

April 18, 2024

Will Seuffert
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

Docket No. E002/CN-23-200

Dear Mr. Seuffert:

Attached are the comments of the Minnesota Department of Commerce (Department) in the following matter:

Application to the Minnesota Public Utilities Commission for a Certificate of Need for the Proposed 345 kV Brookings County – Lyon County and Helena – Hampton Second-Circuit Project

The Application was filed by Northern States Power Company doing Business as Xcel Energy on August 15, 2023.

The Department recommends that the Minnesota Public Utilities Commission (Commission) issue a Certificate of Need to Xcel Energy and the Department is available to answer any questions the Commission may have.

Sincerely,

/s/ Dr. Sydnie Lieb Assistant Commissioner of Regulatory Analysis

MNZ/ad Attachment



# Comments of the Minnesota Department of Commerce Division of Energy Resources

Docket No. E002/CN-23-200

#### I. INTRODUCTION

On August 15, 2023, Northern States Power Company doing Business as Xcel Energy (Xcel or the Applicant) filed their Application to the Minnesota Public Utilities Commission for a Certificate of Need for the Proposed 345 Brookings County – Lyon County and Helena – Hampton Second-Circuit Project (Application). The Application requests that the Commission approve a certificate of need (CN) to install a second circuit on the existing double-circuit capable structures of the 345 kV Brookings County – Hampton transmission line and upgrade existing substations. Xcel states that this project is needed to reduce energy costs by reducing transmission congestion in the area, allowing for more low-cost energy from South Dakota, North Dakota, and southern Minnesota to flow to high load areas. Xcel estimates the project will provide \$334.83 million in benefits over the expected 63-year life of the project and would cost approximately \$102 million to construct.¹ Based on the projected cost savings the Applicant stated that the project is needed for economic reasons, but also produces some reliability benefits. The Applicant submitted a petition requesting exemptions from certain Certificate of Need (CN) content requirements² and a Notice Plan petition on May 16, 2023.³ The Commission approved both petitions in its July 12, 2023, ORDER.⁴

On April 2, 2024, the Commission issued a *Notice of Comment Period on the Merits of the Application for a Certificate of Need* (Notice) <sup>5</sup> that established a comment deadline of April 18, 2024, on the merits of the CN Application. According to the Notice, the topics open for comments include:

- Are there any contested issues of fact with respect to the representations made in the application?
- Should the Commission grant a certificate of need for the project?
- Are there other issues or concerns related to this matter?

<sup>&</sup>lt;sup>1</sup> See Xcel's Application to the Minnesota Public Utilities Commission for a Certificate of Need for the Proposed 345 kV Brookings County – Lyon County and Helena – Hampton Second-Circuit Project, filed August 15, 2023, in Docket No. E002/CN-23-200 eDocket# 20238-198271-01 at page 1-7

<sup>&</sup>lt;sup>2</sup> See Xcel's *Initial Filing -- Exemption Request – Brookings-Hampton Second-Circuit Project,* filed May 16, 2023, in Docket No. E002/CN-23-200 eDocket# <u>20235-195886-02</u>

<sup>&</sup>lt;sup>3</sup> See Xcel's *Initial Filing –Notice and Variance Request– Brookings-Hampton Second-Circuit Project,* filed May 16, 2023, in Docket No. E002/CN-23-200 eDocket# <u>20235-195886-01</u>

<sup>&</sup>lt;sup>4</sup> See the Commission's *Order*, filed July 12, 2023, in Docket No. E002/CN-23-200 eDocket# 20237-197416-01

<sup>&</sup>lt;sup>5</sup> See the Commission's *Notice of Comment Period on the Merits of the Certificate of Need Application,* filed April 2, 2024, in Docket No. E002/CN-23-200 eDocket# <u>20244-204922-01</u>

Analyst assigned: Michael N. Zajicek

Page 2

The Department of Commerce, Division of Energy Resources (Department) provides summaries of the procedural history of the exemption request, the project overview, and the planning background for the project below and provides its analysis in response to the Commission's request for comments.

#### A. EXEMPTION

On July 12, 20213 the Commission issued its Order (July 12 Order) adopting the Department's recommendations with respect to the Exemption Petition which included exemptions to the following Minnesota Rules: <sup>6</sup>

- 7849.0260, subp. A(3) and C(6);
- 7849.0260, subp. D
- 7849.0270, subps. 1-6, Forecasting
- 7849.0270, subp. 2(E), Annual Revenue Requirements;
- 7849.0280, System Capacity;
- 7849.0290, Conservation; and
- 7849.0300, Consequences of Delay and 7849.0340, Alternative of No Facility.

#### B. PROJECT SUMMARY

Xcel requests that the Commission approve a CN to install a second circuit on the existing double-circuit capable structures of the 345 kV Brookings County – Hampton transmission line and upgrade existing substations. The new double circuit line would be approximately 98.5 miles long and will be constructed along existing rights of ways, with the possible exception of the second circuit being rerouted near the Chub Lake substation to avoid steep terrain. Xcel is seeking the approval from a landowner near the Chub Lake substation in order to reroute the line, and if the Xcel is unable to come to an agreement with the landowner they will construct the line withing the existing right of way instead. The project technically consists of two segments of line, one from Brookings County to Lyon County, and another from Helena to Hampton. These two segments are connected by an existing Lyon County to Helena segment which included a second circuit when it was constructed, so upgrades to that portion of the line are not necessary or included in the project. Specifically, as listed in the Application, the proposed project includes:

 installation of a second 345 kV circuit on double-circuit capable structures on the Brookings County – Lyon County and Helena - Hampton 345 kV transmission lines entirely within existing right of ways;

<sup>&</sup>lt;sup>6</sup> See the Commission's Order, filed July 12, 2023, in Docket No. E002/CN-23-200 eDocket# 20237-197416-01

<sup>&</sup>lt;sup>7</sup> See Xcel's Application to the Minnesota Public Utilities Commission for a Certificate of Need for the Proposed 345 kV Brookings County – Lyon County and Helena – Hampton Second-Circuit Project, filed August 15, 2023, in Docket No. E002/CN-23-200 eDocket# 20238-198271-01 at page 1-7

Analyst assigned: Michael N. Zajicek

Page 3

• reconfiguration of certain lines near substations, mostly within existing easements;

- upgrades to the Brookings County, Lyon County, Helena, and Hampton substations with new 345 kV breakers; and
- relay setting changes to the Steep Bank Lake and Hawks Nest Lake substations.

As Minnesota Statutes 7849.120 B requires the consideration of potential alternatives for meeting the Applicant's claimed need; the Applicant reviewed numerous alternatives including a generation alternative, upgrading existing transmission lines or facilities, using different voltage or conductors, constructing alternative transmission lines or substations, DC transmission lines, underground transmission lines, construction of only one segment of the project, no action, and any reasonable combination of alternatives. The Applicant concluded that the alternatives are either not viable or more costly than the proposed new transmission line.<sup>8</sup>

Finally, although Xcel is proposing the project, the existing Brookings County – Hampton transmission line is jointly owned by the Central Minnesota Municipal Power Agency, Great River Energy, Xcel Energy, Otter Tail Power Company, and the Western Minnesota Municipal Power Agency; collectively referred to as the CapX2020 Brookings Owners. Xcel states that it does not need the consent of the other CapX2020 Brookings Owners to construct the second circuit of the line, but those parties must be notified and given the opportunity to invest in the project and have an ownership stake. If the other parties sign on to the project they will be responsible for paying a portion of the project costs, which would reduce the rate impact to Xcel's customers. However, if other parties do not sign onto the project, it is the Department's understanding that if those parties utilized the capacity of the line through the MISO system they would be required to pay Xcel (or whatever combination of owners exists) for the use of the transmission line. Department recommends that the Commission require Xcel to file a compliance filing on the ownership of the project and the portion of costs being paid for by Xcel once all parties have indicated whether or not they will be investing in the project.

