

December 18, 2013

Burl W. Haar  
Executive Secretary  
Minnesota Public Utilities Commission  
121 7th Place East, Suite 350  
St. Paul, Minnesota 55101-2147

**RE: Comments of the Minnesota Department of Commerce, Division of Energy Resources**  
Docket No. ET2/CN-12-1235

Dear Dr. Haar:

Attached are the comments of the Minnesota Department of Commerce, Division of Energy Resources (Department) in the following matter:

Great River Energy's Application for a Certificate of Need and Route Permit: Elko New Market and Cleary Lake Areas Project.

The petitioner is:

William R. Kaul  
Vice President, Transmission  
Great River Energy  
12300 Elm Creek Blvd.  
Maple Grove, Minnesota 55369-4718

The Department withholds a final recommendation pending Great River Energy **providing additional data in reply comments**. The Department's team of Sachin Shah and myself is available to answer any questions the Commission may have.

Sincerely,

/s/ STEVE RAKOW  
Rates Analyst

SR/sm  
Attachment

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

COMMENTS OF THE  
MINNESOTA DEPARTMENT OF COMMERCE  
DIVISION OF ENERGY RESOURCES

DOCKET NO. ET2/CN-12-1235

**I. EXECUTIVE SUMMARY**

Great River Energy, a Minnesota cooperative corporation (GRE or the Applicant) requested that the Minnesota Public Utilities Commission (Commission) approve a certificate of need (CN) for a 115 kV transmission line project in the Elko New Market and Cleary Lake areas in Scott and Rice counties, Minnesota. GRE provides electrical energy and related services to 28 member cooperatives, including Minnesota Valley Electric Cooperative (MVEC) and Steele-Waseca Cooperative Electric (SWCE), the distribution cooperatives serving the area proposed to be supplied by the new and rebuilt transmission lines. GRE requested a CN to construct approximately 5.4 miles of new double circuit 115 kilovolt (kV) transmission line and to rebuild approximately 11.3 miles of existing 69 kV transmission line to 115 kV specifications in the Elko, New Market, and Cleary Lakes regions south of the Twin Cities metropolitan area. The Applicant anticipates start of construction in spring 2015 and energization of the lines in summer 2016.

In terms of need, the Applicant claims a need to address circuit overloads that currently exist on a line in the area. GRE also claims a need to address low voltage concerns in the area. In addition, GRE has identified capacity issues on lines in the area. Historical data show that the electrical peak demand in the affected load area has been growing at a weighted annual average rate of nearly four percent over the last five years. Thus, GRE determined that the transmission system (69 kV and above) in the area is inadequate to serve demand.

Regarding the potential alternatives for meeting GRE's claimed need, GRE reviewed numerous alternatives including renewable generation, distributed generation, higher voltages, and lower voltages. In general, the Minnesota Department of Commerce, Division of Energy Resources

(Department) agrees with GRE's analysis. However, the Department withholds a final recommendation to the Commission pending GRE's submittal of additional information in reply comments.

## II. INTRODUCTION

### A. LOCAL AREA DESCRIPTION

There are two systems that are expected to benefit from GRE's proposal: the Scott-Faribault System (SF System) and the Cleary Lake – Elko System (CLE System). Both the SF System and CLE System are currently served by 69 kV networks.

#### 1. SF System

Figure 1-3 on page 1-6 of the Petition shows that the SF System is generally to the west of the project area within a triangle formed by Owatonna, Shakopee, and Norwood Young America. The 69 kV network that serves the SF System is linked to several 69 kV substations. The substations that support the affected load area are:

- the 115 kV/69 kV Scott County substation located near Norwood Young America;
- the 115 kV/69 kV Carver County substation located west of Shakopee;
- the 115 kV/69 kV Loon Lake substation located near Waseca; and
- the 161 kV/69 kV West Owatonna Substation located near Owatonna.

Between these substations there are nearly 174 miles of 69 kV lines in the SF System. The 69 kV lines in the SF System are owned by multiple companies:

- ITC Midwest LLC (ITCM) owns approximately 62 miles of these lines;
- GRE owns approximately 61 miles of these lines; and
- Northern States Power Company d/b/a Xcel Energy (Xcel) owns approximately 43 miles of these lines.

Regarding the lines, GRE explains that:<sup>1</sup>

[T]he conductors in the area are of high impedance and low current carrying capacity. Of the 174 miles of 69 kV transmission lines in the affected load area of the Scott-Faribault System, over 130 miles are 4/0A or smaller conductor. These characteristics contribute to significant power loss, voltage drop, and overload concerns in the transmission system.

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<sup>1</sup> Petition at page 3-2.

## 2. *CLE System*

The CLE system generally lies to the east of the SF system. The 69 kV network that serves the CLE System is linked to several 69 kV substations in the area. The substations that support the affected local area are:

- the 115 kV/69 kV Glendale substation to the north; and
- the 115 kV/69 kV Lake Marion substation to the south.

Between these substations, the CLE System is made up of about 39 miles of 69 kV transmission lines, all owned by GRE. As with the SF System, the transmission lines use a relatively low capacity and high impedance conductor.

## 3. *Claimed Need*

The Petition states that the 69 kV transmission system to the west of the project area—the SF System—is at risk of experiencing low voltage and transmission system overload issues at system peak conditions. Further, switching procedures that may alleviate or address low voltage or transmission line overload concerns will no longer be sufficient to address these concerns. Thus, GRE concluded that a link to a neighboring system was necessary.

To provide sufficient support to the SF System, GRE determined that connecting the SF System to the 69 kV transmission system in the project area (the CLE System) was the most efficient way to alleviate the identified deficiencies on the SF System. However, the CLE System itself, under contingency operation, currently experiences overload and low voltage issues and needs to be rebuilt. Connecting the CLE System and SF System requires construction of a new double circuit line between the existing New Market substation and the 69 kV Veseli breaker station.

## 4. *Proposed Project*

Overall, GRE proposes to construct and/or rebuild approximately 17 miles of 115 kV transmission lines. Of these 17 miles:

- approximately 11.3 miles would replace existing 69 kV lines; and
- approximately 5.4 miles would be a new double circuit 115 kV transmission line.

The elements of the project as explained on page 1-3 of the Petition are:

- rebuild approximately 3.5 miles of the existing Prior Lake Junction to Credit River Junction 69 kV line to 115 kV standards;
- rebuild approximately 0.9 mile of the existing Credit River Junction to Cleary Lake substation 69 kV line to single circuit 115 kV standards with 69 kV underbuild;
- rebuild approximately 1.3 miles of the existing Cleary Lake substation to Credit River substation 69 kV to 115 kV standards;

- rebuild approximately 5.6 miles of the existing Elko substation to New Market substation 69 kV line (aka MV-PN line) to 115 kV standards; and
- construct approximately 5.4 miles of new double circuit transmission line from the New Market substation (west route option) or a point along the MV-PN line (east route option) to the Veseli 69 kV breaker station (Project).<sup>2</sup>

GRE initially investigated rebuilding the lines of concern at 69 kV. However, GRE determined that 115 kV operation of these facilities would be necessary within GRE's standard transmission planning timeframe. Therefore, GRE determined to construct the lines to 115 kV standards at this time.

The proposed Project is located in Scott, Carver, and Hennepin Counties.

## B. *PROCESS BACKGROUND*

### 1. *Notice Plan*

On November 9, 2012 Great River Energy (GRE or the Applicant) filed GRE's *Notice Plan Petition for the Application of Great River Energy for a Certificate of Need for its 115 kV Transmission Line Project in the Elko New Market and Cleary Lake Areas in Scott and Rice Counties, Minnesota* (Notice Petition). The Notice Petition provided GRE's proposed notice plan to communicate its intent to rebuild or construct 69/115 kilovolt (kV) transmission lines in Scott and Rice Counties, Minnesota. As required by Minnesota Rules part 7849.2550, the Notice Petition provided a plan to notify potentially affected members of the public about the proposed Project.

In response to the Notice Petition, comments were filed by the Department on November 29, 2012.

