

Staff Briefing Papers

Meeting Date **October 3, 2024** **Agenda Item 4****

Company Northern States Power Co., d/b/a Xcel Energy

Docket No. E002/CN-22-532, TL-23-157

In the Matter of the Application of Xcel Energy for a Certificate of Need and Route Permit for the Mankato – Mississippi 345 kV Transmission Line Project in Southeast Minnesota

- Issues**
- Are there any alternative routes or route segments that should be studied to mitigate potential impacts associated with the proposed project?
 - Are there any unique characteristics of the proposed routes or the project that should be considered?

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Relevant Documents	Date
Xcel Energy Initial Filing (20 parts)	04/02/2024
Notice of Public Information and Environmental Impact Statement Scoping Meetings	06/24/2024
PUC Order Accepting Application as Complete	06/26/2024
Xcel Energy Comments on Scope of Environmental Impact Statement	07/03/2024
The Prehn Family and NoCapX 2020 Scoping Comments	07/29/2024
MN DNR Comments	07/31/2024
MN DOT Comments	08/01/2024
CFERS, LLC Scoping Comments for EIS	08/01/2024
Xcel Energy Response to EIS Scoping Comments	08/28/2024
DOC EERA Public Comments (3 parts)	09/13/2024

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The attached materials are work papers of the Commission Staff. They are intended for use by the Public Utilities Commission and are based upon information already in the record unless noted otherwise.

✓ **Relevant Documents**

DOC EERA Scoping Comments and Recommendations

Date

09/19/2024

ISSUES

- Are there any alternative routes or route segments that should be studied to mitigate potential impacts associated with the proposed project?
- Are there any unique characteristics of the proposed routes or the project that should be considered?

PROJECT DESCRIPTION

Northern States Power Co., d/b/a Xcel Energy (Xcel) has applied to the Minnesota Public Utilities Commission (Commission) for a certificate of need and route permit to construct the Mankato to Mississippi River 345-kilovolt (kV) Transmission Line (MMRT Project), a new approximately 130-mile 345 kV transmission line between the Wilmarth Substation in Mankato, Minnesota and the Mississippi River and a new, approximately 20-mile 161 kV transmission line between the North Rochester Substation near Pine Island, Minnesota and an existing transmission line northeast of Rochester, Minnesota. The MMRT Project may cross portions of Blue Earth, Le Sueur, Waseca, Rice, Dodge, Olmstead, Goodhue, Winona, and Wabasha counties and is divided into the four segments described below:

- Segment 1: a new 48- to 54-mile 345-kV transmission line between the Wilmarth Substation and a point near the West Faribault Substation;
- Segment 2: a new 34- to 42-mile 345-kV transmission line from a point near the existing West Faribault Substation to the existing North Rochester Substation;
- Segment 3: conversion of 27 miles of existing 161/345-kV transmission line to 345/345-kV operation and installation of a new 16-mile 345-kV circuit on the existing 345/345-kV double-circuit capable structures between the existing North Rochester Substation and the Mississippi River; and
- Segment 4: a new 19.6-to 23.7-mile 161-kV transmission line between the existing North Rochester Substation and the existing 161-kV Chester Line northeast of Rochester.

Xcel Energy has requested a route width of 1,000 feet along most proposed alignments (500 feet to either side of proposed centerlines), with wider areas (up to 1.25 miles wide) around MMRT Project substations, locations with routing constraints, and where route options come together. The 345 kV portion of the MMRT Project typically requires a permanent 150-foot wide right-of-way. For the 161 kV portions of the Project, a 100-foot wide right-of-way is typically required.

Xcel Energy indicated that the MMRT Project, along with other Long Range Transmission Projects (LRTP) that were studied and approved by the Midcontinent Independent System Operator, Inc. (MISO) are needed to provide reliable, resilient, and cost-effective delivery of energy as the generation resource mix continues to evolve over the coming years. Specifically, the MMRT Project and the other LRTP projects in Wisconsin¹ are needed to address loading and congestion issues on the existing 345 kV transmission system across southern Minnesota and Wisconsin.

