370,184	2,389	322
2019	80,182,356	17%/25%	16,560,239	7,994,340	8,565,898	2,445	330
2020	81,223,780	20%/30%	19,937,938	7,994,340	11,943,598	3,409	460

Estimated RES Capacity Need:
Net 1.5% Energy Forecast and 40% Wind Capacity Factor

Summary							
Year	Net 1.5% Energy Forecast (MWh)	RES Requirement (%)	RES Gross Energy Need (MWh)	RES Energy Online (MWh)	RES Net Energy Need (MWh)	RES Nameplate Capacity Need (MW)	RES Accredited Capacity Need (MW)
	From OES Exhibit CTD-2	Statutory Percentage	Column 1 * Column 2	INPUT	Column 3 - Column 4	Column 5 / (0.4 * 8,760)	Column 6 * 0.135
	1	2	3	4	5	6	7
2010	71,256,699	7%/15%	7,675,354	7,994,340	-318,986	(91)	-12
2011	72,014,179	7%/15%	7,744,196	7,994,340	-250,144	(71)	-10
2012	72,677,736	12%/18%	10,758,553	7,994,340	2,764,213	789	106
2013	73,220,379	12%/18%	10,831,499	7,994,340	2,837,159	810	109
2014	73,747,195	12%/18%	10,902,135	7,994,340	2,907,794	830	112
2015	74,321,450	12%/18%	10,978,914	7,994,340	2,984,573	852	115
2016	74,962,949	17%/25%	15,503,375	7,994,340	7,509,035	2,143	289
2017	75,521,076	17%/25%	15,610,668	7,994,340	7,616,328	2,174	293
2018	76,142,686	17%/25%	15,730,684	7,994,340	7,736,343	2,208	298
2019	76,817,063	17%/25%	15,859,130	7,994,340	7,864,790	2,245	303
2020	77,537,766	20%/30%	19,024,354	7,994,340	11,030,013	3,148	425

Estimate of 2010 Renewable Generation

Docket No. ET2,E002/CN-06-1115
OES Exhibit No. ___ (SLP-6)

Company	Total System Retail Sales (MWh) 2006	Total Minnesota Retail Sales (MWh) 2006	MN as % of Total 2006	Total Renewable Generation (MWh) 2006	Renewables assigned to other projects/not eligible (MWh)	Minnesota Eligible Renewable Generation (MWh)	RES as % of Retail Sales	Planned Additional Renewable Generation to 2010				Estimated 2010 Renewable Generation (MWh)	
								Adjustment for 2007 Additions	Wind - 30% Capacity Factor	Wind - 40% Capacity Factor	Other: Biomass/ Hydro	Wind - 30% Capacity Factor	Wind - 40% Capacity Factor
	Col. B OES #33	Col. C OES #33	Col. D Col B/ Col. C	Col. E OES #34	Col. F OES #34	Col. G Col. E - Col. F	Col. H Col. G/Col. C	Col. I OES #34	Col. J OES #34	Col. K OES #34	Col. L OES #34	Col. M Cols. C+I+J+L	Col. N Cols. G+I+K+L
CMMPA	519,399	519,399	100.0%	30,045	100	29,945	5.8%	-	36,792	49,056	-	66,737	79,001
Dairyland Power Cooperative	4,388,479	756,325	17.2%	179,233	148,405	30,828	4.1%	-	18,081	24,108	9	48,918	54,945
Great River Energy (GRE)	10,860,872	10,860,872	100.0%	550,447	254,280	296,167	2.7%	-	522,972	697,296	-	819,139	993,463
Interstate Power & Light (IPL)	16,061,134	835,777	5.2%	769,950	738,053	31,897	3.8%	-	-	-		31,897	31,897
MN Municipal Power Agency (MMPA)	1,338,311	1,338,311	100.0%	27,360	981	26,379	2.0%	-	-	-	-	26,379	26,379
Minnesota Power	9,077,994	9,077,994	100.0%	759,446	135,424	624,022	6.9%	162,181	92,768	123,691	-	878,972	909,894
Minnkota Power Cooperative	3,401,879	1,728,174	50.8%	2,794	2,794	-	0.0%	-	366,606	488,808		366,606	488,808
Missouri River Energy Services (MRES)	1,890,976	996,079	52.7%	9,748	1,594	8,154	0.8%	-	53,598	71,464	-	61,752	79,618
Otter Tail Power	3,987,770	2,085,660	52.3%	107,135	52,571	54,565	2.6%	(20,389)	84,583	112,777	1,100	119,858	148,052
Rochester Public Utilities				13,513	-	13,513					17,520	31,033	31,033
So. MN Municpal Power Agency SMMPA	2,966,000	2,966,000	100.0%	65,734	7,634	58,101	2.0%	-	157,680	210,240	76,996	292,777	345,337
Xcel	43,622,668	32,882,516	75.4%	3,313,725	977,964	2,335,762	7.1%	368,046	1,552,019	2,069,359	32,747	4,288,574	4,805,914
Total	98,115,482	64,047,107	65.3%	5,829,131	2,319,799	3,509,332	5.5%	509,838	2,885,099	3,846,798	128,372	7,032,641	7,994,340

9. Data Security

The following are a minimum set of security practice requirements for M-RETS to ensure data integrity and confidentiality:

1. Secured web portal interface with password protection for static data collection, user access and reporting.
2. Restricted access privileges based on participant and user roles using digital Certificates.
3. Well-defined system backup and recovery processes.
4. Secured file transfer and data upload processes using encrypted communications for all data interfaces.

10. Creation of Certificates and RRCs

M-RETs Certificates are issued in whole numbers only. A Certificate created and tracked within M-RETS will represent all of the renewable attributes from one MWh of renewable generation. M-RETS Certificates are "Whole Certificates," meaning that none of the renewable attributes may be split off from the Certificate while it is in circulation in the M-RETS system. Once a M-RETS Certificate is created, no changes can be made to that Certificate.

M-RETS does not define the life time or expiration date for Certificates. States and provinces may do so outside of M-RETS to meet their own requirements.

10.1. Certificate Creation

The M-RETS Administrator will issue one electronic Certificate for each MWh of energy that is generated by those generation units that are registered with M-RETS and are physically located in one of the participating M-RETS states or provinces or are located outside of the geographic footprint of M-RETS but are either owned by a participating utility, or have a contract with a participating utility to deliver energy into one of the states in the M-RETS footprint.

Certificates will be issued based on the number of whole MWhs on the Generation Activity Log on the day of Certificate creation. For self-reporting generators, the reported electricity production will be calculated by M-RETS as the difference between current and previous cumulative meter read entered.

Each Certificate shall have a unique serial number. Certificate serial numbers shall contain codes embedded in the number that indicate such things as the generation unit ID, the location of the generator, and the vintage (month and year of generation) of the Certificate. The exact serial number format will be determined at a later date.

Certificates imported from a compatible tracking system must meet equivalent standards to M-RETS. M-RETS will issue an M-RETS serial number for Certificates imported from compatible tracking systems, as described below in Section 15.

Self-Reporting Interface: A standard Internet-based data entry portal which serves as the method for a Self-Reporting Generator to communicate dynamic data to the M-RETS Administrator pursuant to Section 7.8. The protocol for entering data via Self-Reporting Interface will be documented in the Interface Control Document for Self-Reporting Generators.

Standing Orders: A reoccurring, automatic transfer of M-RETS Certificates from an Account Holder's Active Subaccount to one of their other Subaccounts, or to an Active Subaccount held by a different Account Holder.

Static Data: Static data describes the attributes of the generating unit. Static information generally includes information related to the characteristics of the generation facility such as technology type, ownership or location. See Appendix B-1 for a list of M-RETS Static Data Fields.

Station Service: The electric supply for the ancillary equipment used to operate a generating station or substation.

Whole/ Whole Certificate: A "Whole Certificate" is one where none of the renewable attributes have been separately sold, given, or otherwise transferred to another party by a deliberate act of the Certificate owner. Renewable attributes shall include the environmental attributes that are defined as any and all credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, directly attributable to the generation from the generation unit(s). Individual states and provinces may create different definitions of renewable Certificates. The M-RETS Administrator may consider revision of the definition of an M-RETS Certificate in the future if needed to better meet the needs of state and provincial programs. See also definition of "Certificate."

Wholesale Generation Also Serving On-Site Loads: Generators interconnected to the transmission systems, but with on-site loads other than station-service drawing service from the generator before the control area's revenue metering point. Such generators either (i) have the net generation supplied to the grid reportable by the control area to M-RETS, or (ii) are not reportable by the control area to M-RETS on a unit-specific basis.

Wisconsin Electric Provider: An electric utility or retail electric cooperative serving customers in the State of Wisconsin. A list of electric providers eligible to establish a RRC Account will be provided to the M-RETS Administrator by the Wisconsin Public Service Commission.

☐ **Non Public Document – Contains Trade Secret Data**
☐ **Public Document – Trade Secret Data Excised**
☒ **Public Document**

Xcel Energy
Docket No.: E002, ET2/CN-06-1115
Response To: Susan Peirce — Information Request No. 41
MN Department of Commerce
Date Received: January 22, 2008

Question:

For each of the facilities identified in response to DOC No. 34, please identify whether any of the environmental attributes associated with the renewable energy are being sold in voluntary markets as carbon offsets or other environmental offsets. If so, please identify the following information:

a. The amount of attributes sold in kWh for 2006 and year-to-date 2007.

b. The market or offset program in which the attributes were sold.

c. The amount of energy represented by the attribute sale included in Column N (Generation 1/1/06-12/31/06 in kWh), Column O (Generation YTD 2007 in kWh), and Column P (Amount of 2006 generation assigned to other renewable projects-kWh) in the spreadsheet response to DOC No. 34.

d. Please indicate whether or not the intent is to ensure that any attribute sales are kept separate from energy reported for REO/RES or green pricing purposes.

d. If attribute sales are entirely separate from energy reported for REO/RES or green pricing purposes, please explain how the sales of each are accounted for, and the steps taken to ensure that none of the attributes associated with energy intended for REO/RES or green pricing purposes are sold in other markets pertaining to these attributes.

Response:

The following utilities have not sold any of the environmental attributes associated with the facilities identified in Department of Commerce Information Request No. 34: Xcel Energy, Minnesota Power, Otter Tail Power Company, Rochester Public Utilities, Southern Minnesota Municipal Power Agency, Missouri River Energy Services and Wisconsin Public Power Inc. Information about Minnkota Power

Cooperative was not included in response to Request to No. 34, but its renewable wind resources were identified in response to Department of Commerce Information Request No. 39, and Minnkota owns the environmental attributes associated with those facilities.

The following utilities have sold environmental attributes associated with the facilities identified in Department of Commerce Information Request No. 34: Central Minnesota Municipal Power Agency, Dairyland Power Cooperative and Great River Energy. Details about those sales are contained on the attached Excel spreadsheet.

Response By:	Matt Lacey
Title:	Regulatory Policy Specialist
Department:	Transmission
Company:	Great River Energy
Telephone:	763-241-2223
Date:	February 12, 2008

2138732v1

Attachment to DOC0041

	0034	0041a	0041 b	0041 c	0041 d	0041 d2
	Relevant Facility	Attributes Sold 2006, 2007 kWh	Market or Offset Program	Energy sold (kWh)	Tracked separately from REO/RES?	How are sales tracked?
Central Minnesota Municipal Power Agency						
	Hancock Wind Energy Center	9,322,915 (2006)	unknown	9,322,915	Tracked separately from REO/RES	It is anticipated that there will be few instances when CMMPA will sell any credits. Such transactions will be manually segregated in the reporting process.
	Wolf Wind	7468652 (2006)	unknown	7,468,652	see response above	see response above
	Blue Breezes	2921760 (2006)	unknown	2,921,760	see response above	see response above
Great River Energy						
	Trimont	227,500,000 (2006)	RECs- Voluntary	Renewable energy units reported as REO/RES-eligible exclude the energy used for REC sales. Thus, Column N is the net 2006 energy generation for each REO-eligible facility. Column P is the 2006 REC, green pricing or "other" energy sales for each REO-eligible facility. Column R is calculated as the difference between Column N and Column P. The values in Column O are not related to Column N or Column P.	Great River Energy's intent is to ensure that the energy generated to support REC sales is not double counted in the calculation of GRE's achievement of the REO/RES or green pricing purposes.	Great River Energy maintains an internal database that tracks renewable energy generation using MISO metering data and MV90 metering data (the same data that M-RETs will utilize). Great River Energy also maintains an internal database that tracks Member energy sales and green pricing sales. Great River Energy assigns renewable generation to its compliance obligations (REO/RES/green pricing) and pursues REC sales only when it is determined that renewable energy generation obligations can be met first.
	Trimont	271,600,000 (2007)	RECs- Voluntary		see response above	see response above
	Elk River Station	150,000 (2006)	RECs- Voluntary		see response above	see response above
	Elk River Station	200,000 (2007)	RECs- Voluntary		see response above	see response above
Dairyland Power Cooperative						
	McNelius Wind Farm	2945000 (2006)	RECs- Voluntary	2,945,000	Tracked separately from REO/RES	Sales are tracked internally through Gen~Sys Energy
	McNelius Wind Farm	1043000 (2007)	RECs- Voluntary	1,043,000	Tracked separately from REO/RES	Sales are tracked internally through Gen~Sys Energy

Response of
Interstate Power and Light Company
to
MINNESOTA DEPARTMENT OF COMMERCE
Information Request No. 68

Docket Number:	E001/RP-05-2029
Date of Request:	December 14, 2007
Response Due:	December 24, 2007
Information Requested By:	Susan L. Peirce
Date Responded:	December 21, 2007
Author:	Jamie Niccolls
Author's Title:	Sr Asset Strategy Consultant
Author's Telephone No.:	(319) 786-4882
Witness: (If other than Author)	
Subject:	
Reference:	

Information Request No. 68

Please complete Attachment A (Excel Worksheet) for each renewable resource currently used to serve Minnesota customers, or known and approved projects forecast to come on line by January 1, 2010.

Response

Please see Attachment A.

Attachment A: Data on Renewable Energy Sources

Please provide the following information for all sources of renewable energy generation currently or forecast to be in use
(If you would like a copy of this spreadsheet electronically, please e-mail: susan.peirce@state.mn.us)

Interstate Power and Light Company

Facility Name	County	State	Energy Source	Technology Type	Is it a Multi-Fuel Unit? Y/N?	If Y to Col. F. Specify the fuels by %	Vintage	Nameplate Capacity (MW)	Accredited Capacity (MW)	PPA/Own	If PPA, provide the expiration date of Contract	Deliver to MN? Y or N	Generation (1/1/06 - 12/31/06) in kWh
Americas' Hydro	various	IA	hydro					1.99		PPA		Energy is delivered to IPL, and "delivered" to customers via energy adjustment clause. MN customer share is prorated by state energy sales, ~5.21%	8,347,109
Arnold Windfarm, LLC	Nobles	MN	wind				2005	1.65		PPA	2020		6,352,800
B.F.C. Electric Bio Fuels	Linn	IA	biomass/waste				1998	7		PPA	2008		14,840,851
City of Cedar Rapids Hydro	Linn	IA	hydro					2.1		PPA			8,859,600
Flying Cloud Power Partners	Dickinson	IA	wind				2003	43.5	8	PPA	2018		151,499,880
FPL Hancock County Energy	Hancock	IA	wind				2004	56.8	7	PPA	2027		153,180,855
G McNeilus,LLC (Adams wind farm)	Mower	MN	wind				2003	1.25	0.33	PPA	2018		7,469,430
GarMar Wind I (Adams wind farm)	Mower	MN	wind				2003	1.25	0.33	PPA	2018		3,640,650
Hawkeye Power Partners, LLC	Cerro Gord	IA	wind				1999	41.25	4	PPA	2024		102,550,631
Hardin Hilltop/Wind	Greene	IA	wind				2007	14.7		PPA	2027		-
LJ Trust LLC & Zachary Ridge LLC	Osceola	IA	wind				2006	3.6		PPA	2011		119,000
McNeilus Windfarm, LLC (Adams wind farm)	Mower	MN	wind				2003	1.5	0.33	PPA	2018		3,806,163
Minwind I	Rock	MN	wind				2002	1.9	0.5	PPA	2017		5,354,928
Minwind II	Rock	MN	wind				2002	1.9	0.5	PPA	2017		5,255,933
Mitchell Mill Hydro, LLC	Mitchell	IA	hydro					1		PPA			2,666,650
Modern Hydro	Butler	IA	hydro					0.4		PPA			1,937,600
NAE Allendorf, LLC (formerly Navitas/Allendo	Osceola	IA	wind				1997	1.2	1	PPA	2030		918,720
Neppel Energy LLC	Emmett	IA	wind				2003	1.5		PPA	2018		5,185,000

Facility Name	County	State	Energy Source	Technology Type	Is it a Multi-Fuel Unit? Y/N?	If Y to Col. F, Specify the fuels by %	Vintage	Nameplate Capacity (MW)	Accredited Capacity (MW)	PPA/Own	If PPA, provide the expiration date of Contract	Deliver to MN? Y or N	Generation (1/1/06 - 12/31/06) in kWh
Ottumwa Water	Wapello	IA	hydro					3.25		PPA			16,669,593
Sibley Hills, LLC	Osceola	IA	wind							PPA			
Sieve Windfarm	Nobles	MN	wind				2003	1.46			2008		1,860,593
Storm Lake Power Partners II LLC	Buena Vist	IA	wind				2002	0.95		PPA	2017		3,046,000
							1999	80.25	10	PPA	2019		204,631,000
Thorland	Linn	IA	solar				2005	0.007		PPA			11,392
Wilmot Hills	Nobles	MN	wind				2002	1.5		PPA	2012		6,222,466
Windom Wind farm:													-
ALP Wind, LLC	Cottonwoo	MN	wind				2004	1.25	0.2	PPA	2019		2,120,691
Hypergen, LLC	Cottonwoo	MN	wind				2004	1.25	0.2	PPA	2019		2,250,147
JMC Wind, LLC	Cottonwoo	MN	wind				2004	1.25	0.2	PPA	2019		2,216,721
LimlEnergy, LLC	Cottonwoo	MN	wind				2004	1.25	0.2	PPA	2019		2,081,329
Maiden Winds, LLC	Cottonwoo	MN	wind				2004	1.25	0.2	PPA	2019		1,863,369
MD&E Wind, LLC	Cottonwoo	MN	wind				2004	1.25	0.2	PPA	2019		2,171,841
Power Beyond, LLC	Cottonwoo	MN	wind				2004	1.25	0.2	PPA	2019		2,167,901
Power Blades Windfarm, LLC	Cottonwoo	MN	wind				2004	1.25	0.2	PPA	2019		2,127,253
Stony Hills Wind Farm, LLC	Cottonwoo	MN	wind				2004	1.25	0.2	PPA	2019		2,016,333
Tower of Power, LLC	Cottonwoo	MN	wind				2004	1.25	0.2	PPA	2019		1,962,968
Whispering Wind Acres, LLC	Cottonwoo	MN	wind				2004	1.25	0.2	PPA	2019		2,247,571
White Caps Windfarm, LLC	Cottonwoo	MN	wind				2004	1.25	0.2	PPA	2019		2,163,876
TOTAL								287					739,816,844
Note 1 - 2007 Data is incomplete and excludes Second Nature													