On February 4, 2013 the Commission issued its *Order Modifying and Approving Notice Plan and Exemption Requests* approving the Notice Petition with modification.

On May 14, 2013 GRE submitted the Applicant's *Revisions to Project Description in Notices to be Provided During Notice Plan Implementation*.

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<sup>2</sup> GRE stated at page 5-3 that the "Veseli Breaker Station will be constructed to 69kV standards and therefore is not part of this Application." The Department verified that the Veseli Breaker Station is independent of the proposed Project. See page 87 of the *DPC, ITCM, MEC, NWE, XEL MTEP13 Pre-Planning Information* presentation (dated December 10, 2012) available at: [https://www.misoenergy.org/Library/Repository/Meeting%20Material/Stakeholder/SPM/20121210%20WSPM/20121210%20WSPM%20Item%2007c%20MTEP13%20Project%20Review%20DPC\\_ITCM\\_MEC\\_MPW\\_NWE\\_XEL.pdf](https://www.misoenergy.org/Library/Repository/Meeting%20Material/Stakeholder/SPM/20121210%20WSPM/20121210%20WSPM%20Item%2007c%20MTEP13%20Project%20Review%20DPC_ITCM_MEC_MPW_NWE_XEL.pdf)

## 2. *Exemption*

On November 9, 2012 GRE submitted the Applicant's *Exemption Request Petition for the Application of Great River Energy for a Certificate of Need for its 115 kV Transmission Line Project in the Elko New Market and Cleary Lake Areas in Scott, and Rice Counties, Minnesota* (Exemption Petition) to obtain exemption from certain data requirements of Minnesota Rules part 7849.

In response to the Exemption Petition, comments were filed by the Department on December 19, 2012. Reply comments were filed by GRE on December 27, 2012.

On February 4, 2013 the Commission issued its *Order Modifying and Approving Notice Plan and Exemption Requests* approving the Exemption Petition with modifications.

## 3. *Completeness*

On June 20, 2013 GRE filed the Applicant's *Application for a Certificate of Need and Route Permit: Elko New Market and Cleary Lake Areas Project* (Petition). The Petition requested that the Commission approve a CN to construct the proposed Project in the Elko New Market and Cleary Lake areas south of the Twin Cities metropolitan area in Scott and Rice counties, Minnesota.

Comments on completeness were filed on July 15, 2013, by the Department. On September 5, 2013 the Commission issued its *Order Finding Application Complete, Initiating Informal Review Process, and Other Actions* determining that the Petition was complete.

## C. *PLANNING BACKGROUND*

Overall the relationship between CN proceedings and other steps in the regulatory process is summarized Attachment 3. Attachment 3 shows that the planning process is the first step. The overall goal of the planning process is to identify the size, type, and timing of the need. Then, the CN process verifies that the need exists and determines the overall best project to meet the need. Transmission projects are subject to two planning process, that of the Midcontinent Independent Transmission System Operator (MISO) and Commission's biennial transmission planning process.

### 1. *MISO Process*

Great River Energy submitted the proposed Project for consideration as part of MISO's Midwest Transmission Expansion Plan 2013 (MTEP 13) process. The MTEP 13 process will take much of 2013 to complete, with final approval by the MISO Board of Directors expected in December 2013. Any sharing of revenue requirements with other MISO members will not be known until that time.

Select data regarding the proposed Project in draft MTEP 13 is provided in Attachment 2.

## 2. *Minnesota Process*

The Applicant was part of the Minnesota Transmission Owners that prepared the *2009 Biennial Transmission Projects Report* (2009 Report) (Docket No. E999/M-09-602), which was approved by the Commission on May 28, 2010. The 2009 Report discussed a need for improvement in the affected load area and provided alternatives considered for addressing the inadequacies (tracking numbers 2009-TC-N2 and 2009-TC-N5). The *2013 Minnesota Biennial Transmission Projects Report* (2013 Report) (Docket No. E999/M-13-402) also included the proposed Project under Tracking No. 2013-TC-N2. Thus, transmission system deficiencies were reported in the most recent biennial transmission plan.

### III. DEPARTMENT ANALYSIS

Minnesota Statutes §216B.2421, subd. 2 (3) defines a large energy facility (LEF) as “any high-voltage transmission line with a capacity of 100 kilovolts or more with more than ten miles of its length in Minnesota.” Since the proposed Project’s Elko substation to New Market substation segment and New Market substation to Veseli breaker station segments are linked to each other, are being constructed to 115 kV standards or rebuilt to 115 kV standards and are greater than 10 miles in length they qualify as a LEF.<sup>3</sup> Second, Minnesota Statutes §216B.243, subd. 2 states that “no large energy facility shall be sited or constructed in Minnesota without the issuance of a certificate of need by the Commission...” Therefore, a CN must be approved by the Commission before the proposed Project could be sited or constructed.

There are several factors to be considered by the Commission in making a determination in CN proceedings. In a general manner, these factors are located in different sections of Minnesota Statutes. Some of the general, statutory criteria are reflected in a more specific way in Minnesota Rules part 7849.0120. However, some statutory criteria do not appear to be reflected in rules. To clarify the analysis, the Department grouped all of the statutory and rule criteria into five broad categories and allocated each of the statutory and rule criteria to one of the categories. The broad categories are:

- need analysis;
- link to planning process;
- analysis of alternatives;
- socio-economic analysis; and
- policy analysis.

The Department addresses each of the statutory and rule criteria below. A cross-index matching the statutory and rule criteria to the section where each is addressed along with a summary of Department’s analysis is provided as Attachment 1.

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<sup>3</sup> In this case the rebuild qualifies as a LEF since new capacity is being created at a higher (greater than 100 kV) voltage. The remaining parts of the proposed Project are necessary as part of the overall plan to address the claimed need.

A. *NEED ANALYSIS*

Overall, the need analysis is governed by Minnesota Rules 7849.0120 A which states that a CN must be granted upon determining that:

The probable result of denial would be an adverse effect upon the future adequacy, reliability, or efficiency of energy supply to the applicant, to the applicant's customers, or to the people of Minnesota and neighboring states.

The rule then proceeds to list five distinct criteria. The Department presents the analysis of the need for the project in two parts. The first part is designed to address the accuracy of the forecast underlying the claimed need. The second part is designed to address any broader reliability needs claimed by GRE. Each part is addressed separately below.

1. *Forecast Analysis*

a. *Accuracy of the Forecast*

Regarding accuracy of the forecast, Minnesota Rules 7849.0120 A (1) states that the Commission is to consider “the accuracy of the applicant's forecast of demand for the type of energy that would be supplied by the proposed facility.” Regarding the accuracy of the Applicant's forecast of demand, the Petition stated at page 5-33 “The load duration curve shows that the system was at a risk of experiencing low voltage and line overload concerns in the [sic] 2012 for about 690 hours of the year.” Thus, the actual load for the area exceeds the level at which reliable service can be provided.

Based on this information the Department concludes that the accuracy of the forecast of demand is not relevant to a determination of need because the area already experienced historical demand greater than the ability of the infrastructure to provide reliable service. The existing level of demand indicates that transmission and/or distribution improvements are needed regardless of the forecast of future demand. In summary, the Department concludes that the rule subcriterion regarding forecast accuracy has been met.

b. *Relation to State Energy Needs*

Also related to forecast analysis is Minnesota Rules 7849.0120 C (1) which states that the Commission is to consider “the relationship of the proposed facility, or a suitable modification thereof, to overall state energy needs.” Regarding overall state energy needs, clearly the transmission line in question is related to local needs generally and local reliability in particular rather than overall state energy needs. Therefore, a discussion of state energy needs is not directly relevant.



On page 5-32 of the Petition GRE stated that “The system analysis showed that the existing transmission system serving the affected load area can reliably serve loads up to 103 MW level.” However, in 2012 there were about 690 hours when the peak load of the affected load area exceeded the critical load level. When this happens load is at risk of experiencing inadequacies; both low voltage and line overload concerns. Thus, the area has experienced demand greater than reliable supply capability and some improvements need to be implemented as soon as possible. Therefore, while the proposed project is not directly related to overall state energy needs, it is necessary to restore reliable service in the local area. In summary, the Department concludes that this subcriterion has been met.