BACKGROUND

I. Procedural History

¹ Tremval - Eau Claire - Jump River and Tremval - Rocky Run - Columbia transmission projects both located in Wisconsin.

On April 2, 2024, Xcel filed a combined certificate of need and route permit application with the Commission for the MMRT Project.

On June 24, 2024, the Commission issued a notice of public information and environmental impact statement scoping meetings.

On June 26, 2024, the Commission issued an Order Accepting Applications as Complete, Establishing Procedural Requirements, and Notice of and Order for Hearing. In addition to the application completeness determination, the Order approved joint public meetings, joint public hearings, and combined environmental review of the certificate of need and route permit applications, including preparation of an environmental impact statement (EIS) in lieu of an environmental report pursuant to Minn. R. 7849.1900, subp. 2. The Commission denied the request to establish an advisory task force and authorized the Executive Secretary to issue an authorization to the Applicants to initiate consultation with the State Historical Preservation Office (SHPO).

On July 3, 2024, Xcel filed comments regarding the scope of the EIS.

Between July 8 and July 10, 2024, public information and environmental impact statement scoping meetings were held in each of the following cities: Mankato, Waterville, Faribault, Pine Island, and Kellogg. Two online public information and environmental impact statement scoping meetings were held on July 11, 2024. A written comment period was open through August 1, 2024, to receive comments on the scope of the EIS.

On July 29, 2024, The Prehn Family and NoCapX 2020 filed scoping comments. The Prehn comments addressed compliance with the Minnesota Environmental Policy Act, indicated that in their opinion the Commission and the Department of Commerce are the regular and not the Midcontinent Independent System Operator (MISO), the need to have state agencies file comments separately in eDockets and not in groups for the public to be able to easily access the comments and in general for the Commission to increase the public participation through better information being presented at the public meetings. The Prehn Family then addressed the need for the project and cumulative impacts and phased connected actions, system alternatives, including lower voltage levels instead of 345 kV, line losses, no build alternative, magnetic and electric field calculations not being addressed enough in the application, impacts of the new line on Prehn family home and land.

On July 31, 2024, Minnesota Department of Natural Resources (DNR) filed comments regarding potential environmental impacts and river crossings that should be considered in the EIS. Specifically, DNR identified six calcareous fens that have been documented within five miles of the proposed project. DNR also identified karst features in Olmstead County and recommended that the EIS address how the project will account for karst geology during pole structure design and placement. Lastly, DNR recommended that any additional route alternatives considered in the EIS, including Option 4 West A, be submitted to DNR Natural Heritage (NH) staff in order to update the January 23, 2024 NH Review Letter.

On August 1, 2024, Minnesota Department of Transportation (MnDOT) filed general comments typical for all energy projects where parallel installation within trunk highways rights-of-way is expected, like the need for the Applicant to properly identify all existing utilities in those areas for

coordination and possibly relocating existing utilities which may conflict with the MMRT Project. MnDOT also offered some site-specific comments for Segment 1 of the MMRT Project.

On August 1, 2024, Citizens for Environmental Rights & Safety (CFERS) filed scoping comments on behalf of approximately 75 landowners and citizens of the State of Minnesota who banded together as a rural neighborhood coalition to address issues that impact their local environment.

On August 28, 2024, Xcel filed a response to EIS Scoping comments.

On September 13, 2024, EERA filed all the public comments received in three batches labeled as comments 1-26, 27-49, and 50-96.

On September 19, 2024, EERA filed comments and recommendations summarizing the EIS scoping process, discussing the system and route alternatives proposed during the scoping process, and identifying and recommending alternatives for inclusion in the scope of the EIS.

II. Relevant Rules and Statutes

Scope of the EIS

The Minnesota Department of Commerce (Department) is required by Minn. R. 7850.2500, to prepare an EIS for the Commission on proposed high-voltage transmission line projects that are being reviewed under the full permitting process.