Attachment A: Data on Renewable Energy					
Please provide the following information for all					
(If you would like a copy of this spreadsheet e					
Interstate Power and Light Company					
Facility Name	Generation YTD 2007 in kWh Note 1	Amount of 2006 Generation Assigned to other Renew. Projects (kWh)	For the amount in Col. P Identify the project to which it is assigned (ie. green pricing, other state prog.)	MN REO/RES Eligible (kWh)	Comments
Americas' Hydro	7,158,396				IPL has not researched whether it obtains the environmental attributes for this site
Arnold Windfarm, LLC	6,174,000				
B.F.C. Electric Bio Fuels	2,122,390			330,981	
				773,208	
City of Cedar Rapids Hydro	626,400				IPL has not researched whether it obtains the environmental attributes for this site
Flying Cloud Power Partners	134,804,880			3,985,644	reduced for 2006 one time sale of 75,000 renewable energy credits
FPL Hancock County Energy	107,398,861	30,636,171	Second Nature	6,103,655	reduced for Second Nature and sale to CIPCO
G McNeilus,LLC (Adams wind farm)	7,523,135			389,157	
GarMar Wind I (Adams wind farm)	2,911,686			189,678	
Hawkeye Power Partners, LLC	98,382,926			5,342,888	
Hardin Hilltop/Wind	15,848,687			-	
LJ Trust LLC & Zachary Ridge LLC	179,000			-	Environmental Attributes remain with seller
McNeilus Windfarm, LLC (Adams wind farm)	3,757,089			198,301	
Minwind I	5,232,670			278,992	
Minwind II	5,088,432			273,834	
Mitchell Mill Hydro, LLC	2,576,350				IPL has not researched whether it obtains the environmental attributes for this site
Modern Hydro	1,632,050				IPL has not researched whether it obtains the environmental attributes for this site
NAE Allendorf, LLC (formerly Navitas/Allendo	848,520			47,865	
Neppel Energy LLC	4,974,000			270,139	

Facility Name	Generation YTD 2007 in kWh Note 1	Amount of 2006 Generation Assigned to other Renew. Projects (kWh)	For the amount in Col. P Identify the project to which it is assigned (ie. green pricing, other state prog.)	MN REO/RES Eligible (kWh)	Comments
Ottumwa Water	11,455,611				IPL has not researched whether it obtains the environmental attributes for this site
Sibley Hills, LLC	1,829,388			-	Environmental Attributes remain with seller
Sleve Windfarm	2,667,000				
Storm Lake Power Partners II LLC	175,264,000	126,871,220	Iowa Renewable Requirements	158,697	
Thorland				10,661,275	
		11,392	Second Nature	-	all energy used for Second Nature Program
Wilmot Hills					
Windom Wind farm:	40,250,000	6,222,466	Second Nature	-	all energy used for Second Nature Program
ALP Wind, LLC					
Hypergen, LLC				110,488	
JMC Wind, LLC				117,233	
LimiEnergy, LLC				115,491	
Maiden Winds, LLC				108,437	
MD&E Wind, LLC				97,082	
Power Beyond, LLC				113,153	
Power Blades Windfarm, LLC				112,948	
Stony Hills Wind Farm, LLC				110,830	
Tower of Power, LLC				105,051	
Whispering Wind Acres, LLC				102,271	
White Caps Windfarm, LLC				117,098	
TOTAL	638,705,470			112,738	
Note 1 - 2007 Data is incomplete and exclude:				30,327,134	

☐ **Non Public Document – Contains Trade Secret Data**
☐ **Public Document – Trade Secret Data Excised**
☒ **Public Document**

Xcel Energy
Docket No.: E002, ET2/CN-06-1115
Response To: Susan L. Peirce, MN Department of Commerce — Information Request No. 34
Date Received: November 9, 2007

Question:

Please complete Attachment A (Excel Worksheet) for each renewable resource currently used to serve Minnesota Customers, or known and approved projects forecast to come on line by January 1, 2010.

Response:

See Consolidated Attachment A (Excel Worksheet).

It is Applicants' understanding that the Department seeks this data to use as an input to calculate the need for the facilities. Applicants further understand that the Department seeks information for Applicants, the other CapX2020 utilities who signed Project Development Agreements for one of the three 345 kV transmission lines that are the subject of this proceeding, Minnkota Power Cooperative ("Minnkota") and Minnesota Municipal Power Agency ("MMPA").

Based on this understanding, the requested information was gathered from Applicants and all of the CapX2020 utilities that have signed a Project Development Agreement for one of the three 345 kV transmission lines that are the subject of this proceeding. The attached spreadsheet provides that information. Information for Minnkota and MMPA was not readily available and is not included.

Response By:	Matt Lacey
Title:	Regulatory Policy Specialist
Department:	Transmission
Company:	Great River Energy
Telephone:	763-241-2223
Date:	January 11, 2008

Attachment A: Data on Renewable Energy Sources

Please provide the following information for all sources of renewable energy generation currently or forecast to be in use
(If you would like a copy of this spreadsheet electronically, please e-mail: susan.peirce@state.mn.us)

Facility Name	County	State	Energy Source	Technology Type	Is it a Multi-Fuel Unit? Y/N?	If Y to Col. F, Specify the fuels by %	Vintage	Nameplate Capacity (MW)	Accredited Capacity (MW)	PPA/Own	If PPA, provide the expiration date of Contract	Deliver to MN? Y or N	Generation (1/1/06 - 12/31/06) in kWh	Generation YTD 2007 in kWh
Central Minnesota Municipal Power Agency														
Glencoe Landfill Gas	McLeod	MN	Methane	Landfill gas/Turb	N		2008	2.5	0	PPA	2028	Y	0	0
Hancock Wind Energy Center	Hancock	IA	Wind	Turbine	N		June 2005	6	0	Agency PP	Annual	Y	15,600,000	14,300,000
Blue Breezes	Faribault	MN	Wind	Turbine	N		12/15/2005	2.5	0	Member PP	12/15/2025	Y	3,930,000	6,224,568
Wolf Wind	Nobles	MN	Wind	Turbine	N		April 2006	6.25	0	Agency PP	3/31/2021	Y	10,515,000	14,750,000
Mt. Lake Wind	Watonwar	MN	Wind	Turbine	N		August 2007	1.25	0	Member Ov	n/a	Y	0	0
Jeffers Wind Energy Center	Cottonwoo	MN	Wind	Turbine	N		Not in Service	10	0	Agency PP	2033	Y	0	0
Willmar Wind	Kandiyohi	MN	Wind	Turbine	N		Unknown	4	0	Unknown	Unknown	Y	0	0
Total							**2006 nameplate**	**14.75**					**30,045,000**	**35,274,568**
							2007 nameplate	**16**						
Dairyland Power Cooperative														
[See Footnote]									[Note 1]					* as of 10/31/07
Flambeau	Rusk	WI	Hydro	Hydro	N		1951	15.0	23	Own	n/a	Y	44,484,000	28,668,000
McNeilus Wind Farm	Mower	MN	Wind	Wind	N		2003	17.4	[Note 1]	PPA	2023	Y	50,677,000	44,545,000
Seven Mile Creek Landfill	Dunn	WI	Biogas	Landfill	N		2004	3.0	[Note 1]	Own	n/a	Y	19,393,000	12,600,000
Wild Rose Manure Digester	Vernon	WI	Biogas	Digester	N		2005	0.8	[Note 1]	Own/PPA	2035	Y	3,609,000	1,863,000
Five Star Dairy Manure Digester	Dunn	WI	Biogas	Digester	N		2005	0.8	[Note 1]	Own/PPA	2035	Y	4,220,000	4,069,000
Timberline Trail Landfill	Rusk	WI	Biogas	Landfill	N		2006	4.0	[Note 1]	PPA	2026	Y	23,789,000	21,234,000
Central Disposal Landfill	Winnebag	IA	Biogas	Landfill	N		2006	5.0	[Note 1]	PPA	2026	Y	29,731,000	33,195,000
Norswiss Farms Manure Digester	Barron	WI	Biogas	Digester	N		2006	0.8	[Note 1]	Own/PPA	2036	Y	3,330,000	3,123,000
Bach Farms Manure Digester	Clark	WI	Biogas	Digester	N		2008	0.8	[Note 1]	Own/PPA	2038	Y	N?A	N?A
Daley Farms Manure Digester	Goodhue	MN	Biogas	Digester	N		2008	0.8	[Note 1]	Own/PPA	2038	Y	N?A	N?A
Sarona Landfill	Washburn	WI	Biogas	Landfill	N		2008	2.7	[Note 1]	PPA	2028	Y	N?A	N?A
Timberline Trail Landfill	Rusk	WI	Biogas	Landfill	N		2008	2.4	[Note 1]	PPA	2028	Y	N?A	N?A
Central Disposal Landfill	Winnebag	IA	Biogas	Landfill	N		2008	1.6	[Note 1]	PPA	2028	Y	N?A	N?A
Wind Farm (Iberdrola)	Winnebag	IA	Wind	Wind	N		2008	20.0	[Note 1]	PPA	2028	Y	N?A	N?A
Seven Mile Creek Landfill	Dunn	WI	Biogas	Landfill	N		2009	1.0	[Note 1]	Own	2029	Y	N?A	N?A
Sarona Landfill	Washburn	WI	Biogas	Landfill	N		2009	0.8	[Note 1]	PPA	2029	Y	N?A	N?A
Three Manure Digesters	TBD	TBD	Biogas	Digester	N		2010	2.4	[Note 1]	TBD	2040	Y	N?A	N?A
McNeilus Wind Farm	Mower	MN	Wind	Wind	N		2008/2009	20.0	[Note 1]	PPA	2029	Y	N?A	N?A
Total							**2006 and 2007**	**46.8**					**179,233,000**	**149,297,000**

[1] Accredited Capacity to be determined by MAPP generation reserve sharing pool standards.
[2] All of DPC's renewable generation is pooled and the MWhs generated are assigned to states based on each individual state's requirement.
[3] This is the DPC System total that is eligible for the MN REO/RES. This is not an allocation of KWhs to MN REO/RES.

Attachment A: Data on Renewabl			
Please provide the following informa			
(If you would like a copy of this spre:			
Facility Name	Amount of 2006 Generation Assigned to other Renew. Projects (kWh)	For the amount in Col. P Identify the project to which it is assigned (ie. green pricing, other state prog.)	2006 MN REO Eligible (kWh)
Central Minnesota Municipal Pow			
Glencoe Landfill Gas	0	N/A	0
Hancock Wind Energy Center	100,000	GREEN PRICING	15500000
Blue Breezes	0	N/A	3930000
Wolf Wind	0	N/A	10515000
Mt. Lake Wind	0	N/A	0
Jeffers Wind Energy Center	0	N/A	0
Willmar Wind	0	N/A	0
Total	**100,000**		**29945000**
Dairyland Power Cooperative			
[See Footnote]	[Note 2]	[Note 2]	[Note 3]
Flambeau	[Note 2]	[Note 2]	44,484,000
McNeilus Wind Farm	[Note 2]	[Note 2]	50,677,000
Seven Mile Creek Landfill	[Note 2]	[Note 2]	19,393,000
Wild Rose Manure Digester	[Note 2]	[Note 2]	3,609,000
Five Star Dairy Manure Digester	[Note 2]	[Note 2]	4,220,000
Timberline Trail Landfill	[Note 2]	[Note 2]	23,789,000
Central Disposal Landfill	[Note 2]	[Note 2]	29,731,000
Norswiss Farms Manure Digester	[Note 2]	[Note 2]	3,330,000
Bach Farms Manure Digester	[Note 2]	[Note 2]	all
Daley Farms Manure Digester	[Note 2]	[Note 2]	all
Sarona Landfill	[Note 2]	[Note 2]	all
Timberline Trail Landfill	[Note 2]	[Note 2]	all
Central Disposal Landfill	[Note 2]	[Note 2]	all
Wind Farm (Iberdrola)	[Note 2]	[Note 2]	all
Seven Mile Creek Landfill	[Note 2]	[Note 2]	all
Sarona Landfill	[Note 2]	[Note 2]	all
Three Manure Digesters	[Note 2]	[Note 2]	all
McNeilus Wind Farm	[Note 2]	[Note 2]	all
Total			**179,233,000**
[1] Accredited Capacity to be determ			
[2] All of DPC's renewable generatic			
[3] This is the DPC System total tha			

Facility Name	County	State	Energy Source	Technology Type	Is it a Multi-Fuel Unit? Y/N?	If Y to Col. F, Specify the fuels by %	Vintage	Nameplate Capacity (MW)	Accredited Capacity (MW)	PPA/Own	If PPA, provide the expiration date of Contract	Deliver to MN? Y or N	Generation (1/1/06 - 12/31/06) in kWh	Generation YTD 2007 in kWh
Great River Energy														
Chandler	Murray	MN	Wind	Renewable	N		2/1/1999	1.98	0.15	PPA	4/30/2014	Y	6,554,000	4,093,000
Champepadan	Murray	MN	Wind	Renewable	N		12/1/2001	1.98	0.2	PPA	11/30/2016	Y	5,984,000	5,618,000
Moulten	Murray	MN	Wind	Renewable	N		12/1/2001	1.98	0.12	PPA	11/31/2016	Y	6,642,000	6,277,000
McNeilus	Dodge	MN	Wind	Renewable	N		2/28/2003	5.7	0.42	PPA	1/31/2018	Y	13,154,000	11,630,000
Christoffer	Jackson	MN	Wind	Renewable	N		12/1/2003	5.7	0.58	PPA	5/30/2018	Y	18,879,000	14,527,000
Trimont	Martin/Jac	MN	Wind	Renewable	N		12/1/2005	100.5	13.33	PPA	11/30/2020	Y	327,235,000	290,730,000
Elk River Station, Unit 1 - 3	Sherburne	MN	RDF	Thermal	N		8/19/1989	50	36.8	Own	N/A	Y	148,667,700	132,649,400
Elk River Municipal	Sherburne	MN	Landfill Gas	Reciprocating Engine	N		11/1/2002	3.2	Not accredited	PPA	10/31/2022	N	23,331,000	21,770,000
Prairie Star	Mower	MN	Wind	Renewable	N		Q4 07	100	N/A	PPA	12/31/27-approx	Y		N/A
Elm Creek	Martin/Jac	MN	Wind	Renewable	N		2008	99	N/A	PPA	18 yr from COD	Y		N/A
Total							**2006 nameplate**	**171.0**					**550,446,700**	**487,294,400**
							2007 nameplate	**271.0**						

Facility Name	Amount of 2006 Generation Assigned to other Renew. Projects (kWh)	For the amount in Col. P Identify the project to which it is assigned (ie. green pricing, other state prog.)	2006 MN REO Eligible (kWh)
Great River Energy			
Chandler	2,184,667	Wholesale contract	0
	4,369,333	MN Green Pricing	
Champepadan	284,920	WI RPS	0
	5,699,080	MN Green Pricing	
Moulten	3,321,000	MN Green Pricing	0
	3,321,000	Wholesale contract	
McNeilus	5,889,587	MN Green Pricing	5,704,413
	240,000	Wholesale contract	
	240,000	Wholesale contract	
	480,000	Wholesale contract	
	600,000	GRE own use	
Christoffer	-		18879000
Trimont	227500000	REC sales	99735000
Elk River Station, Unit 1 - 3	150,000	Wholesale Contract	148517700
Elk River Municipal	-		23331000
Prairie Star	N/A	N/A	N/A
Elm Creek	N/A	N/A	N/A
Total	**254,279,587**		**296,167,113**

Facility Name	County	State	Energy Source	Technology Type	Is it a Multi-Fuel Unit? Y/N?	If Y to Col. F, Specify the fuels by %	Vintage	Nameplate Capacity (MW)	Accredited Capacity (MW)	PPA/Own	If PPA, provide the expiration date of Contract	Deliver to MN? Y or N	Generation (1/1/06 - 12/31/06) in kWh	Generation YTD 2007 in kWh
Minnesota Power														
Little Falls 5	Morrison	MN	WAT	Run of River	N		1906	0.4		Own		Y	-	-
Little Falls 6	Morrison	MN	WAT	Run of River	N		1906	0.4	0.3	Own		Y	424,000	364,900
Thomson 1	Carlton	MN	WAT	Reservior	N		1907	13	12.1	Own		Y	32,169,000	37,615,521
Thomson 2	Carlton	MN	WAT	Reservior	N		1907	10.8	10.8	Own		Y	25,653,000	29,029,035
Thomson 3	Carlton	MN	WAT	Reservior	N		1907	10.8	10.6	Own		Y	26,982,000	35,597,211
Sylvan	Cass	MN	WAT	Run of River	N		1913	0.6	0.6	Own		Y	3,789,000	2,140,280
Sylvan	Cass	MN	WAT	Run of River	N		1913	0.6	0.6	Own		Y	3,090,000	2,648,389
Thomson 4	Carlton	MN	WAT	Reservior	N		1914	13.5	13.4	Own		Y	23,839,000	35,703,736
Sylvan	Cass	MN	WAT	Run of River	N		1915	0.6	0.6	Own		Y	3,150,000	1,518,938
Pillager 1	Cass	MN	WAT	Run of River	N		1917	0.8	0.8	Own		Y	4,067,000	3,080,000
Pillager 2	Cass	MN	WAT	Run of River	N		1917	0.9	0.9	Own		Y	4,371,000	3,460,000
Rapids Energy Center 4	Itasca	MN	WAT	Run of River	N		1918	0.75	0.75	Own		Y	2,926,000	2,411,000
Thomson 5	Carlton	MN	WAT	Reservior	N		1918	12.5	12.2	Own		Y	30,550,000	33,913,581
Little Falls 1	Morrison	MN	WAT	Run of River	N		1919	0.8	0.8	Own		Y	5,334,000	5,057,400
Little Falls 2	Morrison	MN	WAT	Run of River	N		1919	0.8	0.8	Own		Y	6,615,000	4,946,700
Little Falls 3	Morrison	MN	WAT	Run of River	N		1920	1.1	1	Own		Y	7,582,000	5,847,500
Prairie River	Itasca	MN	WAT	Run of River	N		1921	0.4	0.4	Own		Y	881,000	568,700
Prairie River	Itasca	MN	WAT	Run of River	N		1921	0.5	0	Own		Y	-	-
Knife Falls 1	Carlton	MN	WAT	Run of River	N		1922	0.8	0.6	Own		Y	1,749,000	3,880,000
Knife Falls 2	Carlton	MN	WAT	Run of River	N		1922	0.8	0.6	Own		Y	3,800,000	2,633,100
Knife Falls 3	Carlton	MN	WAT	Run of River	N		1922	0.8	0.7	Own		Y	2,680,000	2,555,300
Scanlon 1	Carlton	MN	WAT	Run of River	N		1923	0.4	0.3	Own		Y	1,282,000	1,500,000
Scanlon 2	Carlton	MN	WAT	Run of River	N		1923	0.4	0.3	Own		Y	1,200,000	1,574,000
Scanlon 3	Carlton	MN	WAT	Run of River	N		1923	0.4	0.4	Own		Y	1,967,000	1,583,200
Scanlon 4	Carlton	MN	WAT	Run of River	N		1923	0.4	0.4	Own		Y	906,000	1,685,700
Winton 3	Lake	MN	WAT	Run of River	N		1923	2	2	Own		Y	88,386,000	7,794,000
Winton 4	Lake	MN	WAT	Run of River	N		1923	2	2	Own		Y	6,275,000	10,328,000
Fond Du Lac	St. Louis	MN	WAT	Run of River	N		1924	12	11	Own		Y	30,824,000	36,148,300
Blanchard 1	Morrison	MN	WAT	Run of River	N		1925	6	5.5	Own		Y	16,909,000	21,379,000
Blanchard 2	Morrison	MN	WAT	Run of River	N		1925	6	5.5	Own		Y	35,489,000	23,717,500
Rapids Energy Center 5	Itasca	MN	WAT	Run of River	N		1948	1.5	1.5	Own		Y	4,690,000	4,444,000
M L Hibbard 3	St. Louis	MN	WDS	Steam	Y	Wood/Coal 70/30	1949	35	33	Own		Y	55,517,000	49,667,000
Thomson 6	Carlton	MN	WAT	Reservior	N		1949	12	12.2	Own		Y	31,504,000	45,556,993
M L Hibbard 4	St. Louis	MN	WDS	Steam	Y	Wood/Coal 70/30	1951	39	24	Own		Y	24,214,000	1,456,000
Rapids Energy Center 6	Itasca	MN	WDS	Steam	Y	Wood/Coal 70/30	1969	15	13.6	Own		Y	35,257,000	36,149,000
Little Falls 4	Morrison	MN	WAT	Run of River	N		1979	1.2	1.2	Own		Y	5,442,000	6,280,200
Rapids Energy Center 7	Itasca	MN	WDS	Steam	Y	Wood/Coal 70/30	1980	15	14.6	Own		Y	92,909,000	84,217,000
Blanchard 3	Morrison	MN	WAT	Run of River	N		1988	6	5.5	Own		Y	19,993,000	20,792,900
SAPPI Cloquet TG 5	Carlton	MN	WDS	Steam	Y	Wood/Coal 50/50	2001	27.6	22.3	Own		Y	104,364,000	102,634,000
Oliver Wind I Energy Center	Oliver	ND	WIN	Wind	N		2006	50.6	10	PPA	12/31/2031	Y	12,667,000	174,848,000
Oliver Wind II Energy Center	Oliver	ND	WIN	Wind	N		2007	48	10	PPA	12/31/2032	Y	-	1,312,000
Wing River CBED Wiind Power	Todd	MN	WIN	Wind	N		2007	2.5	0.3	PPA	12/31/2027	Y	-	1,963,000
Total							2006 nameplate	304.15					759,446,000	848,001,085
							2007 nameplate	354.65						