## 2. *Reliability Analysis*

Minnesota Statutes §216B.243, subd. 3 (9) states that in assessing need, the Commission shall evaluate “with respect to a high-voltage transmission line, the benefits of enhanced regional reliability, access, or deliverability to the extent these factors improve the robustness of the transmission system or lower costs for electric consumers in Minnesota.” Regarding “enhanced regional reliability, access, or deliverability” due to the transmission line in question, the claimed need is for serving local load. Therefore, the proposed transmission line would provide enhanced reliability in the area where it is being built, by restoring service to local loads to acceptable levels. However, beyond this benefit, the Department concludes that the proposed line would have little further impact, positive or negative, with regard to this subcriterion.

## B. *LINK TO PLANNING PROCESS*

### 1. *Renewable Preference*

Regarding renewable preference, there are two sections of Minnesota Statutes that apply to CNs. First, Minnesota Statutes §216B.243, subd. 3a states that:

The Commission may not issue a certificate of need under this section for a large energy facility that generates electric power by means of a nonrenewable energy source, or that transmits electric power generated by means of a nonrenewable energy source, unless the applicant for the certificate has demonstrated to the Commission's satisfaction that it has explored the possibility of generating power by means of renewable energy sources and has demonstrated that the alternative selected is less expensive (including environmental costs) than power generated by a renewable energy source. For purposes of this subdivision, "renewable energy source" includes hydro, wind, solar, and geothermal energy and the use of trees or other vegetation as fuel.

Second, Minnesota Statutes §216B.2422, subd. 4 states that:

The Commission shall not approve a new or refurbished nonrenewable energy facility in an integrated resource plan or a certificate of need, pursuant to section 216B.243, nor shall the Commission allow rate recovery pursuant to section 216B.16 for such a nonrenewable energy facility, unless the utility has demonstrated that a renewable energy facility is not in the public interest.

In response, the Department notes that the proposed Project will not interconnect any particular generation resource. Moreover, the proposed Project is not needed to transmit power from a new generation resource. Rather, the proposed Project will transmit electricity from the existing grid generally to the local area. Therefore, it could reasonably be stated that these renewable preference statutes do not apply.

A brief review indicates that hydro and geothermal resources are not reasonable alternatives because there are no local hydro or geothermal resources to replace the capacity that would be provided by the proposed Project. Wind and solar are not reasonable alternatives because wind and solar are intermittent resources and any generation alternative should be dispatchable so as to meet the timing of the needs. While the lack of dispatchability may be discounted for solar due to its presumed high correlation with the peak, the Department's experience with solar is that such projects are expensive. The Department's experience with biomass is that such projects are also prohibitively expensive.

In summary, the Department concludes that renewable generation is not a reasonable alternative and this statutory criterion has been met.

## 2. *Demand-side Management*

Regarding Demand-Side Management (DSM), Minnesota Statutes §216B.243, subd. 3 states:

No proposed large energy facility shall be certified for construction unless the applicant can show that demand for electricity cannot be met more cost effectively through energy conservation and load-management measures.

Also, Minnesota Statutes §216B.243, subd. 3(8) states that the Commission shall evaluate:

...any feasible combination of energy conservation improvements, required under section 216B.241, that can (i) replace part or all of the energy to be provided by the proposed facility, and (ii) compete with it economically;

These statutes are reflected in Minnesota Rules 7849.0120 A (2) which requires the Commission to consider “the effects of the applicant's existing or expected conservation programs and state and federal conservation programs.”

On page 6-9 of the Petition GRE stated:

effective conservation measures in the affected load area have deferred, but cannot eliminate, the need for additional voltage support and reliability improvements. ... Additionally, peak demand in the affected load area already exceeds system capacity.

The Department agrees with the Applicant that while energy conservation is a tool to help in meeting future needs, it will not be able to address issues related to meeting existing demand at the levels indicated by GRE.

In summary, energy conservation will not be able to address issues related to meeting existing demand at the levels indicated by GRE. Therefore, the Department concludes that this criterion has been met.

### *C. ANALYSIS OF ALTERNATIVES*

Overall, the analysis of alternatives is governed by Minnesota Rules 7849.0120 B which states that a CN must be granted upon determining that:

...a more reasonable and prudent alternative to the proposed facility has not been demonstrated by a preponderance of the evidence on the record.

The rule then proceeds to list four distinct criteria. The Department breaks down the analysis of alternatives to the proposed Project into four broad areas:

- alternatives analysis
- reliability analysis;
- distributed generation (DG) analysis; and
- integrated gasification combined cycle (IGCC) preference.

Each area is addressed separately below.

#### *1. Alternatives Analysis*

##### *a. Non-CN facilities analysis*

Minnesota Rules 7849.0120 A (4) states that the Commission is to consider “the ability of current facilities and planned facilities not requiring certificates of need to meet the future demand.” Regarding the effects of facilities not requiring CNs, these could be considered to be

DG or transmission-related facilities not requiring a CN under Minnesota Statutes §216B.2421, subd. 2. The non-CN alternatives were evaluated considering:

- approximately 53 MW of generation would have to be installed to alleviate the overload on the 69 kV system immediately;<sup>4</sup> and
- the proposed solution would have to be competitive with the proposed Project's initial capital cost about \$14.76 million.

*i. Transmission*

Regarding the use of non-CN transmission, this would consist of rebuilding the 69 kV system to a higher capacity without increasing the voltage. Regarding such an alternative the Petition stated that GRE investigated rebuilding the 69 kV transmission lines in this area instead of upgrading them to 115 kV. However, GRE's engineers determined that a 69 kV rebuild alternative would be able to serve less new load and 115 kV system support would be necessary in this area six to 15 years after the proposed Project's in-service date.

GRE also explored upgrading using distribution voltage to address the system inadequacies. In essence, this option could transfer loads between distribution substations. However, the loads would remain on the same 69 kV transmission network. Thus, transferring loads between substations would not improve overall loading or the low voltage concerns on the transmission network. Distribution substations served by a transmission system separate from the local network are not located in close proximity. To use an independent distribution system to provide support to the local network would require constructing lengthy distribution lines to transfer loads. This transfer would, overall, result in weaker voltage and increased loss on a high impedance distribution system. Thus, GRE determined that distribution alternatives were not a viable alternative.

*ii. Distributed Generation*

As mentioned above, approximately 53 MW of generation would have to be installed to alleviate the overload on the 69 kV system to meet the 2012 loads. In GRE's most recent resource plan (Docket No. ET2/RP-11-1114) GRE's preferred plan did not include any resources through at least 2020. Therefore, the DG alternative has little or no avoided cost value to GRE's generation fleet.

To establish the cost of a DG option the Department referred to the U.S. Energy Information Administration's *Assumptions to the Annual Energy Outlook 2012* (AEO 2012). Specifically, the Department referred to Table 8.2. *Cost and Performance Characteristics of New Central Station Electricity Generating Technologies* in the *Electricity Market Module* section of AEO 2012. The Department calculated an initial capital cost of \$114 million (2010 dollars) for a DG

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<sup>4</sup> Page 5-31 of the Petition reported a peak demand of 156.6 MW in July, 2012. Page 5-32 of the Petition stated that the existing transmission system serving the affected load area can reliably serve loads up to 103 MW level. Obviously more DG would be necessary as load grows into the future.

alternative, about 10 times the capital cost of the proposed Project.<sup>5</sup> Further capital costs would be incurred each year to meet load growth. In summary, since the DG alternative has a far higher initial capital cost and additional annual capital costs to meet load growth, the Department did not pursue a DG alternative further.

*iii. Summary of Non-CN Facilities Analysis*

GRE compared both a lower voltage rebuild and DG to the proposed Project. First, the lower voltage 69 kV rebuild could not meet the claimed need due to engineering considerations. Second, the DG alternative has far higher costs and is clearly inferior economically. Therefore, the Department concludes that this criterion has been met.