## C. PLANNING BACKGROUND

Transmission projects are subject to two planning processes, that of the Midcontinent Independent Transmission System Operator (MISO) and the Commission's biennial transmission planning process.

<sup>8</sup> Id. 61-64

<sup>&</sup>lt;sup>9</sup> *Id.* 7

Analyst assigned: Michael N. Zajicek

Page 4

#### 1. MISO Process

The Applicant stated that the project was submitted to MISO for review in the MISO Transmission Expansion Plan (MTEP) in 2022 and was approved for inclusion in Appendix A<sup>10</sup> by the MISO Board of Directors in December 2022.<sup>11</sup> The Department concludes that the project has completed the necessary MISO process steps.<sup>12</sup>

## 2. Minnesota Process

The Applicant was part of the Minnesota Transmission Owners that prepared the *2023 Minnesota Biennial Transmission Projects Report* (2023 Report) (Docket No. E999/M-23-91), which is currently awaiting Commission decision. The 2023 Report discussed the need for improvement in the affected load area under tracking numbers 2023-SW-N3 and 2023-SW-N5 as each segment of the project has a different tracking number.<sup>13</sup>

# II. DEPARTMENT ANALYSIS

Minnesota Statutes, section 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 pursuant to sections 216C.05 to 216C.30 and this section and consistent with the criteria for assessment of need." Minnesota Statues section 216B.2421, subd. 2 (2) and subd. 2 (3)<sup>14</sup> defines what project qualify as a LEF. The proposed project meets this definition of LEF based on its voltage level and length as the project calls for 98.5 miles of transmission line construction with a capability of operating at 345 kV.<sup>15</sup> As an LEF the project requires a CN application be approved by the Commission before the proposed facility can be sited or constructed.

<sup>&</sup>lt;sup>10</sup> MISO Appendix A is a list of Projects that have been studied and approved by the MISO Board of Directors to be constructed. Being listed in Appendix A is the final MISO approval for a transmission Project and indicated that it has completed its MISO study process.

<sup>&</sup>lt;sup>11</sup> See MISO's MTEP22 Report at https://cdn.misoenergy.org/MTEP22%20Report627345.pdf

<sup>&</sup>lt;sup>12</sup> Id. 60

<sup>&</sup>lt;sup>13</sup> See Minnesota Transmission Owner's *2023 Biennial Transmission Projects Report,* filed November 1, 2023, in Docket No. E999/M-23-91 eDocket# <u>202311-200147-02</u>

<sup>&</sup>lt;sup>14</sup> Minnesota Statutes §216B.2421, Minnesota Statutes §216B.2421, subd. 2 (2) defines a large energy facility (LEF) as "any high voltage transmission line with a capacity of 200 kilovolts or more with more than 1,500 feet in length" and 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."

<sup>&</sup>lt;sup>15</sup> Minnesota Statutes §216B.2421, Minnesota Statutes §216B.2421, subd. 2 (2) defines a large energy facility (LEF) as "any high voltage transmission line with a capacity of 200 kilovolts or more with more than 1,500 feet in length" and 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."

Analyst assigned: Michael N. Zajicek

Page 5

Minnesota statutes, section 216B.243 and Minnesota Rules part 7849.0010 to 7849.0400 set forth factors that must be evaluated. The Department's analysis of the CN includes reviewing the Applicant's filing and other data to determine if the proposed project complies with relevant Minnesota Statues and Rules. The Department has grouped these criteria into five categories – Need Analysis, <sup>16</sup> Link to Planning, <sup>17</sup> Analysis of Alternatives, <sup>18</sup> Socioeconomic Analysis, <sup>19</sup> and Policy Analysis. <sup>20</sup> The Department notes that Minnesota Rules, parts 7849.0240 to 7849.0340 contain requirements for what the Applicant must include in its Certificate of Need application and were addressed by the Department in its September 6, 2023, comments on completeness. <sup>21</sup>

Additionally, Minnesota Rules 7849.1800 subpart 1 requires one of either an Environmental Report (ER), Environmental Assessment (EA), or an Environmental Impact Statement (EIS) be completed for the project. The Department's Energy Environmental Review and Analysis unit (EERA) provided an ER on the project in its March 26, 2024, comments.<sup>22</sup> The Department relies

<sup>&</sup>lt;sup>16</sup> The Need Analysis section broadly covers the requirements of Minnesota Rules part 7849.0120 (A) which governs the circumstances under which the Commission may grant a CN. This section also includes analysis of compliance with Minnesota Rules part 7849.0270, 78490120 C (1), and Minnesota Statutes section 216B.243, subd. 3 (1), (3), (5), which govern the Applicant's required forecast, the States overall energy needs, and reliability, respectively.

<sup>&</sup>lt;sup>17</sup> The Link to Planning section discusses the requirements that data be provided regarding the size, type, and timing of the project, Minnesota's renewable preference, and demand-side management as an alternative to the proposed project. This data is required by Minnesota Rules 7849.0120 A (2), 7849.0250 (B), 7849.0290, and Minnesota Statutes, section 216B.243, subd. 3 (2), 3 (11), and 3a, section 216B.2422, subd. 4.

<sup>&</sup>lt;sup>18</sup> The Analysis of Alternatives section covers the requirements of Minnesota Rules 7849.0120 B, which states that a more reasonable and prudent alternative to the proposed facility has not been demonstrated. This section includes an analysis of alternatives, reliability analysis, the available of distributed generation as an alternative, and the preference for innovative energy projects. These requirements are governed by Minnesota Rules 7849.0120, 7849.0120 B (1), 7849.0250 (C) and Minnesota Statutes sections 216B.243, subd. 3 (6), 216B.2426, 216B.169, and 216B.1694, subd. 2 (a) (4).

<sup>&</sup>lt;sup>19</sup> The Socioeconomic analysis section discusses the requirements of Minnesota Rules, part 7849.0120 C which requires that the evidence on the record shows that the facility will provide benefits to society in a manger compatible with protecting the natural and socioeconomic environment, including human health.

<sup>&</sup>lt;sup>20</sup> The Policy Analysis section discusses other statutory and rules requirements that do not fit into one of the other categories, including compliance with other State and Federal agencies rules as required by Minnesota Rules, part 7849.0120 D and Minnesota Statutes, section 216B.243 subd. 3 (3), the promotional practices that may have given rise to the increase in energy demand of the Applicant as required by Minnesota Statutes, section 216B.243 subd. 3 (4) and Minnesota Rules, Part 7849.0120 A (3), Compliance with the Renewable Energy Standard as required by Minnesota Statues, Sections 216B.243, subd. 3 (10) and 216 B.1691, Environmental Cost Planning, as required by Minnesota Statues section 216B.243, subd. 3 (12), Transmission Planning Compliance, as required by Minnesota Statutes Section 216B.243, subd. 3 (10), and Carbon Dioxide Emissions as required by Minnesota Statues, section 216H.03, subd 3.

