APPLICATION FOR A CERTIFICATE OF NEED FOR THE MAPLE RIVER – CUYUNA 345 KV TRANSMISSION LINE PROJECT

DOCKET NO. E015,ET2,E017/CN-25-109

SUBMITTED BY MINNESOTA POWER,
GREAT RIVER ENERGY,
AND OTTER TAIL POWER COMPANY

January 30, 2026

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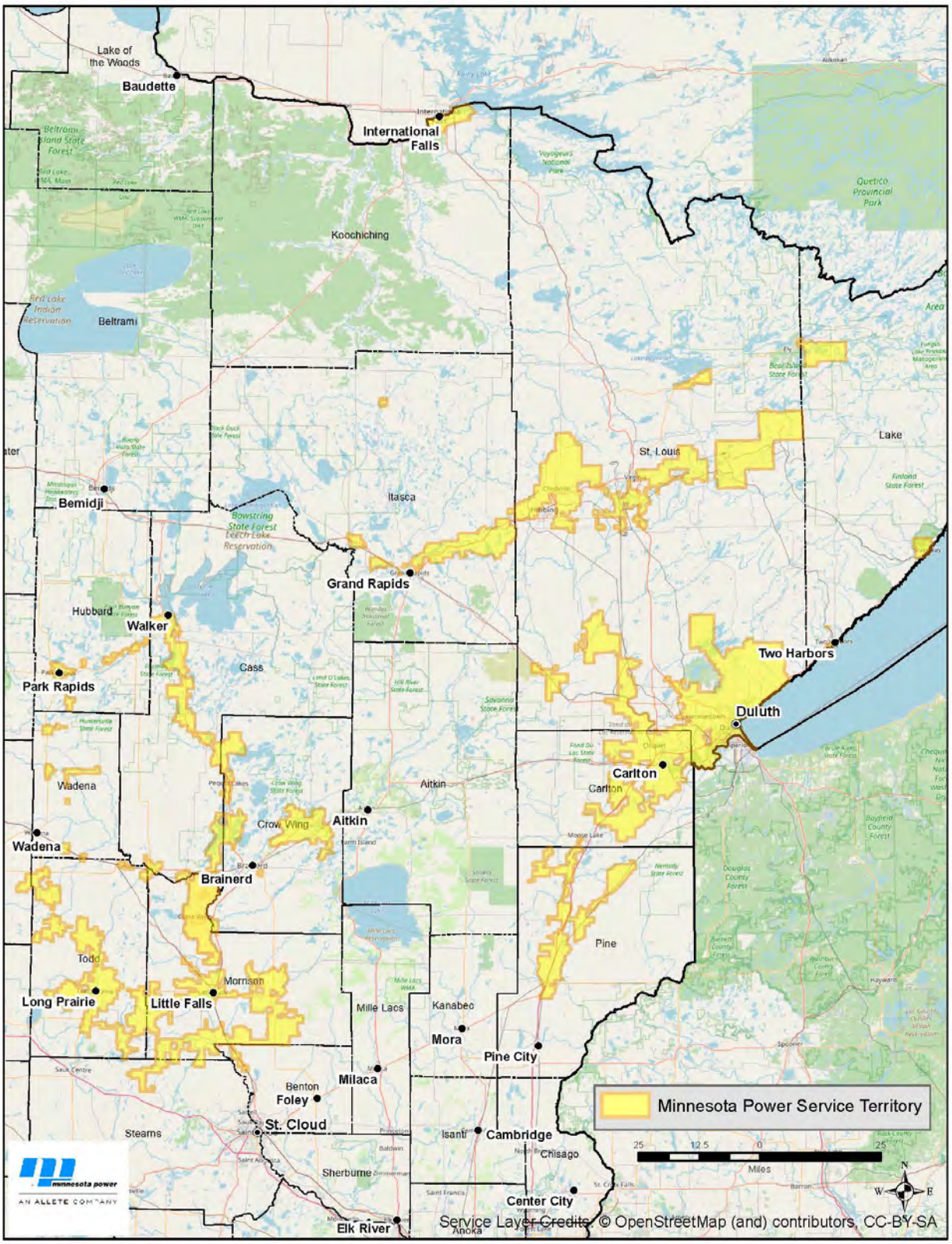
1.1 Introduction

Minnesota Power, Great River Energy, and Otter Tail Power Company (collectively, the "Applicants") submit this application to the Minnesota Public Utilities Commission ("Commission") for a Certificate of Need ("Application") for the Maple River – Cuyuna 345 kilovolt ("kV") Transmission Project (the "Project"). The Project consists of the construction of a new 345 kV double-circuit transmission line, operated initially as a single transmission line, connecting Minnesota Power's Cuyuna Substation in Crow Wing County, Minnesota, to Otter Tail Power Company's Maple River Substation in Cass County, North Dakota.

The Project was studied, reviewed, and approved by the Midcontinent Independent System Operator, Inc. ("MISO") as part of its Long-Range Transmission Planning ("LRTP") Tranche 2.1 Portfolio of projects included in MISO's 2024 Transmission Expansion Plan ("MTEP") ("MTEP24"). The LRTP Tranche 2.1 Portfolio is made up of 24 projects, including Project Number 20, the Maple River – Cuyuna 345 kV Transmission Project. The Project, as part of the LRTP Tranche 2.1 Portfolio, is needed to support the reliability of the regional transmission system, particularly in northern Minnesota and eastern North Dakota; provide additional transmission capacity and regional transfer capability to reliably integrate future generation resources; meet growing electrical demand, enhance resiliency during extreme weather events, and enable cost-effective regional energy transfers supporting economical grid operations.

Minnesota Power is an investor-owned public utility headquartered in Duluth, Minnesota. Minnesota Power supplies retail electric service to 150,000 retail customers, including some of the nation's largest industrial customer operations, and wholesale electric service to 14 municipalities in a 26,000-square-mile electric service territory located in northeastern Minnesota. Minnesota Power generates and delivers electric energy through a network of transmission lines, distribution lines, and substations throughout northeastern Minnesota. Minnesota Power's transmission network is interconnected with the regional transmission grid to promote reliability, and Minnesota Power is a transmission-owning member of MISO and a member of the Midwest Reliability Organization ("MRO"). Minnesota Power provides electricity to customers in northern Minnesota. Minnesota Power's service area is shown in Figure 1.

Figure 1. Minnesota Power's Service Area



Great River Energy is a not-for-profit wholesale electric power cooperative which provides electricity to approximately 1.7 million people through its 26 member-owner cooperatives and customers. Through its member-owners and customers, Great River Energy serves two-thirds of Minnesota geographically and parts of Wisconsin. Great River Energy's 5,100 mile transmission network is interconnected with the regional transmission grid to promote reliability, and Great River Energy is a transmission-owning member of MISO. Great River Energy is based in Maple Grove, Minnesota. Great River Energy's member cooperatives and customers are shown in Figure 2.

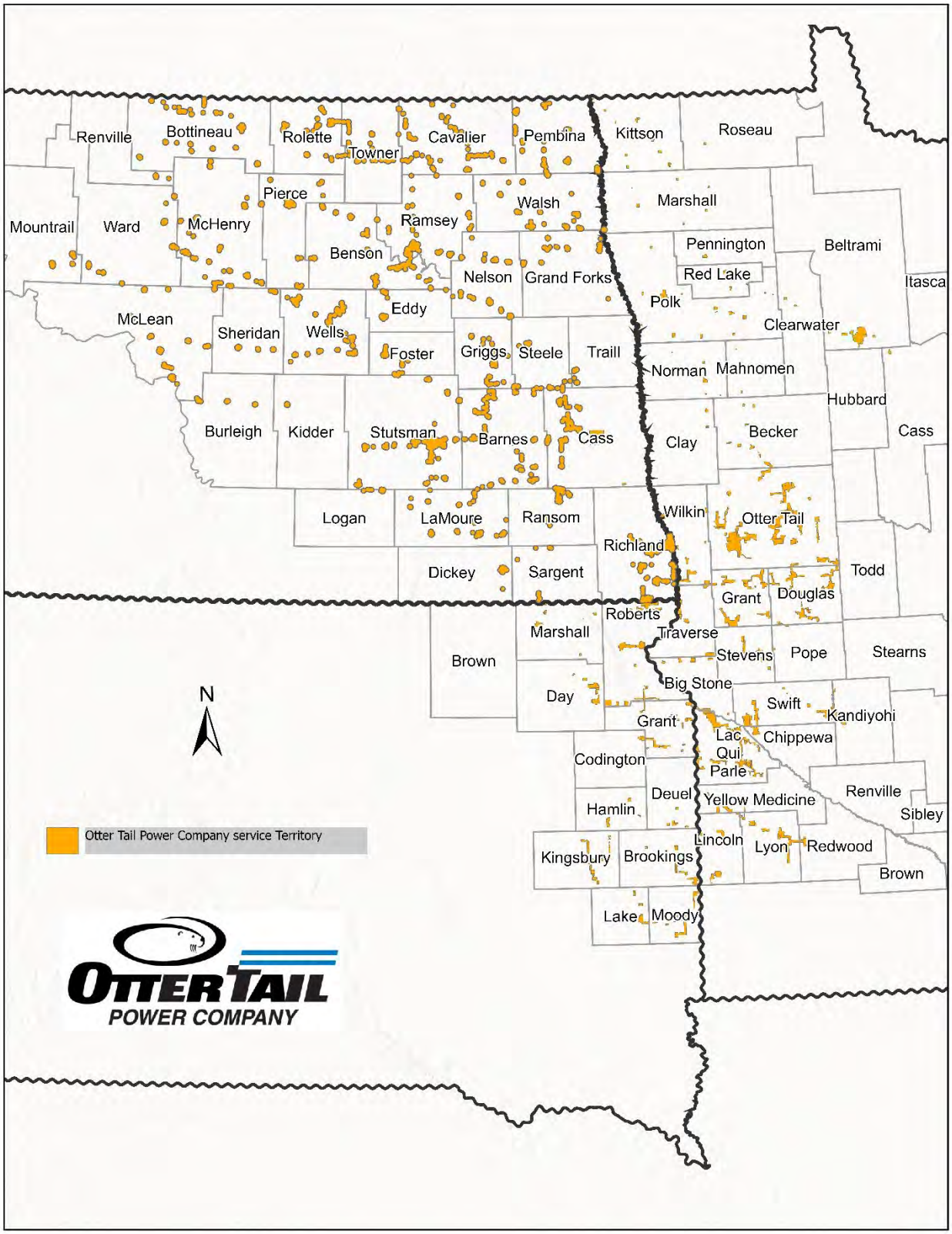
Figure 2. Great River Energy's Member Cooperatives



Otter Tail Power Company is an investor-owned electric utility headquartered in Fergus Falls, Minnesota, that provides electricity and energy services to over 133,000 customers spanning 70,000 square miles in western Minnesota, eastern North Dakota, and northeastern South Dakota.[1] Otter Tail Power Company wholly or jointly owns approximately 6,000 miles of transmission lines and approximately 1,100 megawatts ("MW") of generation capacity in these three states and is a transmission-owning member of MISO. Otter Tail Power Company's service area is shown in Figure 3.

[1] According to Otter Tail Power Company's most recent Affiliated Interest filing in compliance with Minn. R. 7825.2200(A), BlackRock, Inc. owns 15.7 percent of the outstanding shares of Otter Tail Corporation. *In the Matter of Annual Affiliated Interest Reports*, E,G999/PR-25-17, OTTER TAIL POWER COMPANY ANNUAL COMPLIANCE FILING at 2 (March 31, 2025) (eDocket No. 20253-217039-01). In Minnesota Power's Acquisition Docket (Docket No. E015/PA-24-198), the Commission ordered that where any supplier that has more than five percent of its outstanding shares owned by BlackRock, Inc., Minnesota Power must list that supplier on its annual affiliated interest report. *In the Matter of the Petition of Minnesota Power for Acquisition of ALLETE by Canada Pension Plan Investment Board and Global Infrastructure Partners*, Docket No. E015/PA-24-198, ORDER APPROVING PETITION FOR ACQUISITION WITH CONDITIONS AND ESTABLISHING OTHER REQUIREMENTS at 21, (Dec. 10, 2025). Minnesota Power will include Otter Tail Power Company on its annual affiliated interest report. Further, the Commission's order in the Acquisition Docket required that Minnesota Power notify the Commission within 30 days of executing a contract with any such entity with a value over $500,000. *Id.* Such a contract has not yet been executed between Minnesota Power and Otter Tail Power Company for the Project.

Figure 3. Otter Tail Power Company's Service Area



1.2 Project Description and Ownership

The Project consists of construction of a new 345 kV double-circuit transmission line, operated initially as a single transmission line, connecting Minnesota Power's Cuyuna Substation in Crow Wing County, Minnesota, to Otter Tail Power Company's Maple River Substation in Cass County, North Dakota. The Project will be approximately 160 to 180 miles in length depending on the final route selected, with approximately six to 10 miles of its length in North Dakota. The Cuyuna Substation will remain owned by Minnesota Power. The Maple River Substation will remain owned by Otter Tail Power Company. Minnesota Power, Otter Tail Power Company, and Great River Energy will jointly own the new 345 kV transmission line.

1.3 Project Need and Purpose

The Project, as part of the LRTP Tranche 2.1 Portfolio, is needed to support the reliability of the regional transmission system, particularly in northwestern and central Minnesota and eastern North Dakota; provide additional transmission capacity and regional transfer capability to reliably integrate future generation resources; meet growing electrical demand, enhance resiliency during extreme weather events, and enable cost-effective regional energy transfers supporting economical grid operations. The Project was included in the 2025 Minnesota Biennial Transmission Projects Report[2] under Commission tracking number 2025-NE-N1 and was also reported in Minnesota Power's 2025-2039 Integrated Resource Plan ("IRP").[3] Additional Information on the need for the Project is provided in Chapter 3. The Applicants considered several alternatives to the Project. These alternatives are discussed in Chapter 4.

On February 7, 2025, the Applicants filed a Notice of Intent to Own, Construct, and Operate the Project. A Certificate of Need is required under Minn. Stat. § 216B.243 before a high voltage transmission line of the voltages and lengths proposed for the Project is constructed.

1.4 Project Schedule and Cost

The Applicants anticipate starting Project construction in 2028 with an in-service date no later than 2033.

The estimated cost for the Project is between $1,108.40 and $1,332.80 million (2024$). Additional details regarding the schedule and cost for the Project are provided in Section 2.4.

[2] *In the Matter of the 2023 Minnesota Biennial Transmission Projects Report*, Docket No. E999/M-25-99, 2025 MINNESOTA BIENNIAL TRANSMISSION PROJECTS REPORT (Oct. 31, 2025).

[3] *In the Matter of the Application of Minnesota Power for Approval of 2025-2039 Integrated Resource Plan*, Docket No. E015/RP-25-127, APPLICATION at Appendix F, part 1 at 8, Part 7 (Mar. 3, 2025).

1.5 Potential Environmental Impacts

Minn. R. 7849.0310 requires that an Application for a Certificate of Need include environmental data for the proposed facility and any alternatives considered in detail. Specific information that must be provided is detailed in Minn. R. 7849.0330. The information required by Minn. R. 7849.0330 is provided throughout this Application.

The Applicants have identified a general area where the Project may be routed (the "Notice Area") at this time. This Notice Area is primarily located along existing high-voltage transmission line rights-of-way. The Applicants have intentionally developed the Notice Area to minimize potential environmental impacts from the Project, which are anticipated to be limited to temporary construction impacts and incremental permanent impacts where new or expanded rights-of-way are needed.

As the Applicants refine the Notice Area into a final route for the Project (the "Proposed Route"), the Applicants will avoid sensitive areas to the extent practicable and, where avoidance is not practicable, reasonable impact minimization and mitigation measures will be developed and implemented.

1.6 Public Input and Involvement

Prior to filing the Application, the Applicants held public open houses throughout the Project area in and around the Notice Area with detailed discussion in Section 8.5 of this Application. Additionally, consistent with Minn. R. 7829.2550, the Applicants filed with the Commission a proposed Notice Plan Petition. The Notice Plan Petition provided an outreach plan for mailed and published notice of the Project throughout the Notice Area. The Notice Plan Petition was approved by the Commission on October 21, 2025, and implemented by the Applicants prior to filing this Application. The Notice Plan Petition and the Commission's Order are provided in Appendix A. Proof of compliance with the Notice Plan was filed with the Commissioner on January 23, 2026.[4]

1.7 Certificate of Need Criteria

A Certificate of Need is required to be granted under Minn. Stat. § 216B.243 before a high-voltage transmission line of the voltage and lengths proposed for the Project is constructed. Minn. R. 7849.0220 requires certain information in an application for a Certificate of Need for a large high-voltage transmission line, like the Project. The Applicants filed a request for exemption from certain requirements ("Exemption Request") with the Commission. The Exemption Request was approved by the Commission on October 21, 2025. The Exemption Request and the Commission's Order are provided in Appendix B. A summary of the Certificate of Need requirements and granted exemptions, is provided in Appendix C with cross references indicating where the information required by Minnesota statute and rules can be found in this Application.

[4] *In the Matter of the Application for the Maple River – Cuyuna 345 kV Transmission Line Project*, Docket No. E015,ET2,E017/CN-25-109, NOTICE PLAN FILING (Jan. 23, 2026) (eDocket No. 20161-227314-01).

1.8 Request for Joint Proceeding with Route Permit Application

Minn. Stat. § 216B.243, subd. 4 and Minn. R. 7849.1900, Subp. 4 permit the Commission to hold joint proceedings for the Certificate of Need and Route Permit in circumstances where a joint hearing is feasible, more efficient, and may further the public interest.

The Applicants are not submitting a Route Permit Application concurrently with the Certificate of Need Application to allow time for gathering additional public input to inform the routing process. The Applicants held two rounds of open houses in 2025 to gather this input and intend to hold another round of public open houses in early 2026. Ensuring additional time for public input will allow for a more well-developed Route Permit Application for the Project. The Applicants anticipate filing a Route Permit Application for the Project with the Commission no later than August 2026.

The Applicants respectfully request that upon finding this Application is complete that the Commission take no additional action on this Application until the Applicants file the Route Permit Application for the Project. Once the Route Permit Application is deemed complete by the Commission, the Applicants request that the Commission order a joint regulatory review process for the Certificate of Need and Route Permit applications.

A joint hearing is feasible and more efficient for all parties involved than two separate proceedings and will further the public interest by allowing both need and routing issues to be examined in a singular proceeding.

1.9 Applicants' Request and Contact Information

The Applicants respectfully request that the Commission grant a Certificate of Need for the Project. The Commission has established criteria in Minn. R. 7849.0120 to apply in determining whether a Certificate of Need should be granted for a proposed high-voltage transmission line.

An applicant for a Certificate of Need must show that the probable result of denying the request would be an adverse effect on the future adequacy and reliability of the system, there is not a more reasonable and prudent alternative or combination of alternatives to meet the Project needs, the proposed facility will provide benefits to society compatible with protecting the environment, and the project will comply with all applicable standards and regulations.

The Applicants have demonstrated in this Application that the Project meets all the requirements to obtain a Certificate of Need.

Table 1 provides contact information for the Project Applicants.

Table 1. Applicants' Contact Information

Minnesota Power	**Great River Energy**	**Otter Tail Power Company**
Drew Janke	Owen Henriksen	Craig Steingaard
Environmental Compliance Specialist	Transmission Strategy Specialist	Transmission Project Developer
30 West Superior Street	12300 Elm Creek Blvd	215 South Cascade Street
Duluth, MN 55802	Maple Grove, MN 55369	Fergus Falls, MN 56537
218-355-3569	763-445-6008	218-739-8335
djanke@mnpower.com	ohenriksen@grenergy.com	csteingaard@otpco.com

2.1 Project Description

The Project consists of construction of a new 345 kV double-circuit transmission line, operated initially as a single transmission line, connecting Minnesota Power's Cuyuna Substation in Crow Wing County, Minnesota, to Otter Tail Power Company's Maple River Substation in Cass County, North Dakota. The Project will be approximately 160 to 180 miles in length depending on the final route selected, with approximately six to 10 miles of its length in North Dakota. The Cuyuna Substation will remain owned by Minnesota Power. The Maple River Substation will remain owned by Otter Tail Power Company. Minnesota Power, Otter Tail Power Company, and Great River Energy will jointly own the new 345 kV transmission line.

The Project, as part of the LRTP Tranche 2.1 Portfolio, is needed to support the reliability of the regional transmission system, particularly in northern Minnesota and eastern North Dakota; provide additional transmission capacity and regional transfer capability to reliably integrate future generation resources; meet growing electrical demand, enhance resiliency during extreme weather events, and enable cost-effective regional energy transfers supporting economical grid operations. A detailed map set of the Notice Area for the Project is provided in Appendix D, Map 1.

2.2 Project Components

The Project will include construction of a new 345 kV transmission line and modifications at Minnesota Power's existing Cuyuna Substation (previously known as the Cuyuna Series Compensation Station) located north of Riverton in Crow Wing County, Minnesota, and Otter Tail Power Company's existing Maple River Substation located north of Fargo in Cass County, North Dakota, as well as access roads and other associated facilities necessary for the Project's construction, operation, and maintenance. The Proposed Route, for the Project may also include realignments, relocations, consolidations, or other modifications to existing transmission lines to facilitate siting of the new 345 kV transmission line along existing utility corridors consistent with Minnesota routing criteria. The Applicants are currently developing a Route Permit Application for the Project, which will identify specific existing system modifications needed to support the Applicants' Proposed Route when it is filed.

2.2.1 Transmission Line Right-of-Way

The Project's right-of-way is the physical area that is needed to construct, operate, and maintain the transmission line. The Project will generally require a 150-foot-wide right-of-way (75 feet on each side of the centerline). A wider right-of-way may be necessary in limited areas depending on final routing and engineering. However, to the extent practicable, the new double-circuit 345 kV transmission will be co-located with existing high-voltage transmission lines or other rights-of-way, thereby facilitating the partial sharing of right-of-way and lessening the overall right-of-way required from landowners for the Project. Partial right-of-way sharing may not be possible in all co-location

circumstances (for example, new rights-of-way may need to be adjacent to existing rights-of-way). The Applicants will identify additional refinements to right-of-way requirements specific to particular co-location corridors in the Route Permit Application.

2.2.2 Transmission Structure and Conductor Design

2.2.2.1 Transmission Line Design Requirements

The transmission line is proposed to be constructed as a double-circuit 345 kV transmission line initially operated as a single 345 kV transmission line. This is consistent with MISO's definition of the Project, as required under the MISO Tariff. While the Project was studied and approved by MISO as a single-circuit 345 kV transmission line, heavy utilization of the new 345 kV line observed in the LRTP study models led MISO to include the following additional requirements in the Project definition when it was approved by the MISO Board of Directors:

- Double-Circuit Capable Requirement: The Project must be constructed on double-circuit capable structures to facilitate future expansion of the corridor from a single-circuit 345 kV transmission line to a double-circuit 345 kV transmission line. Future considerations for the Project, including the rationale and recent precedents for designing with double-circuit capability, are discussed in Section 2.2.4.