*b. Size, Time, and Timing*

Minnesota Rules 7849.0120 B (1) states that the Commission is to consider “the appropriateness of the size, the type, and the timing of the proposed facility compared to those of reasonable alternatives.” For generation resources, the issue of the correct size, type, and timing of resource additions is best determined within the resource plan process. In this transmission proceeding, the Department concludes that ‘size’ refers to the quantity of power transfers that the transmission infrastructure improvement enables, ‘type’ refers to the transformer nominal voltages, rated capacity, Surge Impedance Loading (SIL), and nature (AC or DC) of power transported, and ‘timing’ refers to the on-line date for the transmission infrastructure improvements.<sup>6</sup>

First, the Department concludes that the size of GRE’s proposed Project is reasonable. GRE stated on page 6-2 of the Petition that the proposed Project could serve about 37 MW of incremental load growth beyond the 2016 level.<sup>7</sup> Table 5-12 on page 5-31 of the Petition indicated that the Applicant forecasts annual load growth of about 3.5 or 4 MW annually. Thus, the proposed Project could serve between 9 and 11 years of growth. GRE stated on page 6-4 that high voltage transmission lines are estimated to have a service life of 40 years. Therefore, the proposed Project’s ability to serve load would not exceed its expected service life.

Second, the Department concludes that GRE’s proposed type is reasonable. Regarding transformer nominal voltages, the Applicant stated that one of its goals is to connect the SF system to the CLE System. The Department concludes that it is reasonable for the Applicant to establish a connection between these two systems at 115 kV because GRE expects that the CLE System will need to be upgraded to 115 kV operation within the planning horizon.<sup>8</sup> Regarding the nature of power transported, alternating current (AC) is appropriate for the relatively short

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<sup>5</sup> The calculation is: (\$1,722 per kW DG overnight cost) times 1.25 overnight to total cost translation factor times 53,000 kW.

<sup>6</sup> The discussion of size, type, and timing is based upon the *Direct Testimony and Exhibit of Samir Ouanes*, filed April 11, 2002 in Docket No. E002/CN-01-1958.

<sup>7</sup> At Appendix H, page 41 GRE indicated that the 2016 load level is 173 MW.

<sup>8</sup> See page 5-3 of the Petition for a discussion.

distances involved with the proposed Project. By contrast, direct current (DC) is appropriate for moving larger quantities of power longer distances with no substations in between the beginning and the end.<sup>9</sup>

Regarding rated capacity, page 6-5 of the Petition indicated that the reasons the conductor (795 thousand circular mil aluminum conductor steel-supported (ACSS)) to be installed as part of the proposed Project was selected are as follows:

ACSR [aluminum conductor steel reinforced] would provide 196 MVA of capacity and ACSS would provide 315 MVA of capacity. ACSS typically costs approximately 10 percent more than ACSR conductor. A smaller conductor than 795 ACSS would be sufficient for the Project, but the incremental cost of going from a 477 ACSR conductor to 795 ACSS conductor is minimal. Further, the 795 ACSS conductor provides 220 percent capacity compared to the smaller 477 ACSR conductor. Therefore 795 ACSS is the choice of conductor for most 115 kV transmission lines.

Third, the Department concludes that GRE's proposed timing is reasonable. On page 5-32 of the Petition GRE stated that "The system analysis showed that the existing transmission system serving the affected load area can reliably serve loads up to 103 MW level." However, in 2012 there were about 690 hours when the peak load of the affected load area exceeded the critical load level. When this happens load is at risk of experiencing inadequacies without the proposed Project; both low voltage and line overload concerns. Thus, some transmission improvements need to be implemented as soon as possible and future load growth will need to be addressed as well. The proposed Project puts transmission improvements in place as soon as is reasonably possible and enables further transmission system improvements to address future load growth in a timely manner.

In summary, the Department concludes that this subcriterion has been met.

*c. Cost Analysis*

*i. Alternatives Studied*

Minnesota Rules 7849.0120 B (2) states that the Commission is to consider "the cost of the proposed facility and the cost of energy to be supplied by the proposed facility compared to the costs of reasonable alternatives and the cost of energy that would be supplied by reasonable alternatives."

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<sup>9</sup> For further data see the Applicant's discussion of the DC alternative in section 6.8 of the Petition.

GRE started by developing indicative cost estimates for four alternatives:

3. Option 1a: new Sheas Lake—New Prague 69 kV line, cost \$21.4 million;
4. Option 1b: new Sheas Lake—New Prague 69 kV line and Scott County—Sheas Lake 115 kV line, cost \$31.7 million;
5. Option 2a: new Lake Marion—Veseli 115 kV line, cost \$16.5 million; and
6. Option 2b: rebuild Lake Marion—New Market 69 kV line and new New Market—Veseli 115 kV/115 kV line, cost \$15.0 million.

*ii. Ranking of Alternatives*

On page 40 of Appendix H GRE explained that Option 1(a) and Option 1(b) were:

. . . found to have an initial investment that is significantly higher than Option 2(a) and Option 2(b) as shown in economic analysis section of this study. Therefore, further analyses on the options are carried for only Options 2(a) and 2(b).

GRE's engineering analysis determined that with Option 2(a):

- long-term transmission line overload and low voltage concerns in the study area were addressed;
- no low voltage or branch overload concerns were identified in the study area; and
- an additional 40 MW of load beyond the 2016 load level in the study area can be served.<sup>10</sup>

GRE's engineering analysis determined that Option 2(b):

- long-term transmission line overload and low voltage concerns in the study area were addressed;
- no low voltage or branch overload concerns were identified in the study area; and
- an additional 37 MW of load beyond the 2016 load level in the study area can be served.<sup>11</sup>

GRE's present-value analysis determined that Option 2(a) had a present value of \$32.3 million over 41 years while Option 2(b) had a present value of \$27.9 million. The Department reviewed GRE's calculations and agrees with GRE's conclusion that Option 2(b) has a lower present value of the revenue requirements. Option 2(a) costs \$808 per MW incremental load; Option 2(b) costs \$754 per MW incremental load.

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<sup>10</sup> See page 40 of Appendix H of the Petition.

<sup>11</sup> See page 41 of Appendix H of the Petition. Note that the 37 MW assumes the installation of the 115/69 kV substation at Veseli and operation of Lake Marion to Elko to New Market to Veseli line at 115 kV; this option can serve an additional 15 MW of load in the affected areas before the 115/69 kV source at Veseli is required.

*iii. Conclusion*

GRE's analysis demonstrated that the internal cost of the proposed Project and the internal cost of energy to be supplied by the proposed Project are less than the alternatives.

*d. Natural and Socioeconomic Environment Analysis*

*i. Introduction*

Minnesota Rules 7849.0120 B (3) states that the Commission is to consider "the effects of the proposed facility upon the natural and socioeconomic environments compared to the effects of reasonable alternatives." The proposed Project would move power from the transmission grid generally to the local area. Therefore, the impact on air emissions would be roughly proportional to the line losses of each alternative. Thus, the Commission's externality costs and the cost of future CO<sub>2</sub> regulation should be added to the prior analysis of alternatives. However, it appears that GRE did not add such costs to its analysis.

*ii. Recommendation*

The Department recommends that, in reply comments GRE should add the Commission's externality costs and the future cost of CO<sub>2</sub> regulation values to the economic analysis of alternatives presented in the Petition.

*2. Reliability Analysis*

Minnesota Rules 7849.0120 B (4) states that the Commission is to consider "the expected reliability of the proposed facility compared to the expected reliability of reasonable alternatives." The proposed Project is proposed to improve reliability. As discussed above, GRE's petition considered several alternatives such as generation, demand-side management, different voltages, non-CN alternatives, DC lines, and a no-build alternative. The Department concludes that each of the alternatives would result in equivalent or inferior reliability. In particular, on an MW-for-MW basis, generation is less reliable than transmission.<sup>12</sup> Therefore, the Department concludes that this subcriterion has been met.

*3. DG Analysis*

Minnesota Statutes §216B.2426 states that "the commission shall ensure that opportunities for the installation of distributed generation, as that term is defined in section 216B.169, subdivision 1, paragraph (c), are considered in any proceeding under section 216B.2422, 216B.2425, or 216B.243." In turn, Minnesota Statutes §216B.169 subd. 1 (c) states:

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<sup>12</sup> For example, in the Petition at page 6-2 GRE stated that new generation, in general, is less reliable than transmission.