<sup>&</sup>lt;sup>21</sup> See Department's *Comments* filed September 6, 2023, in Docket No. E002/CN-23-200 eDocket# <u>20239-198782-</u>01

<sup>&</sup>lt;sup>22</sup> See EERA's Environmental Report – 345 kV Brookings County-Lyon County and Helena-Hampton Second Circuit Project filed March 26, 2024, in Docket No. E002/CN-23-200 eDocket# <u>20243-204562-01</u>

Analyst assigned: Michael N. Zajicek

Page 6

on EERA's ER for sections of the CN requirements that reference environmental and related socioeconomic factors. The ER provides an analysis of potential human and environmental impacts of the project, as well as alternatives to the project. The Department recommends that the Commission consider the ER.

# A. NEED ANALYSIS

Minnesota Rules, part 7849.0120 (A) states that a CN must be granted, in part, 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 Department presents the analysis of the need for the proposed project in two parts below. The first part is designed to address the accuracy of the forecast underlying the claimed need. The second is designed to address broader reliability needs.

# 1. Forecast Analysis

## a. Accuracy of the Forecast

The Commission is required to analyze the accuracy of the Applicants forecast Minnesota Statute 216B.243, subd. 3 (1), and Minnesota Rules 7849.0270 and 7849.0120 A (1). Specifically, Minnesota Statute 216B.243 requires the Commission to evaluate "the accuracy of the long-range energy demand forecasts on which the necessity for the facility is based" while similarly Minnesota Rule 7849.0120 A (1) requires that the Commission consider "the accuracy of the applicant's forecast of demand for the type of energy that would be supplied by the proposed facility" when determining if the probable result of denial would have 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. Both requirements rely on the accuracy of the forecast used in supporting the need for the facility be evaluated and considered. The Department provides a review of the Applicant's forecast information below.

The Commission exempted Xcel from the requirement in Minnesota Rules, part 7849.0270, which more specifically requires an applicant to provide information regarding its system peak demand and annual energy consumption. Instead, to fulfill this requirement, Xcel was required to provide specific forecast data that the Applicant used in studying, planning, and analyzing the

Analyst assigned: Michael N. Zajicek

Page 7

project.<sup>23</sup> As Xcel has stated that the project is needed to reduce congestion on the transmission system that is preventing low-cost wind energy from southern Minnesota from being delivered to high load areas, Xcel provided a discussion of congestion.<sup>24</sup> Xcel provided its congestion charges from MISO since 2020, which show congestion charges increasing by more than 4 times since 2020.<sup>25</sup> The Department is aware of high rates of congestion in southern Minnesota and curtailments of renewable generation as a direct result. As proposed, the project will reduce energy costs by reducing transmission congestion in the area, allowing for more low-cost energy to customers.

Xcel modeled the impacts on congestion for the project using the utility standard modeling software PROMOD and used that modeling to submit the project for MISO review. MISO found that the project had a benefit to cost ratio <sup>26</sup> of 1.36 in the next 20 years for Xcel, and 2.94 for MISO overall. The Life of the project, however, is estimated to be 63 years, and Xcel estimated that the benefit to cost ratio for Xcel during that period would be 2.53, and 6.31 for MISO. As discussed above, MISO reviewed Xcel's proposed project in its 2022 MTEP study and concluded that the project had substantially more benefits than costs, and the MISO Board of Directors approved the project. Overall Xcel projects that the benefits of the project over its life for Xcel will be approximately \$334.83 million, while costing only \$102.00 million to construct.<sup>27</sup>

Xcel also conducted a study to determine the project's impact on the reliability of the transmission system. The study determined that the project improves reliability by reducing or eliminating overloads under certain contingencies (such as a line or generator being out of service for any reason). MISO also conducted a reliability assessment as part of the MTEP 2022 study portfolio and determined the project meets reliability assessment compliance requirements.<sup>28</sup>

Additionally, during the 2023 legislative session, Minnesota enacted a carbon-free standard for electric utilities requiring they generate sufficient electricity from carbon-free resources to provide the electric utility's retail customers in Minnesota with 80 percent of their energy by 2030, 90 percent by 2035, and 100 percent by 2040.<sup>29</sup> This law specifically requires new wind and solar generation to address peak energy demand and annual consumption. The project

<sup>&</sup>lt;sup>23</sup> See Xcel's *Initial Filing -- Exemption Request – Brookings-Hampton Second-Circuit Project,* filed May 16, 2023, in Docket No. E002/CN-23-200 eDocket# <u>20235-195886-02</u>

<sup>&</sup>lt;sup>24</sup> See Xcel's Application to the Minnesota Public Utilities Commission for a Certificate of Need for the Proposed 345 kV Brookings County – Lyon County and Helena – Hampton Second-Circuit Project, filed August 15, 2023, in Docket No. E002/CN-23-200 eDocket# <u>20238-198271-01</u> at page 1

<sup>&</sup>lt;sup>25</sup> Id. 52-53

<sup>&</sup>lt;sup>26</sup> Benefits divided by costs, so benefit cost ratio of 2 would indicate \$2 of benefits per \$1 of costs.

<sup>&</sup>lt;sup>27</sup> Id. 53-58

<sup>&</sup>lt;sup>28</sup> Id. 60

<sup>&</sup>lt;sup>29</sup> See https://www.revisor.mn.gov/laws/2023/0/7/laws.0.10.0#laws.0.10.0

Analyst assigned: Michael N. Zajicek

Page 8

directly addresses and supports Xcel in achieving the carbon-free standard by allowing energy to move from areas of Minnesota with high amounts of wind generation to major load centers.

The Department reviewed the information provided by the Applicant and confirmed the inclusion of the project in MISO's MTEP 2022 Appendix A. The project will provide economic benefits to Xcel's customers, reduce rates, and provide reliability improvements to the system. For these reasons Department concludes that the accuracy of the Applicant's forecasts appears to be reasonable as related to Minnesota Statute 216B.243, subd. 3 (1), Minnesota Rule 7849.0120 A (1).

## b. Relation to State Energy Needs

Minnesota Statutes, section 216B.243 subd. 3 (3) states that in assessing need, the Commission shall evaluate "the relationship of the proposed facility to overall state energy needs, as described in the most recent state energy policy and conservation report prepared under section 216C.18, or, in the case of a high-voltage transmission line, the relationship of the proposed line to regional energy needs, as presented in the transmission plan submitted under section 216B.2425;" Additionally, Minnesota Rule 7849.0120 C (1) states that, by a preponderance of the evidence, the proposed facility must benefit society in a manner compatible with protecting the natural and socioeconomic environments, including human health, considering "the relationship of the proposed facility, or a suitable modification thereof, to overall state energy needs...."