Facility Name	Amount of 2006 Generation Assigned to other Renew. Projects (kWh)	For the amount in Col. P Identify the project to which it is assigned (ie. green pricing, other state prog.)	2006 MN REO Eligible (kWh)
Minnesota Power			
Little Falls 5	0	N/A	-
Little Falls 6	0	N/A	424,000
Thomson 1	0	N/A	32,169,000
Thomson 2	0	N/A	25,653,000
Thomson 3	0	N/A	26,982,000
Sylvan	0	N/A	3,789,000
Sylvan	0	N/A	3,090,000
Thomson 4	0	N/A	23,839,000
Sylvan	0	N/A	3,150,000
Pillager 1	0	N/A	4,067,000
Pillager 2	0	N/A	4,371,000
Rapids Energy Center 4	0	N/A	2,926,000
Thomson 5	0	N/A	30,550,000
Little Falls 1	0	N/A	5,334,000
Little Falls 2	0	N/A	6,615,000
Little Falls 3	0	N/A	7,582,000
Prairie River	0	N/A	881,000
Prairie River	0	N/A	-
Knife Falls 1	0	N/A	1,749,000
Knife Falls 2	0	N/A	3,800,000
Knife Falls 3	0	N/A	2,680,000
Scanlon 1	0	N/A	1,282,000
Scanlon 2	0	N/A	1,200,000
Scanlon 3	0	N/A	1,967,000
Scanlon 4	0	N/A	906,000
Winton 3	0	N/A	88,386,000
Winton 4	0	N/A	6,275,000
Fond Du Lac	0	N/A	30,824,000
Blanchard 1	0	N/A	16,909,000
Blanchard 2	0	N/A	35,489,000
Rapids Energy Center 5	0	N/A	4,690,000
M L Hibbard 3	0	N/A	38,861,900
Thomson 6	0	N/A	31,504,000
M L Hibbard 4	0	N/A	16,949,800
Rapids Energy Center 6	0	N/A	24,679,900
Little Falls 4	0	N/A	5,442,000
Rapids Energy Center 7	0	N/A	65,036,300
Blanchard 3	0	N/A	19,993,000
SAPPI Cloquet TG 5	0	N/A	31,309,200
Oliver Wind I Energy Center	0	N/A	12,667,000
Oliver Wind II Energy Center	0	N/A	-
Wing River CBED Wind Power	0	N/A	-
Total			624,022,100

Facility Name	County	State	Energy Source	Technology Type	Is it a Multi-Fuel Unit? Y/N?	If Y to Col. F. Specify the fuels by %	Vintage	Nameplate Capacity (MW)	Accredited Capacity (MW)	PPA/Own	If PPA, provide the expiration date of Contract	Deliver to MN? Y or N	Generation (1/1/06 - 12/31/06) in kWh	Generation YTD 2007 in kWh
Missouri River Energy Services														
Worthington Wind	Nobles	MN	wind	Wind Turbine	N		7/2002 and 12/2003	3.7	0	PPA	life of unit	Y	9,748,494	8,059,266
Marshall Wind	Lyon	MN	wind	Wind Turbine	N		12/15/2007	18.7	0	PPA		Y	0	0
Odin Wind	Cottonwood/ Watonwan	MN	wind	Wind Turbine	N		1/1/2008	20	0	PPA	2028	Y	0	0
Total							**2006 nameplate**	**3.7**					**9,748,494**	**8,059,266**
							2007 nameplate	**22.4**						
Otter Tail Power Company														
Bemidji Hydro #1	Beltrami	MN	Hydro	Hydro	N		1907	0.24	0.175	Own	N/A	Y	741,005	876,214
Bemidji Hydro #2	Beltrami	MN	Hydro	Hydro	N		1907	0.5	0.583	Own	N/A	Y	Included with #1 unit	Included with #1 unit
Dayton Hollow #2	Ottertail	MN	Hydro	Hydro	N		1909	0.45	0.468	Own	N/A	Y	Included with #1 unit	Included with #1 unit
Hoot Lake	Ottertail	MN	Hydro	Hydro	N		1914	1	0.75	Own	N/A	Y	3,195,840	1,456,469
Pisgah	Ottertail	MN	Hydro	Hydro	N		1918	0.52	0.75	Own	N/A	Y	1,849,645	3,466,183
Wright (Central)	Ottertail	MN	Hydro	Hydro	N		1922	0.4	0.489	Own	N/A	Y	2,034,310	2,141,044
Taplin Gorge (Friberg)	Ottertail	MN	Hydro	Hydro	N		1925	0.56	0.52	Own	N/A	Y	3,847,480	3,144,937
Dayton Hollow #1	Ottertail	MN	Hydro	Hydro	N		1928	0.52	0.549	Own	N/A	Y	6,695,107	6,174,524

Facility Name	Amount of 2006 Generation Assigned to other Renew. Projects (kWh)	For the amount in Col. P Identify the project to which it is assigned (ie. green pricing, other state prog.)	2006 MN REO Eligible (kWh)
Missouri River Energy Services			
Worthington Wind	1,594,400	green pricing program	8,154,094
Marshall Wind			TBD
Odin Wind			TBD
Total	1,594,400		8,154,094
Otter Tail Power Company			
Bemidji Hydro #1	353,459	Renewable energy allocated over 100% of retail sales. This is ND & SD portion	387,546
Bemidji Hydro #2	0	Renewable energy allocated over 100% of retail sales. This is ND & SD portion	0
Dayton Hollow #2	0	Renewable energy allocated over 100% of retail sales. This is ND & SD portion	0
Hoot Lake	1,524,416	Renewable energy allocated over 100% of retail sales. This is ND & SD portion	1,671,424
Pisgah	882,281	Renewable energy allocated over 100% of retail sales. This is ND & SD portion	967,364
Wright (Central)	970,366	Renewable energy allocated over 100% of retail sales. This is ND & SD portion	1,063,944
Taplin Gorge (Friberg)	1,835,248	Renewable energy allocated over 100% of retail sales. This is ND & SD portion	2,012,232
Dayton Hollow #1	3,193,566	Renewable energy allocated over 100% of retail sales. This is ND & SD portion	3,501,541

Facility Name	County	State	Energy Source	Technology Type	Is it a Multi-Fuel Unit? Y/N?	If Y to Col. F. Specify the fuels by %	Vintage	Nameplate Capacity (MW)	Accredited Capacity (MW)	PPA/Own	If PPA, provide the expiration date of Contract	Deliver to MN? Y or N	Generation (1/1/06 - 12/31/06) in kWh	Generation YTD 2007 in kWh
Trautman	Stutsman	ND	Wind	Wind	N		1985	0.05	None	PPA	Indefinite - on small power producer tariff	Y	0	
Potlatch Cogeneration Facility (OTF	Beltrami	MN	Biomass	Steam	N		1992	6.25	5.862	PPA	Unit was shutdown on August 30, 2006	Y	20,389,000	0
Lac Qui Parle Valley School	ac Qui Par	MN	Wind	Wind	N		1997	0.225	None	PPA	Indefinite	Y	24,000	18,360
Hendricks Wind I	Lincoln	MN	Wind	Wind	N		2001	0.9	Jul-0.101, Aug-0.104	PPA	12/31/2017	Y	2,605,000	2,305,565
EMS	Deuel	SD	Wind	Wind	N		2002	0.09	None	PPA	12/31/2012	Y	200,000	163,962
FPLE North Dakota Wind II	LaMoure	ND	Wind	Wind	N		2003	21	Jul-2,723, Aug-2.668	PPA	3/31/2028	Y	60,933,000	59,996,000
Borderline Wind I	Lincoln	MN	Wind	Wind	N		2003	0.9	Jul-0.074, Aug-0.079	PPA	12/31/2028	Y	2,465,000	1,966,464
UM-Morris	Stevens	MN	Wind	Wind	N		2005	1.65	None	PPA	12/31/2009 - This PPA is expected to be replaced when a second turbine is added in 2008 or 2009.	Y	2,156,000	1,181,788
Dennis Tuel Wind	Ottertail	MN	Wind	Wind	N		Nov-07	0.0395	None	PPA	Indefinite - on small power producer tariff	Y	Unknown - owner will use some energy on site	
FPLE Langdon Wind	Cavalier	ND	Wind	Wind	N		Dec-07	19.5	Unknown	PPA	25 Year	Y	Estimate 71,744,400 kWh annually	
UM-Morris Biomass	Stevens	MN	Biomass	Steam	N		Feb-08	0.4	None	Will be PPA	Unknown	Y	Unknown - owner will use some energy on site	
UM-Morris Wind	Stevens	MN	Wind	Wind	N		2008 or 2009	1.5 - 2.0	Unknown	Will be PPA	Unknown	Y	Unknown - owner will use some energy on site	
OTP Langdon Wind	Cavalier	ND	Wind	Wind	N		Jan-08	40.5	Unknown	Own	N/A	Y	Estimate 149,007,600 kWh annually	
Total							2006 nameplate	35.255					107,135,387	82,891,510
							2007 nameplate	54.7945						

Facility Name	Amount of 2006 Generation Assigned to other Renew. Projects (kWh)	For the amount in Col. P identify the project to which it is assigned (ie. green pricing, other state prog.)	2006 MN REO Eligible (kWh)
Trautman	0	Renewable energy allocated over 100% of retail sales. This is ND & SD portion	0
Potlatch Cogeneration Facility (OTP	9,725,553	Renewable energy allocated over 100% of retail sales. This is ND & SD portion	10,663,447
Lac Qui Parle Valley School	11,448	Renewable energy allocated over 100% of retail sales. This is ND & SD portion	12,552
Hendricks Wind I	2,605,000	Green Pricing	0
EMS	200,000	Green Pricing	0
FPLE North Dakota Wind II	29,065,041	Renewable energy allocated over 100% of retail sales. This is ND & SD portion	31,867,959
Borderline Wind I	1,175,805	Renewable energy allocated over 100% of retail sales. This is ND & SD portion	1,289,195
UM-Morris	1,028,412	Renewable energy allocated over 100% of retail sales. This is ND & SD portion	1,127,588
Dennis Tuel Wind			
FPLE Langdon Wind			
UM-Morris Biomass			
UM-Morris Wind			
OTP Langdon Wind			
Total	52,570,595		54,564,792

Facility Name	County	State	Energy Source	Technology Type	Is it a Multi-Fuel Unit? Y/N?	If Y to Col. F, Specify the fuels by %	Vintage	Nameplate Capacity (MW)	Accredited Capacity (MW)	PPA/Own	If PPA, provide the expiration date of Contract	Deliver to MN? Y or N	Generation (1/1/06 - 12/31/06) in kWh	Generation YTD 2007 in kWh
Rochester Public Utilities														
Lake Zumbro Hydro Facilty	Wabasha	MN	Hydro		N		1919 (rebuilt 1984)	2.974	2.974 MW	Own	N/A	Y	13,359,245	14,613,146
Olmsted County Waste to Energy F	Olmsted	MN	Garbage		N		1989	2.66	2.66 MW	PPA	2030	Y	153,438	220,468
Olmsted Cnty Waste to Energy - N	Olmsted	MN	Garbage		N		2009	5	5.0 MW	PPA	2030	Y	N/A	N/A
Total							**2006 and 2007**	**5.634**					**13,512,683**	**14,833,614**
Southern Minnesota Municipal Power Agency														
Fairmont Phase I	Martin	MN	Wind	Wind	N		3/14/2003, 3/17/2003	1.9	0	SMMPA OWNED		Y	5,197,117	5,306,585
Fairmont Phase II	Martin	MN	Wind	Wind	N		12/23/2004, 2/7/2005	3.3	0	SMMPA OWNED		Y	10,748,087	5,571,956
Redwood Falls Phase I	Redwood	MN	Wind	Wind	N		12/28/2004, 2/09/2005	3.3	0	SMMPA OWNED		Y	9,959,069	10,396,888
Olmstead Waste to Energy Facility	Olmstead	MN	MSW	Bio-mass/steam	N		7/1/1987	3.68	.81 - 1.53 MW	PPA	Effective Till Termination	Y	8,046,060	5,851,900
Member Bio-diesel	Various	MN	Bio-Diesel	Internal Combustion	Y	The percentage of Bio-Diesel, Distillate Diesel and Natural gas Varies widely by Site / Engine	Various Years	161.37	161.37	Member Owned		Y	401,000	785,000
Basin Electric	LaMoure; Hyde	N.D.; S.D.	Tradable Renewable Credit (TRC)	Wind	N		Generated in 2004	N/A	N/A	N/A	N/A		39,830,210 kWH Retired in 2006	17,000,000 KWH Will be Retired
Basin Electric	LaMoure; Hyde; Brule; Ward	N.D.; S.D.	Tradable Renewable Credit (TRC)	Wind	N		Generated in 2005	N/A	N/A	N/A	N/A		0	Approximately 55,000,000KWH will be retired in 2007
3Phases Energy; Minnesota Methane	Warren; Cuyhoga	India na; Ohio	Tradable Renewable Credits (TRC)	Landfill Gas	N		Generated in 2005	N/A	N/A	N/A	N/A		0	0
Big Blue Wind Farm LLC (Contracte	Fairbault	MN	Wind	Wind	N		Expected Mid 2009 COD	36 MW	TBD	PPA	20 Years From COD	Y	N/A	N/A
Member Hydro (In Negotiation)	RedWood	MN	Hydro	Hydro	N		Dam constructed in 1902, turbine purchased in 1929 and last refurbished in 2001	Name plate 500KW Effective 350KW	0	Member Owned Consumating PPA or REC purchase	N/A	Y	1,219,936	1,608,918
Confidential (In Negotiation)	Confidenti	IA	Wind	Wind	N		Late 2009 Early 2010	60 MW	TBD	PPA	20 Years From COD	Y	N/A	N/A
Confidential (In Negotiation)	Confidenti	MN	Landfill G	Internal Combustion	N		Late 2008 Early 2009	1.65 MW	TBD	Own		Y	N/A	N/A
Confidential (In Negotiation)	Confidenti	MN	Bio-Mas	Fluid Bed	Y	TBD	Late 2009 Early 2010	Aprox 20 MW	TBD	PPA	20 - 25 Years from COD	Y	N/A	N/A
Total							**2006 and 2007**	**173.55**					**74,181,543**	**27,912,329**

Facility Name	Amount of 2006 Generation Assigned to other Renew. Projects (kWh)	For the amount in Col. P Identify the project to which it is assigned (ie. green pricing, other state prog.)	2006 MN REO Eligible (kWh)
Rochester Public Utilities			
Lake Zumbro Hydro Faciltiy	0	N/A	13,359,245
Olmsted County Waste to Energy F	0	N/A	153,438
Olmsted Cnty Waste to Energy - N	N/A	N/A	
Total	**0**		**13,512,683**
Southern Minnesota Municipal Po			
Fairmont Phase I	5,197,117	Green Pricing	0
Fairmont Phase II	2,436,862	Green Pricing	8,311,225
Redwood Falls Phase I	0		9,959,069
Olmstead Waste to Energy Facility	0		8,046,060
Member Bio-diesel	0		401,000
Basin Electric	0		39,830,210
Basin Electric	0		0
3Phases Energy; Minnesota Methane	0		
Big Blue Wind Farm LLC (Contracte	0		0
Member Hydro (In Negotiation)	0		0
Confidential (In Negotiation)	0		0
Confidential (In Negotiation)	0		0
Confidential (In Negotiation)	0		0
Total	**7,633,979**		**66,547,564**

Facility Name	County	State	Energy Source	Technology Type	Is it a Multi-Fuel Unit? Y/N?	If Y to Col. F. Specify the fuels by %	Vintage	Nameplate Capacity (MW)	Accredited Capacity (MW)	PPA/Own	If PPA, provide the expiration date of Contract	Deliver to MN? Y or N	Generation (1/1/06 - 12/31/06) in kWh	Generation YTD 2007 in kWh
Xcel Energy														
Fenton Power Partners I, LLC	Murray	MN	Wind	Wind Turbine(s)	N		11/13/2007	205.50	27.74	PPA	11/11/2032	Y	NA	NA
FibroMinnesota	Swift	MN	Biomass	Steam Turbine/Boiler	N		9/11/2007	50.00	N/A	PPA	9/9/2028	Y	NA	112,375,000
MinnAURI	Rock	MN	Biomass	Biodiesel	N		July-Oct 2007	2	N/A	PPA	N/A	Y	0	292,000
Apple River	St Croix	WI	Hydro	Hydro	N		1901	4.35	3.00	Own	N/A	Y	11,062,000	6,933,000
Riverdale	St. Croix	WI	Hydro	Hydro	N		1/1/1905	0.50	0.29	Own	N/A	Y	2,204,000	1,262,000
St Croix Falls	Polk	WI	Hydro	Hydro	N		1/1/1905	23.20	23.90	Own	N/A	Y	90,631,000	62,243,000
Dells	Eau Claire	WI	Hydro	Hydro	N		1907	9.50	5.74	Own	N/A	Y	32,430,000	14,561,000
White River	Ashland	WI	Hydro	Hydro	N		1/1/1907	1.00	0.86	Own	N/A	Y	3,902,000	2,775,000
Hayward	Sawyer	WI	Hydro	Hydro	N		1/1/1910	0.17	0.20	Own	N/A	Y	1,435,000	933,000
Cedar Falls	Dunn	WI	Hydro	Hydro	N		1911	6.00	7.20	Own	N/A	Y	26,589,000	18,335,000
Saxon Falls	Iron	WI	Hydro	Hydro	N		1/1/1912	1.26	1.50	Own	N/A	Y	10,498,000	5,699,000
Superior Falls	Iron	WI	Hydro	Hydro	N		1/1/1917	1.32	1.85	Own	N/A	Y	11,421,000	6,187,000
Wissota	Chippewa	WI	Hydro	Hydro	N		1/1/1917	35.00	36.43	Own	N/A	Y	90,797,000	59,644,000
Big Falls	Rusk	WI	Hydro	Hydro	N		1922	7.78	7.59	Own	N/A	Y	26,853,000	15,202,000
Trego	Washburn	WI	Hydro	Hydro	N		1/1/1926	1.20	1.30	Own	N/A	Y	5,910,000	4,243,000
Thornapple	Rusk	WI	Hydro	Hydro	N		1/1/1927	1.40	1.60	Own	N/A	Y	7,296,000	3,916,000
Chippewa Falls	Chippewa	WI	Hydro	Hydro	N		1928	21.60	18.19	Own	N/A	Y	45,485,000	28,794,000
Ladysmith	Rusk	WI	Hydro	Hydro	N		1/1/1941	2.00	2.80	Own	N/A	Y	8,171,000	5,002,000
Holcombe	Chippewa	WI	Hydro	Hydro	N		1/1/1950	33.90	35.20	Own	N/A	Y	64,078,000	39,723,000
St. Anthony	Hennepin	MN	Hydro	Hydro	N		1/1/1954	13.50	11.98	Own	N/A	Y	58,998,000	39,282,000
Menomonie	Dunn	WI	Hydro	Hydro	N		1/1/1958	5.40	5.32	Own	N/A	Y	18,270,000	12,549,000
Cornell	Chippewa	WI	Hydro	Hydro	N		1976	30.80	30.85	Own	N/A	Y	56,203,000	35,927,000
Rapidan Hydro	Blue Earth	MN	Hydro	Hydro	N		5/1/1984	5.00	4.30	PPA	5/1/2017	Y	4,727,000	5,720,000
Lac Courte Orielles Band of Lake Superior	Sawyer	WI	Hydro	Hydro	N		12/9/1986	3.10	3.10	PPA	12/31/2021	Y	6,170,000	0
Neshonoc	Lacrosse	WI	Hydro	Hydro	N		1/1/1987	0.40	0.40	PPA	1/1/2020	Y	1,840,000	1,451,000
Hastings Utilities Dept.	Dakota	MN	Hydro	Hydro	N		10/5/1987	4.00	2.80	PPA	6/30/2033	Y	24,180,000	18,138,000
Jim Falls	Chippewa	WI	Hydro	Hydro	N		1/1/1988	55.50	57.55	Own	N/A	Y	81,823,000	44,698,000
Byllesby	Dakota	MN	Hydro	Hydro	N		3/1/1988	2.58	2.60	PPA	Evergreen	Y	11,658,000	8,256,000