For the purposes of this section, the following terms have the meanings given them...

(c) "High-efficiency, low-emissions, distributed generation" means a distributed generation facility of no more than ten megawatts of interconnected capacity that is certified by the commissioner under subdivision 3 as a high-efficiency, low-emissions facility.

In turn, Minnesota Statutes §216B.169 subd. 3 states:

The commissioner shall certify a power supply or supplies as eligible to satisfy customer requirements under this section upon finding:

- (1) the power supply is renewable energy or energy generated by high-efficiency, low-emissions, distributed generation; and
- (2) the sales arrangements of energy from the supplies are such that the power supply is only sold once to retail consumers.

As discussed elsewhere in these comments GRE currently has a load-serving deficit in the local area. Thus, any DG already certified by the Commissioner of the Department of Commerce would be embedded in the load data and cannot meet the claimed need. Any DG certified by the Commissioner of the Department of Commerce in the future would impact the rate of growth by off-setting future customer load. However, as discussed elsewhere in these comments GRE currently has a load-serving deficit in the local area. Therefore, the question of whether and how much DG might be certified by the Commissioner of the Department of Commerce in the future is not relevant to this Petition. Finally, any Commissioner-certified DG could participate in this proceeding and offer an alternative. Therefore, the Department concludes that this statutory criterion has been met.

#### *4. IGCC Preference*

Minnesota Statutes §216B.1694, subd. 2 (a) (5) states that an 'innovative energy project':

...shall, prior to the approval by the commission of any arrangement to build or expand a fossil-fuel-fired generation facility, or to enter into an agreement to purchase capacity or energy from such a facility for a term exceeding five years, be considered as a supply option for the generation facility, and the commission shall ensure such consideration and take any action with respect to such supply proposal that it deems to be in the best interest of ratepayers.

This statute does not apply since the proposed facility in question is a transmission line rather than a generating facility.

*D. SOCIOECONOMIC ANALYSIS*

Overall, the socioeconomic analysis is governed by Minnesota Rules 7849.0120 C which states that a CN must be granted upon determining that:

...by a preponderance of the evidence on the record, the proposed facility, or a suitable modification of the facility, will provide benefits to society in a manner compatible with protecting the natural and socioeconomic environments, including human health.

The rule then proceeds to list four distinct criteria. The Department relies on the Environmental Report (ER) for its analysis of impacts on the socioeconomic and natural environments in a CN proceeding. As of the date of the submission of these comments, the ER is not yet complete. Therefore, the Department recommends that the Commission consider the ER that will be filed by the Department of Commerce, Energy Environmental Review and Analysis unit in the decision in this matter.

*E. POLICY ANALYSIS*

There are several remaining criteria in statutes and rules that are applicable to CNs but do not closely fit into the need, planning, alternatives, and socioeconomic categories discussed above. Therefore, these criteria are grouped into a final category of policy considerations. In this policy section the Department addresses criteria related to:

- policies of other agencies;
- promotional practices;
- Renewable Energy Standard (RES) compliance;
- environmental cost planning; and
- transmission planning compliance.

*1. Policies of Other Agencies*

Minnesota Rules 7849.0120 D states that a CN must be granted on determining that:

...the record does not demonstrate that the design, construction, or operation of the proposed facility, or a suitable modification of the facility, will fail to comply with relevant policies, rules, and regulations of other state and federal agencies and local governments.

The Department briefly reviewed the information on potentially required permits provided in Table 2-1 of the Petition. Regarding the permits required by other agencies, the Department presumes that the various agencies will review and confirm that GRE is in compliance prior to granting their permits. The Department relies upon the agencies to enforce their requirements. Of course, should any permits be denied, the proposed Project will not be constructed, regardless of the Commission's decision regarding the Petition.

Based upon the above discussion, the Department concludes that the record does not demonstrate that the design, construction, or operation of the proposed facility, or a suitable modification of the facility, will fail to comply with relevant policies, rules, and regulations of other state and federal agencies and local governments. Thus, the record does not demonstrate GRE will fail to comply.

## 2. *Promotional Practices*

Minnesota Rules 7849.0120 A (3) states that the Commission is to consider "the effects of promotional practices of the applicant that may have given rise to the increase in the energy demand, particularly promotional practices which have occurred since 1974." Regarding the effects of promotional practices, the Petition at page 5-39 states that GRE:

. . . has not engaged in any promotional practices to encourage the use of more power. Just the opposite, as described in Section 5.8, Great River Energy has spent significant sums of money promoting conservation and demand side management.

The Department is not aware of any promotional activities that may have triggered the need for the proposed Project. Therefore, the Department concludes that this subcriterion has been met.

## 3. *Renewable Energy Standard Compliance*

### a. *Compliance with Minnesota Statutes §216B.1691*

Minnesota Statutes §216B.243, subd. 3 (10) states that the Commission shall evaluate "whether the applicant or applicants are in compliance with applicable provisions of sections 216B.1691." In turn, Minnesota Statutes §216B.1691, subd. 2 states:

Each electric utility shall make a good faith effort to generate or procure sufficient electricity generated by an eligible energy technology to provide its retail consumers, or the retail customers of a distribution utility to which the electric utility provides wholesale electric service, so that commencing in 2005, at least one percent of the electric utility's total retail electric sales to retail customers in Minnesota is generated by eligible energy technologies and seven percent of the electric utility's total retail

electric sales to retail customers in Minnesota by 2010 is generated by eligible energy technologies.

Minnesota Statutes §216B.1691, subd. 2a (a) states:

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 are 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. |

On April 15, 2013 the Commission issued its *Notice of Renewable Energy Certificate (REC) Retirement Process for Minnesota RES and Green Pricing Programs* (Notice). The Notice required entities subject to Minnesota Statute §216B.1691 (RES Statute) to file by June 1, 2013 a report detailing their compliance with the RES Statute for the year 2012. These filings were made in Docket No. E999/PR-13-186. The Department's June 19, 2013 letter indicated that GRE complied with the RES in 2012. Therefore, the Department concludes that GRE has met this statutory criterion.

*b. C-BED Projects*

Minnesota Statutes §216B.1612 (c) states that "the Commission shall consider the efforts and activities of a utility to purchase energy from C-BED projects when evaluating its good faith effort towards meeting the renewable energy objective under section 216B.1691." To review GRE's efforts towards procuring energy from C-BED projects, the Department referred to the Applicant's 2012 resource plan petition (Docket No. E002/RP-12-1114). This document indicates that GRE has C-BED projects already acquired or contracted to be on the GRE's system. In addition, GRE issued a C-BED specific request for proposals in August 2011. Therefore, the Department concludes that GRE has met this statutory criterion.

*4. Environmental Cost Planning*

Minnesota Statutes §216B.243, subd. 3 (12) states that the Commission shall evaluate "if the applicant is proposing a nonrenewable generating plant, the applicant's assessment of the risk of environmental costs and regulation on that proposed facility over the expected useful life of the

plant, including a proposed means of allocating costs associated with that risk.” In this case, GRE is proposing a transmission line, not a generating plant. Moreover, this line is not proposed to interconnect a new generating plant. Therefore, this statute does not apply.

#### 5. *Transmission Planning Compliance*

Minnesota Statutes §216B.243, subd. 3 (10) states that the Commission shall evaluate “whether the applicant or applicants are in compliance with applicable provisions of ... 216B.2425, subdivision 7, and have filed or will file by a date certain an application for certificate of need under this section or for certification as a priority electric transmission project under section 216B.2425 for any transmission facilities or upgrades identified under section 216B.2425, subdivision 7.” In turn, Minnesota Statutes §216B.2425, subd. 7 states:

Each entity subject to this section shall determine necessary transmission upgrades to support development of renewable energy resources required to meet objectives under section 216B.1691 and shall include those upgrades in its report under subdivision 2.