As discussed above, the project is proposed to reduce congestion and will provide economic benefits to customers by allowing additional renewable energy to be delivered. This directly is beneficial to the State's energy needs by reducing costs for Minnesota customers and increasing the amount of energy that is deliverable. Further, the energy that is facing curtailment due to the line congestion that this project addresses is largely renewable wind and solar energy generated in southwestern Minnesota. Reducing congestion will directly allow an increase in renewable generation that will help achieve Minnesota's carbon-free standard under Minnesota Statue 216B.1691 subd 2g. The proposed project could help Minnesota meet its energy needs while supporting the state's renewable energy and GHG reduction goals under Minnesota Statutes §§ 216B.1691 and 216H.02. Regarding socioeconomic impacts, beyond the savings for Xcel's customers the project will likely reduce the curtailment of various generation facilities, which will increase the taxes on production collected by local governments, and the local economies will benefit from spending related to the construction of the project. As stated previously, the Department relies on the ER for analysis of environmental impacts. Assuming the ER indicates that the facility will be compatible with environmental concerns in the area, the Department concludes that the project meets the requirements of the Rules and Statues related to the State's overall energy needs.

Analyst assigned: Michael N. Zajicek

Page 9

## 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 to address congestion in the area which reduced the access to cheap renewable energy available to Minnesota ratepayers. Xcel also performed a study that determined the project improves reliability by reducing or eliminating overloads under certain contingencies. Therefore, the proposed transmission line would provide enhanced reliability in the area where it is being built and improve access to power by reducing congestion. MISO also performed a study as part of its MTEP process, and determined the proposed project meets its reliability criteria.

## **B.** LINK TO PLANNING PROCESS

This section discusses the following aspects of this proposal: Minnesota's renewable preference; and demand-side management (DSM) as an alternative to the proposed project.

# 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.

<sup>&</sup>lt;sup>30</sup> See Xcel's Application to the Minnesota Public Utilities Commission for a Certificate of Need for the Proposed 345 kV Brookings County – Lyon County and Helena – Hampton Second-Circuit Project, filed August 15, 2023, in Docket No. E002/CN-23-200 eDocket# <u>20238-198271-01</u> at page 60

Analyst assigned: Michael N. Zajicek

Page 10

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 while the proposed project will not interconnect any particular generation resource, it is designed to reduce congestion on lines that transmit renewable energy from southern Minnesota. As such this project supports delivery of renewable generation and Minnesota's renewable preference.

Regarding the use of new renewable generation as an alternative to the project, the Applicant states that the project is designed to reduce congestion on lines that transfer power from the areas in Minnesota where wind and solar power are generated. Attempting to use new renewable generation as an alternative would likely lead to either an additional increase in congestion, or siting renewable resources at suboptimal locations, likely leading to more expensive energy. The project would assist in delivering both new and existing renewable energy, but new renewable generation in an alternative location would not resolve the existing congestion issues.

The Department agrees with this analysis and, based on the support the project provides for renewable generation and concludes this statutory criterion has been met.

# 2. Demand-side Management

The Commission's Exemption Order exempted the Applicant from providing information on conservation programs, as required by Minnesota Rule 7849.0290, 7849.0120 A (2), and Minnesota Statutes, section 216B.243, subd. 3 (2) as the project is needed to reduce congestion, not due to increased demand, and thus conservation will not alleviate the issue. The need for the project was to some extent caused by the construction of new renewable generation outpacing the growth in transmission allowing that power to be delivered, resulting in the congestion this project helps alleviate. While not demand-side management, it's possible that local battery storage could reduce some of the congestion by storing power during high production periods, but battery storage is currently expensive compared to other options. The

-

<sup>&</sup>lt;sup>31</sup> Id. 61-64

Analyst assigned: Michael N. Zajicek

Page 11

Commission required the Applicant to provide a summary of Xcel's conservation programs in Minnesota, which the Applicant provided with its report.<sup>32</sup>

The Department reviewed the Company's alternative data and agrees that demand-side management is not a viable alternative to the project. As the Applicant provided the required alternative data, the Department concludes that this criterion has been met.

# C. ANALYSIS OF ALTERNATIVES

Minnesota Statutes, Section 216B.243, subd. 3(6) and Minnesota Rule 7849.0120 B require an evaluation of alternatives for satisfying energy demand. Granting a CN requires a determination that there is not a more reasonable or prudent alternative to the proposed project considering, in part, the size, type, and timing; the cost of the project compared to reasonable alternatives; the effects of the project on natural and socioeconomic environments, and the expected reliability of the project. The Department further breaks down its analysis of the alternatives to the proposed facility into four broad areas:

- alternatives analysis;
- reliability analysis;
- distributed generation (DG); and
- preference for an innovative energy project (IEP) as defined in Minnesota Statutes.

Each area is addressed separately below.

- 1. Alternative 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." Facilities not requiring CNs under Minnesota Statutes §216B.2421, subd. 2 that could be reasonable alternatives to the project would be distributed generation or transmission-related facilities.

Regarding the use of non-CN transmission alternatives, the only option consists of rebuilding the existing Brookings – Hampton line, as other transmission projects would require a CN unless they were short and/or low voltage enough to not be defined as a LEF.<sup>33</sup> There are not

<sup>&</sup>lt;sup>32</sup> See the Commission's *Order*, filed July 12, 2023, in Docket No. E002/CN-23-200 eDocket# 20237-197416-01

<sup>&</sup>lt;sup>33</sup> Minnesota Statutes §216B.2421, Minnesota Statutes §216B.2421, subd. 2 (2) defines a large energy facility (LEF) as "any high voltage transmission line with a capacity of 200 kilovolts or more with more than 1,500 feet in length" and 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."

Analyst assigned: Michael N. Zajicek

Page 12

opportunities to relieve the congestion via short high voltage lines, and building longer low voltage lines would be inefficient, resulting in higher line losses, and likely would require a large amount of low voltage lines that would end up being more expensive than the project.<sup>34</sup> As the project primarily involves adding a second circuit to the existing line, rebuilding the entire line would be more expensive as it would require replacing existing transmission towers and likely require extensive outages. Because of the additional construction required, the project would be more economic and require less time than rebuilding the existing line.<sup>35</sup>

Regarding the construction of new generation not requiring a CN, the project is being proposed to reduce congestion and thus lower the production costs of existing generation resources. New generation would not resolve the existing congestion. The Applicant states that substantial gas-powered peaking generation located close to load centers might reduce the congestion, but these facilities would likely require a CN, be at odds with the state's Carbon-Free Standard and would likely be more expensive than the project. <sup>36</sup> The Department concludes that new generation is not a competitive alternative to the project.

The Company also considered a no build alternative, which would essentially be the Company taking no action to relieve the congestion on the line. Under this proposal congestion costs would continue to be high, renewable generation in southern Minnesota would continue to be curtailed, and it would be difficult for new renewable generation to be constructed. This alternative would not result in any benefits or costs to Xcel's customers, but as the project is expected to produce substantial economic benefits, it was rejected.

Since the alternatives would either require siting fossil fuel generation near load centers, conflict with the state's Carbon-Free Standard, and/or would not be cost competitive with the project, the Department did not pursue these alternatives further. Additionally, the Applicant calculated that rebuilding the current system to address the issue would be more costly than the project. Therefore, the Department concludes that this criterion has been met.