- High Surge Impedance Loading ("SIL") Requirement: The Project, operating as a single 345 kV transmission line, must be designed to deliver a SIL rating of 550 MW, which is higher than the SIL rating of typical 345 kV structure designs recently implemented in Minnesota. A brief discussion of the background and purpose of the High SIL Requirement is provided below.

The goal of the High SIL Requirement is to optimize the loadability of the proposed 345 kV transmission line as it is integrated into the regional grid, maximizing its efficiency and usefulness as a high-capacity expressway for regional transfers of energy. The SIL rating of a transmission line is determined by the physical characteristics of the line, including its operating voltage and characteristic or "surge" impedance. The characteristic impedance of a transmission line is derived from its inductance and capacitance, electrical parameters which are influenced by a variety of factors, including conductor diameter, number of conductors, bundle configuration, tower geometry, and physical spacing of phase conductors, among other things.

In developing the High SIL Requirement for the Project, MISO shared with the Applicants that it had compared the results of its LRTP study analysis against a calculated "safe loading limit" for the Project. A safe loading limit is an expression of the amount of power that can flow on an alternating current ("AC") transmission line before its reliability performance is potentially impacted.[5] Safe loading limits provide margin for contingencies, voltage drop, and reactive power impacts associated with AC

[5] The use of the term "safe" in "safe loading limit" refers to reliable and secure transmission system operations, and in this context is not intended to refer to hazards impacting public or personnel safety.

transmission. One methodology for calculating the safe loading limit of a transmission line involves applying a scaling factor to the SIL rating of the transmission line based on its length. The scaling factor is derived from the modified St. Clair curve, which has been referenced by MISO in various forums and is described in a technical paper published in the March/April 1979 IEEE Transactions on Power Apparatus and Systems.[6] For the Project, which MISO assumed to be approximately 160-170 miles long, the St. Clair curve scaling factor for calculating the safe loading limit is about 1.5 times the SIL rating of the transmission line.

The Applicants do not have access to the specific assessment MISO used to establish the High SIL Requirement. However, as the Applicants understand it, the goal of MISO's safe loading limit assessment was to ensure that the highest loading observed on the Project's single 345 kV transmission line in the MISO LRTP study was within the line's anticipated safe loading limit. Because the highest loading in the study exceeded the anticipated safe loading limit based on the SIL associated with typical transmission line impedance assumptions, MISO identified a SIL rating that would produce a higher safe loading limit and then included that as the High SIL Requirement in its definition of the Project. In this case, using the modified St. Clair curve as noted above, the Applicants calculated that MISO's required 550 MW SIL rating would result in a safe loading limit of 825 MW for the Project's single 345 kV transmission line, which is generally consistent with the highest power flows the Applicants have observed in studies of the Project. When compared with typical 345 kV single-circuit transmission line on double-circuit capable structure designs implemented in Minnesota, the 550 MW SIL rating is approximately 30 percent higher than the SIL rating of the typical structure design.

MISO identified the High SIL Requirement solely based on the needs of the transmission grid as observed in power flow modeling performed for the LRTP study, without reference to the impact of this requirement on the physical and electrical characteristics of the transmission line that ultimately determine its SIL rating. As a transmission planner, MISO does not have significant experience with transmission line design and optimization, or the multi-variable parametric analysis that must be conducted to ensure all relevant electrical, civil/structural, cost, constructability, maintainability, and other impacts of the High SIL Requirement are appropriately balanced and adequately factored into the final design of the transmission line. Lacking such detailed design expertise, MISO established the High SIL Requirement and allowed the Applicants to apply their transmission line design expertise to determine the most reasonable and prudent way to meet the requirement.

In coordination with MISO, the Applicants determined the best way to meet the MISO project definition, including the project-specific High SIL Requirement, was to string the second circuit conductors on the double-circuit capable structures but operate the transmission line initially as a single 345 kV transmission line. To facilitate operation as a single transmission line, the phase conductors from each circuit of the double-circuit

[6] Dunlop, R.D., Gutman, R., Marchenko, P.P., *Analytical Development of Loadability Characteristics for EHV and UHV Transmission Lines*, IEEE Transactions on Power Apparatus and Systems, Vol. PAS-98, No. 2, March/April 1979.

structure will be “jumpered” together through a physical connection of the conductors at a limited number of structures along the length of the transmission line. This configuration is illustrated in Appendix E. Operating the Project in this way, with two parallel sets of conductors in a single 345 kV transmission line, makes optimal use of the required double-circuit capable structure design to halve the total transmission line impedance, resulting in a SIL rating of 878 MW which is well above the MISO High SIL Requirement. As an ancillary benefit, more power is drawn onto the proposed 345 kV transmission line to relieve loading on the underlying 230 kV and 115 kV transmission system and the Project is designed to facilitate this additional power flow with a high degree of efficiency. Additional benefits of stringing the second circuit conductors at the time of initial Project construction are discussed in Section 2.2.4.

2.2.2.2 Proposed Transmission Line Design

At this time, it is anticipated that the double-circuit 345 kV structures will generally be tubular steel, self-weathering, monopole structures. The benefits to this structure design include a reduced footprint due to the monopole, reduced right-of-way needs by vertically orienting the two circuits to limit conductor blowout compared to horizontal construction and enhanced extreme weather resiliency. Appendix E includes preliminary technical drawings and the dimensions of typical tangent transmission structures. In some cases, other structure designs, including lattice, tubular H-frame, or tubular lattice, may be preferable and more economical due to geotechnical or other constraints specific to particular areas of the route. Example alternative structure designs are also provided in Appendix E.

As noted in Section 2.2, the Project may also include realignments, relocations, consolidations, or other modifications to existing transmission lines to facilitate siting of the new 345 kV transmission line along existing utility corridors consistent with Minnesota routing criteria. The Applicants are currently in the process of developing a Proposed Route for the Project and will identify the structure types that could be used at these locations when the Route Permit Application is filed. The structure designs will be driven by an effort to minimize impacts to landowners to the extent practicable.

At this time, the Applicants anticipate using a double-bundled twisted pair aluminum conductor steel reinforced (“T2-ACSR”) conductor type. The 345 kV transmission line conductor must be capable of carrying 3,000 amperes (“amps”) per the MISO project definition. The size of the conductor will be selected to meet or exceed the emergency capacity needed for the Project during detailed design studies. As the Applicants continue to evaluate the conductors for the Project, the specific conductors that will be used remain subject to change. For the purposes of calculating audible noise, electric fields, and magnetic fields, the Applicants assumed a double-bundled 636 ACSR conductor configuration, which is a typical conductor size based on conductors used on similar projects in the region.

Table 2 summarizes the key specifications of the expected, proposed transmission structures.

Table 2. Typical Structure Design Summary

Line Type	Structure Type	Structure Material	Right-of-Way Width (feet)	Structure Height (feet)	Foundation Type	Foundation Diameter (feet)	Average Structure Span (feet)
Double-Circuit 345 kV	Monopole*	Steel	150	120-180	Reinforced Concrete Pier	7-10	800-1,000

Note: The values in the table above are typical values expected for the majority of tangent structures based on similar facilities. Actual values may vary.

* Alternative structure types may be considered based on route-specific technical considerations. These structures may include lattice towers, tubular H-frame, or tubular lattice towers instead of monopoles.

** Certain specialty or deadend structures may be necessary. These structures may be concrete pier foundations instead of direct embed.

2.2.3 Associated Facilities

2.2.3.1 Cuyuna Substation

The Minnesota Power Cuyuna Substation (referred to during permitting for the Northland Reliability Project (Docket Nos. E015,ET2/CN-22-416 and E015,ET2/TL-22-414) as the Cuyuna Series Compensation Station) will be modified within the existing fenced area to facilitate interconnection of the Project at its eastern endpoint. The Cuyuna Substation is currently under construction as part of the Northland Reliability Project. No additional site grading or fence line expansion is required, and only equipment additions are needed to accommodate the Project. The 345 kV bus will be modified to incorporate two additional 345 kV circuit breakers in an additional breaker row of the breaker-and-a-half configuration. The additional 345 kV breaker row will accommodate the new 345 kV transmission line and be planned to accommodate an additional future 345 kV transmission line when the line is converted to double-circuit operation. An additional shunt reactor will be installed at the Cuyuna Substation to facilitate voltage control and line energization. A figure depicting the Cuyuna Substation is provided in Appendix D, Detailed Maps, Map 1, Page 2. No changes to the Cuyuna Substation fence line are anticipated for the Project.

2.2.3.2 Maple River Substation

The existing Maple River Substation is located adjacent to Reily's Acres, North Dakota in Cass County, and is the western endpoint for the Project. The Maple River Substation 345 kV bus is currently being developed into a ring bus configuration as part of the Jamestown – Ellendale 345 kV project and its underlying network upgrades which were approved in the LRTP Tranche 1 Portfolio. The newly-constructed 345 kV ring bus (currently scheduled for completion in Dec. 2028) will have space to accommodate the new 345 kV transmission line. One new 345 kV circuit breaker, switches, and associated equipment will be installed in the ring bus to allow for the connection of the new 345 kV transmission line. Additionally, a shunt reactor, 345 kV circuit breaker, and associated equipment will be installed to facilitate voltage control and line energization. This will

require site expansion and new fence to be installed on the existing property. A figure depicting the Maple River Substation is provided in Appendix D, Detailed Maps, Map 1, Page 3.

2.2.4 Design Options to Accommodate Future Expansion

The Project is intended to meet current and projected future needs of the local and regional transmission network. The Project is proposed to be constructed on double-circuit structures, consistent with the MISO project definition, even though it will initially be operated as a single 345 kV transmission line. Designing regionally-significant 345 kV transmission lines with double-circuit or double-circuit capable structures has been common practice in the Upper Midwest for almost two decades. This future consideration enables the Project to optimally meet immediate needs while keeping longer-term needs and efficiency in mind, similar to the 345 kV Capacity Expansion Needed by 2020 ("CapX2020") projects, which were originally proposed as single-circuit 345 kV transmission lines but ultimately built using double-circuit capable structures at the recommendation of the Department of Commerce-Division of Energy Resources[7] and approval of the Commission.[8] Today, the second circuit has been added or is in the process of being added to nearly all the original CapX2020 projects, which has doubled the transmission capacity of each corridor and enhanced the redundancy of the grid with minimal physical impacts and significantly less costs than would be required for a new stand-alone 345 kV transmission line. The Project will provide similar long-term flexibility and value through the use of double-circuit structures in its initial construction.

Further enhancing both the near-term value and long-term cost-effectiveness of the Project, the second circuit conductors will be installed at the time of initial construction and jumpered together with the corresponding phase conductors of the other circuit on the double-circuit structures. As discussed in Section 2.2.2, this approach is necessary for the Project to meet the high SIL technical requirement included in the MISO project definition.

Installing the second circuit conductors on the new double-circuit 345 kV transmission line at the time of initial construction will also minimize the overall disturbance to landowners and the environment by limiting construction activities to a single event. If the second circuit conductors were to be installed at a later date, perhaps 5 to 10 years after the initial construction of the Project, a subset of the same construction activities would have to be repeated during a second mobilization requiring personnel and equipment access along the entire length of the transmission line.

The second set of conductors will be installed during the initial construction of the Project and very little transmission line construction mobilization will be necessary to convert the line to true double-circuit operation in the future. To enable the proposed double-circuit

[7] *In the Matter of the Application for Certificates of Need for Three 345 kV Transmission Line Projects with Associated System Connections*, Docket No. ET2,E002, *et al.*/CN-06-115, SURREBUTTAL TESTIMONY OF DR. STEVE RAKOW ON BEHALF OF THE MINNESOTA OFFICE OF ENERGY SECURITY at 21 (July 3, 2008).

[8] *Id.* at ORDER GRANTING CERTIFICATES OF NEED WITH CONDITIONS at 43 (May 22, 2009).

345 kV transmission line to operate as two separate transmission lines in the future, the substations on each end of the transmission line would need to be modified within their existing fence lines to add circuit breakers and associated equipment necessary to interconnect the second circuit transmission line. Along the length of the transmission line itself, when the second circuit needs to be energized, the only activity anticipated to be required would be to access a limited number of transmission structures to remove the jumpers connecting the second circuit conductors to the first circuit conductors. Once these construction activities are completed, the double-circuit line could be re-energized to operate as two distinct 345 kV transmission lines, each rated for 3,000 amps, thus doubling the capacity of the corridor and enhancing the redundancy of the grid.

The estimated cost impact of installing the second circuit conductors at the time of initial construction is approximately a nine percent increase to the initial cost of construction. This is based on a direct comparison of indicative construction costs for 345 kV single-circuit on double-circuit capable construction (with only one circuit installed, including three conductors and two shield wires) versus 345 kV double-circuit construction (with conductors for both circuits installed initially, including six conductors and two shield wires). The comparison does not include costs associated with an alternative approach to meeting the high SIL requirement that is part of the MISO project definition, which would be required to construct the Project using single-circuit on double-circuit capable structures with only one set of conductors installed.

The Applicants have not identified any reasonable alternative that aligns with the intent of the high SIL requirement and meets all Project technical requirements. The comparison also does not include the long-term additional cost of re-mobilization to install the second circuit at a later date for the single-circuit on double-circuit capable construction type, which is less efficient compared to installing the second set of conductors at the time of initial construction. When the long-term inefficiencies are also taken into consideration, installing the second circuit conductors at the time of initial construction is anticipated to result in net long-term cost savings of approximately eight percent compared to initial single-circuit on double-circuit capable construction followed by addition of the second circuit ten years later.

Prior to energizing the second 345 kV circuit, the Applicants would obtain any approvals from the Commission that are necessary at that time, if any. As part of the Project, the Applicants respectfully request that the Commission allow the Applicants to energize the second circuit of the Project upon making a compliance filing in this docket explaining the need for removal of the jumpers and energization of the second circuit. The Applicants would make this compliance filing at least 30 days prior to commencing removal of the jumpers.

Options to accommodate future expansion will be incorporated into the design of Project substations, as described in Section 2.2.3. Space will be reserved at the Cuyuna Substation and the Maple River Substation to accommodate future 345 kV interconnections, including the second 345 kV circuit described above, as necessary for future development of the regional transmission backbone. These future expansion

options will require additional substation modifications that are outside the scope of the Project.

2.3 Proposed Ownership

Minnesota Power, Otter Tail Power Company, and Great River Energy will jointly own the 345 kV transmission line. Minnesota Power will own the Cuyuna Substation. Otter Tail Power Company will own the Maple River Substation.

2.4 Project Costs

2.4.1 Construction Costs

The estimated cost to construct the Project is approximately $1,108.4 million to $1,332.8 million (2024$). The original scoping cost estimate used by MISO for review of the Project as part of the LRTP Tranche 2.1 Portfolio and the cost basis upon which it was approved by the MISO Board of Directors in December 2024 is $907.8 million (2024$).[9] The Applicants have further developed the Project from the original MISO concept and have developed an updated cost range including mid- and high-end estimates based on the notice area and scope of the Project presented in this Application and incorporating the best-available cost estimate information at the time of filing.

The cost estimate is broken down by the individual Project Components in Table 3. All costs are presented in 2024 dollars and include permitting, engineering, project management, materials, land rights and right-of-way, and construction costs. The Applicants developed the updated cost estimate range for the transmission line based on preliminary engineering of the Project, including among other things the development of preliminary design criteria and structure designs based on similar projects, structure spotting along an indicative route, estimated material quantities and costs from recent experiences, and construction access and labor costs developed with reference to recent and in-progress projects. Updated substation facility costs were developed based on similar preliminary engineering activities, such as the development of a preliminary general arrangement, calculation of material and equipment quantities, and utilization of reference material and labor cost data from recent project experiences.

These cost estimates assume that the Applicants will pay prevailing wages for applicable positions for the construction of the Project. The current cost estimate is based on indicative routing in Minnesota and North Dakota and includes a budgetary allowance for potential routing challenges requiring significant added line length or modifications to existing transmission lines which may be necessary to facilitate siting of the new 345 kV transmission line. In some cases, such modifications may be necessary to site the Project along existing utility corridors consistent with Minnesota routing criteria. The Applicants will continue to refine Project cost estimates as the Route Permit Application and Proposed Route are developed and finalized, and will provide updated mid-range and

[9] Cost based on the MISO Appendix A Facilities List for LRTP Project #20.

high-range costs based on the Proposed Route at the time the Route Permit Application is filed.

Table 3. Current Project Cost Estimates

Project Component	Mid ($ Millions) (2024$)	High ($ Millions) (2024$)
Cuyuna – MN/ND Border 345 kV Line*	$994.4	$1,193.3
Maple River – MN/ND Border 345 kV Line*	$43.3	$52.0
Cuyuna Substation 345 kV Expansion	$12.8	$16.7
Maple River Substation 345 kV Expansion	$12.4	$16.2
Transmission Line Routing Impacts (Budgetary)	$45.5	$54.6
Project Cost Totals	**$1,108.40**	**$1,332.80**

* Including stringing the second circuit

2.4.2 Operation and Maintenance Costs

Operations and maintenance ("O&M") costs for the Project consist of two components: the new transmission lines and the substation components associated with the Project. Relevant O&M considerations for each of these components are described below.

Once constructed, O&M costs associated with the new transmission lines will be initially driven by controlling regrowth vegetation within the right-of-way. The Applicants anticipate a post-construction annual maintenance cost of approximately $7,500 per mile for the Project. The majority of this cost is related to vegetation management. The Applicants also perform other general maintenance on their transmission facilities, such as conducting regular right-of-way patrols and repairing aged or worn equipment or facilities. The specific O&M costs for an individual transmission line vary based on the location of the line, the number of trees located along the right-of-way, the age and condition of the line, the voltage of the line, and other factors.

Over the life of the new substation facilities, inspections will be performed regularly to maintain equipment and make necessary repairs. Transformers, circuit breakers, batteries, protective relays and other equipment need to be serviced periodically in accordance with the manufacturer's recommendation. Routine compliance inspections will be performed and the sites must also be kept free of vegetation and drainage maintained. Minnesota Power's substation O&M costs typically range from $50,000 – $100,000 annually. Otter Tail Power's substation O&M costs typically range from $50,000 – $100,000 annually.

2.4.3 Effect on Rates

The Commission's rules require an applicant to provide the annual revenue requirements to recover the costs of a proposed project. The Applicants requested an exemption from this rule requirement. In their Exemption Request, the Applicants proposed to include in this Application an explanation of how MISO spreads wholesale electricity costs across

the MISO region. Minnesota Power and Otter Tail Power Company proposed to provide the general rate impact of the Project on Minnesota Power's and Otter Tail Power Company's customers. Great River proposed to provide an explanation of how wholesale electricity costs are spread among users of the transmission grid and the general financial effects of the Project on Great River Energy's member cooperatives.[10]

2.4.3.1 MISO Cost Allocation

MISO is an independent, not-for-profit Regional Transmission Organization ("RTO") that is responsible for coordination and developing regional planning of high-voltage transmission lines across 15 states and Manitoba. MISO undertakes comprehensive planning of high-voltage transmission lines and identifies projects necessary to cost-effectively maintain or improve regional reliability through reports it refers to as "Portfolios." For projects included in these Portfolios, MISO also establishes the methods by which costs will be recovered across the region.

The Project is part of the MISO LRTP Tranche 2.1 Portfolio, which has been determined by MISO to meet the criteria for being designated an Multi-Value Project ("MVP") according to the MISO Tariff. Therefore, the Project, along with all other projects in the LRTP Tranche 2.1 Portfolio, qualifies for regional cost allocation. MISO has determined that the LRTP Tranche 2.1 Portfolio will be allocated to transmission customers in the MISO Midwest Subregion,[11] where the portfolio is located and provides proximate benefits. The allocation of the Project's costs to transmission customers is governed by Schedule 26-A, MVP Usage Rate, in MISO's Tariff. The annual revenue requirement for the Project is determined pursuant to the formula rate in Attachment MM-MVP Charge in the MISO Tariff. Withdrawing Transmission Owners[12] in the MISO Midwest Subregion pay the annual revenue requirement through Schedule 26-A charges assessed based on actual monthly energy consumption by its customers. Minnesota customers' allocated share of the annual revenue requirement is determined by the percent of total MISO energy used by Minnesota utilities, which has historically been estimated at approximately 15 to 20 percent.

Table 4 summarizes the estimated cost allocation for the Project to each local balancing authority area ("LBA") in the MISO Midwest Subregion.

[10] *In the Matter of the Application for the Maple River – Cuyuna 345 kV Transmission Line Project*, Docket No. E015,ET2,E017/CN-25-109, EXEMPTION REQUEST at 5 and 7 (Aug. 27, 2025).

[11] The MISO Midwest Subregion includes MISO transmission customers in Minnesota, Montana, North Dakota, South Dakota, Iowa, Wisconsin, Missouri, Illinois, Indiana, Michigan, and Kentucky. MISO South Subregion transmission customers are excluded in the allocation and recovery of Project costs.

[12] As defined in the MISO Tariff.

Table 4. Estimated Cost Allocations based on Attachment MM of the MISO Tariff[13]

LBA	Cost Allocation Zone	LBA Allocation		LBA	Cost Allocation Zone	LBA Allocation
ALTE	2	2.8%		MDU	1	0.9%
ALTW	3	3.8%		MEC	3	6.7%
AMIL	4	8.6%		MGE	2	0.7%
AMMO	5	7.1%		MIUP	2	0.6%
BREC	6	1.4%		MP	1	2.3%
CIN	6	7.6%		MPW	3	0.2%
CONS	7	9.3%		NIPS	6	3.6%
CWLD	5	0.3%		NSP	1	9.3%
CWLP	4	0.3%		OTP	1	3.3%
DECO	7	9.8%		SIGE	6	1.1%
DPC	1	1.3%		SIPC	4	0.3%
GLH	4	0.0%		SMP	1	0.3%
GRE	1	2.9%		UPPC	2	0.2%
HE	6	0.7%		WEC	2	5.9%
HMPL	6	0.1%		WPS	2	2.7%
IPL	6	2.7%		Exports and Wheel-Throughs	N/A	3.0%

Minnesota Power's allocated cost will be approximately 2.3 percent using allocations from Table 4 and load ratio share based on September 2025 MISO zonal rates and determinants file,[14] as shown in Table 5.

[13] MISO, *MTEP 24 Appendix A-4. Multi-Value Project (MVP) Schedule 26-A Indicative Annual MVP Usage Rate for LRTP Tranche 2.1* (updated December 2024). Available at: https://www.misoenergy.org/planning/long-range-transmission-planning/.

[14] MISO Transmission Settlements and Pricing. Available at: https://www.misoenergy.org/markets-and-operations/settlements/ts-pricing/.

Table 5. Share of Allocated Costs – Minnesota Power

Pricing Zone	Project LBA Allocation	Load Ratio Share per LBA	MP Share of LBA Allocation
MP	2.3%	86.5%	2.0%

Great River Energy has load in multiple local balancing authority areas: GRE, NSP, OTP, MP, ITCM, and SMP. To calculate costs allocated to Great River Energy, each local balancing authority area allocation is multiplied by Great River individual load ratio share.