Before preparing the EIS, the Department must create a scoping document outlining the issues and alternatives that will be evaluated. Therefore, EERA reviews the comments received during the scoping process in order to identify the unique impacts, mitigation strategies, and system and route alternatives that should be considered in the EIS and that will aid in the Commission's decisions on the certificate of need and route permit applications. As part of the EIS scoping process, EERA also provides the applicant with an opportunity to respond to each proposed alternative, as specified by Minn. R. 7850.2500, subp. 3.

Under Minn. Stat. § 216E.03, subd. 5, the Commission may identify alternative routes for evaluation in the EIS. Similarly, Minn. R. 7849.1400, subp. 6, allows the Commission to identify impacts and alternatives for evaluation in the environmental report.² Accordingly, the Commission has at times provided input on the alternatives to be examined in the environmental document before the Department issues the scoping decision.

COMMENTS

III. EERA Comments and Recommendations

EERA's comments and recommendations provided a summary of the EIS scoping process and identified the system and route alternatives that were suggested by commenters during the EIS

² In this case, the Commission authorized preparation of an EIS in lieu of the environmental report required for a certificate of need application. The EIS, however, must include an analysis of the alternatives required in an environmental report under Minn. R. 7850.1500. See Order Authorizing Joint Proceedings, June 26, 2024, Document ID [20246-207975-01](#).

scoping period.³

According to EERA, approximately 195 people attended the public meetings and 33 individuals provided verbal comments.⁴ A comment period, which closed on August 1, 2024, provided an opportunity to submit written comments to EERA staff on potential impacts and mitigation measures for consideration in the scope of the EIS. A total of 63 written comments were received during the comment period, nine of which were from local units of governments and state agencies.⁵ The remaining comments were received from: Citizens for Environmental Rights and Safety, F.H. Holding LLC, Rochester Archery Club, Xcel Energy, and individual members of the public.

As indicated by EERA, commenters expressed concern about a variety of potential impacts associated with the project, including those associated with farming operations, property values, multiple transmission lines on a property, public health and safety, aesthetics, land use, wildlife and associated habitat, water resources, geology, and noise. Just under one-quarter of the comments expressed a preference for, or displeasure with, a routing option proposed in the route permit application. Commentors proposed multiple route and alignment alternatives for study in the EIS. EERA identified 17 routing alternatives that it believes should be evaluated in the EIS.

A. Alternatives

EERA comments were generally organized by system alternatives and route alternatives. System alternatives were those that related to the need for the proposed project—that is, its size, type, and timeliness, while route alternatives were those associated with the proposed location of the transmission facilities.

1. System Alternatives

EERA recommended that the system alternatives listed below be included in the EIS scope for further analysis because they are required under Minn. R. 7849.1500, subp. 1B, and meet the stated purpose of the project, which is to construct a high-voltage transmission line between Wilmarth Substation in Mankato to a Mississippi River crossing location near Kellogg, MN to address loading and congestion issues on the existing 345 kV transmission system across southern Minnesota and Wisconsin.

- No-build Alternative;
- Chester Junction System Alternative;
- 230 kV System Alternative.

2. Route Alternatives

In determining which alternatives should be carried forward for evaluation in the EIS, EERA applied

³ EERA Comments and Recommendations, September 19, 2024, Document ID [20249-210328-01](#).

⁴ EERA Environmental Impact Statement Scoping Comments Received, September 13, 2024, Document ID [20249-210198-02](#) (Cover Letter), [20249-210198-04](#) (Public Comments 1-26), [20249-210198-06](#) (Public Comments 27-49), [20249-210198-08](#) (Public Comments 50-96).

⁵ Ibid.

the five criteria listed below.

- Was the suggested alternative submitted during the specified comment period?
- Was there an explanation for why the proposed alternative should be included in the EIS?
- Would the alternative be located in an area that is prohibited under Minn. R. 7850.4300?
- Does the alternative meet the applicant's stated need for the project?
- Is the alternative feasible (*i.e.*, is it permissible and constructible)?

After applying the criteria outlined above, EERA analyzed the remaining alternatives and determined whether including the alternative in the EIS would assist the Commission in deciding on a route permit, and ultimately recommended that ten route segments and five alignment alternatives, in addition to Xcel's proposed routes, be carried forward for evaluation in the EIS.