<sup>&</sup>lt;sup>34</sup> This is in part because higher voltage lines can transmit substantially more power than lower voltage lines. For instance, a 2013 North American Electric Reliability Corporation report found that "For example, considering the SIL alternative, on a per-unit basis, for uncompensated overhead transmission lines, three 500 kV circuits, six 345 kV circuits, or thirty-four 161 kV4 circuits would be required to achieve the same loadability of a single 765 kV line. Specifically, a 765 kV line can reliably transmit 2,200–2,400 MW (i.e., 1.0 SIL) for distances up to 300 miles, whereas the similarly situated 500 kV and 345 kV lines with bundled conductors can only deliver about 900 MW and 400 MW, respectively, over the same distance." Available at

https://www.nerc.com/pa/Stand/Project%20201017%20Proposed%20Definition%20of%20Bulk%20Electri/bes\_ph\_ase2\_pc\_report\_final\_20130306.pdf

<sup>&</sup>lt;sup>35</sup> See Xcel's Application to the Minnesota Public Utilities Commission for a Certificate of Need for the Proposed 345 kV Brookings County – Lyon County and Helena – Hampton Second-Circuit Project, filed August 15, 2023, in Docket No. E002/CN-23-200 eDocket# <a href="https://docs.py.edu.org/2023-198271-01">20238-198271-01</a> at page 61

<sup>&</sup>lt;sup>36</sup> Id. at 61

Analyst assigned: Michael N. Zajicek

Page 13

# b. Size, Type, 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 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.

#### Size

The proposed project involves adding a second circuit to an existing 345 kV line and structures. The Applicant states that the existing structures are not designed to carry higher voltage lines. As a result increasing the voltage of the line would require a rebuild of the existing transmission infrastructure, which would be substantially more expensive than the proposed project. Lower voltage lines could be an option but would not provide as much benefits as the proposed 345 kV line and would have higher line losses.<sup>37</sup> In general higher voltage lines are more cost effective and efficient as long as the line is not oversized for expected load to be transmitted. As both the MISO and Applicant studies conclude that 345 kV is the optimal size for the line given the existing infrastructure, the Department concludes that the Applicant's proposed size for the project has met the Rules requirement by a preponderance of evidence.

## Type

Alternative voltages for the line would either be more costly or less efficient. As for the nature of power transported, alternating current (AC) is appropriate for the relatively short distance of 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. The Applicant states that DC lines do not start becoming more economical than AC lines until they are over 300 miles in length. The Department consulted other resources and agrees that DC lines do not become a more economic option until the line length is in the hundreds of miles, as the cost for DC converter equipment is extremely high. This project's length and load size do not approach those that make the higher costs associated with converting DC to AC reasonable. The Applicant states that it studied the project assuming the use of Bundled 2x636 thousand circular mills (kcmil) Aluminum Conductor Steel Reinforced (ACSR), which is a large capacity low impedance conductor and provides a good baseline conductor for analysis. 39

<sup>37</sup> Id. at 61

<sup>&</sup>lt;sup>38</sup> Id. at 62

<sup>&</sup>lt;sup>39</sup> Id. at 61-62

Analyst assigned: Michael N. Zajicek

Page 14

The proposed project will use bundled (twisted pair) 2x636 kcmil ACSR or similar conductors as twisted pair conductors have capacity equal to or greater than 3,000 amps. The Applicant states that this type of conductor is preferred as it reduces outages in windy areas, such as the project area. <sup>40</sup> The Department concludes that the Applicant's proposed type for the project has met the Rules requirement by a preponderance of evidence.

## **Timing**

The Applicant states that congestion costs have been rising substantially and this line would serve to alleviate some of this congestion, and lead to net economic benefits for Xcel's customers. Any delay beyond the targeted fall 2025 in service date for the project delays reducing congestion and electricity prices. The Department concludes that the Applicant's proposed timing for the project has met the Rules requirement by a preponderance of evidence.

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

## c. Alternative Endpoints for the Project

The Applicant also considered alternative endpoints for the project. Specifically, they evaluated building one of the two segments of the line rather than both and constructing a different transmission line along a different route connecting portions of South Dakota and southern Minnesota. Since the project is adding a second circuit to an existing line, changing the endpoints for the entire project would add unnecessary complexity and cost to the project, so small changes in route endpoints were not considered. <sup>41</sup>

The Applicant generally concluded that each of these proposed endpoints was not viable. The Alternative line connecting to South Dakota was found to be more costly, take more time to construct, would have more impacts on landowners and the environment as it would require a new right of way and property accusations, and would require additional MISO approvals. Regarding construction of only one segment of the project the Applicant found that doing so would create negative reliability impacts. The Department reviewed the Applicants alternative endpoint alternatives and agrees that, due to the project taking advantage of the cost savings of adding a second circuit to and existing line, the alternatives were inferior to the proposed project.

<sup>&</sup>lt;sup>40</sup> Id. at 17-18

<sup>&</sup>lt;sup>41</sup> Id. at 62-63

<sup>&</sup>lt;sup>42</sup> Id. at 62-63

Analyst assigned: Michael N. Zajicek

Page 15

## d. Cost Analysis

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."

The project is expected to produce an estimated \$334.83 million in benefits to Xcel customers while costing an estimated \$102.00 million to construct. To be viable an alternative needs to achieve a similar cost to benefit ratio. Because the project is to add a second circuit to existing structures, it is extremely unlikely that other alternatives would be as cost effective. However, the Applicant did not provide detailed cost estimates of for alternatives. The Company stated that it found that alternative transmission (including DC transmission and underground transmission lines), generation, and upgrading the existing line would all be more expensive. The only alternative that might be cost effective is constructing only one of the two segments. However, this alternative was rejected due to reliability concerns and because it would not meet the Applicant's need for the project. <sup>43</sup> Finally, the Applicant eliminated a no action alternative as the project is expected to produced net benefits for Xcel's customers, and a no action alternative would not address the congestion issues and therefore produce no benefits to customers. However, as the Company did not submit any specific cost estimates, and just discussed the alternatives generally, the Department requests that the Applicant submits cost and benefit estimates for each of its alternatives studied in reply comments.

As the Applicant has discussed costs in general, the Department conditionality concludes that the cost of the project is reasonable compared to the costs of reasonable alternatives pending the submittal of more specific cost data for the alternatives.

# e. Natural and Socioeconomic Environment Analysis

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 is designed to reduce wholesale energy costs by addressing congestion, thus directly benefitting customers. He Applicant estimates that the project will provide \$334.83 million in benefits for Xcel customers over the project's 63-year life while only costing \$102.00 to construct. In addition, the project will provide benefits to MISO as a whole, Otter Tail Power, and Great River Energy. The Applicant stated that if the other CapX2020 Brookings Owners sign on to the project and split costs, than the project will

<sup>&</sup>lt;sup>43</sup> Id. at 61-64

<sup>44</sup> Id. at 12

<sup>&</sup>lt;sup>45</sup> Id. at 8

Analyst assigned: Michael N. Zajicek

Page 16

produce net benefits for Xcel's customers in the first year of operation. If the other CapX2020 Brookings Owners do not participate in the project Xcel estimates that net benefits will begin to exceed costs by year 6 of the project being in operation. <sup>46</sup> If the other CapX2020 Brookings Owners do not sign onto the project, Xcel would own all the transmission rights for the new line, and likely eventually recover its additional costs through other MISO processes. Further because the project does not need to construct new towers or use much new land, impacts to the environment and landowners should be minimal compared to alternatives.