Great River Energy's allocated cost will be approximately 4.1 percent using allocations from Table 4 and load ratio share based on September 2025 MISO zonal rates and determinants file[15] as shown in Table 6.

Table 6. Share of Allocated Costs – Great River Energy

Pricing Zone	Project LBA Allocation	Load Ratio Share per LBA	GRE Share of LBA Allocation
GRE	2.9%	77.6%	2.3%
NSP	9.3%	9.6%	0.9%
ALTW	3.8%	4.9%	0.2%
MP	2.3%	13.5%	0.3%
SMP	0.3%	1.3%	0.0%
OTP	3.3%	12.6%	0.4%
TOTAL			**4.1%**

Otter Tail Power Company's allocated cost will be approximately 1.9 percent using allocations from Table 4 and load ratio share based on OTP's Pricing Zone members 2025 Transmission Owner Rate data[16] as shown in Table 7.

Table 7. Share of Allocated Costs – Otter Tail Power Company

Pricing Zone	Project LBA Allocation	Load Ratio Share per LBA	OTP Share of LBA Allocation
OTP	3.3%	56.2%	1.9%

The Applicants will collectively be allocated approximately eight percent of the total costs for the Project with the rest of the costs being allocated to load in the remaining MISO Midwest Subregion. The four major Minnesota utility LBAs (MP, NSP, GRE, and OTP)

[15] MISO Transmission Settlements and Pricing (misoenergy.org). Available at: https://www.misoenergy.org/markets-and-operations/settlements/ts-pricing/.

[16] MISO Transmission Owner Rate Data for Otter Tail Power, Missouri River Energy Services, Great River Energy, and NSP Companies. Available at: https://www.misoenergy.org/markets-and-operations/settlements/to-rate-data/.

will collectively be allocated approximately 18 percent of the total costs for the Project with the rest of the costs being allocated to load in the remaining MISO Midwest Subregion.

2.4.3.2 Rate Impacts – Minnesota Power Customers

Table 8 summarizes Minnesota Power's potential estimated Minnesota jurisdictional revenue requirements and rate impacts by customer class for the first expected in-service year beginning June 1, 2033. The estimated impacts are provided using the indicated capital cost ranges. The total revenue requirements were estimated using the post-acquisition return on equity of 9.65 percent. The revenue requirements incorporate property tax based on the range in capital cost and reflect current assumptions for Minnesota property tax treatment. The gross revenue requirements are offset by the expected estimated net MISO Schedule 26A revenue and expenses for the project. The net Minnesota jurisdictional and class requirements were derived by multiplying the total Minnesota Power customer revenue requirements by Minnesota Power's current CC-TRAN (D-02) Transmission Demand jurisdictional and class allocators reflecting the outcomes of the Company's recently completed rate case. Minn. R. 7849.0260(C)(5) and Minn. R. 7849.0270, Subp. 2(E) require a Certificate of Need Application to include information on the potential retail rate and revenue requirement impacts of the Project. Minnesota Power will determine a cost recovery method at the appropriate time for this Project. Regardless of the cost recovery method, Minnesota Power's retail customers will receive the system reliability, expanded capacity, and reduced congestion benefits associated with the MISO LRTP Tranche 2.1 and the projects will still be subject to MISO cost allocation.

For the average residential customer, the rate impact for the first twelve months following in-service would range from approximately $3.39 to $4.08 per month. If compared to the estimated average current 2025 residential rate reflecting the outcomes of the recently completed rate case, this would represent an increase of approximately 3.18 to 3.83 percent. For Large Power customers, the estimated rate impact for the first twelve months following in-service would range from approximately 0.42¢ to 0.506¢ per kilowatt-hour ("kWh") of energy. If compared to the estimated average current 2025 Large Power rate reflecting the outcomes of the recently completed rate case (Docket No. E015/GR-23-155), this would represent an increase of approximately 4.51 to 5.42 percent. These estimates would also be impacted by any future changes in Minnesota Power's authorized rate of return and the CC-TRAN (D-02) Transmission Demand jurisdictional and class allocators. In addition, the net MISO Schedule 26-A revenue and expense allocations for the project will differ as Attachment MM inputs change from MISO's indicative values to actual values and as variations occur between the Company's actual load relative to that of other members in the MISO Midwest Subregion.

Table 8. Estimated Retail Rate Impact for Minnesota Power Customers

For the twelve months ending	May 2034	May 2034
	Mid-Range	Upper-Range
MN Jurisdictional Revenue Requirements	$34,722,471	$41,794,547
Rate Class Impacts[1]		
Residential		
Average Current Rate (¢/kWh)	15.501	15.501
Increase (¢/kWh)	0.494	0.594
Increase (%)	3.18%	3.83%
Average Impact ($/month)	$3.39	$4.08
General Service		
Average Current Rate (¢/kWh)	15.409	15.409
Increase (¢/kWh)	0.494	0.594
Increase (%)	3.20%	3.86%
Average Impact ($/month)	$12.62	$15.19
Large Light & Power		
Average Current Rate (¢/kWh)	11.922	11.922
Increase (¢/kWh)	0.494	0.594
Increase (%)	4.14%	4.98%
Average Impact ($/month)	$1,151	$1,385
Large Power		
Average Current Rate (¢/kWh)	9.341	9.341
Increase (demand + energy combined) (¢/kWh)	0.421	0.506
Increase (%)	4.51%	5.42%
Average Impact ($/month)	$209,126	$251,348
Lighting		
Average Rate (¢/kWh)	45.980	45.980
Increase (¢/kWh)	0.494	0.594
Increase (%)	1.07%	1.29%
Average Impact ($/month)	$0.65	$0.78

[1] Average current rates are 2024 Final General Base Rates without riders per the 2024 Commission Order in Docket No. E015/GR-23-155 adjusted to include current rider rates. Current rider rates include the Transmission Cost Recovery Rider rates, Renewable Resources Rider rates, Solar Renewable rates, Conservation Program Adjustment rates, the Fuel and Purchased Energy Adjustment with True-Up, the Capacity Revenue and Expense Adjustment, and the Solar Energy Adjustment. The increase (¢/kWh) shown above is the increase associated with Minnesota Power's ownership in the Project.

2.4.3.3 Rate Impacts – Great River Energy Member Cooperatives

As a not-for-profit transmission and generation cooperative, Great River Energy's costs are allocated to Great River Energy's 26 member-owners and two transmission customers based on a board approved formula rate methodology. This formula rate methodology allocates power supply and transmission costs by agreed upon applicable billing determinants. Each Great River Energy member-owner distribution cooperative develops their own rates based on individual costs, including allocated costs from Great River Energy, for their member-consumers via applicable customer rate class.

2.4.3.4 Rate Impacts – Otter Tail Power Company Customers

The proposed Project will not create any direct rate impact for Otter Tail Power Company's Minnesota customers. Otter Tail Power Company does not include its own MVP revenue requirements or Project-related expenses in Minnesota retail rates, and therefore Minnesota customers do not pay for Otter Tail Power Company's ownership share of the Project. Instead, any potential impact to Minnesota customers arises only through MISO's regional cost allocation under Schedule 26-A, which assigns MVP costs to transmission customers based on their proportion of total MISO Midwest energy usage. As a result, Minnesota customers would be responsible only for the portion of Project costs allocated to other transmission owners, not Otter Tail Power Company's share, and even then, only indirectly through Schedule 26-A charges. Otter Tail Power Company estimates that the Project will result in a bill impact for a typical residential customer using 1,000 kWh per month of approximately $0.20 per month, or about $2.40 annually.

2.5 Project Schedule

The anticipated permitting and construction schedule for the Project is provided in Table 9. This schedule is based on information known as of the date of the filing of the Application and may be subject to change.

Table 9. Project Schedule

Milestone	Anticipated Date
Certificate of Need Application filed	January 30, 2026*
Route Permit Application filed	August 2026
Scoping meeting	October 2026
Addendum to EA issued[17]	January 2027
Public hearing and comment period	February 2027
Commission meeting	March 2027
Written order issued	March – June 2027[18]
Land Acquisition Begins	Late 2027 – Early 2027
Construction Begins	2028
In-Service	By June 1, 2033[19]

* Actual date.

[17] At this time, the Applicants believe the Project will be eligible for the Standard Facility process under Minn. Stat. ch. 216I.

[18] "The commission must make a final decision on an application within 60 days of the date the public comment period following completion of the public hearing closes, or the date the report is filed, whichever is later. A final decision on the request for a site or route permit under this section must be made within six months of the date the commission determines the application is complete. The commission may extend the time limit under this subdivision for up to three months for just cause or upon agreement with the applicant." Minn. Stat. § 216I.07.

[19] The Project is estimated to be placed in service between 2031 and 2033. June 1, 2033 is the expected in-service date in the MISO Tranche 2.1 Appendix A to the MTEP 24 report.

3.1 Chapter Overview

The Project is a part of a portfolio of regional transmission projects approved by MISO, the region's grid operator, in December 2024. The projects in that portfolio work together to provide broad regional benefits over a large part of the MISO footprint, including Minnesota and North Dakota. In addition to being beneficial as part of a larger regional portfolio, the Project also provides local benefits within Minnesota and North Dakota.

The Project is needed to enhance the reliability of the regional transmission system, provide additional transmission capacity and regional transfer capability to reliably integrate future generation resources, meet growing electrical demand, enhance resiliency during extreme weather events, and enable cost-effective regional energy transfers supporting economical grid operations. As the way energy is produced and used evolves, the grid becomes more dynamic and variable, causing more unpredictability in the way the electric system operates from day to day. Proactive transmission planning, including planning for the construction of new high voltage transmission lines like the Project, enables an orderly and timely transmission expansion during a period of rapid industry transformation, ensuring the grid continues to operate reliably for the upcoming decades. This type of proactive regional planning is demonstrated by MISO's analysis for the LRTP Tranche 2.1 Portfolio, which is focused on understanding long-term regional needs and identifying a portfolio of regional transmission projects to meet those needs. The projects in this portfolio work together to form a regional transmission superhighway, and the Project is a critical segment of that system. This regional superhighway increases the grid's capacity to deliver energy from where it is produced to where it is needed, alleviates transmission congestion that increases the cost of energy, and enables cost-effective regional energy transfers that support economical grid operations. In addition to these regional benefits, the Project delivers local benefits by supporting local area electricity needs, enhancing grid resiliency, and providing greater flexibility to reliably integrate low-cost generation resources.

The General Background section (*see* Section 3.2) provides a review of power system basics and fundamental concepts that are necessary to understand the need for the Project, including voltage stability and transient stability. The Coordinated Transmission Development and MISO LRTP section (*see* Section 3.3) provides background on MISO's role coordinating the planning of the interstate (regional) transmission grid, the reliability implications of the Midwest's evolving generation fleet and electricity demand, and the purpose and process for the MISO LRTP study, followed by discussion of MISO's analysis and justification of the LRTP Tranche 2.1 Portfolio. The LRTP Tranche 2.1 Portfolio was approved by the MISO Board of Directors in December 2024. The Project-Specific Needs and Benefits section (*see* Section 3.4) provides an overview of needs and benefits specific to the Project, including how the Project enhances the reliability of the transmission system, increases transmission system capacity, positions utilities in Minnesota and North Dakota to meet growing electrical demand and enhance resiliency, enables cost-effective regional energy transfers, and provides local economic and other benefits in Minnesota and North Dakota. The remaining sections in Chapter 3 address

specific Certificate of Need requirements including load forecast, losses, and impact of delay.

3.2 General Background

The electric grid is a set of interconnected wires connecting places where energy is generated to where it is used. Over time, the grid has become smarter, more dynamic, and increasingly interconnected due to rising reliability expectations and advancements in technology, along with additional energy resources.

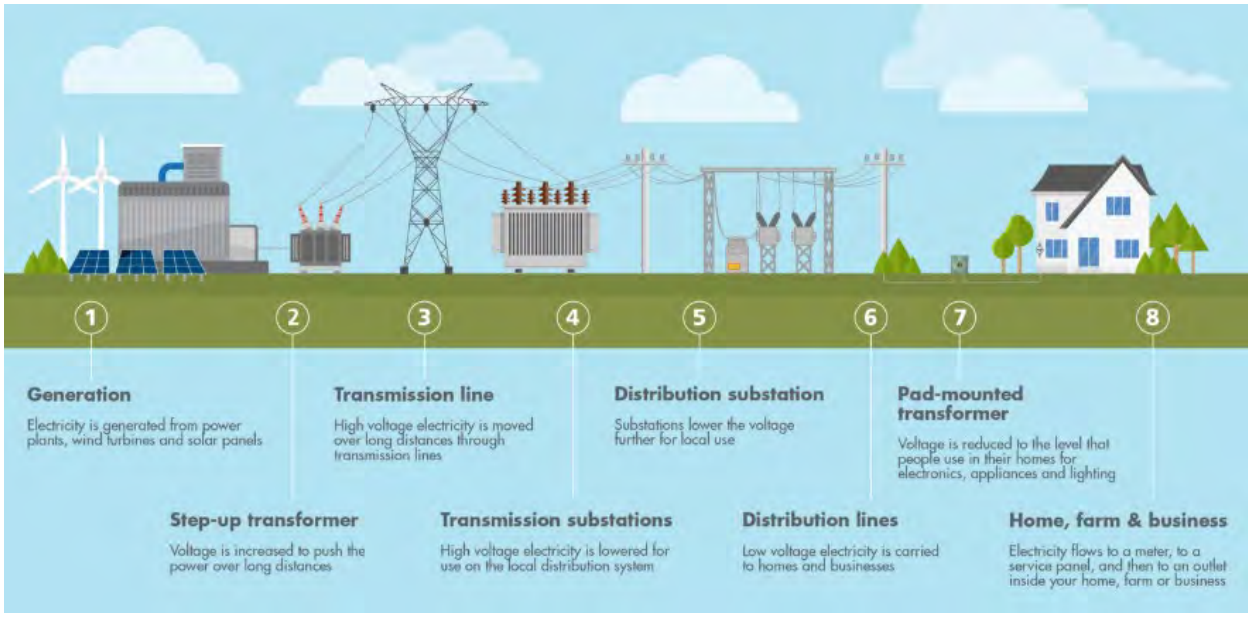
Electricity is produced at generating stations using a variety of sources or fuels, including solar, wind, hydro, biomass, biofuels, natural gas, coal, and nuclear. Unlike other consumables, where excess product can be easily and economically stored for future use, electricity must largely be generated simultaneously with its consumption, so generators connected to the system must instantaneously adjust their electric output to respond to changes in customer demand. While energy storage technologies, including battery energy storage, are advancing, there is not currently a commercially viable large-scale energy storage alternative that could meet the needs of the Project as effectively in terms of technology and cost considerations.[20]

Electricity from these generators, located at power plants, is pushed along high-voltage transmission lines often at voltages in excess of 100,000 volts (*e.g.*, 115 kV, 230 kV, 345 kV, 500 kV, 765 kV). Voltage on transmission lines is higher than what is ultimately used by the consumer because transmitting electricity over long distances at higher voltages reduces electrical losses on the system. This means that more of the energy that is generated reaches the ultimate customer. Once the electricity reaches the community in which it will be used, the electricity is "stepped down" to lower, more usable levels at a substation. Then, the electricity is sent along smaller distribution lines to be delivered to neighborhoods and businesses.

A diagram showing the transfer of electricity from generator to consumer is shown below in Figure 4.

[20] *See* Section 4.2 for discussion of the Applicants' consideration of Generation and Non-Wires Alternatives to the Project, including energy storage.

Figure 4. How Electricity Gets to Consumers[21]



3.2.1 Transmission System Overview

The electric transmission system in the United States is composed of an interconnected network of generating plants, high-voltage transmission lines, and distribution facilities. Electricity uses all available paths as it flows from generation to consumer. Because electricity from all sources is commingled in the transmission system, it is impossible to track the specific journey of electric power generated by a particular power plant as it is transmitted to an end user.

The bulk electric transmission system is comprised of high-voltage transmission lines, which can carry electricity long distances and deliver power to distribution systems to meet customer needs in specific locations, and bulk transformers at 100 kV and above. Transmission lines are made up of conductors, which complete a three-phase circuit and are usually accompanied by a shield wire on top that provides protection from lightning strikes. The shield wire can also include fiber optic cable which provides a communication path between substations for transmission line protection equipment. These conductors are groups of wires, usually made from aluminum, and are most commonly held up by poles or towers (commonly referred to as transmission structures) that are made from wood or steel. Transmission lines carry electricity from the generation source to the area where the power is needed. The rate at which electric charge moves through a wire is called current and is measured in amps. The force that moves the electricity through the wire is called voltage. Voltage is measured in volts (“V”). One kV equals 1,000 V. The wire carrying the current resists its movement. This resistance is measured in a unit called Ohms. Aluminum wires conduct electricity with relatively little resistance.

[21] Great River Energy, How Electricity Gets to You. Available at: https://greatriverenergy.com/cooperatives-articles/how-electricity-gets-to-you/.

Substations are a part of the electric generation, transmission, and distribution system and contain high-voltage electric equipment to monitor, regulate, and distribute electricity. Substations allow multiple transmission lines to be connected with one another, and allow power to be transformed from a higher transmission voltage to a lower voltage for distribution, typically below 69 kV. Substation property dimensions depend on the size of the project and anticipated future needs and can vary based on the physical characteristics of the site, such as shape, elevation, above and below ground geographical characteristics, as well as proximity of the site to transmission lines. Substation sites need to be large enough to accommodate both the fenced area and the required surrounding areas, including storm water ponds, grading, parking and access roads, and the transmission line rights-of-way that will enter and exit the substation. The configuration of a substation may change over time to accommodate future electric system needs.

3.2.2 Transmission System Planning and Design

Electricity is a critical service and thus the transmission grid is planned to stay reliable, resilient, and affordable. Reliability in the most basic sense means "keeping the lights on" 24 hours a day, 365 days a year. To accomplish that task, the transmission system is designed to transport energy from where it is produced to where it is needed, during not only normal operating conditions (*e.g.*, a typical day) but also during more challenging times when the demand for electricity is highest, such as the hottest summer day when air-conditioners are running or conversely the coldest winter day when electric heating is at its maximum, or when regional energy production is dominated by resources far from major load centers. In addition, the transmission system is designed to withstand the outage of a single generator, transmission line, transformer, or other transmission system element without major disruption to the overall power supply. Reliability is measured and assessed to federal standards which are set by the North American Electric Reliability Corporation ("NERC").[22]

While the transmission grid remains extremely reliable, in recent years, extreme weather, wildfires, and sabotage have had an increasing impact on the power grid across the United States. Minnesota is subject to weather events involving high winds, tornadoes, snow and ice, extreme cold, among other things, as well as some of the highest wildfire risk areas[23] in the eastern half of the continental United States. Identifying ways to harden the transmission system in Minnesota is important to MISO and the State of Minnesota. Therefore, owners and operators of the transmission grid, including the Applicants, are seeking new ways to increase the resilience of the transmission grid to better prevent, withstand, and recover from low probability but high impact events. Resilience efforts include the use of stronger transmission structures, new conductors which minimize icing, enhanced security measures, and other physical and non-physical improvements.

[22] More information about NERC is available at: https://www.nerc.com/Pages/default.aspx.

[23] Federal Emergency Management Agency, Resilience Analysis and Planning Tool. Available at: https://experience.arcgis.com/experience/0a317e8998534c30a9b2d3861c814d42/.

As a critical service, electricity must also remain cost-effective. Due to the magnitude of the investment costs associated with the infrastructure needed to generate and transport electricity, an intensive planning process is undertaken to ensure that any needed addition to the power grid is the best option. The best option not only considers the up-front cost of the project (lower is better) but also the value provided (more is better). “Value provided” includes the ability to save money on monthly bills by having access to more cost-effective generators (also known as “reducing system congestion”), lower public or environmental impacts, carbon reduction, and/or better flexibility to meet potential future power needs. Like any major decision, each of these factors are carefully weighed to develop the optimal solution.

3.2.3 System Stability Background

Stability is a key reliability attribute of the power grid. Without a stable system, otherwise isolated events may lead to unpredictable and potentially widespread and catastrophic impacts, up to and including blackouts. A stable system operates normally under all reasonably expected conditions and is able to quickly return to a normal state if there is a disturbance on the system. Unanticipated disturbances on the system may be caused by many things, such as a lightning strike on a transmission line, a transmission line structure failing, or a generator tripping offline. Minimum federal reliability standards require that the transmission grid be designed to withstand the loss of any single element without disruption. Utilities, like the Applicants, also typically evaluate the impacts of events involving multiple system elements and planned maintenance outages to prevent or minimize disruptions. As the energy industry transition reshapes where, how, and what kind of energy is produced and transmitted to customers, the stability of the grid must continually be assessed to ensure that the power grid remains reliable.

There are several aspects to stability that must be considered when planning the power grid, including voltage stability and transient stability. Voltage stability refers to the ability of the system to recover from an event and rapidly restore voltage within the normal operating range. A voltage collapse is an event that occurs when the voltage in some part of the system cannot recover following an event, resulting in extremely low voltages and possibly causing damage to electrical devices and blackouts. Historically, centralized fossil-fueled baseload generating stations have provided voltage support to the power system to maintain acceptable operating voltages and prevent voltage collapses. As the power system evolves and resources become more diverse, additional solutions are becoming necessary to ensure that system voltages remain robust, predictable, and stable under all reasonably foreseeable conditions.

Transient stability refers to the short-term response of the grid during the first few seconds after a disturbance (the transient period). Typical areas of interest in the transient period are voltage and frequency response. Transient stability performance is typically measured by how severe the impact is immediately after the disturbance and how quickly the system recovers from the disturbance. If the system fails to recover to normal operating voltage or frequency, it has become unstable and transmission system elements are likely to begin tripping offline to try to stabilize the system by isolating the problem. Depending on how widespread the impacts are, this can lead to blackouts.

3.3 Coordinated Transmission Development and MISO LRTP

The Project is part of a coordinated long-term transmission development plan affecting much of the MISO region, including Minnesota and North Dakota. This section describes background and historical precedents for the present MISO LRTP Tranche 2.1 initiative; the long-range goals and policies supported by a coordinated build-out of the transmission system; the scope and purpose of MISO LRTP Tranche 2.1, which includes the Project; and the justification and benefits of the Project as a part of the MISO LRTP Tranche 2.1 Portfolio.