Facility Name	Amount of 2006 Generation Assigned to other Renew. Projects (kWh)	For the amount in Col. P Identify the project to which it is assigned (ie. green pricing, other state prog.)	2006 MN REO Eligible (kWh)
Xcel Energy			
Fenton Power Partners I, LLC	N/A	See prior columns	N/A
FibroMinnesota	N/A	See prior columns	N/A
MinnAURI	16% to Wi	See prior columns	0
Apple River	25% to other jurisdictions	See prior columns	8296500
Riverdale	25% to other jurisdictions	See prior columns	1653000
St Croix Falls	25% to other jurisdictions	See prior columns	67973250
Dells	25% to other jurisdictions	See prior columns	24322500
White River	25% to other jurisdictions	See prior columns	2926500
Hayward	25% to other jurisdictions	See prior columns	1076250
Cedar Falls	25% to other jurisdictions	See prior columns	19941750
Saxon Falls	25% to other jurisdictions	See prior columns	7873500
Superior Falls	25% to other jurisdictions	See prior columns	8565750
Wissota	25% to other jurisdictions	See prior columns	68097750
Big Falls	25% to other jurisdictions	See prior columns	20139750
Trego	25% to other jurisdictions	See prior columns	4432500
Thornapple	25% to other jurisdictions	See prior columns	5472000
Chippewa Falls	25% to other jurisdictions	See prior columns	34113750
Ladysmith	25% to other jurisdictions	See prior columns	6128250
Holcombe	25% to other jurisdictions	See prior columns	48058500
St. Anthony	25% to other jurisdictions	See prior columns	44248500
Menomonie	25% to other jurisdictions	See prior columns	13702500
Cornell	25% to other jurisdictions	See prior columns	42152250
Rapidan Hydro	25% to other jurisdictions	See prior columns	3545250
Lac Courte Orielles Band of Lake Superior	25% to other jurisdictions	See prior columns	4627500
Neshonoc	25% to other jurisdictions	See prior columns	1380000
Hastings Utilities Dept.	25% to other jurisdictions	See prior columns	18135000
Jim Falls	25% to other jurisdictions	See prior columns	61367250
Byllesby	25% to other jurisdictions	See prior columns	8743500

Facility Name	County	State	Energy Source	Technology Type	Is it a Multi-Fuel Unit? Y/N?	If Y to Col. F, Specify the fuels by %	Vintage	Nameplate Capacity (MW)	Accredited Capacity (MW)	PPA/Own	If PPA, provide the expiration date of Contract	Deliver to MN? Y or N	Generation (1/1/06 - 12/31/06) in kWh	Generation YTD 2007 in kWh
Eau Galle Renewable Energy Co. Ir	Dunn	WI	Hydro	Hydro	N		8/1/1991	0.30	N/A	PPA	7/30/2026	Y	1,000	1,000
Ford Motor Co.	Ramsey	MN	Hydro	Hydro	N		8/31/2002	18.00	N/A	PPA	TBD - month-month extension until plant sale	Y	58,507,000	17,882,000
St. Cloud Hydro	Sherburne	MN	Hydro	Hydro	N		2/1/2003	8.80	6.70	PPA	10/31/2021	Y	39,483,000	25,639,000
Minnesota Methane LLC	Dakota	MN	Landfill (	Gas Turbine	N		5/1/1994	3.10	3.10	PPA	4/30/2014	Y	19,255,000	9,970,000
Landfill Power Flying Cloud	Hennepin	MN	Landfill (	Gas Turbine	N		11/30/1994	4.80	4.70	PPA	11/30/2019	Y	0	0
Pine Bend	Dakota	MN	Landfill (	Gas Turbine	N		3/31/1996	12.00	12.00	PPA	3/31/2026	Y	60,736,000	49,128,000
Wilmarth	Blue Earth	MN	RDF	Steam Turbine/Boiler	Y	98.2% RDF; remaining gas	12/31/1948	25.00	17.50	Own	N/A	Y	109,669,310	82,646,455
Red Wing	Goodhue	MN	RDF	Steam Turbine/Boiler	Y	98.5% RDF; remaining gas	12/31/1949	23.00	23.70	Own	N/A	Y	96,107,000	74,531,901
Barron Light and Water Dept	Barron	WI	RDF	Steam Turbine/Boiler	N		8/1/1986	0.265	N/A	PPA	Evergreen; 60 days written notice of cancellation	Y	9,000	17,000
Hennepin Energy Resource Recove	Hennepin	MN	RDF	Steam Turbine/Boiler	N		1/1/1990	33.7	33.70	PPA	28 years option for additional 7 years	Y	221,001,000	165,768,000
Wind Power Partners 1993	Lincoln	MN	Wind	Wind Turbine(s)	N		5/3/1994	25.00	3.38	PPA	10/27/2018	Y	59,584,000	48,711,000
Lake Benton 1	Lincoln	MN	Wind	Wind Turbine(s)	N		12/14/1998	107.25	14.48	PPA	12/13/2028	Y	279,574,000	228,296,000
Lake Benton 2	Pipestone	MN	Wind	Wind Turbine(s)	N		5/31/2000	103.50	13.97	PPA	5/31/2030	Y	300,007,000	210,024,000
Ruthton Ridge Wind Farm	Pipestone	MN	Wind	Wind Turbine(s)	N		1/23/2001	1.98	0.27	PPA	1/23/2031	Y	6,267,000	4,820,000
Florence Hills	Lincoln	MN	Wind	Wind Turbine(s)	N		2/3/2001	1.98	0.27	PPA	2/2/2031 6:36:00 AM	Y	5,761,000	4,129,000
Hadley Ridge	Murray	MN	Wind	Wind Turbine(s)	N		2/3/2001	1.98	0.27	PPA	2/2/2031	Y	6,056,000	4,101,000
Hope Creek	Lincoln	MN	Wind	Wind Turbine(s)	N		2/3/2001	1.98	0.27	PPA	2/2/2031	Y	6,105,000	4,700,000
Jack River	Lincoln	MN	Wind	Wind Turbine(s)	N		2/3/2001	1.98	0.27	PPA	2/2/2031	Y	5,377,000	4,226,000
Jessica Mills	Lincoln	MN	Wind	Wind Turbine(s)	N		2/3/2001	1.98	0.27	PPA	2/3/2031	Y	5,646,000	4,259,000
Julia Hills	Lincoln	MN	Wind	Wind Turbine(s)	N		2/3/2001	1.98	0.27	PPA	2/3/2031	Y	5,430,000	4,367,000
Soliloque Ridge LLC	Lincoln	MN	Wind	Wind Turbine(s)	N		2/3/2001	1.98	0.27	PPA	2/3/2031	Y	6,072,000	4,478,000
Spartan Hills	Pipestone	MN	Wind	Wind Turbine(s)	N		2/3/2001	1.98	0.27	PPA	2/3/2031	Y	5,923,000	4,441,000
Sun River	Lincoln	MN	Wind	Wind Turbine(s)	N		2/3/2001	1.98	0.27	PPA	2/3/2031	Y	5,526,000	4,294,000
Tsar Nicolas	Lincoln	MN	Wind	Wind Turbine(s)	N		2/3/2001	1.98	0.27	PPA	2/3/2031	Y	5,631,000	4,155,000

Facility Name	Amount of 2006 Generation Assigned to other Renew. Projects (kWh)	For the amount in Col. P Identify the project to which it is assigned (ie. green pricing, other state prog.)	2006 MN REO Eligible (kWh)
Eau Galle Renewable Energy Co. Ir	25% to other jurisdictions	See prior columns	750
Ford Motor Co.	25% to other jurisdictions	See prior columns	43880250
St. Cloud Hydro	16% to WI	See prior columns	33100257
Minnesota Methane LLC	25% to other jurisdictions	See prior columns	14441250
Landfill Power Flying Cloud	25% to other jurisdictions	See prior columns	0
Pine Bend	25% to other jurisdictions	See prior columns	45552000
Wilmarth	25% to other jurisdictions	See prior columns	82251982
Red Wing	25% to other jurisdictions	See prior columns	72080250
Barron Light and Water Dept	25% to other jurisdictions	See prior columns	6750
Hennepin Energy Resource Recove	16% to WI; 0% to MN	See prior columns	0
Wind Power Partners 1993	16% to WI	See prior columns	N/A
Lake Benton 1	16% to WI	See prior columns	234378626
Lake Benton 2	16% to WI	See prior columns	251508468
Ruthton Ridge Wind Farm	16% to WI	See prior columns	5253889
Florence Hills	16% to WI	See prior columns	4829688
Hadley Ridge	16% to WI	See prior columns	5076999
Hope Creek	16% to WI	See prior columns	5118078
Jack River	16% to WI	See prior columns	4507765
Jessica Mills	16% to WI	See prior columns	4733279
Julia Hills	16% to WI	See prior columns	4552197
Soliloque Ridge LLC	16% to WI	See prior columns	5090413
Spartan Hills	16% to WI	See prior columns	4965500
Sun River	16% to WI	See prior columns	4632678
Tsar Nicolas	16% to WI	See prior columns	4720704

Facility Name	County	State	Energy Source	Technology Type	Is it a Multi-Fuel Unit? Y/N?	If Y to Col. F, Specify the fuels by %	Vintage	Nameplate Capacity (MW)	Accredited Capacity (MW)	PPA/Own	If PPA, provide the expiration date of Contract	Deliver to MN? Y or N	Generation (1/1/06 - 12/31/06) in kWh	Generation YTD 2007 in kWh
Twin Lake Hills	Lincoln	MN	Wind	Wind Turbine(s)	N		2/3/2001	1.98	0.27	PPA	2/3/2031	Y	5,955,000	4,525,000
Winter Spawn	Lincoln	MN	Wind	Wind Turbine(s)	N		2/3/2001	1.98	0.27	PPA	2/3/2031	Y	6,229,000	4,639,000
Autumn Hills LLC	Lincoln	MN	Wind	Wind Turbine(s)	N		2/17/2001	1.98	0.27	PPA	2/2/2031	Y	5,279,000	4,348,000
Agassiz Beach LLC	Clay	MN	Wind	Wind Turbine(s)	N		2/26/2001	1.98	0.27	PPA	2/2/2031	Y	5,399,000	4,210,000
Metro Wind	Sherburne	MN	Wind	Wind Turbine(s)	N		3/15/2001	0.66	0.09	PPA	3/15/2031	Y	898,000	789,000
Kas Brothers Wind Farm	Pipestone	MN	Wind	Wind Turbine(s)	N		12/10/2001	1.50	0.20	PPA	12/10/2031	Y	4,213,000	3,260,000
Olsen Wind Farm	Pipestone	MN	Wind	Wind Turbine(s)	N		12/15/2001	1.50	0.20	PPA	12/15/2031	Y	3,604,000	3,266,000
BT Windfarm LLC	Dodge	MN	Wind	Wind Turbine(s)	N		8/13/2002	1.80	0.24	PPA	8/12/2027	Y	3,979,000	3,231,000
G M Windfarms	Dodge	MN	Wind	Wind Turbine(s)	N		8/13/2002	1.80	0.24	PPA	8/12/2027	Y	5,424,000	3,390,000
JCKD Windfarm LLC (aka SG, LLC	Dodge	MN	Wind	Wind Turbine(s)	N		8/13/2002	1.80	0.24	PPA	8/12/2027	Y	4,101,000	3,305,000
McNeilus Windfarm LLC	Dodge	MN	Wind	Wind Turbine(s)	N		8/13/2002	1.80	0.24	PPA	8/12/2022	Y	4,200,000	3,430,000
Asian Children's Support LLC	Dodge	MN	Wind	Wind Turbine(s)	N		2/1/2003	1.90	0.26	PPA	1/31/2028	Y	4,549,000	3,527,000
Bangladesh Childrens Support LLC	Dodge	MN	Wind	Wind Turbine(s)	N		2/1/2003	1.90	0.26	PPA	1/31/2028	Y	5,413,000	3,521,000
Burmese Children's Support LLC	Dodge	MN	Wind	Wind Turbine(s)	N		2/1/2003	1.90	0.26	PPA	1/31/2028	Y	4,286,000	3,457,000
Indian Children's Support LLC	Dodge	MN	Wind	Wind Turbine(s)	N		2/1/2003	1.90	0.26	PPA	1/31/2028	Y	4,530,000	3,577,000
Salvadoran Children's Support LLC	Dodge	MN	Wind	Wind Turbine(s)	N		2/1/2003	1.90	0.26	PPA	2/1/2028	Y	4,470,000	3,587,000
K-Brink Wind Farm LLC	Pipestone	MN	Wind	Wind Turbine(s)	N		2/13/2003	1.90	0.26	PPA	2/13/2028	Y	6,751,000	4,926,000
Windcurrent Farms	Pipestone	MN	Wind	Wind Turbine(s)	N		5/31/2003	1.90	0.26	PPA	5/30/2028	Y	6,359,000	3,414,000
Boeve Windfarm LLC	Pipestone	MN	Wind	Wind Turbine(s)	N		8/9/2003	1.90	0.26	PPA	8/7/2028	Y	5,255,000	3,420,000
Fey Windfarm LLC	Pipestone	MN	Wind	Wind Turbine(s)	N		9/4/2003	1.90	0.26	PPA	9/2/2028	Y	5,780,000	4,471,000
GarMar Foundation 1, LLC	Dodge	MN	Wind	Wind Turbine(s)	N		9/10/2003	1.80	0.24	PPA	9/8/2028	Y	3,918,000	3,126,000
NAE Shaokatan	Lincoln	MN	Wind	Wind Turbine(s)	N		11/1/2003	1.65	0.22	PPA	10/31/2033	Y	0	0
CG Windfarm LLC	Pipestone	MN	Wind	Wind Turbine(s)	N		12/1/2003	1.90	0.26	PPA	11/29/2028	Y	6,192,000	3,900,000
Chanarambie Power Partners	Murray	MN	Wind	Wind Turbine(s)	N		12/15/2003	85.50	11.54	PPA	12/13/2023	Y	256,113,000	210,785,000
Buffalo Ridge Wind Farm LLC	Murray	MN	Wind	Wind Turbine(s)	N		12/18/2003	1.50	0.20	PPA	12/16/2018	Y	5,173,000	3,332,000
Moulten Heights Wind Power Project LLC	Murray	MN	Wind	Wind Turbine(s)	N		12/18/2003	1.50	0.20	PPA	12/17/2018	Y	5,116,000	3,452,000
Muncie Power Partners LLC	Murray	MN	Wind	Wind Turbine(s)	N		12/18/2003	1.50	0.20	PPA	12/17/2018	Y	4,978,000	3,121,000
North Ridge Wind Farm LLC	Murray	MN	Wind	Wind Turbine(s)	N		12/18/2003	1.50	0.20	PPA	12/17/2018	Y	5,225,000	3,442,000

Facility Name	Amount of 2006 Generation Assigned to other Renew. Projects (kWh)	For the amount in Col. P Identify the project to which it is assigned (ie. green pricing, other state prog.)	2006 MN REO Eligible (kWh)
Twin Lake Hills	16% to WI	See prior columns	4992327
Winter Spawn	16% to WI	See prior columns	5222032
Autumn Hills LLC	16% to WI	See prior columns	4425607
Agassiz Beach LLC	16% to WI	See prior columns	4526208
Metro Wind	16% to WI	See prior columns	752831
Kas Brothers Wind Farm	16% to WI	See prior columns	3531935
Olsen Wind Farm	16% to WI	See prior columns	3021385
BT Windfarm LLC	16% to WI	See prior columns	3335763
G M Windfarms	16% to WI	See prior columns	4547167
JCKD Windfarm LLC (aka SG, LLC	16% to WI	See prior columns	3438041
McNeilus Windfarm LLC	16% to WI	See prior columns	3521036
Asian Children's Support LLC	16% to WI	See prior columns	3813618
Bangladesh Childrens Support LLC	16% to WI	See prior columns	4537945
Burmese Children's Support LLC	16% to WI	See prior columns	3593134
Indian Children's Support LLC	16% to WI	See prior columns	3797689
Salvadoran Children's Support LLC	16% to WI	See prior columns	3747389
K-Brink Wind Farm LLC	Windsource	See prior columns	0
Windcurrent Farms	Windsource	See prior columns	0
Boeve Windfarm LLC	Windsource	See prior columns	0
Fey Windfarm LLC	16% to WI	See prior columns	4845617
GarMar Foundation 1, LLC	16% to WI	See prior columns	3284624
NAE Shaokatan	16% to WI	See prior columns	0
CG Windfarm LLC	16% to WI	See prior columns	5191014
Chanarambie Power Partners	16% to WI	See prior columns	214710285
Buffalo Ridge Wind Farm LLC	16% to WI	See prior columns	4336743
Moulton Heights Wind Power Project LLC	16% to WI	See prior columns	4288958
Muncie Power Partners LLC	16% to WI	See prior columns	4173266
North Ridge Wind Farm LLC	16% to WI	See prior columns	4380337