Based on the above, the Department concludes that this sub-criterion has been met pending the additional consideration by the Commission of the ER submitted in this proceeding by EERA, which will include a full analysis of the effects of the proposed project and any alternatives upon the natural and socioeconomic environments.

# 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." While the proposed project is proposed to reduce congestion, it is also expected to improve reliability. As discussed above, the Applicant's petition considered several alternatives such as generation, alternative transmission lines or types, different voltages, non-CN alternatives, DC lines, and a no-build alternative. Further MISO performed a reliability assessment of the project as part of the MTEP 22 portfolio and the project met all compliance requirements through MISO's reliability assessment. The Department concludes that each of the alternatives would result in equivalent or inferior reliability or would fail to meet the goal of the project of reducing congestion and producing economic benefits for Minnesota ratepayers. Therefore, the Department concludes that this subcriterion has been met.

## 3. DG Analysis

Minnesota Statutes § 216B.2426 states:

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.

Minnesota Statutes § 216B.169 states:

<sup>&</sup>lt;sup>46</sup> Id. at 23

<sup>&</sup>lt;sup>47</sup> Id. at 60

<sup>48</sup> Id. at 60

Analyst assigned: Michael N. Zajicek

Page 17

For the purposes of this section, the following terms have the meanings given them . . . (c) "High-efficiency, low-emission, 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-emission facility.

Minnesota Rule 7849.0110 requires the Commission consider alternatives proposed before the close of the public hearing for which there exists substantial evidence on the record. This rule allows other parties to propose alternatives to the project during the CN process for consideration. No proposals for distributed generation as an alternative to the proposed project have been filed in this proceeding.

As discussed elsewhere in these comments the project is proposed to reduce congestion on the transmission system and produce economic benefits. The Applicant's assessment of alternatives to the project determined that only substantial additions of gas-powered generation located close to load-centers might reduce congestion, likely far in excess of the size of distributed generation resources and for much higher costs. <sup>49</sup> It is likely, however, that such an alternative would eliminate congestion by reducing demand for the currently congested generation resources, potentially resulting in existing wind and solar facilities d not being operated, resulting in stranded costs. The Department notes that the Applicant did not directly address distributed generation in its application, but given nature and goal of the project, namely, to reduce congestion and allow existing resources to be better utilized, it is unlikely that distributed generation would be a viable alternative to the project. The Department requests that the Company provide a discussion of distributed generation as an alternative to the project in Reply Comments.

Due to the goal to reduce congestion and allow existing resources to be used more efficiently, 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. For these reasons, while the Department has requested additional information on distributed as an alternative, the requirement of the Minnesota Statutes § 216B.2426 that distributed generation have an opportunity to be considered has been met as other parties had the opportunity to submit distributed generation alternatives in this process. As no DG alternatives have been submitted in this process, the Department concludes that this statutory criterion has been met.

<sup>&</sup>lt;sup>49</sup> Id. at 61

Analyst assigned: Michael N. Zajicek

Page 18

# 4. Innovative Energy Project (IEP) Preference

Minnesota Statutes § 216B.1694, subd. 2(a)(4) states that an IEP:

... 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

Minnesota Rule 7849.0120 C requires 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, considering:

- (1) the relationship of the proposed facility, or a suitable modification thereof, to overall state energy needs;
- (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;
- (3) the effects of the proposed facility, or a suitable modification thereof, in inducing future development; and
- (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;

As discussed above, the project is designed to reduce wholesale energy costs by addressing congestion, thus directly benefitting customers.<sup>50</sup> The Applicant estimates that the project will provide \$334.83 million in benefits for Xcel over the project's 63-year life while only costing

<sup>&</sup>lt;sup>50</sup> Id. at 12

Analyst assigned: Michael N. Zajicek

Page 19

\$102.00 to construct. In addition, the project will likely provide benefits to MISO as a while, Otter Tail Power, and Great River Energy. 51

As noted above, the Department relies on its ER for its socioeconomic analysis in a CN proceeding. The Department recommends that the Commission consider the ER filed by the Minnesota Department of Commerce's Energy Environmental Review and Analysis staff in this matter in the instant docket.

#### 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 socioeconomics 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) and Solar Energy Standard (SES) compliance;
- environmental cost planning; and
- transmission planning compliance.

## 1. Policies of Other Agencies

Minnesota Rules, part 7849.0120 D requires, in part, that when granting a certificate of need:

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.

Similarly, Minnesota Statutes, section 216B.243 subd. 3 (3) requires that in assessing need, the Commission shall evaluate "the 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 7.11 of the Petition.<sup>52</sup> This table appears to be comprehensive. The Department takes no position on whether the Applicant will obtain these permits and approvals in the future. The

\_

<sup>&</sup>lt;sup>51</sup> Id. at 8

<sup>&</sup>lt;sup>52</sup> Id. at 120-121

Analyst assigned: Michael N. Zajicek

Page 20

Department recommends that the Commission consider the EA that filed by EERA staff and any filings by other relevant state agencies in this matter and concludes that the record has not demonstrated that the Applicant will fail to comply with various policies, rules, and regulations of other state and federal agencies and local governments.

#### 2. Promotional Practices

Minnesota Statutes, section 216B.243 subd. 3 (4) requires that in assessing need the Commission shall evaluate "promotional activities that may have given rise to the demand for this facility," Minnesota Rule 7849.0120 A(3) requires consideration of "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" and Rule 7849.0240 similarly requires the Applicant to explain the relationship of the project to the promotional activities that may have given rise to the demand for the facility. This rule is concerned is intended to ensure that utilities and other power producing entities are not advertising to consumers of electricity to incite increased demand for electricity, that utilities can then use to justify the construction of new generation facilities, that they would then be able to bill to utility ratepayers. The Applicant stated that Xcel has not conducted any promotional activities for the project and the congestion is being driven instead by the location of good wind and solar resources in Minnesota and is expected to worsen over the next 10 years.<sup>53</sup>

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

# 3. Renewable Energy Standard 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 sections 216B.1691."

Minnesota Statutes §216B.1691, subd. 2a (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, so that the electric utility generates or procures an amount of electricity from an eligible energy technology that is equivalent to at least the following standard percentages of the electric utility's total retail electric sales to retail customers in Minnesota by the end of the year indicated:

-

<sup>&</sup>lt;sup>53</sup> Id. at 12

Analyst assigned: Michael N. Zajicek

Page 21

- (1) 2012 12 percent
- (2) 2016 17 percent
- (3) 2020 20 percent
- (4) 2025 25 percent
- (5) 2034 55 percent.

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

In addition to the requirements of subdivisions 2a and 2g, each public utility shall generate or procure sufficient electricity generated by solar energy to serve its retail electricity customers in Minnesota so that by the end of 2020, at least 1.5 percent of the utility's total retail electric sales to retail customers in Minnesota is generated by solar energy.