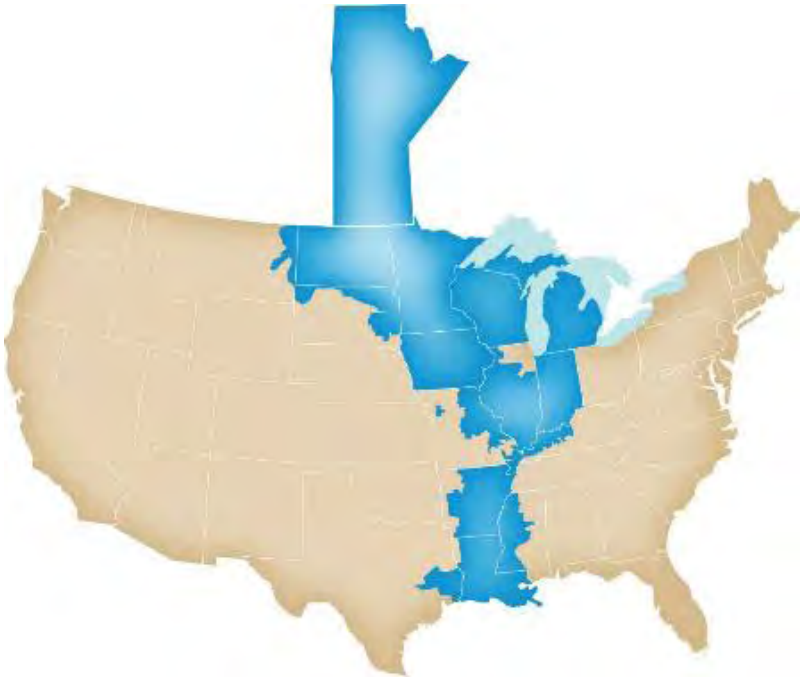
3.3.1 MISO Background

MISO is an independent not-for-profit RTO which operates the transmission system and energy market in parts of 15 states and the Canadian province of Manitoba.[24] The Federal Energy Regulatory Commission ("FERC") approved MISO as the first RTO on December 20, 2001. Since that time, MISO has overseen comprehensive annual planning processes involving broad and robust stakeholder engagement. As a federally registered planning authority and RTO, MISO is responsible for planning and operating the transmission system within its footprint in a reliable manner. MISO also provides operational oversight and control, market operations, and oversees planning of the transmission systems of its member transmission owners ("TOs"). MISO has 55 member-TOs, including the Applicants, with more than 77,000 miles of transmission lines under its functional control.[25] MISO members also include 168 non-TOs, such as independent power producers and exempt wholesale generators, municipals, cooperatives, transmission-dependent electric utilities, and power marketers and brokers.

[24] *See* Figure 5 for a map of MISO's footprint.

[25] MISO Fact Sheet (June 2025). Available at: https://www.misoenergy.org/about/media-center/corporate-fact-sheet/.

Figure 5. MISO Reliability Footprint



3.3.2 Regional Transmission Planning

The Applicants, along with all other MISO members, are obligated to develop, propose, and construct transmission facilities that satisfy all federal and state regulatory, policy, and mandatory reliability requirements for the jurisdictions in which they operate. All of these rules and requirements work together to require the electric transmission system in Minnesota and North Dakota be planned, constructed, operated, and maintained in a way that will allow it to operate reliably and in coordination with other States, interconnected transmission systems throughout the Upper Midwest, and the entire Eastern Interconnection. The Application should be reviewed in light of these regulatory requirements.

What sets the Project and the broader MISO LRTP Tranche 2.1 Portfolio apart is the proactive long-term view to ensure a reliable grid for the upcoming decades during a time of rapid transformation in the way electricity is generated and used. The MISO LRTP effort, discussed in further detail below, is an “inflection point” in the regional grid, similar to the long-term view that resulted in the large regional interconnections in the 1970s and CapX2020 development in the 2000s. In the same way that the reliability of today’s regional grid is built upon these foundational components established in years past, the regional transmission planning efforts supporting the need for the Project and the broader MISO LRTP portfolio will establish the foundational reliability components for the grid of the future. While utilities must continue to develop facilities that meet the immediate needs of customers as well as facilitate annual changes and generation and demand, each can be met more reliably and cost-effectively in the long-term with the Project and the MISO LRTP portfolio in place. The Project will deliver lasting benefits to the overall system,

supporting Minnesota and North Dakota customers and businesses for years and decades to come.

3.3.3 MISO Transmission Expansion Plan Process

MISO has a responsibility, established by FERC, to study the transmission system within its footprint, including planning necessary transmission projects to provide for efficient, reliable, and non-discriminatory transmission service. MISO's transmission planning process, known as the MTEP process, takes place annually in 18-month overlapping cycles of model building, stakeholder input, reliability analysis, economic analysis, and resource assessments. The results are documented within the annual MTEP report. In developing the MTEP, MISO adheres to the planning principles outlined in FERC Order Nos. 890 and 1000, and is aligned with the planning principles in FERC Order No. 1920. These FERC Orders require an open and transparent regional transmission planning process and include the requirement to plan for public policy objectives and for coordinated inter-regional planning and cost allocation. Each cycle, MISO undergoes a rigorous, open, and transparent stakeholder process that offers numerous opportunities for advice and input from a diverse stakeholder community, which includes end-use customers, regulatory authorities, environmental advocates, independent power producers, transmission owners, and others.

The MTEP process is a "top-down, bottom-up" process which simultaneously considers both local needs as identified by local utilities (bottom-up) and regional needs as identified by MISO (top-down) to identify the optimal plan to meet all the MISO region's reliability needs. Each year as part of the MTEP process, the bottom-up planning process assesses transmission system needs based on changes in demand and generation, age and asset renewal, and other factors. Should these changing factors result in the grid no longer meeting national reliability standards or policy, the transmission owners, in coordination with MISO and working through its stakeholder process, will identify mitigation to ensure the system stays reliable and in compliance. At the same time, MISO's top-down planning process examines regional transmission needs over the long-term planning horizon.

The first MTEP report was released in 2003. Since then, there have been over 20 annual MTEP cycles. In the last three MTEP cycles (2022-2024), MISO approved approximately 1,500 transmission projects. Most projects are smaller-scale and incremental in nature – many being replacements of older transmission lines and substations for age and condition purposes. In response to fundamental shifts in electricity usage and production, MISO has also identified three regional transmission portfolios through its top-down planning process consisting of higher-voltage transmission projects which, when combined, span the Midwest Subregion of MISO: the 2011 MVP Portfolio, LRTP Tranche 1 Portfolio, and LRTP Tranche 2.1 Portfolio.

3.3.4 Multi-Value Projects and CapX2020

In the 2000s, Minnesota's transmission grid was at a point where incremental improvements were exhausted, and a step-change was needed to meet the reliability needs of the time. In 2004, CapX2020, now known as Grid North Partners, formed to

develop a long-term vision for the Upper Midwest power grid to maintain system reliability in the most cost-effective manner with these transformational changes. CapX2020 identified the need for, and ultimately developed, an approximately 800-mile 345 kV network across Minnesota, North Dakota, and South Dakota. CapX2020's vision was optimized for the entire Midwest via MISO's first regional transmission portfolio, the 2011 MVP Portfolio, which consisted of 17 projects, primarily 345 kV, totaling approximately 2,200 miles across nine Midwest states.[26] All CapX2020 lines were constructed and in-service as of 2017. All the 2011 MVP projects were constructed and in-service as of 2024.

To optimally meet immediate needs with longer-term goals in mind, at the recommendation of the Department[27] and approval of the Commission,[28] the 345 kV CapX2020 projects originally proposed as single-circuit 345 kV transmission lines were built using double-circuit capable structures. Today, the second circuit has been added or is in the process of being added to nearly all the original CapX2020 projects, doubling the transmission capacity of each corridor with minimal physical impacts and significantly less costs than would be required for a new stand-alone option.

The scope of the Project in this Application similarly includes the implementation of a single circuit 345 kV transmission line on double circuit-capable structures to provide long-term transmission capacity value in the proposed new transmission corridor. The Applicants' proposed configuration for the Project further improves upon this approach by proactively installing the second circuit conductors at the time of initial construction, reducing human and environmental impacts and cost associated with re-mobilization at a later date, and enhancing the electrical performance of the Project to meet MISO technical requirements.

3.3.5 MISO LRTP and the Reliability Imperative

In response to a fundamental shift in the generation mix towards more renewable (i.e., wind, solar, hydro) generation sources, MISO released a study in 2021 called the Renewable Integration Impact Assessment ("RIIA") to understand the implications of an increase in renewable generation entering the system, or "renewable penetrations." The RIIA found that up to 30 percent renewable penetration is manageable with incremental transmission; however, managing the system beyond 30 percent of system-wide renewable penetrations will require transformational change in planning, markets, and operations, as shown in Figure 6. Within the next 20 years, Minnesota's generation mix

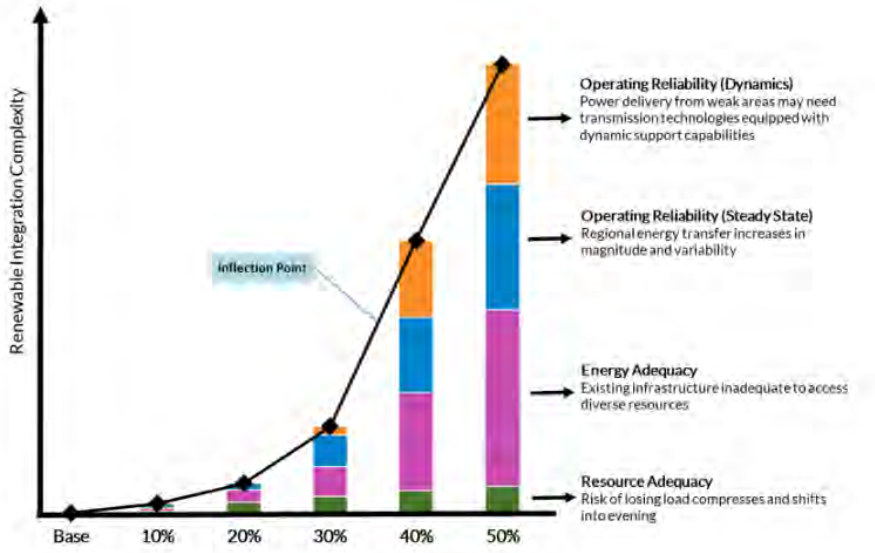
[26] Regionally Cost Allocated Project Reporting Analysis. 2011 MVP Portfolio Analysis Report. Available at: https://cdn.misoenergy.org/MVP%20Dashboard117055.pdf.

[27] *In the Matter of the Application for Certificates of Need for Three 345 kV Transmission Line Projects with Associated System Connections*, Docket No. ET2,E002, *et al*./CN-06-115, SURREBUTTAL TESTIMONY OF DR. STEVE RAKOW ON BEHALF OF THE MINNESOTA OFFICE OF ENERGY SECURITY at 21 (July 3, 2008).

[28] *Id.* at ORDER GRANTING CERTIFICATES OF NEED WITH CONDITIONS at 43 (May 22, 2009).

is expected to be primarily renewable, and MISO is expected to be 83 percent renewable.[29]

Figure 6. Reliability Implications of Increasing Renewable Penetrations[30]



In 2024, the MISO system reached a 19 percent renewable penetration level MISO-wide, and many areas of MISO are experiencing periods of more than 40 percent of their energy from renewables.[31] While incremental transmission expansion has been, and continues to be, developed, the increased stress to efficiently maintain reliability is evident in the increased congestion levels and more frequent use of MISO emergency operating procedures.

Recognizing that transformational changes in the way electricity is produced and used require proactive planning and significant changes to the transmission grid to maintain reliability, MISO developed the Reliability Imperative in 2020.[32] The Reliability Imperative is a shared responsibility of electricity providers (like the Applicants), states, and MISO to address the urgent and complex challenges facing the electric grid in the MISO region. MISO's response to the Reliability Imperative consists of a host of initiatives grouped into

[29] MISO Futures Report, Series 1A. Available at: https://cdn.misoenergy.org/Series1A_Futures_Report630735.pdf – page 77.

[30] MISO's Renewable Integration Impact Assessment (RIIA). Available at: https://cdn.misoenergy.org/RIIA%20Summary%20Report520051.pdf?_t_id=HAcY9Glq5QpaFZ2DUyt_JA%3d%3d&_t_uuid=Ls_331WCSMiJH1i_VSQ81w&_t_q=riia&_t_tags=language%3aen%2csiteid%3a11c11b3a-39b8-4096-a233-c7daca09d9bf%2candquerymatch&_t_hit.id=Optics_Models_Find_RemoteHostedContentItem/520051&_t_hit.pos=3.

[31] MISO Fact Sheet (June 2025). Available at: https://www.misoenergy.org/meet-miso/media-center/corporate-fact-sheet/.

[32] Additional information on MISO's Reliability Imperative is available at: https://www.misoenergy.org/meet-miso/MISO_Strategy/reliability-imperative/.

four categories: Market Redefinition, Transmission Evolution, System Enhancements, and Operations of the future.

As part of the Reliability Imperative's Transmission Evolution initiative, the MISO LRTP effort is a multi-year multi-phase study to identify regional transmission network projects necessary to ensure the transmission system is reliable, economic, and compliant in the future based on state and utility policy goals, projected conditions, and industry trends. The objective of MISO's LRTP is to address needs and issues not easily addressed within the more near-term focus of the annual MTEP cycle, producing an orderly and timely transmission expansion plan that provides benefits in excess of costs and value that is consistent with MISO's Tariff criteria.[33]

MISO evaluates the projects in the LRTP in accordance with MISO's federally approved Tariff. For any project to be deemed needed under MISO's Tariff, it must meet defined criteria, which may vary depending on the type of project. The transmission projects resulting from the LRTP effort meet the MISO Tariff criteria for being MVP projects. For a project to be deemed needed as an MVP by MISO, it must address three primary areas of value:

- **Reliability** – address transmission issues to maintain national reliability standards;
- **Economic** – provide multiple types of economic value across multiple pricing zones with a benefit-to-cost ratio of 1.0 or higher; and
- **Policy** – support the reliable and economic delivery of energy in support of documented energy policy mandates or laws.

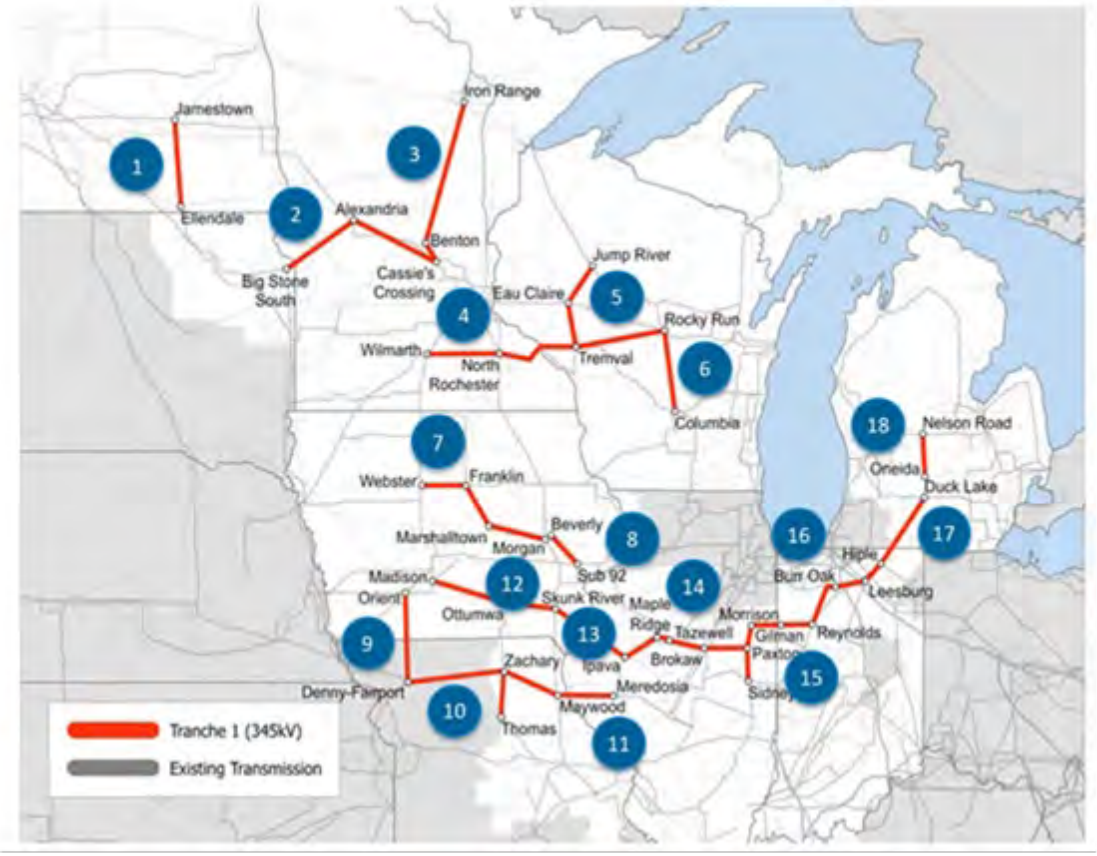
In addition to meeting the above criteria, MVP transmission projects must be developed as part of a portfolio of complementary projects. As MVP portfolios, LRTP Tranche 1 and Tranche 2.1 are eligible for cost allocation under the MISO Tariff. MISO cost allocation is discussed further in Section 2.4.3.

3.3.6 LRTP Tranche 1

In July 2022, MISO approved the first phase, or "tranche," of the LRTP. The MISO LRTP Tranche 1 Portfolio consists of 18 transmission projects totaling approximately 2,000 miles of new and upgraded transmission lines, to enhance connectivity, and help maintain adequate reliability for the Midwest by 2030 and beyond. Figure 7 depicts the projects in the MISO LRTP Tranche 1 Portfolio.

[33] Appendix F – MISO LRTP Tranche 2.1 Report at 3.

Figure 7. MISO LRTP Tranche 1 Portfolio



MISO LRTP Tranche 1 includes three 345 kV projects in Minnesota and one 345 kV project in North Dakota:

- the Big Stone South to Alexandria to Big Oaks Transmission Projects;[34]
- the Northland Reliability Project; [35]
- the Mankato to Mississippi River Project;[36] and
- the Jamestown to Ellendale Transmission Project.[37]

MISO LRTP Tranche 1 was intentionally designed as a first step to address immediate reliability needs driven by a changing resource fleet mix and to increase primarily intra-

[34] LRTP Project #2, Commission Docket Nos. CN-22-538, TL-23-159, and TL-23-160.

[35] LRTP Project #3, Commission Docket Nos. CN-22-416 and TL-22-415.

[36] LRTP Project #4, Commission Docket Nos. CN-22-532 and TL-23-157.

[37] LRTP Project #1, NDPSC Docket Nos. PU-24-091 and PU-25-236.

state, but also inter-state, transfers to meet NERC standards. More specifically, the MISO LRTP Tranche 1 Portfolio:

- Addresses reliability violations as defined by NERC at over 300 different sites across the Midwest. In addition, the portfolio increases transfer capability across the MISO Midwest subregion to allow reliability to be maintained for all hours under varying dispatch patterns driven by differences in weather conditions.

- Provides $23.2 billion in net economic savings over the first 20 years of the LRTP Tranche 1 Portfolio's service, which results in a benefit-to-cost ratio of at least 2.6. This amount increases to $52.2 billion in net economic savings over 40 years, resulting in a benefit-to-cost ratio of 3.8.[38]

- Supports the reliable interconnection of approximately 43,431 MW in new, primarily renewable, generation capacity across the MISO Midwest subregion, 8,339 MW of which is in Minnesota and the surrounding region.

The MISO LRTP Tranche 1 Portfolio also was designed to bolster the existing 345 kV network, meet long-term needs identified in MISO's least transformative Futures scenario (Future 1), and provide an incremental expansion that would position the grid for future LRTP tranches.

3.3.7 LRTP Tranche 2.1

MISO always envisioned the LRTP as a multi-phase process due to the magnitude and complexity of the needs and the resources involved in analyzing and justifying a large regional transmission overlay. Since MISO developed LRTP Tranche 1, the pace of industry transformation has accelerated and the magnitude of the change has increased. Shortly after finalizing LRTP Tranche 1, MISO kicked off an exercise to begin refreshing key assumptions in anticipation of continuing its evaluation of long-term transmission needs under the Reliability Imperative. The refreshed "Futures" formed the underlying set of assumptions for the evaluation and development of the second phase of the LRTP, Tranche 2, which would continue to focus on the MISO Midwest Subregion.

Transmission grid expansions are long-term decisions, and long-term forecasts of the future generation mix and energy usage are necessary to plan the grid. As part of the MTEP process, MISO and its stakeholders develop a range of forward-looking scenarios, or Futures, which forecast multiple pathways and timelines for states and utilities to meet their energy goals. The Futures are designed to bookend the potential range of future economic and policy outcomes, ensuring that the actual future falls within the range of reasonable outcomes considered in the Futures. These Futures, which envision system conditions 20 years ahead, are then used to assess and identify transmission needed to deliver the necessary energy reliably and efficiently from generation resources to customers. Futures are developed through an iterative and robust stakeholder process

[38] Values as of July 2022. While market forces, have driven project costs to increase since 2022, the same forces will also cause benefits to increase.

which includes representatives from MISO utilities, state regulatory authorities, public consumer advocates, environmental representatives, independent power producers, and others.

During the MTEP 2021 cycle, three Planning Futures were used in MISO's grid planning initiatives, including LRTP Tranche 1. MISO developed a series of future scenarios in 2021 ("MTEP21 Futures") over the course of 18 months and incorporated numerous rounds of stakeholder feedback, policy assessments and industry trends. The Futures incorporate varying assumptions about utility and state goals, retirements, technology, Distributed Energy Resources ("DER") adoption and electrification, and other factors. Starting in July 2022, MISO began the process of refreshing the original MTEP21 Futures. Since the completion of the original MTEP21 Futures, utility and state plans had been refined, new legislation and policies had taken effect at the state and federal level, and prices and incentives affecting resource development had seen significant changes.

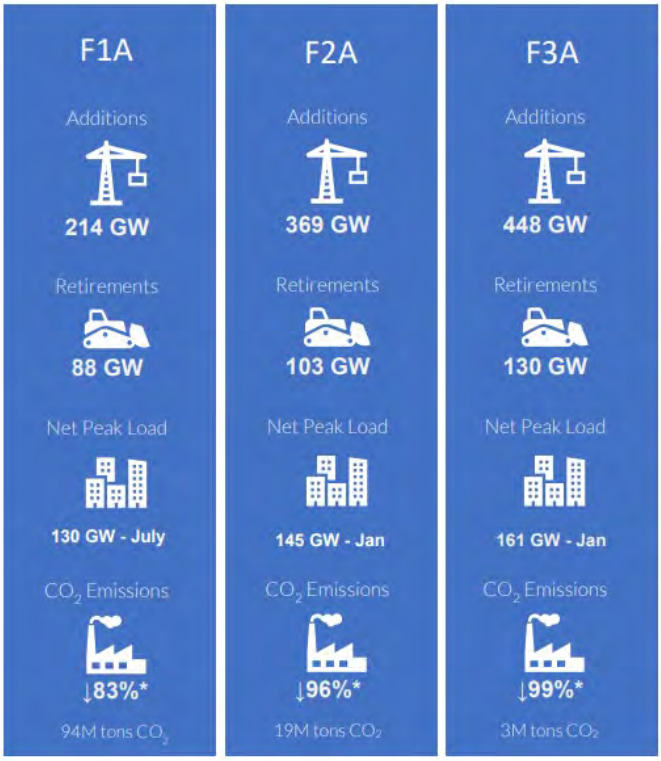
The "Series 1A Futures" incorporated these various timely updates while still foundationally being built upon the original defining characteristics of the MTEP21 Futures. Compared to the MTEP21 Futures, the Series 1A Futures demonstrate an accelerating pace of transformation in the industry and, as a result, accelerating need for transmission to support a reliable transition. A summary of the key assumptions for each Series 1A Future is shown in Figure 8 and Figure 9. MISO focused its evaluation and development of Tranche 2 on Future 2A and Future 1A.