Facility Name	County	State	Energy Source	Technology Type	Is it a Multi-Fuel Unit? Y/N?	If Y to Col. F. Specify the fuels by %	Vintage	Nameplate Capacity (MW)	Accredited Capacity (MW)	PPA/Own	If PPA, provide the expiration date of Contract	Deliver to MN? Y or N	Generation (1/1/06 - 12/31/06) in kWh	Generation YTD 2007 in kWh
Vandy South Project LLC	Murray	MN	Wind	Wind Turbine(s)	N		12/18/2003	1.50	0.20	PPA	12/17/2018	Y	5,214,000	3,486,000
Viking Wind Farm LLC	Murray	MN	Wind	Wind Turbine(s)	N		12/18/2003	1.50	0.20	PPA	12/17/2018	Y	4,916,000	3,142,000
Vindy Power Partners LLC	Murray	MN	Wind	Wind Turbine(s)	N		12/18/2003	1.50	0.20	PPA	12/17/2018	Y	4,865,000	3,117,000
Wilson-West Windfarm LLC	Murray	MN	Wind	Wind Turbine(s)	N		12/18/2003	1.50	0.20	PPA	12/17/2018	Y	4,907,000	3,147,000
Moraine Wind LLC	Murray	MN	Wind	Wind Turbine(s)	N		12/22/2003	51.00	6.89	PPA	12/21/2018	Y	154,652,000	120,855,000
Bisson Windfarm LLC	Pipestone	MN	Wind	Wind Turbine(s)	N		12/28/2003	1.90	0.26	PPA	12/26/2028	Y	4,672,000	3,493,000
TG Windfarm LLC	Pipestone	MN	Wind	Wind Turbine(s)	N		12/28/2003	1.90	0.26	PPA	12/27/2028	Y	5,723,000	3,311,000
Tofteford Windfarm LLC	Pipestone	MN	Wind	Wind Turbine(s)	N		12/28/2003	1.90	0.26	PPA	12/27/2028	Y	5,658,000	4,608,000
Westridge Windfarm LLC	Pipestone	MN	Wind	Wind Turbine(s)	N		12/28/2003	1.90	0.26	PPA	12/27/2028	Y	6,078,000	4,440,000
NAE Lakota Ridge	Lincoln	MN	Wind	Wind Turbine(s)	N		5/1/2004	11.25	1.52	PPA	5/1/2034	Y	30,036,000	23,873,000
NAE Shaokatan Hills	Lincoln	MN	Wind	Wind Turbine(s)	N		5/1/2004	11.88	1.60	PPA	5/1/2034	Y	36,411,000	29,561,000
Woodstock Windfarm	Pipestone	MN	Wind	Wind Turbine(s)	N		5/1/2004	10.20	1.38	PPA	5/1/2034	Y	25,530,000	20,110,000
Carlton College	Rice	MN	Wind	Wind Turbine(s)	N		9/20/2004	1.65	0.22	PPA	9/18/2024	Y	4,650,000	3,643,000
JJN Windfarm LLC	Lincoln	MN	Wind	Wind Turbine(s)	N		12/17/2004	1.50	0.20	PPA	12/17/2029	Y	5,241,000	3,883,000
Lucky Wind	Pipestone	MN	Wind	Wind Turbine(s)	N		1/1/2005	1.65	0.22	PPA	12/31/2024	Y	5,138,000	4,081,000
Stahl Wind	Pipestone	MN	Wind	Wind Turbine(s)	N		1/24/2005	1.65	0.22	PPA	1/23/2025	Y	5,497,000	4,244,000
Carstensen Wind LLC	Pipestone	MN	Wind	Wind Turbine(s)	N		1/25/2005	1.65	0.22	PPA	1/23/2025	Y	4,466,000	3,327,000
Greenback Energy LLC	Pipestone	MN	Wind	Wind Turbine(s)	N		1/25/2005	1.65	0.22	PPA	1/23/2025	Y	5,303,000	4,017,000
Northern Lights	Pipestone	MN	Wind	Wind Turbine(s)	N		1/25/2005	1.65	0.22	PPA	1/24/2025	Y	5,072,000	4,286,000
Minwind III	Rock	MN	Wind	Wind Turbine(s)	N		2/2/2005	1.65	0.22	PPA	2/1/2025	Y	4,981,000	3,575,000
Minwind IV	Rock	MN	Wind	Wind Turbine(s)	N		2/2/2005	1.65	0.22	PPA	2/1/2025	Y	5,137,000	3,403,000
Minwind IX	Rock	MN	Wind	Wind Turbine(s)	N		2/2/2005	1.65	0.22	PPA	2/1/2025	Y	5,390,000	3,940,000
Minwind V	Rock	MN	Wind	Wind Turbine(s)	N		2/2/2005	1.65	0.22	PPA	2/1/2025	Y	5,195,000	3,880,000
Minwind VI	Rock	MN	Wind	Wind Turbine(s)	N		2/2/2005	1.65	0.22	PPA	2/1/2025	Y	5,083,000	3,796,000
Minwind VII	Rock	MN	Wind	Wind Turbine(s)	N		2/2/2005	1.65	0.22	PPA	2/1/2025	Y	5,232,000	4,027,000
Minwind VIII	Rock	MN	Wind	Wind Turbine(s)	N		2/2/2005	1.65	0.22	PPA	2/1/2025	Y	5,500,000	3,816,000
Ashland Windfarm LLC	Dodge	MN	Wind	Wind Turbine(s)	N		5/1/2005	1.90	0.26	PPA	4/30/2025	Y	4,413,000	3,576,000
Brandon Wind LLC	Dodge	MN	Wind	Wind Turbine(s)	N		5/1/2005	1.50	0.20	PPA	4/29/2025	Y	4,164,000	3,345,000

Facility Name	Amount of 2006 Generation Assigned to other Renew. Projects (kWh)	For the amount in Col. P Identify the project to which it is assigned (ie. green pricing, other state prog.)	2006 MN REO Eligible (kWh)
Vandy South Project LLC	16% to WI	See prior columns	4371115
Viking Wind Farm LLC	16% to WI	See prior columns	4121289
Vindy Power Partners LLC	16% to WI	See prior columns	4078534
Wilson-West Windfarm LLC	16% to WI	See prior columns	4113744
Moraine Wind LLC	16% to WI	See prior columns	129651267
Bisson Windfarm LLC	Windsource	See prior columns	0
TG Windfarm LLC	16% to WI	See prior columns	4797831
Tofteford Windfarm LLC	16% to WI	See prior columns	4743339
Westridge Windfarm LLC	Windsource	See prior columns	0
NAE Lakota Ridge	16% to WI	See prior columns	25180440
NAE Shaokatan Hills	16% to WI	See prior columns	30524871
Woodstock Windfarm	16% to WI	See prior columns	21402871
Carlton College	16% to WI	See prior columns	3898290
JJN Windfarm LLC	16% to WI	See prior columns	4393750
Lucky Wind	16% to WI	See prior columns	4307401
Stahl Wind	16% to WI	See prior columns	4608366
Carstensen Wind LLC	16% to WI	See prior columns	3744035
Greenback Energy LLC	16% to WI	See prior columns	4445728
Northern Lights	16% to WI	See prior columns	4252071
Minwind III	16% to WI	See prior columns	4175782
Minwind IV	16% to WI	See prior columns	4306563
Minwind IX	16% to WI	See prior columns	4518663
Minwind V	16% to WI	See prior columns	4355187
Minwind VI	16% to WI	See prior columns	4261292
Minwind VII	16% to WI	See prior columns	4386205
Minwind VIII	16% to WI	See prior columns	4610881
Ashland Windfarm LLC	Windsource	See prior columns	0
Brandon Wind LLC	16% to WI	See prior columns	3490856

Facility Name	County	State	Energy Source	Technology Type	Is it a Multi-Fuel Unit? Y/N?	If Y to Col. F. Specify the fuels by %	Vintage	Nameplate Capacity (MW)	Accredited Capacity (MW)	PPA/Own	If PPA, provide the expiration date of Contract	Deliver to MN? Y or N	Generation (1/1/06 - 12/31/06) in kWh	Generation YTD 2007 in kWh
GarWind LLC	Dodge	MN	Wind	Wind Turbine(s)	N		5/1/2005	1.50	0.20	PPA	4/29/2025	Y	3,471,000	3,225,000
Grant Windfarm LLC	Dodge	MN	Wind	Wind Turbine(s)	N		5/1/2005	1.90	0.26	PPA	4/29/2025	Y	4,792,000	3,653,000
Henslin Creek LLC	Dodge	MN	Wind	Wind Turbine(s)	N		5/1/2005	1.50	0.20	PPA	4/29/2025	Y	4,101,000	3,272,000
Triton Wind LLC	Dodge	MN	Wind	Wind Turbine(s)	N		5/1/2005	1.50	0.20	PPA	4/30/2025	Y	4,058,000	3,237,000
Wasioja Wind LLC	Dodge	MN	Wind	Wind Turbine(s)	N		5/1/2005	1.50	0.20	PPA	4/30/2025	Y	4,018,000	3,255,000
Wilhelm Wind LLC	Dodge	MN	Wind	Wind Turbine(s)	N		5/1/2005	1.50	0.20	PPA	4/30/2025	Y	4,381,000	3,507,000
Zumbro Windfarm	Dodge	MN	Wind	Wind Turbine(s)	N		5/1/2005	1.90	0.26	PPA	4/30/2025	Y	4,266,000	3,389,000
Gary J.T. (Tholen)	Pipestone	MN	Wind	Wind Turbine(s)	N		8/25/2005	1.65	0.22	PPA	8/26/2025	Y	47,266,000	30,051,000
Jenna M.T. (Tholen)	Pipestone	MN	Wind	Wind Turbine(s)	N		8/28/2005	1.65	0.22	PPA	8/27/2025	Y	See Gary J.T. for Tholen total	See Gary J.T. for Tholen total
Krysta J.T. LLC (Tholen)	Pipestone	MN	Wind	Wind Turbine(s)	N		8/28/2005	1.65	0.22	PPA	8/27/2025	Y	See Gary J.T. for Tholen total	See Gary J.T. for Tholen total
Mark J.P. LLC (Tholen)	Pipestone	MN	Wind	Wind Turbine(s)	N		8/28/2005	1.65	0.22	PPA	8/27/2025	Y	See Gary J.T. for Tholen total	See Gary J.T. for Tholen total
Theresa M.T. LLC (Tholen)	Pipestone	MN	Wind	Wind Turbine(s)	N		8/28/2005	1.65	0.22	PPA	8/27/2025	Y	See Gary J.T. for Tholen total	See Gary J.T. for Tholen total
McBeth Wind 1LLC (Tholen)	Pipestone	MN	Wind	Wind Turbine(s)	N		9/4/2005	1.65	0.22	PPA	9/3/2025	Y	See Gary J.T. for Tholen total	See Gary J.T. for Tholen total
McBeth Wind 2 LLC (Tholen)	Pipestone	MN	Wind	Wind Turbine(s)	N		9/4/2005	1.65	0.22	PPA	9/3/2025	Y	See Gary J.T. for Tholen total	See Gary J.T. for Tholen total
McBeth Wind 3 LLC (Tholen)	Pipestone	MN	Wind	Wind Turbine(s)	N		9/4/2005	1.65	0.22	PPA	9/3/2025	Y	See Gary J.T. for Tholen total	See Gary J.T. for Tholen total
Velva Windfarm LLC	McHenry	ND	Wind	Wind Turbine(s)	N		1/19/2006	11.88	1.60	PPA	1/18/2026	Y	31,148,000	23,175,000
Bendwind LLC	Murray	MN	Wind	Wind Turbine(s)	N		3/1/2006	1.25	0.17	PPA	2/27/2026	Y	2,177,000	2,734,000
DeGreffpa Wind LLC	Murray	MN	Wind	Wind Turbine(s)	N		3/8/2006	1.25	0.17	PPA	3/6/2026	Y	2,415,000	2,731,000
Larswind LLC	Murray	MN	Wind	Wind Turbine(s)	N		3/20/2006	1.25	0.17	PPA	3/19/2026	Y	2,259,000	2,657,000
DeGreff DP LLC	Murray	MN	Wind	Wind Turbine(s)	N		4/5/2006	1.25	0.17	PPA	4/3/2026	Y	2,075,000	2,302,000
Rock Ridge windfarm LLC	Pipestone	MN	Wind	Wind Turbine(s)	N		4/12/2006	1.80	0.24	PPA	4/11/2021	Y	2,067,000	810,000
Southridge Windfarm LLC	Pipestone	MN	Wind	Wind Turbine(s)	N		4/12/2006	1.80	0.24	PPA	4/11/2021	Y	3,161,000	1,401,000
Windvest Windfarm LLC	Pipestone	MN	Wind	Wind Turbine(s)	N		4/12/2006	1.80	0.24	PPA	4/11/2021	Y	3,001,000	1,116,000
TAIR Windfarm llc	Murray	MN	Wind	Wind Turbine(s)	N		4/23/2006	1.25	0.17	PPA	4/22/2026	Y	1,382,000	2,686,000
Groen Wind LLC	Murray	MN	Wind	Wind Turbine(s)	N		4/24/2006	1.25	0.17	PPA	4/22/2026	Y	1,912,000	2,380,000
Hillcrest Wind LLC	Murray	MN	Wind	Wind Turbine(s)	N		4/28/2006	1.25	0.17	PPA	4/26/2026	Y	2,083,000	2,370,000
Sierra Wind LLC	Murray	MN	Wind	Wind Turbine(s)	N		5/1/2006	1.25	0.17	PPA	4/30/2026	Y	2,266,000	2,442,000
Breezy Bucks I	Lincoln	MN	Wind	Wind Turbine(s)	N		5/11/2006	1.25	0.17	PPA	5/9/2026	Y	1,755,000	2,533,000

Facility Name	Amount of 2006 Generation Assigned to other Renew. Projects (kWh)	For the amount in Col. P Identify the project to which it is assigned (ie. green pricing, other state prog.)	2006 MN REO Eligible (kWh)
GarWind LLC	16% to WI	See prior columns	2909885
Grant Windfarm LLC	Windsource	See prior columns	0
Henslin Creek LLC	16% to WI	See prior columns	3438041
Triton Wind LLC	16% to WI	See prior columns	3401992
Wasioja Wind LLC	16% to WI	See prior columns	3368458
Wilhelm Wind LLC	16% to WI	See prior columns	3672776
Zumbro Windfarm	Windsource	See prior columns	0
Gary J.T. (Tholen)	16% to WI	See prior columns	39625073
Jenna M.T. (Tholen)	16% to WI	See prior columns	See Gary J.T. for Tholen total
Krysta J.T. LLC (Tholen)	16% to WI	See prior columns	See Gary J.T. for Tholen total
Mark J.P. LLC (Tholen)	16% to WI	See prior columns	See Gary J.T. for Tholen total
Theresa M.T. LLC (Tholen)	16% to WI	See prior columns	See Gary J.T. for Tholen total
McBeth Wind 1LLC (Tholen)	16% to WI	See prior columns	See Gary J.T. for Tholen total
McBeth Wind 2 LLC (Tholen)	16% to WI	See prior columns	See Gary J.T. for Tholen total
McBeth Wind 3 LLC (Tholen)	16% to WI	See prior columns	See Gary J.T. for Tholen total
Velva Windfarm LLC	16% to WI	See prior columns	26112677
Bendwind LLC	16% to WI	See prior columns	1825071
DeGreffpa Wind LLC	16% to WI	See prior columns	2024596
Larswind LLC	16% to WI	See prior columns	1893815
DeGreff DP LLC	16% to WI	See prior columns	1739560
Rock Ridge windfarm LLC	16% to WI	See prior columns	1732853
Southridge Windfarm LLC	16% to WI	See prior columns	2649999
Windvest Windfarm LLC	16% to WI	See prior columns	2515864
TAIR Windfarm llc	16% to WI	See prior columns	1158589
Groen Wind LLC	16% to WI	See prior columns	1602910
Hillcrest Wind LLC	16% to WI	See prior columns	1746266
Sierra Wind LLC	16% to WI	See prior columns	1899683
Breezy Bucks I	16% to WI	See prior columns	1471290

Facility Name	County	State	Energy Source	Technology Type	Is it a Multi-Fuel Unit? Y/N?	If Y to Col. F. Specify the fuels by %	Vintage	Nameplate Capacity (MW)	Accredited Capacity (MW)	PPA/Own	If PPA, provide the expiration date of Contract	Deliver to MN? Y or N	Generation (1/1/06 - 12/31/06) in kWh	Generation YTD 2007 in kWh
Breezy Bucks II	Lincoln	MN	Wind	Wind Turbine(s)	N		5/11/2006	1.25	0.17	PPA	5/9/2026	Y	1,739,000	2,437,000
Roadrunner LLC	Lincoln	MN	Wind	Wind Turbine(s)	N		5/11/2006	1.25	0.17	PPA	5/10/2026	Y	2,284,000	2,531,000
Salty Dog I LLC	Lincoln	MN	Wind	Wind Turbine(s)	N		5/11/2006	1.25	0.17	PPA	5/10/2026	Y	2,369,000	2,605,000
Salty Dog II, LLC	Lincoln	MN	Wind	Wind Turbine(s)	N		5/11/2006	1.25	0.17	PPA	5/10/2026	Y	1,723,000	2,251,000
Wally's Wind Farm LLC	Lincoln	MN	Wind	Wind Turbine(s)	N		5/11/2006	1.25	0.17	PPA	5/10/2026	Y	2,408,000	2,898,000
Windy Dog LLC	Lincoln	MN	Wind	Wind Turbine(s)	N		5/11/2006	1.25	0.17	PPA	5/10/2026	Y	7,437,000	2,418,000
Shanes Wind Farm LLC	Pipestone	MN	Wind	Wind Turbine(s)	N		8/11/2006	2.00	0.27	PPA	8/10/2026	Y	1,595,000	1,211,000
Elsinore Wind Farm	Dodge	MN	Wind	Wind Turbine(s)	N		12/1/2006	1.65	0.22	PPA	11/29/2021	Y	5,283,000	2,637,000
GarMar Foundation 2, LLC	Dodge	MN	Wind	Wind Turbine(s)	N		12/1/2006	1.90	0.26	PPA	11/29/2021	Y	4,320,000	3,330,000
FPL Mower County	Mower	MN	Wind	Wind Turbine(s)	N		12/3/2006	98.90	13.35	PPA	12/1/2026	Y	70,413,000	270,083,000
St. Paul Cogeneration	Ramsey	MN	Wood	Steam Turbine/Boiler	N		4/16/2003	25.00	25.00	PPA	12/31/2022	Y	158,448,000	120,114,000
Laurentian Energy LLC	Waseca	MN	Wood	Steam Turbine	N		12/29/2006	35.00	35.00	PPA	12/28/2026	Y	NA	176,080,000
French Island	LaCrosse	WI	Wood W	Steam Turbine/Boiler	Y	55.1% wood; remaining gas, coal or RDF	1/1/1940	25.00	25.00	Own	N/A	Y	38,627,144	28,236,449
Bayfront	Ashland	WI	Wood W	Steam Turbine/Boiler	Y	40% wood; remaining gas, coal or RDF tires	1956	72.00	71.11	Own	N/A	Y	120,151,000	95,191,036
Averill Wind LLC	Clay	MN	Wind	Wind Turbine(s)	N		TBD	4.95	0.67	PPA	20 yrs from vintage	Y	NA	NA
Central Minnesota Ethanol Coopera	Morrison	MN	Biomass	Steam Turbine/Boiler	N		TBD	1.132	N/A	PPA	15 yrs from vintage	Y	NA	NA
Cisco Wind Energy	Jackson	MN	Wind	Wind Turbine(s)	N		TBD	8	1.08	PPA	20 yrs from vintage	Y	NA	NA
Crown Hydro	Hennepin	MN	Hydro	Hydro	N		TBD	3.00	N/A	PPA	20 yrs from vintage	Y	NA	NA
Ewington Energy Systems LLC	Jackson	MN	Wind	Wind Turbine(s)	N		TBD	19.95	2.69	PPA	20 yrs from vintage	Y	NA	NA
Glacial Ridge Windpower LLC	Pope	MN	Wind	Wind Turbine(s)	N		TBD	6.3	0.85	PPA	20 yrs from vintage	Y	NA	NA
Grant County Wind LLC	Grant	MN	Wind	Wind Turbine(s)	N		TBD	20	2.70	PPA	20 yrs from vintage	Y	NA	NA
Herman Wind LLC	Traverse	MN	Wind	Wind Turbine(s)	N		TBD	20	2.70	PPA	20 yrs from vintage	Y	NA	NA
Jeffers Wind	Cottonwoo	MN	Wind	Wind Turbine(s)	N		TBD	50.00	6.75	PPA	20 yrs from vintage	Y	NA	NA
Kenyon Wind	Goodhue	MN	Wind	Wind Turbine(s)	N		TBD	18.90	2.55	PPA	20 yrs from vintage	Y	NA	NA
MinnDakota	Lincoln, MN and Brookings, SD	MN, SI	Wind	Wind Turbine(s)	N		TBD	150.00	20.25	PPA	15 yrs from vintage	Y	NA	NA
North Community Turbines	Lincoln	MN	Wind	Wind Turbine(s)	N		TBD	16	2.16	PPA	20 yrs from vintage	Y	NA	NA
North Wind Cooperative	Lincoln	MN	Wind	Wind Turbine(s)	N		TBD	14	1.89	PPA	20 yrs from vintage	Y	NA	NA