The most recent biennial transmission plan (Docket No. E999/M-13-402) at page 116 summarizes the renewable energy standard (RES) analysis as follows:

As can be seen, the Minnesota RES utilities have sufficient capacity acquired to meet the Minnesota RES needs through 2025. When considering the RES needs, including other jurisdictions outside of Minnesota, the Minnesota RES utilities have enough capacity to meet RES needs beyond 2020

Thus, there is sufficient time to allow events to develop before CN petitions are necessary for RES-related transmission projects. Therefore, the Department concludes that this statutory criterion has been met.

#### 6. *Carbon Dioxide Emissions*

Minnesota Statutes, §216H.03 states that:

. . . on and after August 1, 2009, no person shall: (1) construct within the state a new large energy facility that would contribute to statewide power sector carbon dioxide emissions; . . .

The proposed Project is a transmission line, is expected to reduce system losses, and thus the quantity of generation necessary to serve load and resulting CO<sub>2</sub> emissions. Therefore, Department concludes that the proposed Project will not contribute to, and in fact will reduce, statewide power sector CO<sub>2</sub> emissions.

#### **IV. DEPARTMENT RECOMMENDATION**

The Department requests that, in reply comments GRE add the Commission's externality costs and future cost of CO<sub>2</sub> regulation values to the economic analysis of alternatives presented in the Petition.

/sm

**Docket No. ET2/CN-12-1235**

**Attachment No. 1**

## Rules and Statutes Addressed in the Comments

Statute or Rule Citation	Department Comment	Location
<p><b>7849.0120 CRITERIA.</b> A certificate of need must be granted to the applicant on determining that:</p>		
<p>A. the probable result of denial would be an adverse effect upon the future adequacy, reliability, or efficiency of energy supply to the applicant, to the applicant's customers, or to the people of Minnesota and neighboring states, considering:</p>		
<p>(1) the accuracy of the applicant's forecast of demand for the type of energy that would be supplied by the proposed facility;</p>	actual load for the area exceeds the level at which reliable service can be provided	<b>III.A.1.a</b>
<p>(2) the effects of the applicant's existing or expected conservation programs and state and federal conservation programs;</p>	conservation will not be able to address issues related to meeting existing demand at the levels indicated by GRE	<b>III.B.2</b>
<p>(3) the effects of promotional practices of the applicant that may have given rise to the increase in the energy demand, particularly promotional practices which have occurred since 1974;</p>	The Department is not aware of any promotional activities that may have triggered the need for the proposed Project	<b>III.E.2</b>
<p>(4) the ability of current facilities and planned facilities not requiring certificates of need to meet the future demand; and</p>	the lower voltage 69 kV rebuild could not meet the claimed due to engineering considerations, the DG alternative has far higher costs	<b>III.C.1.a</b>
<p>(5) the effect of the proposed facility, or a suitable modification thereof, in making efficient use of resources;</p>	addressed in environmental report	<b>III.D</b>
<p>B. a more reasonable and prudent alternative to the proposed facility has not been demonstrated by a preponderance of the evidence on the record, considering:</p>		
<p>(1) the appropriateness of the size, the type, and the timing of the proposed facility compared to those of reasonable alternatives;</p>	this subcriterion has been met	<b>III.C.1.b</b>
<p>(2) the cost of the proposed facility and the cost of energy to be supplied by the proposed facility compared to the costs of reasonable alternatives and the cost of energy that would be supplied by reasonable alternatives;</p>	that the internal cost of the proposed Project and the internal cost of energy to be supplied by the proposed Project are less than the alternatives	<b>III.C.1.c</b>
<p>(3) the effects of the proposed facility upon the natural and socioeconomic environments compared to the effects of reasonable alternatives; and</p>	in reply comments GRE should add the Commission's externality costs and internal cost of CO <sub>2</sub> regulation values to the economic analysis of alternatives	<b>III.C.1.d</b>
<p>(4) the expected reliability of the proposed facility compared to the expected reliability of reasonable alternatives;</p>	the proposed Project is proposed to improve reliability ... each of the alternatives would result in equivalent or inferior reliability	<b>III.C.2</b>



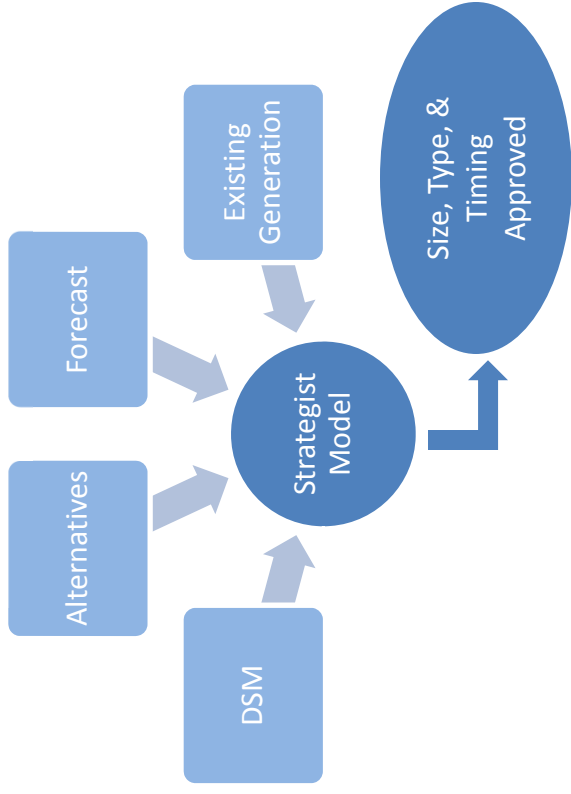
C. by a preponderance of the evidence on the record, the proposed facility, or a suitable modification of the facility, will provide benefits to society in a manner compatible with protecting the natural and socioeconomic environments, including human health, considering:		
(1) the relationship of the proposed facility, or a suitable modification thereof, to overall state energy needs;	the proposed project is not directly related to overall state energy needs, it is necessary to restore reliable service in the local area	<b>III.A.1.b</b>
(2) the effects of the proposed facility, or a suitable modification thereof, upon the natural and socioeconomic environments compared to the effects of not building the facility;	the Department relies on the ER for its analysis of impacts on the socioeconomic and natural environments	<b>III.D</b>
(3) the effects of the proposed facility, or a suitable modification thereof, in inducing future development; and	the Department relies on the ER for its analysis of impacts on the socioeconomic and natural environments	<b>III.D</b>
(4) the socially beneficial uses of the output of the proposed facility, or a suitable modification thereof, including its uses to protect or enhance environmental quality; and	the Department relies on the ER for its analysis of impacts on the socioeconomic and natural environments	<b>III.D</b>
D. the record does not demonstrate that the design construction, or operation of the proposed facility, or a suitable modification of the facility, will fail to comply with relevant policies, rules, and regulations of other state and federal agencies and local governments.	the record does not demonstrate GRE will fail to comply	<b>III.E.1</b>
Minnesota Statutes §216B.243, subd. 3 (9)	the proposed line would have little further impact, positive or negative,	<b>III.A.2</b>
Minnesota Statutes §§216B.243 subd. 3a & 216B.2422, subd. 4	these renewable preference statutes do not apply	<b>III.B.1</b>
Minnesota Statutes §216B.2426	the question of whether and how much DG might be certified by the Commissioner of the Department of Commerce in the future is not relevant to this Petition	<b>III.C.3</b>
Minnesota Statutes §216B.1694, subd. 2 (a) (5)	this statute does not apply	<b>III.C.4</b>
Minnesota Statutes §216B.243 subd. 3 (10) Compliance with §216B.1691	the Department's June 19, 2013 letter concludes that GRE complied with the RES in 2012	<b>III.E.3.a</b>
Minnesota Statutes §216B.1612 (c)	GRE has met this statutory criterion	<b>III.E.3.b</b>
Minnesota Statutes §216B.243, subd. 3 (12)	this statute does not apply	<b>III.E.4</b>
Minnesota Statutes §216B.243, subd. 3 (10) Compliance with §216B.2425, subd. 7	there is sufficient time to allow events to develop before CN petitions are necessary for RES-related transmission projects	<b>III.E.5</b>
Minnesota Statutes §§216H.03	the proposed Project will not contribute to, and in fact will reduce, statewide power sector CO <sub>2</sub> emissions	<b>III.E.6</b>