Figure 8. Overview of MISO MTEP21 and Series 1A Futures[39]



[39] MISO Series 1A Futures Report at 4. Available at: https://cdn.misoenergy.org/Series1A_Futures_Report630735.pdf.

Figure 9. MISO Series 1A Futures Assumptions[40]



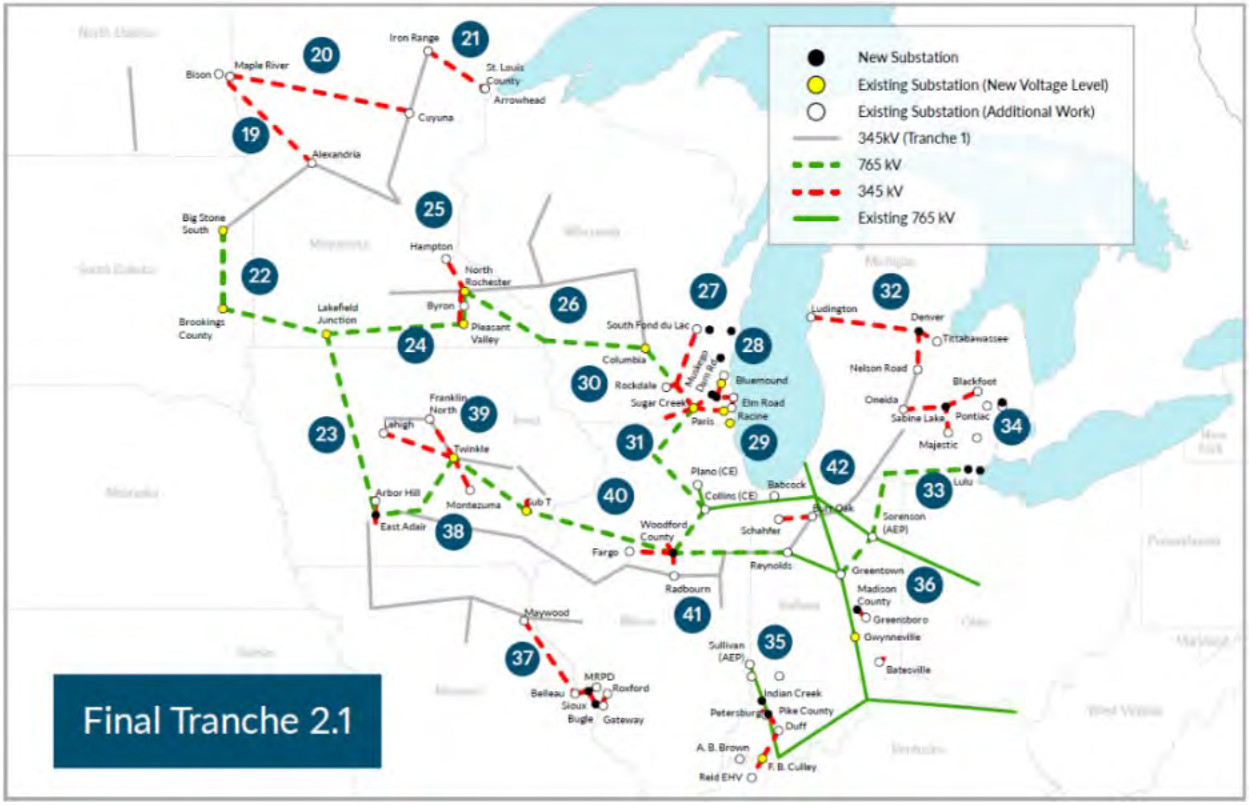
While MISO's original plan was to address long-term transmission needs in the Midwest in two stages (Tranche 1 and Tranche 2), based on the magnitude and complexity of needs identified under the Series 1A futures MISO determined it was necessary to approach its evaluation of needs in the Midwest in three stages. As a result, Tranche 2 was renamed LRTP Tranche 2.1 and a subsequent effort, referred to at the time as Tranche 2.2, was added to MISO's multi-phase LRTP work plan.

Including the time spent working on the Series 1A Futures, the LRTP Tranche 2.1 Portfolio was developed over approximately two and a half years, culminating with its approval in December 2024. MISO followed an extensive stakeholder process, spending more than 40,000 staff hours, facilitating more than 300 meetings, and incorporating stakeholder feedback to arrive at the LRTP Tranche 2.1 Portfolio.[41] The LRTP Tranche 2.1 Portfolio includes several additional 345 kV projects and establishes a new 765 kV "backbone" across the Midwest, as shown in Figure 10.

[40] MISO Series 1A Futures Report at 4. Available at: https://cdn.misoenergy.org/Series1A_Futures_Report630735.pdf.

[41] Appendix F – MISO LRTP Tranche 2.1 Report at 6.

Figure 10. MISO LRTP Tranche 2.1 Portfolio[42]



The LRTP Tranche 2.1 Portfolio includes 24 projects totaling approximately 3,600 miles of new and upgraded transmission in MISO's Midwest subregion. The LRTP Tranche 2.1 Portfolio builds upon and is enabled by the LRTP Tranche 1 portfolio and other previous enhancements to the existing transmission grid. Combined, the 765 kV and 345 kV networks established and expanded by the LRTP Tranche 2.1 Portfolio will work together with the existing grid to move electricity from where it is produced by many types of generation in different locations across multiple states to local communities where it is consumed, enabling each state to meet its policy and reliability needs in a more efficient, less costly and less impactful manner. The LRTP Tranche 2.1 Portfolio is needed to address:

- **Reliability Issues** – The portfolio relieves significant levels of transmission line overloads, including 961 unique overloads identified in power flow modeling, in addition to voltage violations, stability limits, and other reliability constraints across the Midwest.[43]

- **Economic Issues –** The portfolio reduces generation curtailments, economic price separation between MISO regions, system losses, and severe wide-area congestion, including thousands of hours of uneconomic grid operations caused

[42] Appendix F – MISO LRTP Tranche 2.1 Report at 144.

[43] *Id.* at 28-29 and Figure 2.19.

by nearly 250 unique needs identified in economic planning simulations of future-year conditions.[44]

- **Cost Effectiveness** – The $21.8 billion portfolio has a benefit-to-cost ratio of 1.8 to 3.5. This means that every dollar invested in transmission will result in economic benefits of $1.80 to $3.50. Per MISO's analysis, the LRTP Tranche 2.1 is expected to provide net economic savings of $23.1 billion to $72.4 billion over the first 20 years of service.[45]

- **Generation Transition and Public Policy** – The portfolio alleviates congestion and enables interconnection of approximately 116 GW of new generation resources[46] to meet projected load, public policy objectives, and planning reserve margins. As a result, the portfolio is anticipated to reduce Midwest carbon dioxide ("CO_2") emissions by 127 to 199 million metric tons over 20 to 40 years to help states like Minnesota comply with decarbonization laws.[47] In addition to Minnesota, Illinois[48] and Michigan[49] have enforceable decarbonization standards, and Wisconsin[50] has a decarbonization goal. In addition, many Midwest utilities have decarbonization goals.

The Project is the Minnesota portion of MISO LRTP Tranche 2.1 Project No. 20.[51] The Project serves a key role in the execution of MISO LRTP Tranche 2.1 by addressing reliability needs specific to northern Minnesota and eastern North Dakota.[52]

A copy of MISO's full LRTP Tranche 2.1 Portfolio report can be found in Appendix F.

3.3.7.1 Reliability Need[53]

MISO identified the need for the LRTP Tranche 2.1 Portfolio to prevent numerous thermal and voltage violations and other reliability issues**.** In MISO's assessment of the eight core power flow models developed for LRTP Tranche 2.1 analysis, the severity of transmission line overloads is reduced by an average of approximately 60 percent in the 2032 models

[44] *Id.* at 28-29 and Figure 2.19.

[45] *Id.* at 125 Figure 2.137. Net savings are 20-year NPV in $-2024.

[46] *Id.* at 75.

[47] *Id.* at 142.

[48] Illinois Climate and Equitable Jobs Act mandates 100% carbon-free power by 2045.

[49] Michigan Senate bill 271 mandates 100% carbon-free power by 2040.

[50] Wisconsin Governor Evers Executive Order #38 established a state goal to reach 100% carbon-free electricity by 2050.

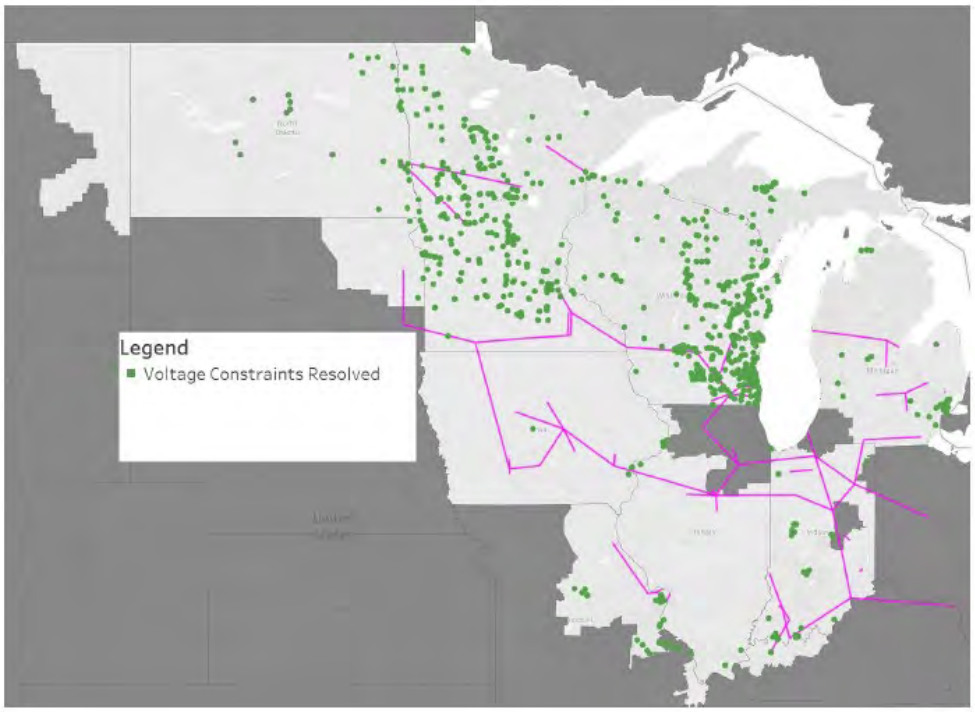
[51] Appendix F – MISO LRTP Tranche 2.1 Report at 145. LRTP Tranche 2.1 Project 20: Maple River - Cuyuna 345 kV.

[52] *Id.* at 81-83.

[53] *Id.* at 63-69 ("Total Reliability Results").

and 53 percent in the 2042 models by the LRTP Tranche 2.1 Portfolio. Similarly, the severity of voltage violations is reduced by an average of 31 percent in 2032 models and 45 percent in 2042 models. Figure 11 provides voltage constraints observed in the eight core power flow models which MISO found were relieved by the LRTP Tranche 2.1 Portfolio.

Figure 11. Voltage Constraints Relieved by LRTP Tranche 2.1[54]



The LRTP Tranche 2.1 Portfolio also addresses several other reliability issues. Angular separation across the Midwest region, a key indicator for stability issues and transfer limitations, is reduced by the LRTP Tranche 2.1 Portfolio in the most stressed case by nearly 20 percent. Reduced angular separation across the Midwest means power can take more direct paths from generation resources to load, with more efficiency, less congestion, and greater operational flexibility during outages.

MISO also evaluated transient stability performance, finding that the portfolio resolves approximately 90 percent of the transient voltage violations in the 2042 average load case and 30 percent of transient voltage violations in the 2042 summer peak case. In addition to the eight core models, MISO also evaluated four key transfer sensitivities, finding that the LRTP Tranche 2.1 Portfolio mitigates an average of approximately 70 percent of thermal constraints on facilities greater than 200 kV and 44 percent of thermal constraints

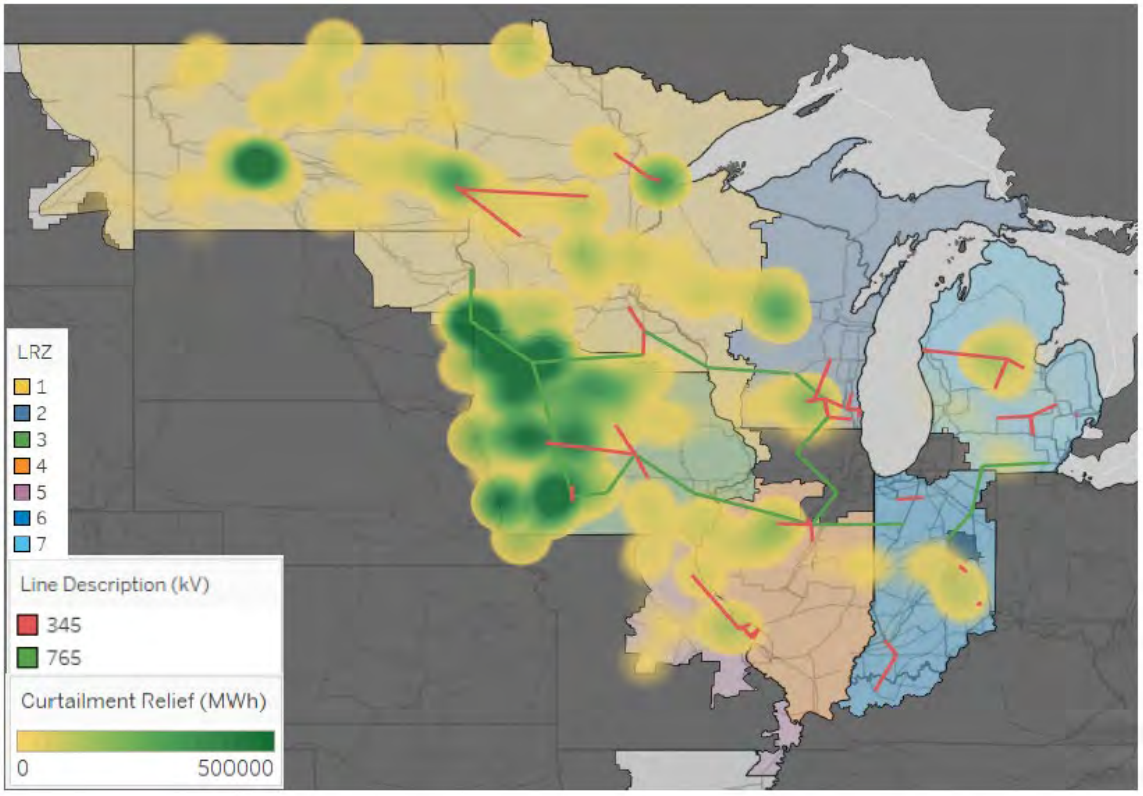
[54] *Id.* at Page 66, Figure 2.65.

on facilities less than 200 kV when considering grid conditions under varying transfer conditions.

3.3.7.2 Economic Need[55]

MISO determined that the LRTP Tranche 2.1 Portfolio enhances economic value for the MISO Midwest subregion and cost-effectively enables member plans for fleet transition and future electricity needs. For the MISO Midwest subregion, MISO's economic analysis identified that the LRTP Tranche 2.1 Portfolio would reduce economic congestion on transmission by 29.5 percent and improve access to economic generation through reducing generation curtailment by 11.2 percent (27.1 million MWh) in the Future 2A Year 20 models. Figure 12 illustrates the curtailment reduction achieved by the portfolio, with significant pockets of curtailment relief in central North Dakota, the North Dakota/Minnesota Border, and northeastern Minnesota due to 345 kV project additions.

Figure 12. Generation Curtailment Relieved by LRTP Tranche 2.1[56]



In addition to congestion reduction and curtailment relief, MISO's economic modeling found that the LRTP Tranche 2.1 portfolio would decrease the system cost of serving load by reducing price separation across the region, facilitate more economic dispatch of

[55] *Id.* at 70-76 ("Total Economic Results").

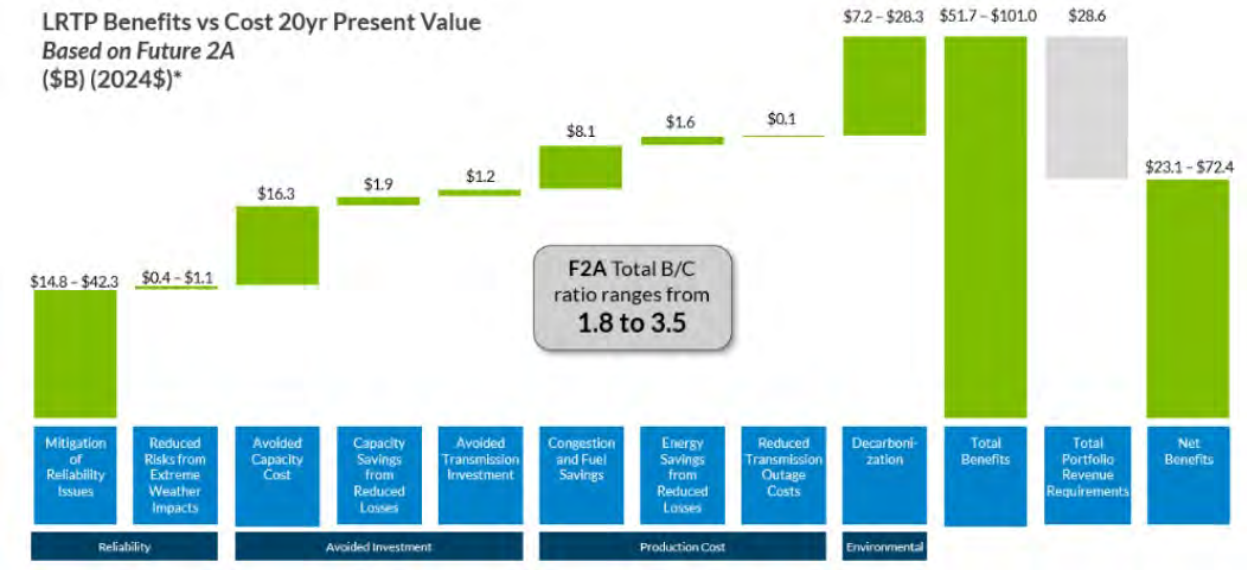
[56] *Id.* at 73, Figure 2.74.

generation (leading to $8.1 billion in adjusted production cost ("APC") savings), and provide a robust regional transmission backbone to support nearly 116 GW of new resource additions under Future 2A assumptions.

3.3.7.3 Cost-Effectiveness

The MISO LRTP Tranche 2.1 Portfolio is projected to deliver net economic benefits estimated at $23.1 billion to $72.4 billion over the first 20 years of service based on Future 2A, as shown in Figure 13.[57] MISO estimates these projected savings will offset the capital cost of the LRTP Tranche 2.1 Portfolio by a ratio of 1.8 to 3.5, meaning that net cost savings are expected relative to what would be needed without the LRTP Tranche 2.1 Portfolio.[58]

Figure 13. Economic Savings from the MISO LRTP Tranche 2.1 Portfolio[59]



As shown in Figure 14, MISO quantified the economic benefits of the LRTP Tranche 2.1 Portfolio using nine different metrics. The development of the LRTP Tranche 2 benefit metrics is described in detail in the October 1, 2024 whitepaper produced by MISO,[60] and the application of these metrics to the final LRTP Tranche 2.1 Portfolio is discussed in the

[57] *Id.* at 125.

[58] *Id.*

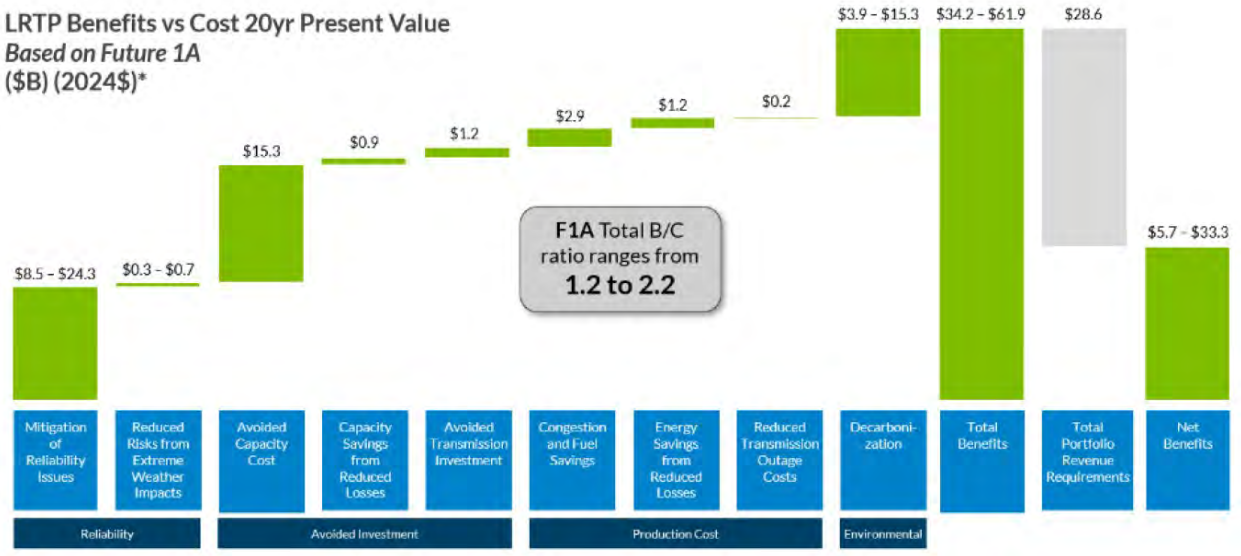
[59] *Id.*

[60] LRTP Tranche 2.1 Business Case Metrics. October 1, 2024. Available at: https://cdn.misoenergy.org/LRTP%20Tranche%202%20Business%20Case%20Metrics%20Methodology%20Whitepaper633738.pdf.

MISO LRTP Tranche 2.1 Report. The inclusion of each metric is approved in MISO's federally approved tariff and further supported by FERC Order 1920.[61]

MISO also evaluated the financially quantifiable benefits of the LRTP Tranche 2.1 Portfolio against reasonable bookends for changed assumptions. When considering the less aggressive renewable energy transition assumptions of Future 1A, MISO estimates the projected savings achieved by the LRTP Tranche 2.1 Portfolio will still offset the capital cost by a benefit-cost ratio of 1.2 to 2.2, as shown in Figure 14.