Facility Name	Amount of 2006 Generation Assigned to other Renew. Projects (kWh)	For the amount in Col. P Identify the project to which it is assigned (ie. green pricing, other state prog.)	2006 MN REO Eligible (kWh)
Breezy Bucks II	16% to WI	See prior columns	1457877
Roadrunner LLC	16% to WI	See prior columns	1914773
Salty Dog I LLC	16% to WI	See prior columns	1986032
Salty Dog II, LLC	16% to WI	See prior columns	1444463
Wally's Wind Farm LLC	16% to WI	See prior columns	2018728
Windy Dog LLC	16% to WI	See prior columns	6234749
Shanes Wind Farm LLC	16% to WI	See prior columns	1337155
Elsinore Wind Farm	19% to Windsource (Nov.-Dec. 2006)	See prior columns	4264000
GarMar Foundation 2, LLC	20% to Windsource (Nov.-Dec. 2006)	See prior columns	3453000
FPL Mower County	16% to WI	See prior columns	59030175
St. Paul Cogeneration	16% to WI	See prior columns	158448000
Laurentian Energy LLC	N/A	See prior columns	N/A
French Island	25% to other jurisdictions	See prior columns	28970358
Bayfront	16% to WI; 0% to MN	See prior columns	0
Averill Wind LLC	N/A	See prior columns	N/A
Central Minnesota Ethanol Coopera	N/A	See prior columns	N/A
Cisco Wind Energy	N/A	See prior columns	N/A
Crown Hydro	N/A	See prior columns	N/A
Ewington Energy Systems LLC	N/A	See prior columns	N/A
Glacial Ridge Windpower LLC	N/A	See prior columns	N/A
Grant County Wind LLC	N/A	See prior columns	N/A
Herman Wind LLC	N/A	See prior columns	N/A
Jeffers Wind	N/A	See prior columns	N/A
Kenyon Wind	N/A	See prior columns	N/A
MinnDakota	N/A	See prior columns	N/A
North Community Turbines	N/A	See prior columns	N/A
North Wind Cooperative	N/A	See prior columns	N/A

Facility Name	County	State	Energy Source	Technology Type	Is it a Multi-Fuel Unit? Y/N?	If Y to Col. F. Specify the fuels by %	Vintage	Nameplate Capacity (MW)	Accredited Capacity (MW)	PPA/Own	If PPA, provide the expiration date of Contract	Deliver to MN? Y or N	Generation (1/1/06 - 12/31/06) in kWh	Generation YTD 2007 in kWh
Remaining 500 MW C-BED Commi	Various	MN	Wind	Wind Turbine(s)	N		TBD	333	44.96	PPA	TBD	Y	NA	NA
SAF Hydroelectric	Hennepin	MN	Hydro	Hydro	N		TBD	9.18	N/A	PPA	20 yrs from vintage	Y	N/A	N/A
St. Olaf College	Rice	MN	Wind	Wind Turbine(s)	N		TBD	1.65	0.22	PPA	20 yrs from vintage	Y	3,000	25,000
West Stevens Wind LLC	Stevens	MN	Wind	Wind Turbine(s)	N		TBD	20	2.70	PPA	20 yrs from vintage	Y	NA	NA
Total							**2006 nameplate**	**1237.59**					**3,313,725,454**	**2,917,130,841**
							2007 nameplate	**1495.09**						
2118712.4														

Facility Name	Amount of 2006 Generation Assigned to other Renew. Projects (kWh)	For the amount in Col. P Identify the project to which it is assigned (ie. green pricing, other state prog.)	2006 MN REO Eligible (kWh)
Remaining 500 MW C-BED Commi	N/A	See prior columns	N/A
SAF Hydroelectric	N/A	See prior columns	N/A
St. Olaf College	16% to WI	See prior columns	2515
West Stevens Wind LLC	N/A	See prior columns	N/A
Total			2,335,761,569
2118712.4			

STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION

LeRoy Koppendrayer	Chair
David C. Boyd	Commissioner
J. Dennis O'Brien	Commissioner
Thomas Pugh	Commissioner
Phyllis A. Reha	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	DOCKET NO.: E-999/CI-03-869
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

NOTICE OF COMPLIANCE OF XCEL ENERGY

INTRODUCTION

Northern States Power Company, a Minnesota corporation ("Xcel Energy"), respectfully submits this compliance filing to the Minnesota Public Utilities Commission ("Commission") in the above-referenced Dockets. In its October 9, 2007 Order, the Commission approved use of the Midwest Renewable Energy Tracking System ("M-RETS") to satisfy Commission responsibility under Minn. Stat. 216B.1691, Subd. 4(d) to establish a program for tradable energy credits. To facilitate timely participation in M-RETS, the Commission set a schedule for meeting a series of 5 steps. Specifically, utilities subject to Minn. Stat 216B.1691 must have completed steps (1) through (3) by January 1, 2008 and the following two steps by March 1, 2008:

(4) *Utility creates an account for its organization, with subaccounts if desired.*

(5) *Utility registers its generation units/facilities and designates a Qualifying Reporting Entity for each unit/facility. Utility provides APX with appropriate documentation of facility characteristics.*

Our initial compliance filing indicating satisfaction of steps (1) through (3) was made on January 4, 2008. We provide the following information as demonstration of the status of our compliance to-date with the March deadline and request additional time in which to complete registration activity.

COMPLIANCE REPORT

A. M-RETs Registration

We have established an M-RETS account for Northern States Power Company with sub-accounts for Northern States Power Company – Minnesota (NSP-MN), Northern States Power Company – Wisconsin (NSP-WI), and Windsource – Minnesota (Windsource – MN) to track compliance requirements of each of our jurisdictions.

In addition, Xcel Energy has made substantial progress toward registering generating resources within M-RETS. As set forth in Attachment A, Xcel Energy has registered 82 generating resources within M-RETS, comprising 1,166 MW of installed renewable energy generating capacity in Minnesota, Wisconsin, North Dakota and South Dakota. These generating resources reflect all of our self-owned renewable energy generation and 59 renewable energy purchase agreements ("REPAs"). At this time, we do not yet have the documentation required to register the remaining 71 REPAs (representing about 555 MW of installed renewable energy generating capacity) in the M-RETS.

B. Outstanding Issues

In its December 18, 2008 Order, the Commission recognized that full compliance with the March 1, 2008 deadline could present some challenges, particularly for Xcel Energy. As described on pages 10-11 of that Order, some of Xcel Energy's older REPAs were signed prior to the creation of separate markets for Renewable Energy Credits ("RECs") and that those contracts do not contain explicit language dealing with the environmental attributes separate from the renewable energy that is being purchased. In addressing this "silent contract" issue, Order Point 4 provides that Xcel Energy "shall actively pursue negotiations and settlements to clarify such ownership, if such facilities are to be utilized to meet renewable energy objectives/renewable energy standards."

As called for in the Commission's December 18, 2007 Order, we have been diligently pursuing negotiations and settlements to clarify Xcel Energy's entitlement to the RECs associated with all of its REPAs. Xcel Energy has communicated by mail, email, and telephone with its contract vendors in an effort to resolve all of the issues surrounding treatment of RECs. Those negotiations are ongoing.

Attachment B shows the current status of the remaining REPAs (71) for which we have been unable to complete the registration process. These 71 REPAs are divided into two categories; 46 are "silent contracts" in that they do not explicitly address how RECS are to be treated apart from the energy that is being sold to Xcel Energy; and, 25 are clear on Xcel Energy ownership of the RECs.

In the case of the 25 REPAs clear on Xcel Energy ownership of RECs, the signed authorization forms have not yet been returned, however we do not anticipate problems beyond needing additional time for these forms to find their way back to us.

Once the forms are returned, we will promptly register these renewable resources within M-RETS.

Of the 46 REPAs that do not explicitly address RECs, most of these vendors have refused to provide Xcel Energy access to the RECs without additional compensation (38); a couple have partially agreed or indicated willingness to negotiate with Xcel Energy (2); a few have not yet responded (6). We are continuing our efforts to negotiate settlements with as many of these vendors as is achievable.

We note that at page 11 of the Commission's December 18, 2008 Order in this docket, the Commission declined to make a decision at that time but acknowledged interpretation of power purchase agreements may be needed in the future. We believe we have gone as far as possible in settling the matter with our vendors and believe that at this time, it would be helpful for the Commission to consider that question and provide guidance to Xcel Energy and its REPA counterparties. Consequently, we will file a separate petition shortly with the Commission seeking a declaration that the purchase of "energy" under a REPA necessarily includes the purchase of all of the attributes that makes the energy renewable. As described in that petition, the Commission has the authority to make this declaration and doing so will clarify that, even in the "silent contract" scenario, purchase of energy from a renewable resource includes the purchase of the attributes that differentiate the energy as renewable.

CONCLUSION

Xcel Energy has made substantial progress in its M-RETS compliance program and has completed the steps needed for successful M-RETS registration of a large number of generating resources. However, we respectfully request additional time to

complete the process for our remaining renewable energy sources. We are hopeful that we will be able to register RECs from additional projects, including those that fall into the "silent contract" category. We will continue to keep the Commission informed of our ongoing efforts to register all of our renewable energy resources within M-RETS.

Dated: March 3, 2008
Northern States Power Company,
a Minnesota corporation

Respectfully submitted,

/s/

Debra J. Paulson

Xcel Energy's M-RETS Registered Generating Resources Compliance Filing

ATTACHMENT A
Docket Nos. E999/CI-03-869 E999/CI-04-1616

M-RETS Generator	Contract	Assignment of Registration Rights	Nameplate Capacity (MW)	Generation Technology	Fuel Type
Boeve Windfarm	Boeve Windfarm LLC	Yes	1.90	Wind	Wind
Chanarambie Power Partners (1)	Chanarambie Power Partners LLC	Yes	43.50	Wind	Wind
Chanarambie Power Partners (2)	Chanarambie Power Partners LLC	Yes	42.00	Wind	Wind
Cisco Wind Energy	Cisco Wind Energy LLC	Yes	8	Wind	Wind
East Ridge	Bendwind LLC, DeGreeff DP LLC, DeGreeffpa LLC, Groen Wind LLC, Hillcrest Wind LLC, Larswind LLC, Sierra Wind LLC, TAIR Windfarm LLC	Yes	10.00	Wind	Wind
Ewington Energy Systems	Ewington Energy Systems LLC	Yes	19.95	Wind	Wind
Fenton Power Partners I (1)	Fenton Power Partners I LLC	Yes	102.75	Wind	Wind
Fenton Power Partners I (2)	Fenton Power Partners I LLC	Yes	102.75	Wind	Wind
Fey Windfarm	Fey Windfarm LLC	Yes	1.90	Wind	Wind
Ford Motor Co.	Ford Motor Co.	Yes	18.00	Hyrdoelectric	Hyrdoelectric
FPL Energy Mower County	FPL Mower County LLC	Yes	98.90	Wind	Wind
Jeffers Wind 20	Jeffers Wind 20, LLC	Yes	50.00	Wind	Wind
K-Brink Wind Farm	K-Brink Wind Farm LLC	Yes	1.90	Wind	Wind
Minwind	Minwind III LLC, Minwind IV LLC, Minwind V LLC, Minwind VI LLC, Minwind VII LLC, Minwind VII LLC, Minwind IX LLC	Yes	11.55	Wind	Wind
MinnDakota Wind (1)	MinnDakota Wind LLC	Yes	99.00	Wind	Wind
MinnDakota Wind (2)	MinnDakota Wind LLC	Yes	51.00	Wind	Wind
Moraine Wind	Moraine Wind LLC	Yes	51.00	Wind	Wind
NAE Shaokatan Power Partners	NAE Shaokatan Power Partners	Yes	1.65	Wind	Wind
Norgaard North	Roadrunner-I LLC, Salty Dog-I LLC, Wally's Wind Farm LLC, Wind Dog-I LLC	Yes	5.00	Wind	Wind
Norgaard South	Breezy Bucks-I LLC, Breezy Bucks-II LLC, Salty Dog-II LLC	Yes	3.75	Wind	Wind
Pipestone	Carstensen Wind LLC, Greenback Energy LLC, Lucky Wind LLC, Northern Lights Wind LLC, Stahl Wind LLC	Yes	8.25	Wind	Wind
Rock Ridge Power Partners	Rock Ridge Power Partners LLC	Yes	1.80	Wind	Wind
Shane's Wind Machine	Shane's Wind Machine LLC	Yes	2.00	Wind	Wind
South Ridge Power Partners	South Ridge Power Partners LLC	Yes	1.80	Wind	Wind
St. Olaf College	St. Olaf College	Yes	1.65	Wind	Wind
Tholen Transmission, Inc. (North)	Gary J.T., Jenna M.T., Krysta J.T., Mark J.P., Theresa M.T.	Yes	8.25	Wind	Wind
Tholen Transmission, Inc. (South)	McBeth-1 LLC, McBeth-2 LLC, McBeth-3 LLC	Yes	4.95	Wind	Wind
West Ridge	Bisson Windfarm LLC, CG Windfarm LLC, TG Windfarm LLC, Tofteland Windfarm LLC, Westridge Windfarm LLC	Yes	9.50	Wind	Wind
Windcurrent Farms	Windcurrent Farms LLC	Yes	1.90	Wind	Wind
Windvest Power Partners	Windvest Power Partners LLC	Yes	1.80	Wind	Wind
Apple River (Units 1, 3-4)	Wisconsin	N/A	3.30	Hydroelectric	Hydroelectric
Bayfront (Unit 4)	Wisconsin	N/A	20.00	Biomass	Wood Waste
Bayfront (Unit 5)	Wisconsin	N/A	20.00	Biomass	Wood Waste
Bayfront (Unit 6)	Wisconsin	N/A	32.00	Biomass	Wood Waste
Big Falls (Units 1-3)	Wisconsin	N/A	7.78	Hyrdoelectric	Hyrdoelectric
Cedar Falls (Units 1-3)	Wisconsin	N/A	6.00	Hyrdoelectric	Hyrdoelectric
Chippewa Falls (Unit 1)	Wisconsin	N/A	3.60	Hyrdoelectric	Hyrdoelectric
Chippewa Falls (Unit 2)	Wisconsin	N/A	3.60	Hyrdoelectric	Hyrdoelectric
Chippewa Falls (Unit 3)	Wisconsin	N/A	3.60	Hyrdoelectric	Hyrdoelectric
Chippewa Falls (Unit 4)	Wisconsin	N/A	3.60	Hyrdoelectric	Hyrdoelectric

Xcel Energy's M-RETS Registered Generating Resources
Compliance Filing

ATTACHMENT A
Docket Nos. E999/CI-03-869 E999/CI-04-1616

M-RETS Generator	Contract	Assignment of Registration Rights	Nameplate Capacity (MW)	Generation Technology	Fuel Type
Chippewa Falls (Unit 5)	Wisconsin	N/A	3.60	Hyrdoelectric	Hyrdoelectric
Chippewa Falls (Unit 6)	Wisconsin	N/A	3.60	Hyrdoelectric	Hyrdoelectric
Cornell (Unit 1)	Wisconsin	N/A	10.00	Hyrdoelectric	Hyrdoelectric
Cornell (Unit 2)	Wisconsin	N/A	10.00	Hyrdoelectric	Hyrdoelectric
Cornell (Unit 3)	Wisconsin	N/A	10.00	Hyrdoelectric	Hyrdoelectric
Cornell (Unit 4)	Wisconsin	N/A	0.80	Hyrdoelectric	Hyrdoelectric
Dells (Units 1-7)	Wisconsin	N/A	9.50	Hyrdoelectric	Hyrdoelectric
French Island (Unit 1)	Wisconsin	N/A	12.50	Biomass	RDF and Wood Waste
French Island (Unit 2)	Wisconsin	N/A	12.50	Biomass	RDF and Wood Waste
Hayward (Unit 1)	Wisconsin	N/A	0.17	Hyrdoelectric	Hyrdoelectric
Holcombe (Unit 1)	Northern States Power Company -- Wisconsin	N/A	11.30	Hyrdoelectric	Hyrdoelectric
Holcombe (Unit 2)	Northern States Power Company -- Wisconsin	N/A	11.30	Hyrdoelectric	Hyrdoelectric
Holcombe (Unit 3)	Northern States Power Company -- Wisconsin	N/A	11.30	Hyrdoelectric	Hyrdoelectric
Jim Falls (Unit 1)	Northern States Power Company -- Wisconsin	N/A	27.50	Hyrdoelectric	Hyrdoelectric
Jim Falls (Unit 2-3)	Northern States Power Company -- Wisconsin	N/A	28.00	Hyrdoelectric	Hyrdoelectric
Ladysmith (Units 1-3)	Wisconsin	N/A	2.00	Hyrdoelectric	Hyrdoelectric
Menomonie (Units 1-2)	Wisconsin	N/A	5.40	Hyrdoelectric	Hyrdoelectric
Red Wing (Unit 1)	Northern States Power Company -- Minnesota	N/A	11.50	Biomass	RDF
Red Wing (Unit 2)	Northern States Power Company -- Minnesota	N/A	11.50	Biomass	RDF
Riverdale (Units 1-2)	Wisconsin	N/A	0.50	Hyrdoelectric	Hyrdoelectric
Saxon Falls (Units 1-2)	Wisconsin	N/A	1.26	Hyrdoelectric	Hyrdoelectric
St Croix Falls (Unit 1)	Northern States Power Company -- Wisconsin	N/A	2.50	Hyrdoelectric	Hyrdoelectric
St Croix Falls (Unit 2)	Northern States Power Company -- Wisconsin	N/A	2.50	Hyrdoelectric	Hyrdoelectric
St Croix Falls (Unit 3)	Northern States Power Company -- Wisconsin	N/A	2.50	Hyrdoelectric	Hyrdoelectric
St Croix Falls (Unit 4)	Northern States Power Company -- Wisconsin	N/A	2.50	Hyrdoelectric	Hyrdoelectric
St Croix Falls (Unit 5)	Northern States Power Company -- Wisconsin	N/A	3.40	Hyrdoelectric	Hyrdoelectric
St Croix Falls (Unit 6)	Northern States Power Company -- Wisconsin	N/A	3.40	Hyrdoelectric	Hyrdoelectric
St Croix Falls (Unit 7)	Northern States Power Company -- Wisconsin	N/A	3.20	Hyrdoelectric	Hyrdoelectric
St Croix Falls (Unit 8)	Northern States Power Company -- Wisconsin	N/A	3.20	Hyrdoelectric	Hyrdoelectric
St. Anthony (Units 1-5)	Minnesota	N/A	13.50	Hyrdoelectric	Hyrdoelectric
Superior Falls (Units 1-2)	Wisconsin	N/A	1.32	Hyrdoelectric	Hyrdoelectric
Thornapple (Units 1-2)	Wisconsin	N/A	1.40	Hyrdoelectric	Hyrdoelectric
Trego (Units 1-2)	Wisconsin	N/A	1.20	Hyrdoelectric	Hyrdoelectric
White River (Units 1-2)	Wisconsin	N/A	1.00	Hyrdoelectric	Hyrdoelectric
Wilmarth (Unit 1)	Wisconsin	N/A	12.50	Biomass	RDF
Wilmarth (Unit 2)	Wisconsin	N/A	12.50	Biomass	RDF
Wissota (Unit 1)	Wisconsin	N/A	6.00	Hyrdoelectric	Hyrdoelectric
Wissota (Unit 2)	Wisconsin	N/A	6.00	Hyrdoelectric	Hyrdoelectric
Wissota (Unit 3)	Wisconsin	N/A	6.00	Hyrdoelectric	Hyrdoelectric
Wissota (Unit 4)	Wisconsin	N/A	6.00	Hyrdoelectric	Hyrdoelectric
Wissota (Unit 5)	Wisconsin	N/A	6.00	Hyrdoelectric	Hyrdoelectric
Wissota (Unit 6)	Wisconsin	N/A	5.00	Hyrdoelectric	Hyrdoelectric