Target Appendix	Expected ISD	From Sub	To Sub	Ckt	Facility Rating	Facility Description	Miles Upgraded	Miles New	Estimated Cost
A in MTEP13	17-Apr-15	Elko		1	190	Replace the current 69kV switch with a manual quick whip 115kV switch	-		\$ 200,000
A in MTEP13	4-Sep-15	New Market		1	190	Replace the current 69kV switch with a manual quick whip 115kV switch	-		\$ 200,000
A in MTEP13	30-Oct-15	New Market/Elko	Veseli	1	190	Design and build a 6 mile double circuit from GRE's New Market to Elko line to Xcel's Veseli substation. 795 ACSS conductor is specified. The line will be built to 115kV specs but energized at 69kV. Depending upon selected route, may include distribution under build		6.0	\$ 6,117,957
A in MTEP13	31-Oct-15	Cleary Lake		1	190	Replace the current 69kV switch with a manual quick whip 115kV switch	-		\$ 220,000
A in MTEP13	30-Nov-15	Credit River Jct.		1	190	Replace the current 69kV switch with a manual quick whip 115kV switch	-		\$ 220,000
A in MTEP13	31-Dec-15	Veseli		1	190	Xcel will be rebuilding Veseli into a 4 position straight bus. GRE's existing SW-CV line will need to be re-terminated into this new substation	-		\$ 60,000
A in MTEP13	29-Feb-16	Credit River Jct.	Credit River Jct	1	190	Retire the existing 69 kV line and rebuild 2.25 miles to 115kV specifications, including fiber and 795 ACSS conductor. The line will be built to 115kV specs but energized at 69kV. Apprx. ½ mile of single phase distribution is currently under built on the 69kV line and will have rebuilt on the new 115kV poles	1.3		\$ 1,420,489
A in MTEP13	31-Mar-16	Prior Lake Jct	Credit River Jct	1	190	Rebuild with 795ACSS to 115kV specifications including fiber. The line will be built to 115kV specs but energized at 69kV. Apprx. 1.25 miles of single phase distribution is currently under built on the 69kV line and will have rebuilt on the new 115kV poles	3.5		\$ 2,236,985
A in MTEP13	30-Sep-16	New Market	Elko	1	190	Retire the existing 69 kV line and rebuild 5.6 miles to 115kV specifications, including fiber and 795 ACSS conductor. The line will be built to 115kV specs but energized at 69kV. Three phase distribution is currently under built on the 69kV line and will have rebuilt on the new 115kV poles	5.6		\$ 4,086,769

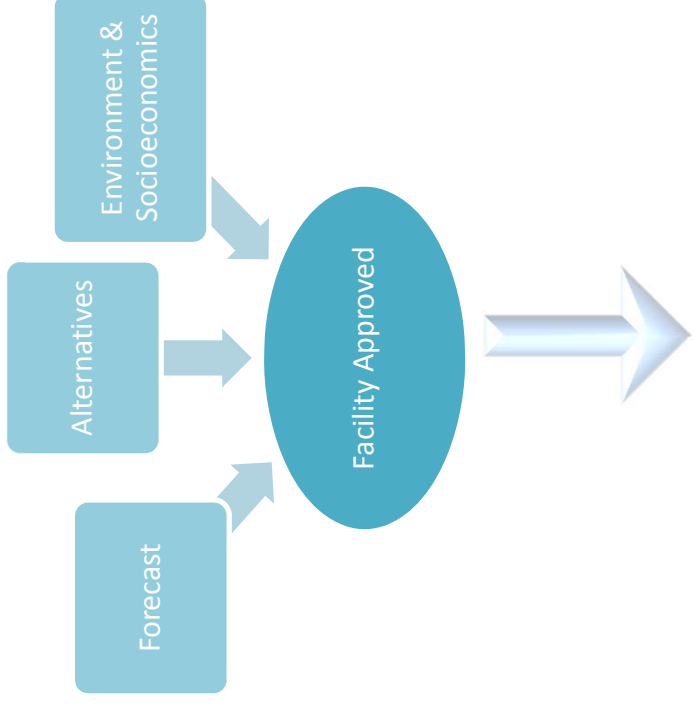
**Docket No. ET2/CN-12-1235**

**Attachment No. 3**

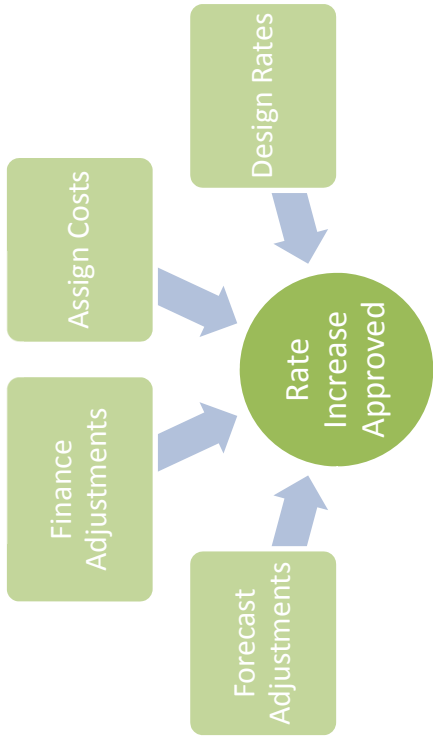
### Resource Plan



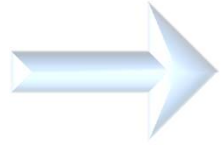
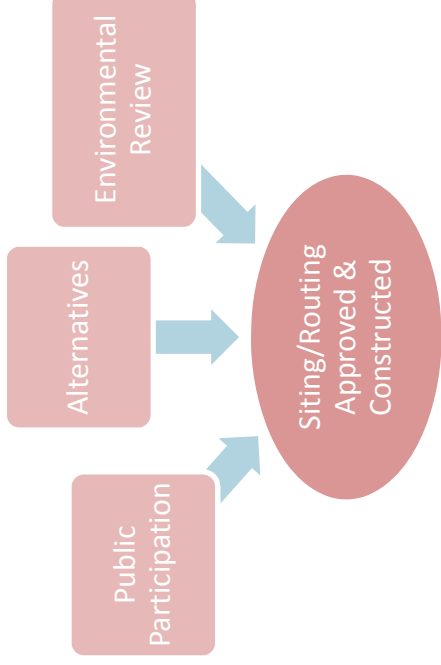
### Certificate of Need



### Rate Case



### Energy Facility Permitting



### **RESOURCE PLAN** (Minn. Stat. 216B.2422, Minn. Rules 7843)

- DOES identify generic size, type, and timing of plants needed.
- DOES NOT identify specific power plants that would supply the deficit.
- Filed by every electricity provider (or its wholesale provider) with 100 MW of capacity and supplying electric service to 10,000 Minnesota customers.
- Consists of a 15-year forecast of projected power needs, existing energy supplies, and generic new additions to provide power to those projected customers.
- Results in a Commission determination of any projected deficits in supply on a generic basis i.e., identifies the size (how many MW), type (whether baseload, intermediate, peaking, wind, etc), and timing (which year) of resource needs.
- May substitute for a certificate of need process in circumstances prescribed by Minnesota Statute.

### **CERTIFICATE OF NEED** (Minn. Stat. 216B.243, Minn. Rules 7849, 7851, 7853, and 7855)

- DOES identify specific large energy facilities.
- Filed by every electric provider (or its wholesale provider) for generation facilities above 50 MW and transmission facilities above 100 kV and 10 miles long or above 200 kV and 1,500 feet long.
- Consists of forecast of resource needs (the deficit to be addressed) and alternative projects to provide power to customers (supply).
- Starts with a resource plan-determined size, type, and timing of a need, confirms a specific need exists, and evaluates the economic, environmental, and social consequences of the alternatives to fulfill the need.
- Results in a Commission determination of the specific facility needed to fulfill demand (if any).