Figure 14. Economic Savings from the MISO LRTP Tranche 2.1 Portfolio Based on Future 1A Evaluation[62]



3.3.7.4 Generation Transition and Public Policy

MISO is not an integrated resource planner, but it is obligated to plan the transmission system in a way that ensures the energy planned by its members can be reliably and economically delivered to where it is needed. In developing the Series 1A Futures, MISO considered member plans as well as additional resources needed to meet the projected load, policy objectives, and planning reserve margin requirements for each of the Futures scenarios. MISO's analysis shows that the LRTP Tranche 2.1 Portfolio supports the reliable interconnection of approximately 115.7 GW of new generation resources to meet the needs identified in the Series 1A Futures.[63] Of the capacity supported by the LRTP

[61] FERC Order 1920, Docket No. RM-21-17-000 (May 14, 2024). Available at: https://www.ferc.gov/media/e1-rm21-17-000https://www.ferc.gov/media/e1-rm21-17-000; FERC Order 1920-A, Docket No. RM-21-17-001 (Nov. 21, 2004). Available at: https://www.ferc.gov/media/e-1-rm-21-17-001. https://www.ferc.gov/media/e-1-rm-21-17-001.

[62] Appendix F – MISO LRTP Tranche 2.1 Report at 143.

[63] *Id.* at 75.

Tranche 2.1 Portfolio, 32.1 GW is in Minnesota, North Dakota, eastern South Dakota, and western Wisconsin (MISO Local Resource Zone ("LRZ") 1).[64] In addition to supporting reliability and future electricity needs, the generation enabled by the LRTP Tranche 2.1 Portfolio is expected to reduce CO_2 emissions by 127 million metric tons over the first 20 years of service and 199 million metric tons over the first 40 years of service.[65] Using the Commission's valuation of CO_2 emission reduction,[66] the LRTP Tranche 2.1 Portfolio is expected to result in approximately $28 to $39 billion in carbon reduction benefits over the first 20 years across the MISO footprint.[67]

3.3.7.5 Other Qualitative Benefits

The LRTP Tranche 2.1 Portfolio also provides multiple other qualitative benefits. MISO expects that the addition of the LRTP Tranche 2.1 Portfolio will increase operational flexibility to better allow timely outage scheduling to maintain the reliability of the system; and reduce the economic impact due to congestion caused by outages. The operational flexibility also helps reduce the economic impacts of natural gas price changes by providing access to a broader pool of generation resources.[68]

The LRTP Tranche 2.1 Portfolio also gives more flexibility to better support diverse policy needs. The proactive long-range approach to planning regional transmission provides regulators greater confidence in achieving policy goals by reducing uncertainty around future resource expansion plans. Elimination of much of the high transmission cost barriers allows resource planners to assume less risk in making resource investment decisions.

3.3.8 Need for the Project in MISO LRTP Tranche 2.1

MISO LRTP Tranche 2.1 was developed as a portfolio of projects designed to work together; however, each project in the portfolio was also individually justified by MISO based on regional and local needs. MISO identified through robust alternatives analysis that the Project is a critical component of the LRTP Tranche 2.1 Portfolio, enhancing the value of the Portfolio for meeting North Dakota, Minnesota, and the Midwest's electrical needs. To identify the optimal LRTP Tranche 2.1 Portfolio, MISO evaluated 97 alternative

[64] *Id.* at 76.

[65] *Id.* at 142.

[66] *In re Establishing an Updated 2020 Estimate of the Costs of Future Carbon Dioxide Regulation on Elec. Generation under Minn. Stat. § 216H.06*, Docket No. E999/DI-19-406, ORDER ESTABLISHING 2020 AND 2021 ESTIMATE OF FUTURE CARBON DIOXIDE REGULATION (Sept. 30, 2020).

[67] Appendix F – MISO LRTP Tranche 2.1 Report at 143. Range given is based on varying discount rate assumption.

[68] *Id.* at 148.

project ideas.[69] MISO's justification for the Project is discussed in the LRTP Tranche 2.1 Report along with two other 345 kV projects in North Dakota and Northern Minnesota, shown in Figure 15.

Figure 15. North Dakota and Northern Minnesota LRTP Tranche 2.1 Projects[70]



According to MISO, the North Dakota and Northern Minnesota project group including the Project provides outlets to North Dakota generation, resolves constraint violations in the area, and connects to Tranche 1 lines. While congestion in the area is reduced, the increased generation outlet in North Dakota, South Dakota, and Minnesota would shift congestion to new flowgates elsewhere in the region if those areas were not also addressed with the portfolio.[71] Specifically, MISO identified that the North Dakota and Northern Minnesota project group resolves more than 50 percent of constraint violations in the area, including several overloaded 115 kV and 230 kV transmission lines illustrated in Figure 16. With the LRTP Tranche 2.1 Portfolio, the final worst-case loading on these transmission lines is reduced by an average of 63 percent compared to the pre-portfolio worst-case loading and all of them are within their existing rated capacity. Even where constraints are not fully resolved, the worst-case loading is reduced significantly by the portfolio. The North Dakota and Northern Minnesota project group also increases the deliverability of resources from North Dakota, South Dakota, and Minnesota to load centers in Northern Minnesota, the Twin Cities, and beyond, reducing overall congestion and addressing some of the most-constrained flowgates in the region. Table 10 shows congestion relief on the top flowgates impacted by the North Dakota and Northern Minnesota project group.

[69] *Id.* at 42.

[70] *Id.* at 81.

[71] *Id.* at 82.

Figure 16. Top Reliability Constraints Resolved by LRTP Tranche 2.1 projects in North Dakota and Northern Minnesota[72]

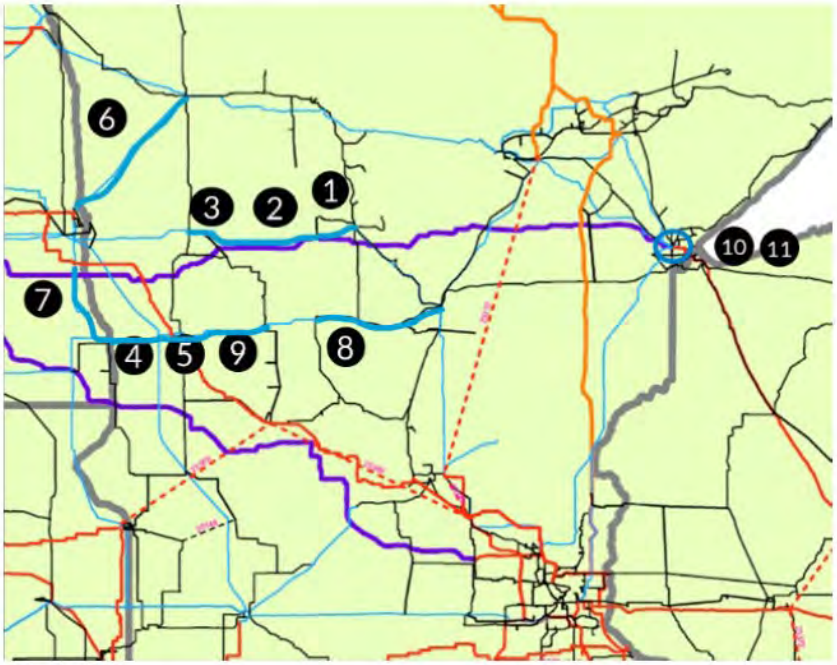


Table 10. Top Economic Constraints Resolved by North Dakota and Northern Minnesota LRTP Tranche 2.1 projects[73]

Y20 Top Relieved Flowgates - Projects 19, 20, & 21			
	Congestion Measure ($/MW)		
Top Relieved Flowgates	Reference	Change Case	Total Relief
Event 1117: [MP] HIBBARD - [MP] WNTR ST 115 kV 1	1,621,984	876,000	745,984
Event 270: [NSP] CASS CO7 - [NSP] REDRIVR7 115 kV 1	158,693	-	158,693
Event 192: [MP] LONG PR7 - [GRE] GRE-LTLSKTP7 115 kV 1	454,591	329,864	124,727
Base Case: [NSP] CASS CO7 - [NSP] REDRIVR7 115 kV 1	112,246	-	112,246
Event 1033: [MP] AITKNMN7 - [GRE] GRE-AITKIN 7 115 kV 1	47,573	-	47,573
Event 586: [GRE] GRE-INMAN 4 - [GRE] GRE-WINGRIV4 230 kV 1	64,442	24,550	39,892
Event 1355: [MP] CLOQUET7 - [MP] CANOSIA7 115 kV 1	58,902	19,317	39,585
Event 1391: [NSP] CASS CO7 - [NSP] REDRIVR7 115 kV 1	38,318	-	38,318
Event 1045: [MP] FLDWDTP7 - [MP] MDWLNDS7 115 kV 1	31,812	-	31,812
Event 592: [NSP] SHEYNNE4 - [OTP] LAKE PARK T4 230 kV 1	40,486	11,028	29,457

[72] *Id.* at 82.

[73] *Id.* at 83.

To quantify more specific impacts of the Project within the LRTP Tranche 2.1 Portfolio, the Applicants evaluated detailed results workbooks from MISO's final portfolio analysis to identify the number of pre- and post-portfolio thermal violations (transmission line overloads) on the transmission system in the immediate Project area. By filtering for buses located in eastern North Dakota and northern Minnesota – areas where transmission line loading is most directly impacted by the Project – the Applicants identified that the Project resolves a total of 1,140 thermal violations on 49 unique transmission facilities. The number of thermal violations resolved by the Project in each of the eight (8) post-portfolio LRTP Tranche 2.1 power flow cases is shown in Table 11. The worst-case pre- and post-portfolio loading for the top ten most overloaded facilities in the 2032 and 2042 cases is shown in Table 12. While nearly 400 overloads remain in the post-portfolio cases, subsequent analysis by the Applicants confirmed that the majority of these overloads are relieved by the beneficial impact of the Applicants' solution for meeting MISO's project-specific high SIL technical requirement (see Section 3.4.1). As discussed in Section 2.2.2, the Applicants have designed the Project to meet this requirement by stringing the second circuit conductors on the double-circuit capable structures but operating the transmission line initially as a single 345 kV transmission line. Because this refinement of the Project was identified after MISO completed its LRTP Tranche 2.1 analysis, the impacts resulting from a significantly lower Project transmission line impedance were not represented in MISO's original analysis.

Table 11. Thermal Violations Resolved by the Project in LRTP Post-Portfolio Case

MISO LRTP Tranche 2.1 Power Flow Case	Pre-Portfolio # of Overloads	Post-Portfolio # of Overloads	Overloads Resolved
2032 Average	217	47	170
2032 Light Load	20	1	19
2032 Summer	255	71	184
2032 Winter	201	65	136
2042 Average	196	42	154
2042 Light Load	151	36	115
2042 Summer	207	62	145
2042 Winter	289	72	217
TOTAL	**1536**	**396**	**1140**

Table 12. Top Ten Constraints Relieved by the Project in LRTP Post-Portfolio Case

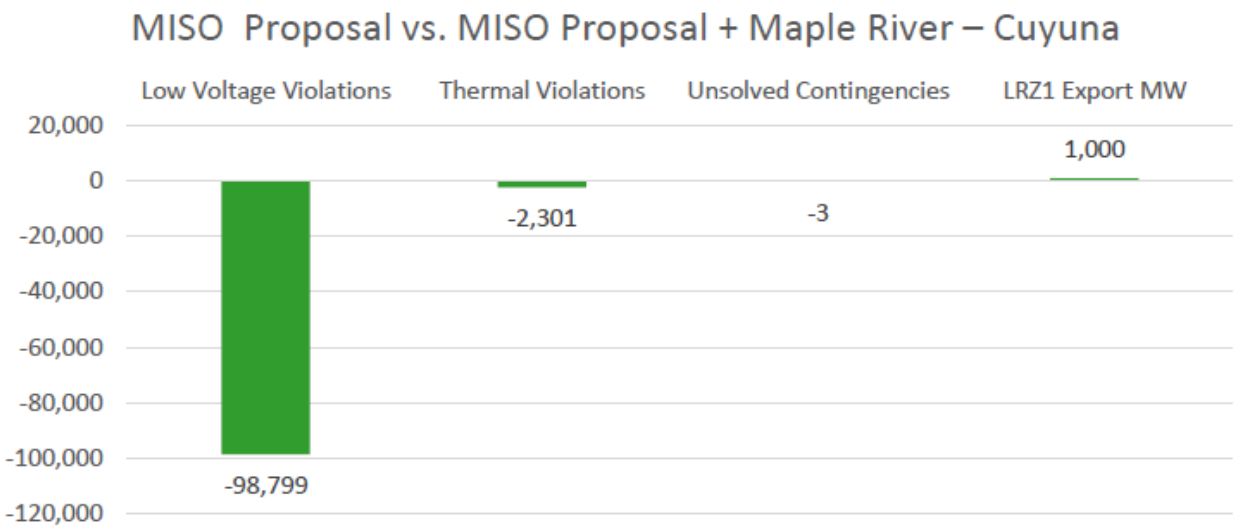
Branch	2032 Cases Pre-Portfolio % Loading	2032 Cases Post-Portfolio % Loading	2042 Cases Pre-Portfolio % Loading	2042 Cases Post-Portfolio % Loading
615300 GRE-INMAN 4 230 615566 GRE-WINGRIV4 230 1	158.9	99.7	155.2	112.4
608647 LONG PR7 115 619405 GRE-LTLSKTP7 115 1	157.7	105.9	132.3	99.1
608644 DOGLAKE7 115 616715 GRE-FISHTTP7 115 1	119.4	86.1	141.1	100.1
603027 DGLASCO7 115 619112 GRE-HUDSON 7 115 1	139.2	94.3	108.5	93.5
608610 BADOURA4 230 615341 GRE-HUBBARD4 230 1	138.4	83.5	126.7	77.4
620223 HOOT LK7 115 658110 FERGSFL7 115 1	118.3	89.3	138.3	101.0
620239 BAGLEY 7 115 620243 SHEVLIN7 115 1	117.1	84.0	136.1	95.2
620207 DL OTP 7 115 658112 AUDUBON7 115 1	139.4	102.3	130.7	95.9
620243 SHEVLIN7 115 620285 SOLWAY 7 115 1	111.4	78.3	130.5	89.9
608649 BLNCHRD7 115 616710 GRE-BELLEVU7 115 1	129.6	79.7	112.8	77.7

3.3.9 Applicants' Analysis in Support of MISO LRTP Tranche 2.1

Through their collective engagement during the MISO LRTP Tranche 2.1 study process, the Applicants submitted the Project for MISO's consideration during the alternative solution submittal window in April 2024. At the time, the Applicants provided analysis with the alternative solution submittal to support the need for and value of the Project as part of the LRTP Tranche 2.1 Portfolio. This analysis included both power flow and economic planning assessments of the Project. These results are based on the solution scope that was considered by the Applicants at the time, prior to the addition by MISO of certain technical requirements, like the high SIL rating. The Applicants' analysis in support of MISO's LRTP Tranche 2.1 studies identified that the Project would help to alleviate voltage and thermal constraints, particularly in the area along the Minnesota and North Dakota border, as well as provide economic benefits through congestion relief and more efficient transfer of power between the states. The benefits identified by the Applicants at the time included 490 GWh of reduced generation curtailments and $19 million annual reduction in APC, mainly from relief of three major 230 kV corridors between eastern North Dakota and northern Minnesota. Figure 17, which was provided to MISO at the time the Applicants submitted the Project as an alternative solution for consideration in LRTP Tranche 2.1, shows the incremental benefits the Project brought to the LRTP portfolio as it was being evaluated by MISO at the time. These benefits included 98,799 individual

resolved low voltage violations, as well as 2,301 thermal violations resolved and 1,000 MW incremental transfer capability to export power from MISO LRZ 1.

Figure 17. Summary of Applicants' Analysis in Support of MISO LRTP Tranche 2.1 Study



3.4 Meeting Member and Customer Needs and Enhancing Resiliency

In addition to the regional benefits identified by MISO in the LRTP Tranche 2.1 analysis, the Project provides localized benefits to the Applicants' customers and members, as well as neighboring utilities. This section will provide an overview of the Applicants' analysis of needs and benefits specific to the Project, including how the Project enhances the reliability of the transmission system, increases transmission system capacity, positions utilities in Minnesota and North Dakota to meet the growing electrical demand and enhance resiliency, enables cost-effective regional energy transfers, and provides local economic and other benefits in Minnesota and North Dakota.

3.4.1 Enhance the Reliability of the Transmission System

The Project supports local and regional transmission system reliability by reducing voltage and thermal violations across northern Minnesota and eastern North Dakota. The Applicants' analysis of the LRTP Tranche 2.1 final power flow models found that the LRTP Tranche 2.1 portfolio, including the Project, mitigates 81,802 voltage violations and 14,580 thermal violations in North Dakota, South Dakota, and Minnesota, as compared to the system without the portfolio. The Project also specifically relieves thermal overloads

and low voltage violations along all three of the major 230 kV transmission paths connecting eastern North Dakota and northern Minnesota.[74]

As discussed in Section 2.2.2, the Applicants have designed the Project to meet the MISO project definition, including the project-specific high SIL technical requirement, by stringing the second circuit conductors on the double-circuit capable structures but operating the transmission line initially as a single 345 kV transmission line. Since this solution was identified after MISO completed its LRTP Tranche 2.1 analysis, the beneficial impacts resulting from a significantly lower overall transmission line impedance were not represented in MISO's original analysis. Upon further analysis of the Project with the addition of the second circuit conductors, the Applicants found an additional 230 voltage violations and 319 thermal violations were relieved by the Project, including many of those constraints which were not fully resolved in the original LRTP analysis, as discussed in Section 3.3.8. The majority of these overloads were relieved along existing 230 kV pathways between eastern North Dakota and north central Minnesota. The Applicants' analysis of reliability impacts specific to the Project confirms that the Project will enhance transmission system reliability by reducing the risk of overloads, enhance efficiency by drawing power off the underlying system and reducing congestion, and provide flexibility to meet future needs by establishing an additional high-capacity transmission path connecting eastern North Dakota and northern Minnesota.

3.4.2 Increase Transmission System Capacity

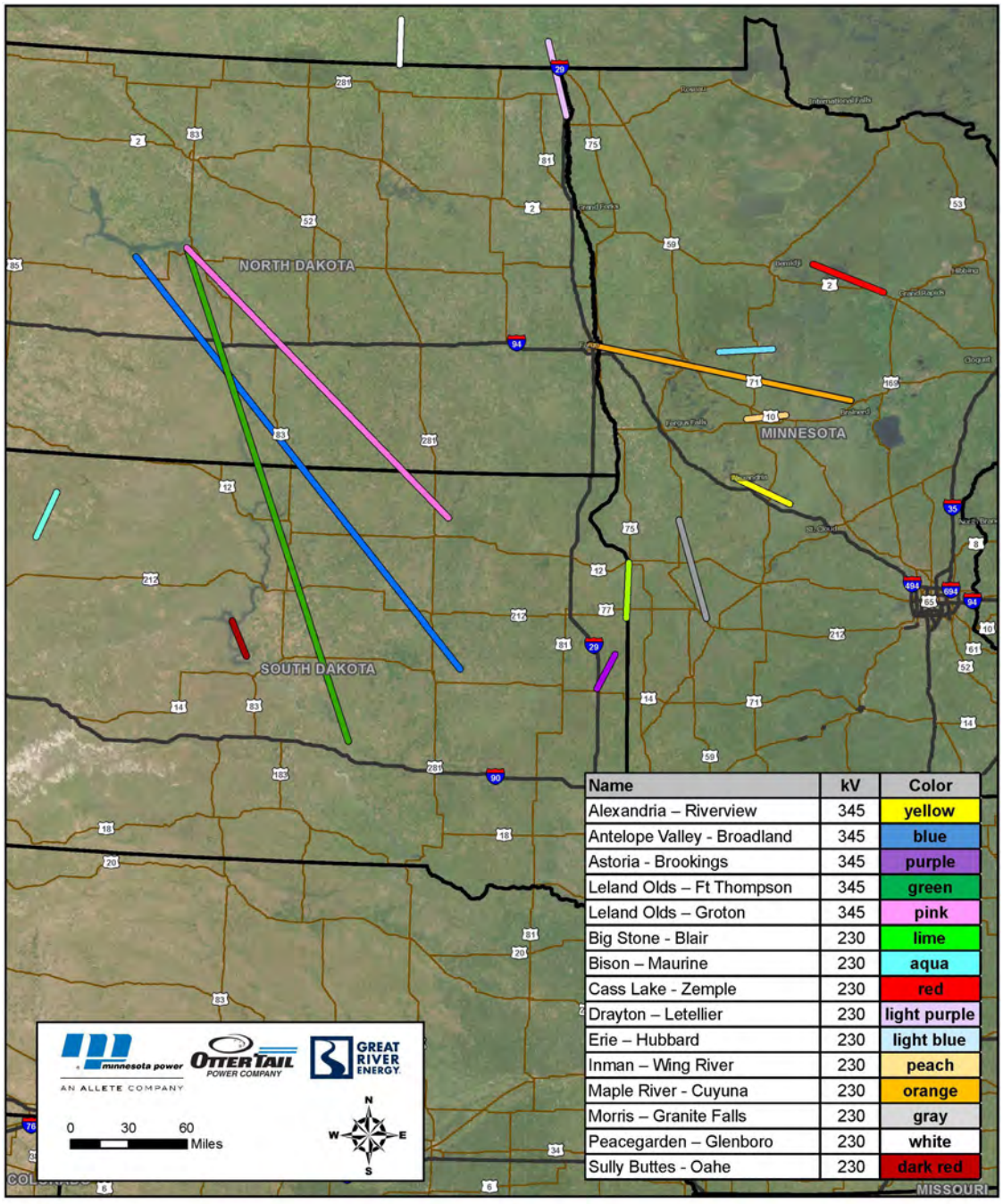
The Project enhances regional transfer capability to meet load-serving and reliability needs in North Dakota and Minnesota. Eastern North Dakota and Northern Minnesota have long been a nexus for large regional transfers from energy-rich areas in North Dakota, South Dakota, and Manitoba to load centers in northeastern Minnesota, the Twin Cities, Wisconsin, and beyond. These transfers have typically been predictable, moving power from west to east and from north to south. However, as the way energy is produced and used continues to evolve and the location, size, and operational characteristics of both generation and load shifts, expanded regional transfer capability both to and through eastern North Dakota and northern Minnesota will be necessary to maintain reliability under changing system conditions and dispatch scenarios. The following sub-sections describe how the Project provides for increased and more flexible regional transfer capability, first in the west to east direction to and from North Dakota, then in the south to north direction into and through northern Minnesota. The Project's impact on transient stability performance under these high transfer scenarios will also be discussed.

[74] *See* Figure 18 (map of NDEX, below).