As a utility with retail customers Xcel is subject to Minnesota Statutes §216B.1691 and §216B.1691 subd. 2f (a). The Applicant submitted its most recent compliance filing related to compliance with Minnesota Statutes §216B.1691 and §216B.1691 subd. 2f (a). in Docket No. E999/M-23-12. The Commission issued an *Order* on August 1, 2023 which concluded that Xcel is in compliance with Minnesota Statutes §216B.1691.<sup>54</sup>

Therefore, the Department concludes that the Applicants have 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, the Applicants are 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

<sup>&</sup>lt;sup>54</sup> See the Commission's ORDER, filed August 1, 2023, in Docket No. E999/PR-23-12 eDocket# 20238-197909-01

Analyst assigned: Michael N. Zajicek

Page 22

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-21-111) at page 185 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 2030. When considering the RES needs, including other jurisdictions outside of Minnesota, the Minnesota RES utilities have enough capacity to meet RES needs beyond 2022. In addition, some utilities with less than sufficient capacity to meet the Minnesota RES need may use renewable energy credits to fulfill their requirement.

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, subd. 3 prohibits, with limited exceptions, construction of a new large energy facility that would contribute to statewide power sector carbon dioxide emissions.

As the proposed project is a transmission line, it is expected to reduce system losses, and thus the quantity of generation necessary to serve load and resulting CO<sub>2</sub> emissions.<sup>55</sup> The project is also largely connecting renewable generation resources to load centers in support of the state's carbon free goals. Therefore, Department concludes that the proposed project will likely not contribute to statewide power sector CO<sub>2</sub> emissions but recommends that the Commission consider the ER provided by EERA staff for a more detailed discussion on Carbon Dioxide emissions related to the project.

<sup>&</sup>lt;sup>55</sup> See Xcel's Application to the Minnesota Public Utilities Commission for a Certificate of Need for the Proposed 345 kV Brookings County – Lyon County and Helena – Hampton Second-Circuit Project, filed August 15, 2023, in Docket No. E002/CN-23-200 eDocket# <u>20238-198271-01</u> at page 63

Analyst assigned: Michael N. Zajicek

Page 23

# 7. Use of Renewable Resource

Minnesota Statutes §216B.243, Subd. 3 (11) requires the Commission to evaluate "whether the applicant has made the demonstrations required under subdivision 3a." Minnesota Statutes §216B.243, Subd. 3a states:

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.

The Applicant states that the project will reduce congestion to increase delivery of generation from renewable resources in Minnesota, North Dakota, and South Dakota to load centers, and that the project will support future renewable energy development. <sup>56</sup> Based on the Department's review of the project and its location the Department concludes that the project will primarily serve to support renewable generation and likely will lead to reductions in fossil fuel emissions. As such the Department concludes that the consideration established by Minnesota Statutes §216B.243, Subd. 3 (11) has been met.

# III. DEPARTMENT RECOMMENDATION

Based on its review, the Department requests that the Applicant submits cost and benefit estimates for each of its alternatives studied and provide a discussion of distributed generation as an alternative to the project in Reply Comments.

In response to the Commission's April 2, 2024, Notice of Comment period<sup>57</sup> and based upon the above analysis and the analysis in the Department's September 6, 2023, Completeness comments, <sup>58</sup> the Department:

<sup>&</sup>lt;sup>56</sup> Id. at 50

<sup>&</sup>lt;sup>57</sup> See the Commission's *Notice of Comment Period on the Merits of the Certificate of Need Application,* filed April 2, 2024, in Docket No. E002/CN-23-200 eDocket# 20244-204922-01

<sup>&</sup>lt;sup>58</sup> See Department's *Comments* filed September 6, 2023, in Docket No. E002/CN-23-200 eDocket# <u>20239-198782-01</u>

Analyst assigned: Michael N. Zajicek

Page 24

 Has not identified any contested issues with respect to the representations made in the application pertaining to the certificate of need, but relies on input from MISO studies and EERA's ER on some issues; and

- The Application complies with Minnesota Statues, section 216B.243 and Minnesota Rules Part 7849.0010 to 7849.0400, and thus meets the criteria for the Commission to grant the project a Certificate of need. Specifically:
  - Xcel has met each of the five criteria listed under Minnesota Rules, part 7849.0120 A and thus shown 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;"
  - Xcel has met three of the four criteria listed under Minnesota Rules, part 7849.0120 B and thus shown that "a more reasonable and prudent alternative to the proposed facility has not been demonstrated by a preponderance of the evidence on the record;" and
  - Xcel has shown 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."

For 7849.120 B (2) the Department concludes that the criteria is met pending the submittal of more detailed cost information from the Applicant in reply comments.

Assuming the Company provides the requested data on 7849.120 B (2), the Department recommends that, should the Commission find, after consideration of the Environmental Report, that the proposed facility "will provide benefits to society in a manner compatible with protecting the natural and socioeconomic environments, including human health," that the Commission issue a Certificate of Need to Xcel for the project.

Finally, Department recommends that the Commission require Xcel to file a compliance filing on the ownership of the project and the portion of costs being paid for by Xcel once all parties have indicated whether or not they will be investing in the project.

# **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. E002/CN-23-200

Dated this 18<sup>th</sup> day of April 2024

/s/Sharon Ferguson

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
David	Bell	david.bell@state.mn.us	Department of Health	POB 64975 St. Paul, MN 55164	Electronic Service	No	OFF_SL_23-200_Official CC Service List
Brian	Bell	bell.brian@dorsey.com	Dorsey & Whitney LLP	50 South Sixth St. Suite 1500 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_23-200_Official CC Service List
Generic Notice	Commerce Attorneys	commerce.attorneys@ag.st ate.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1400 St. Paul, MN 55101	Electronic Service	Yes	OFF_SL_23-200_Official CC Service List
Randall	Doneen	randall.doneen@state.mn.u s	Department of Natural Resources	500 Lafayette Rd, PO Box 25 Saint Paul, MN 55155	Electronic Service	No	OFF_SL_23-200_Official CC Service List
Michael	Drysdale	Drysdale.michael@dorsey.	Dorsey & Whitney LLP	50 South Sixth Street, Suite 1500 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_23-200_Official CC Service List
Kate	Fairman	kate.frantz@state.mn.us	Department of Natural Resources	Box 32 500 Lafayette Rd St. Paul, MN 551554032	Electronic Service	No	OFF_SL_23-200_Official CC Service List
Annie	Felix Gerth	annie.felix- gerth@state.mn.us		Board of Water & Soil Resources 520 Lafayette Rd Saint Paul, MN 55155	Electronic Service	No	OFF_SL_23-200_Official CC Service List
Sharon	Ferguson	sharon.ferguson@state.mn .us	Department of Commerce	85 7th Place E Ste 280  Saint Paul, MN 551012198	Electronic Service	No	OFF_SL_23-200_Official CC Service List
Todd	Green	Todd.A.Green@state.mn.u s	Minnesota Department of Labor & Industry	443 Lafayette Rd N St. Paul, MN 55155-4341	Electronic Service	No	OFF_SL_23-200_Official CC Service List
Kari	Howe	kari.howe@state.mn.us	DEED	332 Minnesota St, #E200 1ST National Bank Blo St. Paul, MN 55101	Electronic Service g	No	OFF_SL_23-200_Official CC Service List