Xcel Energy's Outstanding Generating Resources
REPAs Not Yet M-RETS Registered
Compliance Filing

ATTACHMENT B
Docket Nos. E999/CI-03-869 E999/CI-04-1616

Contract	Contract Date	Assignment of Registration Rights	Contract -- REC Ownership	Generation Technology	Fuel Type	Nameplate Capacity (MW)
Laurentian Energy Authority LLC	1/31/2005	Contingent	NSP	Biomass	Wood	35.00
Ashland Wind Farm LLC	5/1/2005	No Response	NSP	Wind	Wind	1.90
Asian Children Support LLC	2/14/2003	No Response	NSP	Wind	Wind	1.90
Bangladesh Children Support Inc.	2/14/2003	No Response	NSP	Wind	Wind	1.90
Brandon Windfarm LLC	5/1/2005	No Response	NSP	Wind	Wind	1.50
BT LLC	1/31/2002	No Response	NSP	Wind	Wind	1.80
Burmese Children Support Inc.	2/14/2003	No Response	NSP	Wind	Wind	1.90
Carleton College	9/2/2003	No Response	NSP	Wind	Wind	1.65
Elsinore Wind LLC	9/15/2005	No Response	NSP	Wind	Wind	1.65
G M LLC	1/31/2002	No Response	NSP	Wind	Wind	1.80
Gar Mar Wind I LLC	5/1/2005	No Response	NSP	Wind	Wind	1.50
GarMar Foundation	1/31/2002	No Response	NSP	Wind	Wind	1.80
GarMar Foundation Ii, LLC	9/15/2006	No Response	NSP	Wind	Wind	1.90
Grant Windfarm, LLC	5/1/2005	No Response	NSP	Wind	Wind	1.90
Henslin Creek Windfarm LLC	5/1/2005	No Response	NSP	Wind	Wind	1.50
Indian Children Support, Inc.	2/14/2003	No Response	NSP	Wind	Wind	1.90
JJN Windfarm LLC	5/20/2002	No Response	NSP	Wind	Wind	1.50
McNeilus Windfarm LLC	1/31/2002	No Response	NSP	Wind	Wind	1.80
Salvadoran Children Support LLC	2/14/2003	No Response	NSP	Wind	Wind	1.90
SG, LLC	1/31/2002	No Response	NSP	Wind	Wind	1.80
Triton Windfarm LLC	5/1/2005	No Response	NSP	Wind	Wind	1.50
Velva Windfarm LLC	5/10/2004	No Response	NSP	Wind	Wind	11.88
Wasioja Windfarm LLC	5/1/2005	No Response	NSP	Wind	Wind	1.50
Willhelm Wind LLC	5/1/2005	No Response	NSP	Wind	Wind	1.50
Zumbro Windfarm LLC	5/1/2005	No Response	NSP	Wind	Wind	1.90
Agassiz Beach LLC	2/15/1999	No	NSP (Silent Contract)	Wind	Wind	1.98
Autumn Hills LLC	2/15/1999	No	NSP (Silent Contract)	Wind	Wind	1.98
Buffalo Ridge Wind Farm LLC	12/21/2002	No	NSP (Silent Contract)	Wind	Wind	1.50
Byllesby (Neshkoro Power Association)	3/19/1987	No	NSP (Silent Contract)	Hyrdoelectric	Hyrdoelectric	2.58
Florence Hills LLC	2/15/1999	No	NSP (Silent Contract)	Wind	Wind	1.98
Hadley Ridge LLC	2/15/1999	No	NSP (Silent Contract)	Wind	Wind	1.98
Hennepin Energy Resource Recovery	8/1/1986	No	NSP (Silent Contract)	Biomass	RDF (Steam Turbine/Boiler)	33.7
Hope Creek LLC	2/15/1999	No	NSP (Silent Contract)	Wind	Wind	1.98
Jack River LLC	2/15/1999	No	NSP (Silent Contract)	Wind	Wind	1.98
Jessica Mills LLC	2/15/1999	No	NSP (Silent Contract)	Wind	Wind	1.98
Julia Hills LLC	2/15/1999	No	NSP (Silent Contract)	Wind	Wind	1.98
Lac Courte Orielles Band of Lake Superior	2/1/1984	No	NSP (Silent Contract)	Hyrdoelectric	Hyrdoelectric	3.10
Lake Benton Power Partners LLC	9/6/1996	No	NSP (Silent Contract)	Wind	Wind	107.25
Metro Wind LLC	2/15/1999	No	NSP (Silent Contract)	Wind	Wind	0.66
Moulton Heights Wind Power Project LLC	12/21/2002	No	NSP (Silent Contract)	Wind	Wind	1.50
Muncie Power Partners LLC	12/21/2002	No	NSP (Silent Contract)	Wind	Wind	1.50
N A E Lakota Ridge, LLC	3/26/1997	No	NSP (Silent Contract)	Wind	Wind	11.25
N A E Shaokatan Hills LLC	3/26/1997	No	NSP (Silent Contract)	Wind	Wind	11.88
Neshkoro (Neshonoc)	6/23/1986	No	NSP (Silent Contract)	Wind	Wind	0.40
North Ridge Wind Farm LLC	12/21/2002	No	NSP (Silent Contract)	Wind	Wind	1.50
Pine Bend	9/20/1994	No	NSP (Silent Contract)	Landfill Gas	Combined Cycle Combustion Turbine	12.00
Rapidan Hydro	2/24/1983	No	NSP (Silent Contract)	Hyrdoelectric	Hyrdoelectric	5.00
Ruthton Ridge LLC	2/15/1999	No	NSP (Silent Contract)	Wind	Wind	1.98
Soliloque Ridge LLC	2/15/1999	No	NSP (Silent Contract)	Wind	Wind	1.98
Spartan Hills LLC	2/15/1999	No	NSP (Silent Contract)	Wind	Wind	1.98
St Cloud (City of) Hydro	5/12/1986	No	NSP (Silent Contract)	Hyrdoelectric	Hyrdoelectric	8.80
St Paul Cogeneration	12/23/1998	No	NSP (Silent Contract)	Biomass	Wood	25.00
Sun River LLC	2/15/1999	No	NSP (Silent Contract)	Wind	Wind	1.98
Tsar Nicolas LLC	2/15/1999	No	NSP (Silent Contract)	Wind	Wind	1.98
Twin Lake Hills LLC	2/15/1999	No	NSP (Silent Contract)	Wind	Wind	1.98
Vandy South Project LLC	12/21/2002	No	NSP (Silent Contract)	Wind	Wind	1.50

Xcel Energy's Outstanding Generating Resources
REPAs Not Yet M-RETS Registered
Compliance Filing

ATTACHMENT B
Docket Nos. E999/CI-03-869 E999/CI-04-1616

Contract	Contract Date	Assignment of Registration Rights	Contract -- REC Ownership	Generation Technology	Fuel Type	Nameplate Capacity (MW)
Viking Wind Farm LLC	12/21/2002	No	NSP (Silent Contract)	Wind	Wind	1.50
Vindy Power Partners LLC	12/21/2002	No	NSP (Silent Contract)	Wind	Wind	1.50
Wilson-West Windfarm LLC	12/21/2002	No	NSP (Silent Contract)	Wind	Wind	1.50
Winter's Spawn LLC	2/15/1999	No	NSP (Silent Contract)	Wind	Wind	1.98
Woodstock Wind Farm LLC	9/19/1997	No	NSP (Silent Contract)	Wind	Wind	10.20
Hastings Utilities Dept.	9/10/1985	Yes, No Letter	NSP (Silent Contract)	Hyrdoelectric	Hyrdoelectric	4.00
Lake Benton Power Partners II LLC	4/9/1998	Yes, No Letter	NSP (Silent Contract)	Wind	Wind	103.50
FibroMinn LLC	8/31/2000	Contingent	NSP (Silent Contract)	Biomass	Steam Turbine/Boiler	50.00
Minnesota Methane LLC	3/31/1994	Contingent	NSP (Silent Contract)	Landfill Gas	Internal combustion	3.10
Barron Light and Water Dept	7/1/1986	No Response	NSP (Silent Contract)	Biomass	RDF (Steam Turbine/Boiler)	0.265
Eau Galle Renewable Energy Co. Inc.	7/31/1991	No Response	NSP (Silent Contract)	Hyrdoelectric	Hyrdoelectric	0.30
Kas Brothers Windfarm LLC	8/28/2000	No Response	NSP (Silent Contract)	Wind	Wind	1.50
Landfill Power Flying Cloud	9/20/1994	No Response	NSP (Silent Contract)	Landfill Gas	Internal combustion	4.80
Olsen Windfarm LLC	8/10/2001	No Response	NSP (Silent Contract)	Wind	Wind	1.50
Wind Power Partners 1993 LP	10/28/1993	No Response	NSP (Silent Contract)	Wind	Wind	25.00

CERTIFICATE OF SERVICE

I, Carole Wallace, hereby certify that I have this day served copies or summaries of the foregoing document on the attached list of persons by e-filing, delivery by hand or by causing to be placed in the U.S. mail at Minneapolis, Minnesota.

DOCKET NOS. E999/CI-04-1616 AND E999/CI-03-869

Dated this 3th day of March 2008

/s/ Carole A. Wallace

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Xcel Energy
Docket No.: E002, ET2/CN-06-1115
Response To: Susan L. Peirce, MN Department of Commerce — Information Request No. 59
Date Received: March 6, 2008
March 15, 2008

Question:

With respect to planned biogas or biomass facilities, please provide a capacity factor for those facilities along with an explanation of how the capacity factor was determined.

Response:

Utility	Capacity Factor and Explanation
Central Minnesota Municipal Power Agency ("CMMPA")	CMMPA currently estimates that the Landfill Gas station at Glencoe will average 90% capacity factor. This is based on the continuous nature of the engineered system as well as the existence of a full backup generation power plant should any of the installed units fail.
Dairyland Power Cooperative	Dairyland Power Cooperative currently does not have any planned biogas or biomass facilities under contract. For potential future biogas or biomass facilities, Dairyland Power Cooperative relies on initial engineering estimates of capacity factor. For existing biogas or biomass facilities, the capacity factor is based on actual generation.

Project	Technology	MW	MWh	Hours	Capacity Factor
Seven Mile Creek	Landfill	3.0	14,447	8,760	55%
Wild Rose	Digester	0.8	1,989	8,760	29%
Five Star	Digester	0.8	4,913	8,760	72%

Utility	Capacity Factor and Explanation
	Norswiss | Digester | 0.8 | 3,841 | 8,760 | 52% Timberline Trail | Landfill | 3.2 | 26,005 | 8,760 | 93% Central Disposal | Landfill | 4.8 | 39,927 | 8,760 | 95%
Great River Energy	The 2007 capacity factor for the Elk River Municipal (Landfill gas) is 92.1%, based on generation of 25,818 MWh and capacity of 3.2 MW. The 2007 capacity factor of the Elk River Station (refuse-derived fuel) is 49.9% based on generation of 160,970 MWh and accredited capacity of 36.8 MW. Great River Energy has no planned biomass or biogas generation projects at this time.
Minnesota Power	Minnesota Power does not own or have under contract any existing or planned biogas facilities. With respect to new biomass facilities, the capacity factor is approximately 75% and for existing biogas facilities, the capacity factor is lower, approximately 65%, due to equipment and maintenance needs of older systems. Minnesota Power determines these capacity factors on a case by case basis applying general utility industry practices.
Otter Tail Power Company	Otter Tail Power is currently working with two entities that may result in PPAs. One of these facilities is a wood waste biomass facility that previously operated at an annual capacity factor typically in the 60-75% range. If the unit is restarted, the capacity factor experienced will be dependent upon (1) the amount of fuel available for the facility and (2) the operating parameters of the facility such as maintenance, forced outage rate, etc. The second entity is considering the installation of biogas. At this point Otter Tail Power does not know what the capacity factor will be, but the developer has indicated the expectation that it will be high.
Rochester Public Utilities	Rochester Public Utilities ("RPU") purchases "behind the meter" generation for the Olmsted

Utility	Capacity Factor and Explanation
	County Waste to Energy Facility ("OWEF") when RPU system demand exceeds 216 MW. The current OWEF capacity is 2.66 MW. The OWEF is planning an additional 5 MW unit to be in-service in 2009. When RPU demand is below 216 MW, the OWEF generation is purchased by Southern Minnesota Municipal Power Agency ("SMMPA"). The capacity factor of the OWEF biomass facility is forecasted to vary between 40% to 55% depending on the year. This estimate was provided to RPU from SMMPA based on estimates of steam versus electrical loading on an annual basis.
SMMPA	The capacity factor of the OWEF biomass facility is forecasted to vary between 40% to 55% depending on the year. This estimate was provided to SMMPA from Olmsted County based on their estimates of steam versus electrical loading on an annual basis. The capacity factor of the SMMPA Methane Energy Facility is estimated to be 90% based on experience from similar landfill gas generating facilities. All SMMPA biodiesel fired generating units use an estimated capacity factor of approximately 5% (or 500 operating hours per year) based on several years of operating history.
Wisconsin Public Power Inc.	Wisconsin Public Power Inc. has one biogas facility purchased that started in February 2007. Wisconsin Public Power Inc. used a capacity factor of 98% for this facility based on the developers' estimated capacity factor for the facility.

Utility	Capacity Factor and Explanation
Xcel Energy	See the chart below:

Facility Name	Capacity Factor	Source
Central Minnesota Ethanol Cooperative	N/A	Not operating (plant problems)
FibroMinnesota	80%	Estimate based on late 2007
MinnAURI	N/A	R&D Project (Idle)
Landfill Power Flying Cloud	N/A	Idle
Minnesota Methane LLC	62%	Average 2006-2007
Pine Bend	60%	Average 2006-2007
Barron Light and Water Dept	1%	Average 2006-2007
Hennepin Energy Resource Recovery	74%	Average 2006-2007
Red Wing	49%	Average 2006-2007
Wilmarth	51%	Average 2006-2007
Laurentian Energy LLC	80%	Average 2007
St. Paul Cogeneration	72%	Average 2006-2007
Bayfront (CF only represents renewable generation)	20%	Average 2006-2007
French Island	18%	Average 2006-2007

Response By: Andrew Lucero
Title: Lucero Consulting LLC
Company: Central Minnesota Municipal Power Agency
Telephone: 218-721-4034
Date: April 18, 2008

Response By: John McWilliams
Title: Resource Planner
Department: Strategic Planning
Company: Dairyland Power Cooperative
Telephone: 608-787-1342
Date: April 18, 2008

Response By: Matt Lacey
Title: Regulatory Policy Analyst
Department: Transmission

Company:	Great River Energy
Telephone:	763-445-5958
Date:	April 18, 2008

Response By:	David Moeller
Title:	Attorney
Department:	Minnesota Power Legal Services
Company:	Minnesota Power
Telephone:	218-723-3963
Date:	April 18, 2008

Response By:	Bryan Morlock
Title:	Consultant, Planning
Department:	Risk Management
Company:	Otter Tail Power
Telephone:	218-739-8269
Date:	April 18, 2008

Response By:	Scott Nickels
Title:	Senior Electrical Engineer
Department:	N/A
Company:	Rochester Public Utilities
Telephone:	507-273-5061
Date:	April 18, 2008

Response By:	Larry Johnston
Title:	Director of Corporate Development, Agency Relations, and Officer
Department:	Regulatory Affairs
Company:	Southern Minnesota Municipal Power Agency
Telephone:	507-292-6440
Date:	April 18, 2008

Response By:	Peter Shatrawka
Title:	Director of Planning
Company:	Wisconsin Public Power Inc.

Telephone:	608-834-4595
Date:	April 18, 2008

Response By:	Jim Alders
Title:	Manager Regulatory Projects
Department:	Government and Regulatory Affairs
Company:	Xcel Energy
Telephone:	612-330-6732
Date:	April 18, 2008

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Xcel Energy
Docket No.: E002, ET2/CN-06-1115
Response To: Susan L. Peirce — Information Request No. 36
MN Department of Commerce
Date Received: November 9, 2007

Question:

What has been the companies wind capacity factor for the years 2005, 2006 and 2007?

Response:

It is Applicants' understanding that the Department seeks this data to use as an input to calculate the need for the facilities. Applicants further understand that the Department seeks information for Applicants, the other CapX2020 utilities who signed Project Development Agreements for one of the three 345 kV transmission lines that are the subject of this proceeding, Minnkota Power Cooperative ("Minnkota") and Minnesota Municipal Power Agency ("MMPA").

Based on this understanding, the requested information was gathered from Applicants and all of the CapX2020 utilities that have signed a Project Development Agreement for one of the three 345 kV transmission lines that are the subject of this proceeding. The attached spreadsheet provides that information. Information for Minnkota and MMPA was not readily available and is not included.

Company	2005 Wind Capacity Factor	2006 Wind Capacity Factor	2007 Wind Capacity Factor
Central Minnesota Municipal Power Agency	30%	26%	30%
Dairyland Power Cooperative	29%	33%	35%
Great River Energy	34%	37%	39%
Minnesota Power	0	0	43%
Missouri River Energy Services	33%	30%	33%
Otter Tail Power Company	36%	32%	36%
Rochester Public Utilities[1]	0	0	0
Southern Minnesota Municipal Power Agency [2]	34%	35%	31%
Wisconsin Public Power, Inc.	33%	30%	35%
Xcel Energy	31%	32%	34%

For 2005 and 2006, the annual capacity factor of a utility's wind generating units was calculated as:

$$\frac{\text{Sum of annual generation of wind facilities (kWh)}}{\text{Sum of nameplate capacity of wind facilities (kW)} * 8{,}760 \text{ hours}}$$

Wind facility capacity factors for 2007 were similarly calculated, but with a fewer number of hours to reflect the actual generation data. For example, for generation data through October, 31, 2007, 7,296 hours were used (8,760 – (24 * 61)).

Notes:
[1]Rochester Public Utilities does not own wind generation. For those Rochester Public Utilities customers that participate in a green pricing program the wind generation is provided by Southern Minnesota Municipal Power Agency.

[2] The low capacity factor in 2007 is the result of a prolonged turbine outage due to equipment failure.

Response By:	Matt Lacey
Title:	Regulatory Policy Specialist
Department:	Transmission
Company:	Great River Energy
Telephone:	763-241-2223
Date:	January 11, 2008

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Xcel Energy
Docket No.: E002, ET2/CN-06-1115
Response To: Susan L. Peirce, MN Department of Commerce — Information Request No. 58
Date Received: March 3, 2008

Question:

Please explain how the accredited capacity for a facility is determined.

(a) If determined by other entities (i.e. MISO, MAPP), please provide information on the factors they consider and how they determine accredited capacity.

(b) Does accredited capacity change over the life of the facility? If so, please explain how those changes are made, and the frequency of any updates.

(c) A number of the hydro facilities listed in response to OES IR No. 34 show accredited capacity greater than the nameplate capacity. Please explain.

(d) Do the utilities use standard rates to estimate accredited capacity for planning purposes? If so, please provide those rates along with an explanation of how those rate(s) were determined.

Response:

(a) Accredited capacity for the facilities relevant to this proceeding is determined by Mid-Continent Area Power Pool ("MAPP") or Mid-American Interconnected Network ("MAIN").

MAPP

Accreditation of generation capacity in MAPP is governed by Section 4.2.2 of the MAPP Generation Reserve Sharing Pool Handbook ("MAPP GRSP Handbook") (Revised January 16, 2007). Thermal generation is determined on a "before-the-fact" basis using the results of a performance test. Monthly output values are then determined from

this performance test. Variable generation capacity is done differently and is explained below.