3.4.2.1 North Dakota Import/Export ("NDEX") Transfer Capability

The Project enhances transfer capability for importing power into and exporting out of North Dakota. North Dakota import and export transfer capability has historically been measured by the NDEX interface. The historical NDEX interface includes 23 distinct ties ranging from 41.6 kV to 345 kV. Major transmission lines included in the NDEX interface are illustrated geographically and listed in Figure 18.

Figure 18. NDEX Interface Tie Lines (230 kV and Greater)



Name	kV	Color
Alexandria – Riverview	345	yellow
Antelope Valley - Broadland	345	blue
Astoria - Brookings	345	purple
Leland Olds – Ft Thompson	345	green
Leland Olds – Groton	345	pink
Big Stone - Blair	230	lime
Bison – Maurine	230	aqua
Cass Lake - Zemple	230	red
Drayton – Letellier	230	light purple
Erie – Hubbard	230	light blue
Inman – Wing River	230	peach
Maple River - Cuyuna	230	orange
Morris – Granite Falls	230	gray
Peacegarden – Glenboro	230	white
Sully Buttes - Oahe	230	dark red

The Project relieves loading on the underlying transmission system along the NDEX interface and provides a lower impedance path for the power to flow across this interface, increasing transfer capacity. Two models from the MTEP24 annual reliability assessment were used to analyze the impact of the Project on the NDEX interface, considering thermal (transmission line loading) limits only. The Summer Peak ("SUM") case represents the system during a period when loads throughout MISO, including in North Dakota, are at or near summer peak levels. This is the most likely scenario to drive higher amounts of North Dakota imports, especially when renewable energy output is low. The Shoulder High Wind ("SHW") case represents the system during a period when loads are at off-peak levels while output from wind generation is near peak. This is one scenario that could drive higher amounts of North Dakota exports. As shown in Table 13, the Project facilitates increased NDEX transfer capability for both scenarios, facilitating 1020 MW additional North Dakota export capability for generation in North Dakota to be transferred towards Minnesota and beyond, and facilitating 617 MW additional North Dakota import capability for regional generation to be delivered from the MISO system east into North Dakota to serve load.

Table 13. NDEX Transfer Capability of the Project

CASE	POST-PROJECT CHANGE IN NDEX TRANSFER LIMIT RANGE
SUM – NORTH DAKOTA IMPORT	617 MW
SHW – NORTH DAKOTA EXPORT	1020 MW

The results of this NDEX study demonstrate that the Project increases transfer capability to support both North Dakota future electricity needs and North Dakota generator deliverability under varying system conditions, creating a more robust and resilient system for North Dakota.

3.4.2.2 Northern Minnesota Interface Transfer Capability

The Project increases and improves the reliability of transfer capability into northern Minnesota and Eastern North Dakota during south-to-north ("North Flow") transfer conditions typically present during local peak load times, which are aggravated by modest-to-high transfers from MISO to Manitoba Hydro, a lack of dispatchable generation resources in the area, and low renewable energy output. For example, a typical peak or near-peak hour in northern Minnesota and Eastern North Dakota occurs during severely cold winter nights where solar and wind resources may not be locally available. This drives the need for significant power transfers into the area to supplement any remaining dispatchable generation in the area. The same set of conditions generally drives peak loading in Manitoba, requiring Manitoba to potentially import power from MISO to

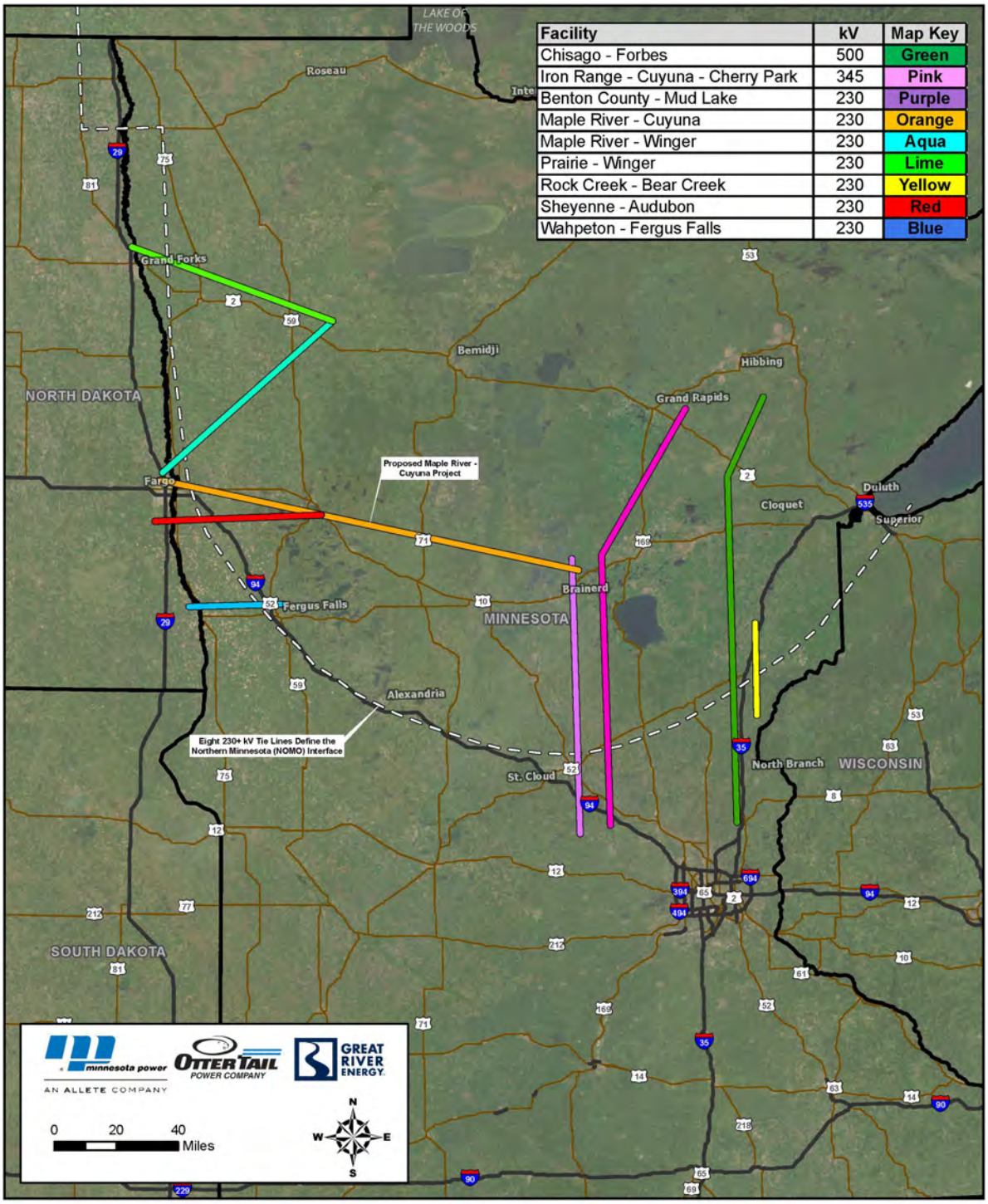
supplement its own resources. These conditions result in the North Flow condition to serve these winter peaking loads. An extended period of severe cold or drought conditions may further aggravate the situation by limiting the availability of hydroelectric and other dispatchable resources in the area, creating near-total dependence on the transmission system to reliably serve peak load during these critical hours.

The most limiting transmission constraints during this North Flow condition have historically been regional voltage stability constraints associated with the loss of one or more critical tie lines, resulting in heavy loading and voltage collapse along the 230 kV transmission paths in northern Minnesota and eastern North Dakota. To understand and evaluate a voltage stability issue, the issue must be expressed in terms of an interface. In this case, the NOMN ("NOMN") interface[75] was developed to directly characterize the issue. The NOMN interface definition is provided and illustrated graphically in Figure 19. For reference, the Iron Range – Cuyuna – Cherry Park 345 kV double-circuit transmission line was permitted as part of the Northland Reliability Project[76] and is currently under construction with an in-service date in 2030.

[75] *In the Matter of the Application for a Certificate of Need for the Northland Reliability Project 345 kV Transmission Line*, Docket No. E015,ET2/CN-22-416, APPLICATION at Section 3.3.2.2 (Aug. 4, 2023).

[76] *Id.* at ORDER GRANTING CERTIFICATE OF NEED AND ISSUING ROUTE PERMIT (Feb. 28, 2025).

Figure 19. NOMN Interface Tie Lines



The Project by itself and in combination with the rest of the Tranche 2.1 Portfolio enhances NOMN interface transfer capability to reliably serve load during winter events that impact the local and regional system. Two MISO LRTP Tranche 2.1 models were used to analyze the impact of the Project on the NOMN interface. The Winter North Flow

("WNF") case represents the system during a period when local load is at or near winter peak in northern Minnesota and Eastern North Dakota, and Manitoba is importing power from MISO. As power is drawn from surrounding regions, including the North Dakota, South Dakota, northern Iowa, Wisconsin, and southern Minnesota, it flows through central Minnesota and the Twin Cities to northern Minnesota, eastern North Dakota, and Manitoba, stressing the transmission system. The Winter Low Renewable ("WLR") scenario captures multi-day periods of low renewable output, particularly during early morning hours or regional winter freezes.[77]

For the Winter North Flow case, the Project and the MISO Tranche 2.1 Portfolio increase NOMN interface transfer capability. Results for the two most limiting regional faults for NOMN voltage stability are shown in Table 14. Fault #1 is historically the most limiting fault for the NOMN interface while Fault #2 is anticipated to become more limiting as the regional transmission system develops. For security purposes, the specific transmission line names of the faulted lines are not given. The Project alone increases the NOMN voltage stability system operating limit ("SOL") by 218-297 MW, resulting in 200-300 MW of increased load-serving capability in northern Minnesota and Eastern North Dakota compared to the WNF pre-portfolio case. As part of the larger LRTP Tranche 2.1 portfolio, the Project contributes to increasing the NOMN voltage stability SOL by approximately 970 MW, resulting in 1,250 MW of increased load-serving potential in the area compared to the WNF pre-portfolio case.[78]

Table 14. Project Impact on NOMN Transfer in the WNF Case

NOMN Voltage Stability in 2032 Winter North Flow [MISO LRTP2.1]				
	Fault #1		Fault #2	
Case	SOL (MW)	∆Load	SOL (MW)	∆Load
Pre-Portfolio	2474.5	-	2553.1	-
Pre-Portfolio with MRC	2771.5	+300	2771.5	+200
Post-Portfolio	3449.3	+1250	3523.5	+1250

The Project is also impactful for the WLR case, which is another challenging condition for local and regional reliability. One of the realities of the energy transition is that intermittent generation resources are weather-dependent and do not always generate power. During times when the wind is not blowing or the sun is not shining, the system must remain

[77] Appendix F – MISO LRTP Tranche 2.1 Report at Chapter 2.

[78] The analysis described here is limited to NOMN voltage stability under the two most limiting contingencies. Other constraints may exist that are more limiting for total load-serving capability at this level.

resilient, reliable, and flexible to meet customer energy needs. The following analysis shows how the Project, in the WLR case, supports periods of minimal renewable generation.

Results for the two most limiting regional faults in the WLR case are shown in Table 15. The Project alone increases the NOMN voltage stability SOL by 66-68 MW, resulting in roughly 50 MW of increased load-serving capability in northern Minnesota and Eastern North Dakota compared to the WLR pre-portfolio case. As part of the larger LRTP Tranche 2.1 Portfolio, the Project contributes to increasing the NOMN voltage stability SOL by 279-324 MW, resulting in 400-450 MW of increased load-serving potential in the area compared to the WLR pre-portfolio case.[79] Although the Project's standalone contribution in this scenario is modest, its combined effect with the broader MISO Tranche 2.1 Portfolio is significant, demonstrating the importance of these projects working together to strengthen reliability and transfer capability under a variety of potential system conditions.

Table 15. Project Impact on NOMN Transfer in the WLR Case

NOMN Voltage Stability in 2032 Winter Low Renewables [MISO LRTP2.1]				
	Fault #1		Fault #2	
Case	SOL (MW)	∆Load	SOL (MW)	∆Load
Pre-Portfolio	3845.1	-	3995.3	-
Pre-Portfolio with MRC	3913.2	+50	4061.9	+50
Post-Portfolio	4124.3	+400	4319.7	+450

The results of this NOMN study demonstrate that the Project works together with the LRTP Tranche 2.1 Portfolio to increase the voltage stability limit for the NOMN interface. As a result, the Project and the portfolio contribute to increased load-serving capability in northern Minnesota and Eastern North Dakota of up to 1,250 MW in the WNF case and up to 400 MW in the WLR case compared to pre-portfolio load levels for each case. The Project increases NOMN interface transfer capability and reliability, allowing increased load within northern Minnesota and Eastern North Dakota, and creating a more robust and resilient system.

[79] The analysis described here is limited to NOMN voltage stability under the two most limiting contingencies. Other constraints may exist that are more limiting for total load-serving capability at this level.

3.4.2.3 Transient Stability Analysis

In addition to relieving thermal and voltage violations in steady state conditions and increasing regional voltage stability limits, the Project improves the transient stability of the region. Transient stability refers to the short-term response of the grid during the first few seconds after a disturbance (the transient period). Typical areas of interest in the transient period are voltage and frequency response. Traditionally, the most severe transient impacts occur during times of high bulk power transfers across the region. In some of these scenarios, such as the North Flow scenario described in Section 3.4.2.2, high transfers correlate with periods of high local demand. In other scenarios, high transfers correlate with periods of high regional generation output and lower local demand in the Upper Midwest, leading power to flow through the regional grid to areas of greater demand further south and east.

The Applicants evaluated the impact of the Project on transient stability performance under limiting regional transfer conditions such as the NDEX and NOMN transfers described in the preceding sections. The Project, by itself, significantly improves the transient voltage response of the system in Eastern North Dakota and Northwestern Minnesota. Pre- and Post-Project transient voltage performance following a representative regional fault is shown in Table 16 below for a SHW case with high NDEX export levels. Results are quantified using a metric called Voltage Sag Severity Index ("VSSI"), which is based on Institute of Electrical and Electronic Engineers ("IEEE") Standard 1564. The VSSI represents the margin between the modeled transient voltage performance and the applicable transient voltage criteria, where a VSSI value greater than or equal to 1.0 represents a violation of the applicable criteria and a VSSI value less than 1.0 represents performance within applicable criteria. Below the 1.0 VSSI threshold, the smaller the VSSI, the more robust transient voltage performance is and the more margin there is in the system. As shown in Table 16, the Project mitigates transient voltage violations present in the Pre-Project case where VSSI is greater than 1.0, and the resulting transient voltage performance in the Post-Project case is within applicable criteria with a 28-31 percent margin.

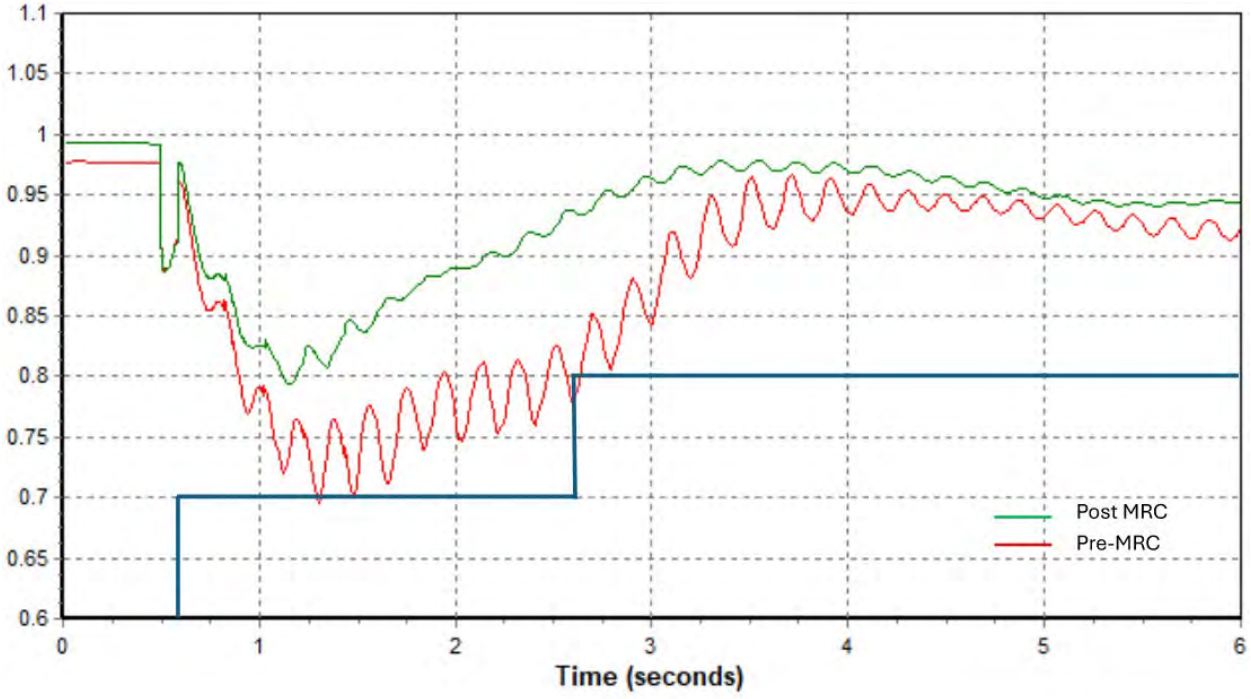
Table 16. Transient Stability Analysis Results

Bus	Pre-Project VSSI	Post-Project VSSI
Northwestern MN 230kV	1.185	0.721
Eastern ND 345kV	1.102	0.689

To further illustrate the impact of the Project on transient voltage performance, Figure 20 shows the voltage response for the Eastern North Dakota 345 kV bus in Table 17 over the first approximately five seconds following the fault. The **blue** curve represents the applicable transient voltage criteria, which require a stepped recovery of the voltage back

to a steady state. In the pre-Project scenario, shown in **red** on the plot, the transient voltage drops below the criteria and takes considerably longer to recover to a steady state compared to the post-Project scenario, which is shown in **green** on the plot. As demonstrated visually in Figure 20, the Project improves transient stability performance, resulting in less severe voltage drop and faster voltage recovery, ultimately increasing the transient stability performance margin.

Figure 20. Regional Fault Pre and Post Project



3.4.2.4 Transmission System Capacity Conclusions

In conclusion, the Project is a flexible solution for enhancing regional energy transfers to meet load-serving and reliability needs in North Dakota and Minnesota as the way energy is produced and used continues to evolve and the location, size, and operational characteristics of both generation and load shifts. As demonstrated by the NDEX, NOMN, and transient stability studies, the Project provides standalone benefits and works as a part of the regional portfolio to reliably move power from where it is generated to where it is used under a broad range of system conditions, including peak- and off-peak loading, high- and low-renewable output, and import or export from North Dakota.

3.4.3 Meet Local Customer Needs and Enhance Resiliency

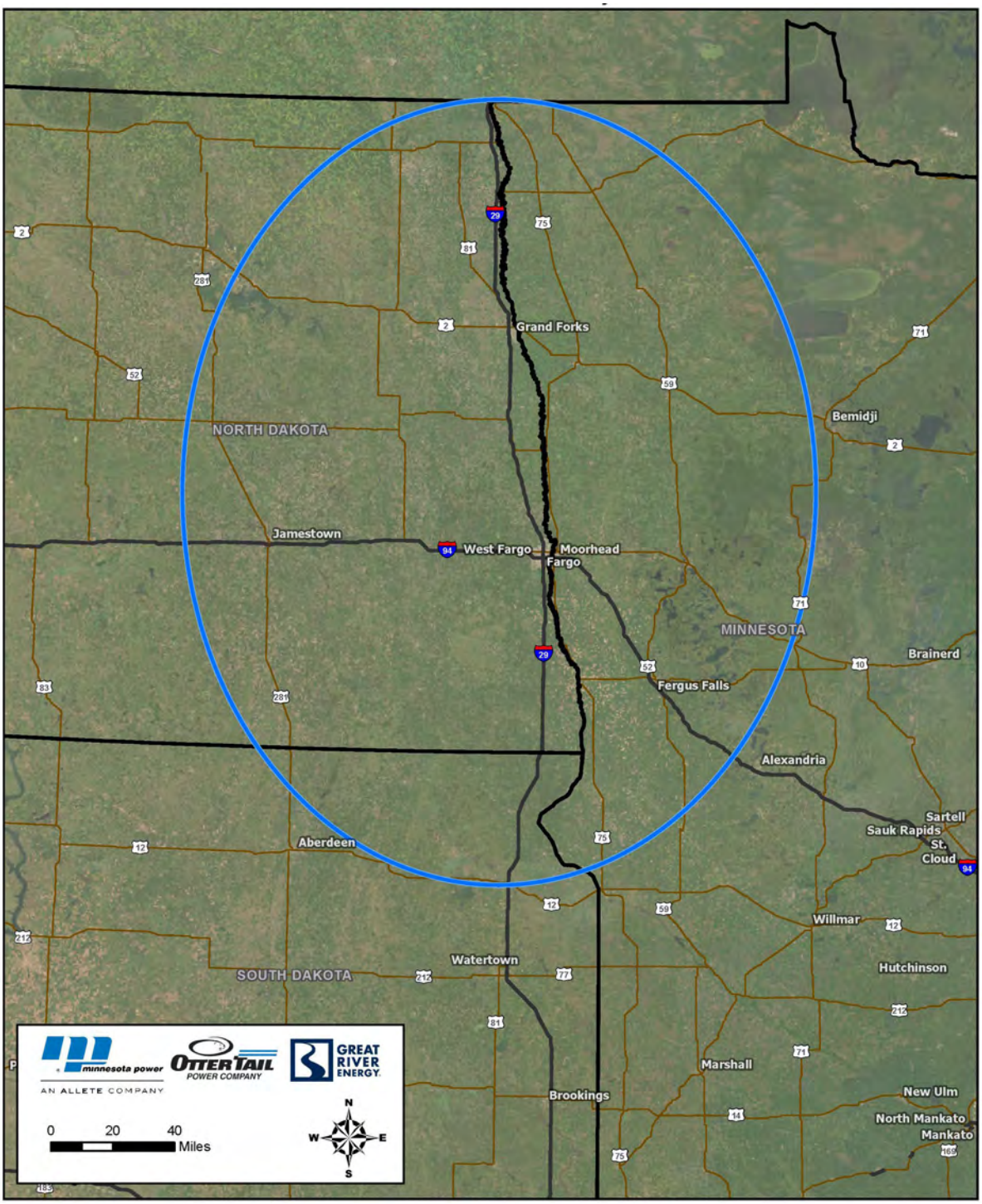
Beyond meeting the regional transmission system needs identified by the Applicants and MISO, the Project provides additional benefits, including local benefits to customers in eastern North Dakota and northern Minnesota. By establishing an additional high-

capacity transmission connection between the Fargo area in North Dakota and the extra high voltage ("EHV") transmission network in northern Minnesota, the Project reduces stress on the underlying 115 kV and 230 kV networks following critical contingencies that would otherwise limit capacity for power transfers between northern Minnesota and eastern North Dakota. The following sub-sections will provide an overview of the Applicants' assessment of the Project's beneficial impacts on local reliability and load serving capabilities in Eastern North Dakota and the Fargo-Moorhead area, as well as its impact on resiliency and transmission source reliability in the area.