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Ray	Kirsch	Raymond.Kirsch@state.mn .us	Department of Commerce	85 7th Place E Ste 500 St. Paul, MN 55101	Electronic Service	No	OFF_SL_23-200_Official CC Service List
Chad	Konickson	chad.konickson@usace.ar my.mil	U.S.Army Corps of Engineers	180 5th St # 700  Saint Paul,  MN  55101	Electronic Service	No	OFF_SL_23-200_Official CC Service List
Stacy	Kotch Egstad	Stacy.Kotch@state.mn.us	MINNESOTA DEPARTMENT OF TRANSPORTATION	395 John Ireland Blvd. St. Paul, MN 55155	Electronic Service	No	OFF_SL_23-200_Official CC Service List
Dawn S	Marsh	dawn_marsh@fws.gov	U.S. Fish & Wildlife Service	Minnesota-Wisconsin Field Offices 4101 American Blvd E Bloomington, MN 55425	Electronic Service	No	OFF_SL_23-200_Official CC Service List
Christa	Moseng	christa.moseng@state.mn. us	Office of Administrative Hearings	P.O. Box 64620 Saint Paul, MN 55164-0620	Electronic Service	Yes	OFF_SL_23-200_Official CC Service List
Generic Notice	Residential Utilities Division	residential.utilities@ag.stat e.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012131	Electronic Service	Yes	OFF_SL_23-200_Official CC Service List
Stephan	Roos	stephan.roos@state.mn.us	MN Department of Agriculture	625 Robert St N Saint Paul, MN 55155-2538	Electronic Service	No	OFF_SL_23-200_Official CC Service List
Christine	Schwartz	Regulatory.records@xcele nergy.com	Xcel Energy	414 Nicollet Mall FL 7  Minneapolis, MN 554011993	Electronic Service	No	OFF_SL_23-200_Official CC Service List
Will	Seuffert	Will.Seuffert@state.mn.us	Public Utilities Commission	121 7th PI E Ste 350  Saint Paul,  MN  55101	Electronic Service	Yes	OFF_SL_23-200_Official CC Service List

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Janet	Shaddix Elling	jshaddix@janetshaddix.co m	Shaddix And Associates	7400 Lyndale Ave S Ste 190 Richfield, MN 55423	Electronic Service	Yes	OFF_SL_23-200_Official CC Service List
Zeviel	Simpser	simpser.zev@dorsey.com	Dorsey & Whitney LLP	50 South Sixth Street Suite 1500 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_23-200_Official CC Service List
Jayme	Trusty	execdir@swrdc.org	SWRDC	2401 Broadway Ave #1  Slayton, MN 56172	Electronic Service	No	OFF_SL_23-200_Official CC Service List
Jen	Tyler	tyler.jennifer@epa.gov	US Environmental Protection Agency	Environmental Planning & Evaluation Unit 77 W Jackson Blvd. Mailstop B-19J Chicago, IL 60604-3590	Electronic Service	No	OFF_SL_23-200_Official CC Service List
Cynthia	Warzecha	cynthia.warzecha@state.m n.us	Minnesota Department of Natural Resources	500 Lafayette Road Box 25 St. Paul, MN 55155-4040	Electronic Service	No	OFF_SL_23-200_Official CC Service List
Alan	Whipple	sa.property@state.mn.us	Minnesota Department Of Revenue	Property Tax Division 600 N. Robert Street St. Paul, MN 551463340	Electronic Service	No	OFF_SL_23-200_Official CC Service List
Jonathan	Wolfgram	Jonathan.Wolfgram@state. mn.us	Office of Pipeline Safety	445 Minnesota St Ste 147  Woodbury, MN 55125	Electronic Service	No	OFF_SL_23-200_Official CC Service List

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
David	Bell	david.bell@state.mn.us	Department of Health	POB 64975 St. Paul, MN 55164	Electronic Service	No	SPL_SLCN - CERTIFICATE OF NEEDS
Randall	Doneen	randall.doneen@state.mn.u s	Department of Natural Resources	500 Lafayette Rd, PO Box 25 Saint Paul, MN 55155	Electronic Service	No	SPL_SLCN - CERTIFICATE OF NEEDS
Kate	Fairman	kate.frantz@state.mn.us	Department of Natural Resources	Box 32 500 Lafayette Rd St. Paul, MN 551554032	Electronic Service	No	SPL_SL_CN - CERTIFICATE OF NEEDS
Annie	Felix Gerth	annie.felix- gerth@state.mn.us		Board of Water & Soil Resources 520 Lafayette Rd Saint Paul, MN 55155	Electronic Service	No	SPL_SL_CN - CERTIFICATE OF NEEDS
Todd	Green	Todd.A.Green@state.mn.u s	Minnesota Department of Labor & Industry	443 Lafayette Rd N St. Paul, MN 55155-4341	Electronic Service	No	SPL_SL_CN - CERTIFICATE OF NEEDS
Kari	Howe	kari.howe@state.mn.us	DEED	332 Minnesota St, #E200 1ST National Bank Blo St. Paul, MN 55101	Electronic Service lg	No	SPL_SL_CN - CERTIFICATE OF NEEDS
Ray	Kirsch	Raymond.Kirsch@state.mn .us	Department of Commerce	85 7th Place E Ste 500 St. Paul, MN 55101	Electronic Service	No	SPL_SLCN - CERTIFICATE OF NEEDS
Chad	Konickson	chad.konickson@usace.ar my.mil	U.S.Army Corps of Engineers	180 5th St # 700 Saint Paul, MN 55101	Electronic Service	No	SPL_SLCN - CERTIFICATE OF NEEDS
Stacy	Kotch Egstad	Stacy.Kotch@state.mn.us	MINNESOTA DEPARTMENT OF TRANSPORTATION	395 John Ireland Blvd. St. Paul, MN 55155	Electronic Service	No	SPL_SL_CN - CERTIFICATE OF NEEDS
Dawn S	Marsh	dawn_marsh@fws.gov	U.S. Fish & Wildlife Service	Minnesota-Wisconsin Field Offices 4101 American Blvd E Bloomington, MN 55425	Electronic Service	No	SPL_SLCN - CERTIFICATE OF NEEDS

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Stephan	Roos	stephan.roos@state.mn.us	MN Department of Agriculture	625 Robert St N Saint Paul, MN 55155-2538	Electronic Service	No	SPL_SLCN - CERTIFICATE OF NEEDS
Jayme	Trusty	execdir@swrdc.org	SWRDC	2401 Broadway Ave #1  Slayton, MN 56172	Electronic Service	No	SPL_SLCN - CERTIFICATE OF NEEDS
Jen	Tyler	tyler.jennifer@epa.gov	US Environmental Protection Agency	Environmental Planning & Evaluation Unit 77 W Jackson Blvd. Mailstop B-19J Chicago, IL 60604-3590	Electronic Service	No	SPL_SLCN - CERTIFICATE OF NEEDS
Cynthia	Warzecha	cynthia.warzecha@state.m n.us	Minnesota Department of Natural Resources	500 Lafayette Road Box 25 St. Paul, MN 55155-4040	Electronic Service	No	SPL_SLCN - CERTIFICATE OF NEEDS
Alan	Whipple	sa.property@state.mn.us	Minnesota Department Of Revenue	Property Tax Division 600 N. Robert Street St. Paul, MN 551463340	Electronic Service	No	SPL_SLCN - CERTIFICATE OF NEEDS
Jonathan	Wolfgram	Jonathan.Wolfgram@state. mn.us	Office of Pipeline Safety	445 Minnesota St Ste 147  Woodbury, MN 55125	Electronic Service	No	SPL_SLCN - CERTIFICATE OF NEEDS