Accreditation of variable generation capacity (wind, solar, and run-of-river hydro) is done on a monthly basis according to Section 4.2.2.7.2.7 of the MAPP GRSP Handbook, which is attached. In this case the generator is defined as the interconnected facility which may be made up of multiple wind generators.

To calculate the monthly accreditation of variable generation two sets of data are required. First, the hour that the system peak demand occurs for a given month is required (hour ending 18, for August, for example). The second set of required data is the historical hourly production for the generation facility for the given month (August in this example). A median generation output value is then determined using all metered hourly data occurring over a four-hour period, one of which must include the hour of system peak demand for that month. As a result, there are four possible accreditation values for August. In this example, the accredited capacity would be one of the four median values of generation for the periods: Hour ending 15-18, 16-19, 17-20 or 18-21.

Variable generation may be accredited on a "before-the-fact" or "after-the fact" basis, determined by whether there is three years of production data available. In either case, the determination of the accredited capacity is the same, but the timing of the submission of the accreditation value is different. If less than three years of operating history is available the "after-the-fact" accreditation is utilized where the accreditation is calculated after the month in question and then submitted to MAPP. When at least three years of data are available the utility may use historical operational data to apply towards its seasonal MAPP planning reserve requirement.

In addition to MAPP, another regional planning reserve sharing group was created in June 2007, the Midwest Planning Reserve Sharing Group. The reserve sharing group is administered by MISO which consists largely of MISO members and several MAPP members. The group has completed a loss of load expectation study and established reserve margins but no language has yet been approved on resource accreditation. If this group continues, the first planning year is set to begin on June 1, 2008.

MISO is anticipating an updated FERC filing to the Module E which has the potential to address requirements for the loss of load studies and resource qualifications. If this language change is approved by FERC it is possible that MISO would determine the resource accreditation for MISO members beginning on June 1, 2009.

MAIN

Wisconsin Public Power Inc. serves load in both MAPP and MAIN. Generation used to serve load in MAIN is accredited according to MAIN Guide 3A (Procedure For The Uniform Rating of Conventional Generating Equipment) and MAIN Guide 3B (Procedure for the Uniform Rating and Reporting of Non-Conventional Resource Capability). MAIN Guides 3A and 3B can be accessed at the following address:

http://www.nerc.com/~filez/regional_standards/regional_criteria_rfc.html

(b) Because accreditation of thermal units is based on actual performance tests which are required on an annual basis, the resulting ratings may vary over time as a unit ages or as it has changes in efficiencies due to equipment replacements and upgrades.

Accredited capacity of variable generation is likely to change over the life of the facility according to the energy production of the facility. The accredited value for variable generation could also change as a result of a change in the hour of a utility's peak demand. The accreditation procedure described in response to part a. is used.

(c) The nameplate capacity of a hydro facility is typically set at the time of construction and is usually based on the design of the facility. Depending on the type of hydro facility, the accredited capacity is determined either by using the monthly median of hourly recorded data for a 10 year period or by using a one hour URGE test, based on MAPP methodology for accrediting resources. Accredited capacity for a hydro facility can exceed nameplate capacity when the efficiency of hydro equipment such as motors, generators, and pumps is improved during replacement or repair. Because accreditation is based on actual performance rather than design ratings, accreditation values may vary from nameplate values.

(d) The Applicants understand the Department to be asking for the standard rates used by the following utilities to estimate accredited capacity accreditation of wind generators. See responses below:

Participant Utility	Response
Dairyland Power Cooperative	13%. Dairyland used accreditation values generated from the MAPP procedures.
Otter Tail Power Company	Otter Tail Power uses an estimate of 20% of nameplate capacity on the winter peak and 15% of nameplate capacity on the summer peak. This is based on actual historical performance and accreditation levels of wind generation facilities located on the company's system.
Central Minnesota Municipal Power Agency	15%. CMMPA's estimated accredited capacity is generated using the MAPP procedures based on the accreditation rules set forth in the MAPP GRSP handbook.
Southern Minnesota Municipal Power Agency	The SMMPA estimates that the MAPP procedures yield an accreditation percentage somewhere in the mid teen's. However, not all wind projects are accreditable due to insufficient transmission. As a result, SMMPA uses an accreditation value of only 10% for all future planned wind resources to account for some percentage of non-accreditable wind projects.

Participant Utility	Response
Wisconsin Public Power, Inc.	WPPI follows MAIN Guide 3B for wind accreditation. All WPPI wind projects are relatively new, or in the process of being built. Because WPPI lacks historic output values for its MISO deliverable wind resources, WPPI uses the provision of MAIN Guide 3B that provides for the assignment of a default value of 10% of the nameplate capacity as the monthly net capability value. For wind resources that are not deliverable, there is no capacity accredited for planning reserve purposes. For deliverable wind resources a value of 10% of nameplate capacity is used for planning reserve purposes.
Rochester Public Utilities	Rochester Public Utilties does not own or purchase any wind generated energy so it has not established standard rates to estimate accredited capacity for planning purposes.

Participant Utility	Response
Missouri River Energy Services	MRES has two kinds of wind resources included in the model. The first type is included for purposes of modeling compliance with the "25% by 2025" Minnesota RES. These resources include currently owned MRES wind generation as well as anticipated additions needed to meet the RES requirement. Currently MRES has approximately 40 MW of wind resources under construction at two sites, one near Marshall, Minnesota; and one near Odin, Minnesota; in addition to approximately 4 MW of existing wind resources at Worthington, Minnesota. None of these resources has firm transmission as required to accredit the capacity associated with the 15% MAPP reserve obligation. MRES also is pursuing the addition of 65 MW of wind resources at Watertown, South Dakota at a site that also does not have firm transmission for accrediting wind. Combined, these wind resources will total approximately 109 MW which represents the majority of the resources necessary to meet the RES. Thus, the model assigns a zero percent accreditation value to these resources. The second type of wind resource included in the model is large, accredited installations with firm transmission, for direct comparison against Big Stone II and other thermal resources in the model. Since these installations are accredited, they can help meet future capacity requirements. These resources were assigned 15% of nameplate as an assumed accreditation amount.

Participant Utility	Response
Minnkota Power Cooperative	Minnkota Power Cooperative uses 36% as the estimated capacity accreditation percentage for its two wind projects: Valley City and Petersburg. Minnkota's estimated accredited capacity is generated using the MAPP procedures based on the accreditation rules set forth in the MAPP GRSP handbook.
Minnesota Power	Minnesota Power's estimated accredited capacity is based on generation type and the accreditation rules set forth in the MAPP GRSP handbook. The accreditation for wind is 20% in MAPP until three years of real time data can be gathered.
Great River Energy	Future wind additions are assumed to achieve summer accreditation of 15% of nameplate capacity.
Xcel Energy	For planning purposes, Xcel Energy uses 13.5% as the assumed capacity accreditation percentage for wind generation. The number was originally developed from averaging actual MAPP wind accreditation on the NSP system over several years prior to the 2004 Resource Plan filing in Minnesota. Subsequent review of accreditation for new wind generation on the NSP system has been in the same range.

Response By: Matt Lacey
Title: Regulatory Policy Specialist
Department: Transmission
Company: Great River Energy
Telephone: 763-445-5958
Date: April 9, 2008

mapp SM
mid-continent area power pool

MAPP Generation Reserve Sharing Pool Handbook

Revision January 16, 2007

4.2.2.7.2.7.

The Monthly Net Capability established for Variable Capacity Generation, such as wind, solar, and run-of-river hydro, will be based on the median generation output value as further explained in the following steps:

4.2.2.7.2.7.1.

For each month, select an appropriate 4-hour period including the usual peak hour for that month. Any combination of four continuous clock hours which includes the GRSP Member's usual peak hour in that month is appropriate. The same four-hour period is utilized for the current month and all corresponding historical months.

4.2.2.7.2.7.2.

List all hourly net power output (MW) data measured at the system interconnection for the selected 4-hour period of each day of the month being examined and during each year of the historical data record being used including the current month. Up to the ten-year point in time, all applicable data should be used. Beyond ten years, the GRSP Member may choose to use the most recent ten years of applicable data or choose to use more data as long as the record is chosen without bias, i.e., the data record should be a continuous set and include recent data. Separate lists should be made for each independent interconnection. Any "parallel" interconnections whereby the plant (farm) has multiple outlets for a generator(s) will be considered as one independent interconnection. For a 10-year historical record, each such monthly list should contain 1200 hourly values for a 30-day month (30 days/month x 10 years x 4 hours/day).

4.2.2.7.2.7.3.

For a plant (farm) that experiences changing characteristics during its historical record due to changing nameplate capability or receiving formal Extended Accreditation pursuant to Section 4.2.2.4, the GRSP Member shall properly adjust (prorate) the data entries in the list(s) of net power output used in the accreditation calculation. The previous hourly production values shall be adjusted by the

multiplication factor of new nameplate capability divided by previous nameplate capability.
In addition, the GRSP Member may adjust the median calculation for Qualifying Outages. For purposes of this section 4.2.2.7.2.7.3, Qualifying Outages are those receiving formal Extended Accreditation pursuant to section 4.2.2.4 and other forced and scheduled outages or derates that are less than 120 days in duration and are not related to fuel availability or quality (i.e., are mechanical or electrical, but not related to the supply of fuel, wind, solar radiation, water supply, etc.). Specifically for wind farms that are not in Extended Accreditation and do not have mechanical or electrical outages less than 120 days in duration, if the actual production in an hour is zero because of too little wind or because of too much wind, and the turbine brakes are set, then this is not a Qualifying Outage. If the Qualifying Outage is partial (including when some, but not all, of the units are totally out of service), then the actual production can be prorated upward to reflect the expected value if all units were in service.

Here are some examples of the hourly adjustments, assuming the variable capacity plant is a wind farm with ten turbines of equal capacity (if the turbines are not of equal capacity then the adjustment needs to also be capacity weighted):

(a) in an hour when there are no Qualifying Outages, then the actual total production is part of the median calculation, without adjustment, whether it is non-zero, or zero due to no wind, or the brakes being set due to too much wind or some other reason,

(b) in an hour when there are Qualifying Outages on two of the ten turbines, then the adjusted total production for that hour becomes the actual production divided by 80% for the purpose of median calculation,

(c) in an hour when all ten of the turbines are on Qualifying Outage, then this hour shall not be used in the median calculation, and

(d) in an hour when one of the ten turbines is on a Qualifying Outage for a part of the hour, then the contribution from that turbine shall be subtracted from the total actual production and the remainder divided by 90% shall be the adjusted total production.

If a GRSP Member has historically been accrediting a variable capacity plant without making these adjustments for Qualifying Outages, it may begin to do so. If the GRSP Member has a log of corresponding historical hourly outage data, that may be used to adjust the historical hourly production data. If the GRSP Member does not have a log of corresponding historical hourly outage data, then they may either:

(a) begin adjusting future production data and merge it with the historical data that is without such adjustments, or

(b) elect to start the historical data period over by filing after-the-fact, adjusted production data for a three-year period, and then switch to before-the-fact accreditation all the time keeping an hourly log of outage data suitable for such adjustments, or

(c) provide some outage analysis acceptable to the AWG that allows for such adjustments of historical data in lieu of using an hourly outage log.

4.2.2.7.2.7.4.

Select for each independent interconnection the appropriate median value from the list(s) of net output generation values recorded in Section 4.2.2.7.2.7.2 (before adjustments) and from 4.2.2.7.2.7.3(after adjustments) and submit them on Form B-2.

4.2.2.7.2.7.5.

Sum the median net output generation values determined in Section 4.2.2.7.2.7.4 for the various independent interconnections to determine the plant

(farm) accreditation value for the month (Station Total column on Form B-2 under "For Accreditation Purposes"). Also include the sum of the medians before adjustment in the Station Total – Before Adjustment Information column.

4.2.2.7.2.7.6.

To support the variable capacity accreditation process described above, the GRSP Member shall have access to continuous hourly outage records and metering records of the generation output values for the independent interconnections. The GRSP Member shall also have access to inspect and test such metering and recording equipment and processes and to inspect other operating records as necessary for satisfying the MAPP accreditation process.

4.2.2.7.2.7.7.

During the first three years, Monthly Net Capability will be determined after-the-fact by applying all historical data for the same month including the month just completed. The annual URGE filings to be made following the first three years of operation shall report Monthly Net Capability on a before-the-fact basis pursuant to Section 4.2.2.7.2 for the following MAPP years by applying historical data per Section 4.2.2.7.2.7.2. Once before-the-fact accreditation is established, revision reports between annual reports shall not be filed except to report changes in installed nameplate capability. All filings whether for after-the-fact or before-the-fact accreditation should use accumulated data (including multiple years), as further clarified in section 4.2.2.7.4.1.2.

4.2.2.7.3. Testing Procedures to Demonstrate Capability

4.2.2.7.3.1. General Procedure for Testing

4.2.2.7.3.1.1.

Ratings will be confirmed annually, or more frequently if appropriate, to demonstrate the Monthly Net Capability. If adequate data are available to demonstrate the capability during normal peak load period operation, no special test is

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Xcel Energy
Docket No.: E002, ET2/CN-06-1115
Response To: Susan L. Peirce, MN Department of Commerce — Information Request No. 33
Date Received: November 9, 2007

Question:

Minn. Stat. §216B.243, subd. 3 (10) requires a determination of the utilities good faith compliance with Minn. Stat. §216B.1691 in granting a certificate of need. To determine the status of your utility's renewable energy mix relative to the REO/RES requirements contained in Minnesota Statutes, please provide the following information:

a. Your utility's total retail sales, defined as the kWh of electricity sold to all retail customers of your utility, or any distribution utilities to their retail customers.
b. The peak kW for total system retail sales corresponding to the information in (a);
c. The total kWh of electricity provided to Minnesota retail customers (either directly or through distribution utilities);
d. The peak kW for Minnesota retail customers corresponding to the information in (c);
e. Total kWh of electricity generated from eligible energy technologies as defined by Minnesota Stat. §216B.1691, subd. 1(a)(1) and the Minnesota Public Utilities Commission's Orders in Docket No. E999/CI-03-869, deliverable to Minnesota retail customers. Please also provide the total nameplate capacity of renewable generation that meets these definitions.

Response:

This request references Minn. Stat. § 216B.243, subd. 3 (10) which requires the Commission to evaluate whether "applicants" for a Certificate of Need are in compliance with the applicable sections of Minn. Stat. §§ 216B.1691 ("REO/RES") and 216B.2425, subd. 7. The applicants in this proceeding are Xcel Energy and Great River Energy. In addition, Section 216B.243, subd. 3 (10) requires a determination of whether "applicants are in compliance with" the REO/RES. As of the date of this

response, Xcel Energy and Great River Energy are in compliance with the REO/RES.

It is Applicants' understanding that the Department seeks this data to use as an input to calculate the need for the facilities. Applicants further understand that the Department seeks information for Applicants, the other CapX2020 utilities who signed Project Development Agreements for one of the three 345 kV transmission lines that are the subject of this proceeding, Minnkota Power Cooperative ("Minnkota") and Minnesota Municipal Power Agency ("MMPA").

Based on this understanding, the requested information was gathered from Applicants and all of the CapX2020 utilities that have signed a Project Development Agreement for one of the three 345 kV transmission lines that are the subject of this proceeding. The attached spreadsheet provides that information. The data covers all of 2006 and, to the extent data is available, 2007. The spreadsheet does not include data for 2008. Information for Minnkota and MMPA was not readily available and is not included.

Specifically, the attached spreadsheet provides responses to A through E above in columns A through F. It also includes additional information in column G. Column G shows the qualifying renewable energy remaining for meeting the utility's Minnesota Renewable Energy Objective ("REO") after deducting renewable energy requirements in other jurisdictions or for purposes other than meeting the REO.

Company	Year	(a) Retail Sales (kWh)	(b) Peak kW for System Sales	(c) kWh Provided to MN Retail Customers	(d) Peak kW for MN Retail Customers	(e) Total kWh Generated from Eligible Tech., Deliverable to MN customers	(f) Nameplate Capacity in MW	(g) Total kWh Generated from Eligible Tech. Available for MN REO/RES
Central Minnesota Municipal Power Agency	2006	519,399,230	109,007,000	519,399,230	109,007,000	30,045,000	14.8	29,945,000
	2007	537,321,147	93,575	533.889.147	93,575	35,274,568	16	35,174,568
Dairyland Power Cooperative	2006	4,388,479,092	1,023,215	756,325,319	160,970	179,233,000	46.8	140,053,000
	2007 (through Oct.)	3,563,974,565	1,025,000	678,889,672	142,969	149,297,000	46.8	99,573,000
Great River Energy	2006	10,860,872,108	2,562,700	10,860,872,108	2,562,700	550,446,700	171	296,350,620
	2007 (through Oct.)	10,906,869,900	2,504,400	10,906,869,900	2,504.40	487,294,400	271	288,144,800
Minnesota Power	2006	9,077,994,000	1,332,100	9,077,994,000	1,332,100	624,022,100	304.2	624,022,100
	2007 (through Nov.)	9,123,014,000	1,357,700	9,123,014,000	1,357,700	724,710,585	354.7	724,710,585

Company	Year	(a) Retail Sales (kWh)	(b) Peak kW for System Sales	(c) kWh Provided to MN Retail Customers	(d) Peak kW for MN Retail Customers	(e) Total kWh Generated from Eligible Tech., Deliverable to MN customers	(f) Nameplate Capacity in MW	(g) Total kWh Generated from Eligible Tech. Available for MN REO/RES
Missouri River Energy Services	2006	1,890,976,000	402,516	996,079,000	203,431	9,748,494	3.7	8,154,094
	2007 (through Sept.)	1,502,218,000	404,353	797,246,000	207,256	8,059,266	22.4	6,740,366
Otter Tail Power Company	2006	3,987,769,603	680,331	2,085,659,574	337,784	107,135,387	35.3	54,564,792
	2007 (through Oct.)	3,356,283,100	704,940	1,740,885,825	Data not yet available	82,891,510	54.8	42995376
Rochester Public Utilities	2006	20,184,143	72,400	20,184,143	72,400	13,512,683	5.6	13,512,683
	2007 (through Nov.)	23,902,794	60,300	23,902,794	60,300	14,833,614	5.6	14,833,614
Southern Minnesota Municipal Power Agency (see note)	2006	2,966,000,000	526,000	2,966,000,000	526,000	34,351,333	173.6	66,547,564
	2007 (through Nov.)	3,114,000,000	552,600	3,114,000,000	552,600	27,912,329	173.6	93,763,239

Company	Year	(a) Retail Sales (kWh)	(b) Peak kW for System Sales	(c) kWh Provided to MN Retail Customers	(d) Peak kW for MN Retail Customers	(e) Total kWh Generated from Eligible Tech., Deliverable to MN customers	(f) Nameplate Capacity in MW	(g) Total kWh Generated from Eligible Tech. Available for MN REO/RES
Wisconsin Public Power, Inc.	2006	5,025,936,000	988,000	0	0	0	0	0
	2007 (through Nov.)	4,696,057,000	947,000	0	0	0	0	0
Xcel Energy	2006	43,622,668,102	9,027,000	32,882,516,000	6,887,000	3,313,725,454	1,237.6	2,335,761,569
	2007 (through Sept.)	33,676,775,303	8,763,000	25,367,093,000	6,774,000	2,917,130,841	1,495.1	2,252,584,354

Note: For Southern Minnesota Municipal Power Agency ("SMMPA") the total renewable energy available for complying with the REO/RES (column G) is greater than total REO -eligible energy generated (column E). The result occurs because SMMPA purchased renewable energy credits from Basin Electric Power Cooperative in an effort to ensure compliance with the REO.

Response By:	Matt Lacey
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Department:	Transmission
Company:	Great River Energy
Telephone:	763-241-2223
Date:	January 11, 2008

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