### **ROUTING AND SITING** (Minn. Stat. 216E, Minn. Rules 7850, 7852, and 7854)

- Determines the location for new large energy facilities.
- Filed by every electric provider (or its wholesale provider) for generation facilities above 50 MW and transmission facilities above 100 kV and 1,500 feet long.
- May take place without a certificate of need for transmission facilities above 100 kV and between 1,500 feet and 10 miles in length.
- For other facilities, may take place simultaneously (at the same time as the certificate of need) or sequentially (after the certificate of need).
- Consists of a specific facility and one or more alternative locations.
- Starts with a certificate of need-determined facility and evaluates the economic, environmental, and social consequences of the alternative locations for the facility.
- Results in Commission determination of the specific location for a specific facility.

### **RATE CASE** (Minn. Stat. 216B.16, Minn. Rules 7825)

- Determines the charges applied to customer bills for all utility services.
- Filed by every investor-owned retail electricity provider.
- Generally, new large energy facilities may only be included in a rate case only after they are constructed.
- Consists of one year's data on sales, utility costs, and customer rates on a forecasted or historic basis.
- Starts with the costs incurred and evaluates the prudence of the utility's costs.
- Results in specific rates being charged to specific customer classes.

## **CERTIFICATE OF SERVICE**

I, Sharon Ferguson, hereby certify that I have this day, served copies of the following document on the attached list of persons by electronic filing, certified mail, e-mail, or by depositing a true and correct copy thereof properly enveloped with postage paid in the United States Mail at St. Paul, Minnesota.

**Minnesota Department of Commerce  
Comments**

**Docket No. ET2/CN-12-1235**

Dated this **18<sup>th</sup>** day of **December, 2013**

**/s/Sharon Ferguson**

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Julia	Anderson	Julia.Anderson@ag.state.mn.us	Office of the Attorney General-DOC	1800 BRM Tower 445 Minnesota St St. Paul, MN 551012134	Electronic Service	Yes	OFF_SL_12-1235_CN-12-1235
Sarah	Beimers	sarah.beimers@mnhs.org	Minnesota Historical Society	345 Kellogg Boulevard West  St. Paul, MN 55102	Electronic Service	No	OFF_SL_12-1235_CN-12-1235
Kodi	Church	kchurch@briggs.com	Briggs & Morgan	2200 IDS Center 80 South Eighth Street Minneapolis, Minnesota 55402	Electronic Service	No	OFF_SL_12-1235_CN-12-1235
Katie	Clark Sieben	katie.clark.sieben@state.mn.us	DEED	332 Minnesota St, #E200 1st National Bank Bldg Saint Paul, MN 55101	Electronic Service	No	OFF_SL_12-1235_CN-12-1235
Commander	Commander	N/A	Corps of Engineers	180 5th ST. E. STE 700 St. Paul, MN 55101	Paper Service	No	OFF_SL_12-1235_CN-12-1235
Randall	Doneen	randall.doneen@state.mn.us	Department of Natural Resources	500 Lafayette Rd, PO Box 25  Saint Paul, MN 55155	Electronic Service	No	OFF_SL_12-1235_CN-12-1235
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 500  Saint Paul, MN 551012198	Electronic Service	No	OFF_SL_12-1235_CN-12-1235
Travis	Germundson	travis.germundson@state.mn.us		Board of Water & Soil Resources 520 Lafayette Rd Saint Paul, MN 55155	Electronic Service	No	OFF_SL_12-1235_CN-12-1235
Burl W.	Haar	burl.haar@state.mn.us	Public Utilities Commission	Suite 350 121 7th Place East St. Paul, MN 551012147	Electronic Service	Yes	OFF_SL_12-1235_CN-12-1235
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John	Lindell	agorud.ecf@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012130	Electronic Service	Yes	OFF_SL_12-1235_CN-12-1235
Susan	Medhaug	Susan.medhaug@state.mn.us	Department of Commerce	Suite 500, 85 Seventh Place East  St. Paul, MN 551012198	Electronic Service	No	OFF_SL_12-1235_CN-12-1235
Bob	Patton	bob.patton@state.mn.us	MN Department of Agriculture	625 Robert St N  Saint Paul, MN 55155-2538	Electronic Service	No	OFF_SL_12-1235_CN-12-1235
Michele	Ross	michele.ross@state.mn.us	Department of Health	625 N Robert St  Saint Paul, MN 55101	Electronic Service	No	OFF_SL_12-1235_CN-12-1235
Carole	Schmidt	cschmidt@greenergy.com	Great River Energy	12300 Elm Creek Boulevard  Maple Grove, MN 553694718	Electronic Service	No	OFF_SL_12-1235_CN-12-1235



First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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David	Seykora	dave.seykora@state.mn.us	MN Department of Transportation	395 John Ireland Boulevard Mail Stop 130 St. Paul, MN 55155-1899	Electronic Service	No	OFF_SL_12-1235_CN-12-1235
Tony	Sullins	N/A	U.S. Fish and Wildlife Service	Twin Cities Ecological Services Field Office 4101 American Blvd. E. Bloomington, MN 55425	Paper Service	No	OFF_SL_12-1235_CN-12-1235

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Sarah	Beimers	sarah.beimers@mnhs.org	Minnesota Historical Society	345 Kellogg Boulevard West  St. Paul, MN 55102	Electronic Service	No	SPL_SL_12-1235_Elko New Market Scoping
Douglas	Benson	bademaidouglas.benson@state.mn.us	Department of Health	625 North Robert Street  St. Paul, MN 55155	Paper Service	No	SPL_SL_12-1235_Elko New Market Scoping
David	Birkholz	david.birkholz@state.mn.us	MN Department of Commerce	Suite 500 85 7th Place East St. Paul, MN 551012198	Electronic Service	No	SPL_SL_12-1235_Elko New Market Scoping
Commander	Commander	N/A	Corps of Engineers	180 5th ST. E. STE 700 St. Paul, MN 55101	Paper Service	No	SPL_SL_12-1235_Elko New Market Scoping
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Stacy	Kotch	Stacy.Kotch@state.mn.us	MINNESOTA DEPARTMENT OF TRANSPORTATION	395 John Ireland Blvd.  St. Paul, MN 55155	Electronic Service	No	SPL_SL_12-1235_Elko New Market Scoping
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Debra	Moynihan	debra.moynihan@state.mn.us	MN Department of Transportation	395 John Ireland Blvd MS 620  St. Paul, MN 55155-1899	Electronic Service	No	SPL_SL_12-1235_Elko New Market Scoping
Carole	Schmidt	cschmidt@grenergy.com	Great River Energy	12300 Elm Creek Boulevard  Maple Grove, MN 553694718	Electronic Service	No	SPL_SL_12-1235_Elko New Market Scoping

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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Tom	Stockert	tom.stockert@abheonline.com	Abhe Svoboda Inc	17066 Revere Way Prior Lake, MN 55372	Paper Service	No	SPL_SL_12-1235_Elko New Market Scoping
Erin	Stwora	erin.stwora@co.dakota.mn.us	Dakota County	N/A	Electronic Service	No	SPL_SL_12-1235_Elko New Market Scoping

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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Randall	Doneen	randall.doneen@state.mn.us	Department of Natural Resources	500 Lafayette Rd, PO Box 25  Saint Paul, MN 55155	Electronic Service	No	SPL_SL_CN - CERTIFICATE OF NEEDS
Travis	Germundson	travis.germundson@state.mn.us		Board of Water & Soil Resources 520 Lafayette Rd Saint Paul, MN 55155	Electronic Service	No	SPL_SL_CN - CERTIFICATE OF NEEDS
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Susan	Medhaug	Susan.medhaug@state.mn.us	Department of Commerce	Suite 500, 85 Seventh Place East  St. Paul, MN 551012198	Electronic Service	No	SPL_SL_CN - CERTIFICATE OF NEEDS
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Michele	Ross	michele.ross@state.mn.us	Department of Health	625 N Robert St  Saint Paul, MN 55101	Electronic Service	No	SPL_SL_CN - CERTIFICATE OF NEEDS