EERA recommended that two route segments not be included in the scope of the EIS, namely the Mankato airport route segments 3 and 4 along Segment 1 North due to aviation easements that prohibit above-ground structures south of the airport. The two route segments would not be permissible and therefore EERA deemed them infeasible.

Attachment 1 to EERA's comments and recommendations includes maps of all 17 route segments and alignment alternatives that were analyzed.

IV. Xcel Energy Comments

Prior to EERA's comments and recommendations, Xcel filed a letter⁶ to address an Applicant's proposed route option. After further analysis conducted after filing its application⁷, Xcel determined that a greater portion of the proposed 161 kV transmission line in Segment 4 of the Project could be double circuited with existing transmission lines in the area. As a result, Xcel Energy proposed that this double-circuit route option, as shown in Attachment A of Xcel's July 3 comments, be included in the EIS for further study as an alternative to part of Route Option 4 West.

Xcel later filed a second letter⁸ to offer one additional alignment alternative and two additional route alternatives in Segment 1 of the MMRT Project be included for evaluation in the EIS in response to comments received during the scoping process.

Responding to comments filed on August 1, 2024, by Citizens for Environmental Rights and Safety who requested that the EIS evaluate a route option for the 345 kV transmission line from the Wilmarth Substation along State Highway 14 to the Byron Substation, Xcel indicated that Highway 14 route alternative (HWY 14-ALT) would also require a new 13-mile long 345 kV connection from the Byron Substation north to the North Rochester Substation.

⁶ Xcel Energy Scoping Comments on Environmental Impact Statement, July 3, 2024, (and July 8 duplicate filing), Document ID [20247-208324-02](#).

⁷ Application for a Certificate of Need and Route Permit for the Mankato – Mississippi River Transmission Project at 92 (April 2, 2024), Document ID [20244-204917-17](#).

⁸ Xcel Energy Response to EIS Scoping Comments, July 28, 2024, Document ID [20248-209829-01](#).

Xcel indicated that after performing a high-level feasibility review and environmental analysis of the HWY 14-ALT, the Company does not believe that this route is superior to the routes proposed in the Application, but still supports inclusion of this route alternative in the EIS for further analysis.

Responding to the system alternatives proposed, Xcel indicated that while the Company does not believe that the Chester Junction System Alternative is more prudent and reasonable alternative, the Company supports inclusion of this alternative in the EIS for further study. With regard to the 230 kV System Alternative, Xcel indicated the Application included an evaluation of lower voltage transmission lines (161 kV, 115 kV, 69 kV and 34.5 kV) as alternatives and concluded that they were not a more reasonable or prudent alternative to the 345 kV portions of the MMRT Project. Xcel stated the lower voltage alternatives would not have sufficient capacity to address the overload and congestion issues on the existing system and would not offer the capacity needed to support future renewable generation.⁹

STAFF DISCUSSION

Alternatives

After PUC Energy Facilities Permitting staff attended seven public information and EIS scoping meetings, reviewing comments received during the written comment period, and reviewing EERA's comments and recommendations, staff agrees with EERA's recommendation on the system and route alternatives to be included in the EIS scope for further evaluation in the EIS. Staff is unaware of any other system or route alternatives that were not already identified and considered in EERA's comments and recommendations. Further, it is staff's understanding that Xcel does not object to the system and route alternatives being recommended by EERA.

Procedural Matters

No other procedural matters have been identified at this time.

⁹ Application at 90 (eDockets ID No. [20244-204917-17](#)).

COMMISSION DECISION OPTIONS

System Alternatives [choose one of the following]

1. Adopt the system alternatives recommend by EERA for inclusion in the EIS scope (EERA and Xcel), **or**
2. Adopt additional system alternatives or some other combination of system alternatives for inclusion in the EIS scope [INSERT description of alternative recommended].

Route Alternatives [choose one of the following]

3. Adopt the route alternatives recommended by EERA for inclusion in the EIS scope (EERA and Xcel), **or**
4. Adopt additional route alternatives or some other combination of route alternatives for inclusion in the EIS scope [INSERT description of alternative recommended].

Staff Recommendation: 1 and 3