3.4.3.1 Meeting Customer Needs in Eastern North Dakota and Northwestern Minnesota

The Project strengthens transfer capability and reliable load-serving capability in Eastern North Dakota and Northwestern Minnesota. To quantify the Project's impact Eastern North Dakota and Northwestern Minnesota load-serving capability, the Applicants evaluated voltage stability constraints limiting transfer capability into the area. The geographic study area evaluated for the voltage stability analysis is shown in Figure 21. It encompasses major load centers along the Red River – such as the Fargo-Moorhead and Grand Forks communities – as well as most of Eastern North Dakota and Northwestern Minnesota from the Canadian border into Northeastern South Dakota. In addition to Fargo-Moorhead and Grand Forks, this area includes larger communities in North Dakota and Minnesota like Jamestown, Alexandria, Fergus Falls, Detroit Lakes, Thief River Falls, Wahpeton, Devil's Lake, and Valley City.

Figure 21. Eastern North Dakota/Northwestern Minnesota Study Area Map



Limiting conditions for voltage stability in the study area may be present under a broad range of system conditions, including SUM, shoulder average ("SHAW"), and WNF cases. The Applicants evaluated the Project's impact on the voltage stability limit in the study area under this range of operating conditions, including three LRTP models, based on

forward-looking Future 2A assumptions, and two MTEP24 annual reliability assessment models, based on a more business-as-usual set of assumptions. For these five models, the Project increases load-serving capability in the study area by improving voltage stability performance following a representative limiting fault on a major area tie line.[80] Table 17 summarizes results for this fault in each of the five power flow models, considering the impact of the Project by itself and as part of the full LRTP Tranche 2.1 Portfolio.[81] Compared to the pre-portfolio case, the Project by itself increases potential load-serving capability in the area by 200-500 MW. As part of the larger LRTP Tranche 2.1 Portfolio, the Project contributes to increasing potential load-serving capability by 400-1,250 MW, depending on system conditions.

Table 17. Project Impact on Eastern North Dakota/Northwestern Minnesota Voltage Stability and Load Serving Capability

Incremental Study Area Load-Serving Capability based on Voltage Stability					
	LRTP SUM	**LRTP SHAW**	**MTEP24 SHAW**	**LRTP WNF**	**MTEP24 WNF**
Study Case	**∆Load (MW)**	**∆Load (MW)**	**∆Load (MW)**	**∆Load (MW)**	**∆Load (MW)**
Project By Itself	+300	+200	+350	+450	+500
Project with Full LRTP Portfolio	+850	+400	N/A	+1250	N/A

The results of this study demonstrate that the Project enhances load serving capability by improving voltage stability limits for transferring power into the eastern North Dakota/northwestern Minnesota area beyond current system capabilities, creating a more robust and resilient system. This benefit is present across a broad range of system conditions and future planning assumptions, and the benefit is increased when the Project is combined with the full LRTP Tranche 2.1 Portfolio.

3.4.3.2 Meeting Customer Needs in the Fargo-Moorhead Area

The Project enhances reliability and local load-serving capability in the Fargo-Moorhead area. By establishing a redundant EHV transmission source into the Fargo-Moorhead area, the Project reduces strain on existing infrastructure and enables power to be delivered from multiple directions to meet customer needs in the area. This redundant connection supports reliability for meeting growing customer needs in the Fargo-Moorhead area by improving system voltages during peak conditions, alleviating

[80] The analysis described here is limited to Eastern North Dakota and Northwestern Minnesota voltage stability limits under a single representative contingency on a major area tie line. Other constraints may exist that are more limiting for total load-serving capability.

[81] The impact of the full portfolio was only evaluated in the LRTP models, where it was readily available.

overloads on existing transmission facilities, and providing multiple pathways for delivering power to the area.

To quantify the Project's impact on local reliability and load-serving capability in the Fargo-Moorhead area, the Applicants used the MTEP24 2-year, 5-year, and 10-year power flow models to evaluate a representative 300 MW increase in area load. Post-contingent voltages improved significantly in the post-Project case compared to the pre-Project case, mitigating low voltage violations and enabling increased Fargo-Moorhead area load-serving capability following the most limiting contingencies on the backbone transmission network. This demonstrates that the Project supports at least 300 MW of additional load in the area beyond the capability of the system today. By increasing the capacity of the transmission system to accommodate future electricity needs, the Project positions the Fargo-Moorhead area grid for the increased electrical demand that accompanies electrification, new population and business growth, and the continued energy transition, thus creating a more robust and flexible system.

3.4.3.3 Resiliency, Flexibility, and Reliability

The Project establishes a redundant pathway for power transfers within and through eastern North Dakota and northern Minnesota, strengthening resiliency, flexibility, and reliability of the regional grid and the major transmission paths and sources in the area.

Recent transmission studies by the Applicants and MISO show that as the location and operational characteristics of the generation fleet change and demand for electricity increases, local transmission networks become more dependent on EHV[82] transmission paths and connections to the bulk regional transmission grid.[83] In the current system configuration, bulk power transfers in eastern North Dakota and northern Minnesota either flow on the three major 230 kV transmission paths in the area or flow indirectly through the single 345 kV transmission line connecting the Fargo area to the Twin Cities before connecting back to northern Minnesota through 230 kV, 345 kV, and 500 kV connections. By establishing a new 345 kV connection directly parallel to the three major existing 230 kV transmission paths, the Project will create a redundant path for bulk power flows between major load centers in eastern North Dakota and northern Minnesota. This additional high-capacity transmission path will unload the underlying 230 kV and 115 kV networks, improve the reliability of the major transmission sources in the area, add

[82] Extra high voltage ("EHV") transmission is typically defined as 345 kV and above.

[83] *In the Matter of Minnesota Power's 2021–2035 Integrated Resource Plan*, Docket No. E015/RP-21-33, APPLICATION at Appendix F, Part 8 (February 1, 2021); *In the Matter of the Application of Minnesota Power for Approval of 2025-2039 Integrated Resource Plan*, Docket No. E015/RP-25-127, APPLICATION at Appendix F, Part 7 (March 3, 2025).

redundancy for these critical sources to back each other up, and enhance the overall resiliency of the eastern North Dakota and northern Minnesota transmission system.

Expanding transmission paths for bulk power transfers in eastern North Dakota and northern Minnesota enhances efficiency, flexibility, and resiliency that is needed as utilization of the power grid continues to grow, much like constructing a new interstate highway would provide redundancy and relieve congestion on busy state and local highways. By providing a new high-capacity path for bi-directional power transfers in the area, the Project also enhances flexibility to meet rising electrical demand, such as the adoption of commercial and personal electric vehicles, conversion to electrical heating and cooling, and industrial process conversion from fossil fuels to electricity (*e.g.* electrifying iron ore mining trucks) – commonly referred to as "electrification" when considered in aggregate. MISO forecasts that electrification could increase energy consumption in Minnesota and the surrounding region (MISO LRZ 1) by approximately 2,600 gigawatt-hours ("GWh") to 40,000 GWh by 2039.[84] By adding transfer capability in northern Minnesota and eastern North Dakota, the Project supports the ability to serve increased electricity demand due to electrification and other drivers.

The configuration of the Project on robust steel monopole double-circuit structures will further enhance the resiliency of regional transfer paths and local power delivery sources in eastern North Dakota and northern Minnesota. As local and regional transfer paths are enhanced with both redundancy and additional transfer capability, the robust physical design of the Project helps to better withstand the effects of extreme weather. Constructing the Project on double-circuit structures with both sets of conductors strung and connected together to operate as a single transmission line will enable the future establishment of a second 345 kV circuit in the Maple River – Cuyuna transmission corridor, continuing to enhance transmission capacity, redundancy, and reliability as future needs develop.

3.4.4 Enable Cost-Effective Regional Transfers

The Project, together with the broader LRTP Tranche 2.1 Portfolio, is expected to deliver economic savings more than two times the cost of the portfolio (*see* Section 3.3.7.3). By itself, the Project is projected to provide approximately $169 million to $336 million in economic savings over the first twenty years of the Project's service by reducing system congestion and improving access to lower cost generation. These economic savings from congestion relief alone are estimated to offset a considerable amount of the estimated

[84] MISO, Futures Report at Figures 41, 43, and 45. Available at: https://cdn.misoenergy.org/Series1A_Futures_Report630735.pdf.

cost of the Project, with additional reliability and other benefits further enhancing the Project's value.

The Applicants calculated the economic benefits of the Project in a manner consistent with MISO's calculation of the full LRTP Tranche 2.1 Portfolio's congestion and fuel savings benefit.[85] Because the Project was designed and optimized to function as part of a portfolio, isolating the benefits of a single project results in an underestimation as it ignores the "synergistic" performance impacts. The Applicants calculated the economic benefits of the Project using production cost modeling software ("PROMOD") by comparing the annual system economic performance in two ways:

- Performance of the system with the full LRTP Tranche 2.1 Portfolio (post-portfolio), with and without the Project. This demonstrates the value of the Project as a part of the LRTP Tranche 2.1 Portfolio.

- Performance of the system without the LRTP Tranche 2.1 Portfolio (pre-portfolio), with and without the Project. This demonstrates the standalone value of the Project when added to the system without the rest of the LRTP Tranche 2.1 Portfolio.

In each case, the annual Adjusted Production Cost ("APC") was calculated for the forecast year. The difference between cases represents APC savings or "economic savings" provided by the Project. APC is a measure of the overall cost to serve electrical demand – it represents an impact to consumers considering generation fuel costs, maintenance, purchases and sales, system congestion, and other factors. APC is the industry standard and a MISO federal tariff-approved measure of economic benefits for a transmission project.

Reported APC benefits in this section reflect direct impacts from the Project, holding the generation fleet constant between the compared simulations. This is done to isolate the direct benefits of the transmission project alone. As shown in Table 18, the Project is estimated to provide upwards of $35-$40 million annually in economic benefits to the MISO footprint from congestion relief – or net present value of approximately $169-336 million over the first twenty years of service.

[85] Appendix F – MISO LRTP Tranche 2.1 Report at Chapter 7.

Table 18. Annual Direct Economic Transmission Benefits Provided by the Project to the MISO Footprint for 2042 Future 2A

Pre & Post MRC Case Common Assumption	APC Benefit from adding the Project
Pre-Portfolio Comparison	$40.1 M
Post-Portfolio Comparison	$35.5 M

In addition to reducing system congestion and providing access to lower cost generating resources, the Project and the broader LRTP Tranche 2.1 Portfolio supports the interconnection of generating resources that otherwise would not be able to cost-effectively interconnect to the grid. MISO estimates that the LRTP Tranche 2.1 Portfolio supports approximately 115.7 GW of new generation resources of various types.[86] Since additional generation adds optionality to use lower cost generation to serve load, there are also APC savings associated with the enabled generation. To provide a conservative bookend, the preceding analysis does not consider the economic impact of any new generation that would be enabled by the Project. However, the Project will support a more adaptable and reliable system and enable a generation portfolio with a lower overall production cost generation portfolio, delivering additional quantifiable benefits beyond those presented in this section. Many of these additional benefits, including enabled low-cost generation, were evaluated by MISO for the LRTP Tranche 2.1 Portfolio, as discussed in the MISO LRTP Tranche 2.1 Report[87] and the MISO LRTP Tranche 2.1 Business Case Metrics whitepaper.[88]

3.4.5 Local Economic Impacts

In addition to improving the reliability, capacity, and efficiency of the local and regional transmission system, the Project is expected to generate meaningful economic benefits for local communities. Although the Project is not anticipated to create additional permanent jobs, construction and construction related activities will provide a substantial infusion of economic activity within communities along the Project corridor. The University of Minnesota Duluth's Bureau of Business and Economic Research ("BBER"), with peer review conducted by North Dakota State University, was engaged to provide an independent economic impact analysis of the construction phase of the Project ("Local

[86] *See* Section 3.4.

[87] *See* Appendix F – MISO LRTP Tranche 2.1 Report.

[88] LRTP Tranche 2.1 Business Case Metrics. October 1, 2024. Available at: https://cdn.misoenergy.org/LRTP%20Tranche%202%20Business%20Case%20Metrics%20Methodology%20Whitepaper633738.pdf.

Economic Impact Study"). The analysis evaluates impacts in Minnesota and North Dakota combined, each state individually, and the seven-county region where construction will occur. Construction is scheduled from 2025 through 2033, with the most intensive activity occurring between 2028 and 2032, and the transmission line expected to be placed into service in 2033. A copy of the Local Economic Impact Study is provided in Appendix G.

Approximately $550 million in Project spending[89] is expected to occur within Minnesota and North Dakota. Over the nine-year construction period, the Project is projected to generate more than $1.0 billion in total economic output across the two-state region, contribute $541.5 million in value added, and produce $328.7 million in employee wages and benefits. The Project is expected to support an average of 272 jobs per year, with employment peaking at more than 500 jobs during peak construction in 2028. An employment multiplier of 2.64 indicates that for every direct construction job supported, an additional 1.64 jobs are generated elsewhere in the regional economy through supplier activity and household spending.

Minnesota will generate $952.3 million in total economic output, $514.4 million in value added, $312.9 million in labor income, and an average of 257 jobs per year. North Dakota is projected to experience $52.8 million in total economic output – approximately five percent of total output – and support an average of 15 jobs annually. The seven-county construction corridor is expected to generate $609.3 million in total output and support an average of 154 jobs per year. Construction-related activity is also projected to generate approximately $131.8 million in tax revenues at the local, state, and federal levels. Overall, the Project represents a significant economic stimulus concentrated during peak construction years and within communities along the Project corridor, reinforcing its importance as a short- to mid-term driver of regional economic activity.

3.5 Project Area Load Data

Minnesota Power's most recent peak demand and annual forecast may be found in Minnesota Power's 2025 Annual Electric Utility Forecast Report filed on August 1, 2025[90] which is provided in Appendix H.

[89] Because the Applicants' cost estimate was not finalized at the time of the Local Economic Impact Study, estimated Project costs and spending are based on the original MISO-approved cost estimate of $908 million for the Project. Spending associated with the Project will scale with the final Project cost, and so will the corresponding local economic impacts.

[90] Commission Docket No. E999/PR-25-11.

Otter Tail Power Company's most recent peak demand and annual forecast may be found in Otter Tail's 2025 Annual Electric Utility Forecast Report filed on July 1, 2025[91] which is provided in Appendix H.

Great River Energy's most recent peak demand and annual forecast may be found in Great River Energy's 2025 Annual Electric Utility Forecast Report filed on July 1, 2025[92] which is provided in Appendix H.

The Applicants' recent filings detailing energy conservation and optimization are provided in Appendix I. In addition to supporting power transfer and electrical demand in the Applicants' service territories, the Project is needed to support the broader MISO region. MISO's base demand forecast is developed by aggregating each MISO member's forecasts. To consider a broader range of potential outcomes to "bookend" uncertainty, MISO creates multiple demand and energy forecasts from the base forecast in the Futures (*see* Section 3.3 for details on the MISO's Futures). The load forecasts used in MISO's Futures consider different adoption rates for demand response, energy efficiency, and distributed generation (*e.g.*, behind-the-meter solar) and differing impacts of electrification. MISO's demand and energy forecasts are developed for each of MISO's ten Local Resource Zones to consider regional differences. MISO's ten Local Resource Zone forecasts are then aggregated to a MISO-wide forecast.

The MISO Series 1A Futures' gross peak demand and annual energy forecast for the MISO Market Footprint are provided in Figure 22 and Figure 23, respectively. The associated gross peak demand and gross annual energy compound annual growth rates ("CAGR") are provided in Table 19. Additional details on MISO's Series 1A Futures and load forecast can be found the MISO Series 1A Futures Report (a copy of this report is provided in Appendix F). MISO's evaluation and justification of the LRTP Tranche 2.1 Portfolio was based primarily on Future 2A assumptions, with a sensitivity analysis to test the business case against Future 1A.

Table 19. Series 1A Futures 20-Year CAGR

Series 1A Future	Gross Demand 20-Year CAGR	Gross Energy 20-Year CAGR
Future 1A	0.77%	0.63%
Future 2A	1.14%	1.25%
Future 3A	1.63%	1.95%

[91] *Id.*

[92] *Id.*

Figure 22. MISO Market Footprint Series 1A Futures Coincident Peak Load Forecast (GW)[93]



Figure 23. MISO Market Footprint Series 1A Futures Annual Energy Forecast (TWh)[94]



[93] MISO, *MISO Futures Report, Series 1A* (November 1, 2023). Figure 25. Available at: https://cdn.misoenergy.org/Series1A_Futures_Report630735.pdf.

[94] *Id.* at *Figure 26*.

3.6 Estimated System Losses

Transmission system losses are a measure of the energy flow across the system that is converted into heat due to impedance within the elements of the transmission system. It is necessary for utilities to provide enough generation to serve their respective system demands (plus reserves), taking into account the loss of energy before it can be usefully consumed.

When system losses are reduced or minimized, electrical energy is delivered to end users more efficiently, optimizing the existing generation assets as well as helping to defer the need to add more generation resources to a utility's portfolio. Therefore, system loss reduction results in monetary savings in the form of less fuel required to meet the system demand plus potentially delayed capital investment in generation plant construction.

Each new transmission line that is added to the electric system affects the losses of the system. In determining the losses associated with a particular transmission project, it is not reasonable to consider only the project's transmission facilities and calculate losses directly from operation of those new transmission facilities. Rather, it is necessary to look at the total losses of the system with and without the proposed project included. The losses were therefore studied using the larger MISO North area as the basis for the system loss evaluation. In its Exemption Order, the Commission authorized the Applicants to provide line loss data for the system as a whole, rather than line loss data specific to an individual transmission line.[95]

The Applicants used power flow software Power System Simulator for Engineering ("PSS/E") to calculate the losses at peak demand based on a 20-year Winter Peak MISO LRTP Tranche 2.1 case. The results are shown below in Table 20. The Existing Transmission System includes all projects with in-service dates prior to 2033.

Table 20. Loss Analysis

Scenario	System Losses (MW)
Existing Transmission System	3900.3
System with Project	3697.6
Difference	-202.7

The table shows that the Project's proposed transmission infrastructure reduces the losses on the electrical system. Under winter peak demand conditions, the losses incurred on the transmission system in Minnesota and neighboring states are 202.7 MW less when the Project is energized as compared to the existing system configuration. This finding demonstrates that the Project, as part of a regional transmission superhighway, provides a more efficient path for regional power flows that otherwise would have to flow

[95] *In the Matter of the Application for the Maple River – Cuyuna 345 kV Transmission Line Project*, Docket No. E015,ET2,E017/CN-25-109, EXEMPTION REQUEST (Aug. 27, 2025).

on the lower voltage transmission system, which is less efficient and therefore produces higher losses.

The demand for electric power is not constant and losses are related to the square of the current flowing through the transmission lines in the electric system, therefore, the losses will change over time, increasing as demand increases and decreasing as demand decreases. Because losses change over time, there is no precise method to calculate average annual loss reductions. One common method is to use the loss savings at peak demand to estimate the average annual loss savings based on the following formula:

$$Loss\ Factor = (0.3\ x\ Load\ Factor) + (0.7\ x\ Load\ Factor^2)$$

$$Annual\ Loss\ Savings\ (MWh) = (Loss\ Factor\ x\ Peak\ Loss\ Savings)\ x\ 8760\ hours/year$$

Assuming a load factor of 55 percent and using the calculated loss savings at peak demand, the Project will reduce average transmission losses by an estimated 668,977 megawatt-hours ("MWh") annually.

3.7 Consequence of Delay

If the Project is delayed, there will be both regional and local reliability consequences. The MISO LRTP Tranche 2.1 Portfolio assumes the Project will be in service in 2033. Delay of the Project would impact the performance of the broader portfolio, which was optimized to work together to deliver benefits across the Midwest. The loss in performance would increase the risk of reliability events, delay and potentially diminish the economic benefits of the Tranche 2.1 Portfolio, including approximately $1.37 billion to $2.24 billion in value from reduced congestion and fuel savings for North Dakota, Minnesota and the surrounding area for the length of the delay,[96] and could jeopardize Minnesota and other MISO states in meeting clean energy policy objectives. Additionally, as discussed in the MISO LRTP Tranche 2.1 Report and preceding sections of the Application, the Tranche 2.1 projects deliver significant economic benefits to local economies by supporting future electricity needs, investing in local economies, and creating local jobs, all of which benefits would also be delayed or diminished if the Project is delayed.

3.8 Effect of Promotional Practices

The Applicants have not conducted any promotional activities or events that have triggered the need for the Project. Rather, the Project is driven by regional reliability needs, economic transmission operations, and meeting public policy objectives.

3.9 Effect of Inducing Future Development

The Project is not intended to induce future development, but it may support future economic development that otherwise would not be possible if the Project and the MISO

[96] *See* Appendix F – MISO LRTP Tranche 2.1 Report at Table 2.31 for CAZ 1 (20 Year PV).

LRTP Tranche 2.1 Portfolio were not constructed. These efforts are discussed in Section 4.10.

3.10 Socially Beneficial Uses of Facility Output

The Project supports public policy goals such as Minnesota's carbon-free by 2040 standard and its interim targets. The addition of the broader MISO LRTP Tranche 2.1 Portfolio (including the Project) is projected to result in a reduction in CO_2 emissions by supporting the more efficient dispatch of lower-cost, non-emitting resources. MISO estimates that the broader MISO LRTP Tranche 2.1 Portfolio will reduce CO_2 emissions by 127-199 million metric tons over 20-40 years of the portfolio's service.[97] Furthermore, by expanding the high voltage regional transmission network, additional avenues are created for power to travel to load centers from areas of high generation. This results in a reduction of congestion and power loss, creating a more efficient power grid, and increased access to low cost generation.

[97] *Id.* at 142.

4.1 Analysis of Alternatives

In any Certificate of Need proceeding, the Commission is required to evaluate "possible alternatives for satisfying the energy demand or transmission needs including but not limited to potential for increased efficiency and upgrading of existing energy generation and transmission facilities, load-management programs, and distributed generation."[98] The Commission requires that an applicant must discuss a number of alternatives. Minn. R. 7849.0260 states that each application for a proposed large high-voltage transmission line ("LHVTL") must include:

> B. a discussion of the availability of alternatives to the facility, including but not limited to:
>
> (1) new generation of various technologies, sizes, and fuel types;
>
> (2) upgrading of existing transmission lines or existing generating facilities;
>
> (3) transmission lines with different design voltages or with different numbers, sizes, and types of conductors;
>
> (4) transmission lines with different terminals or substations;[99]
>
> (5) double-circuiting of existing transmission lines;
>
> (6) if the proposed facility is for DC (AC) transmission, an AC (DC) transmission line;
>
> (7) if the proposed facility is for overhead (underground) transmission, an underground (overhead) transmission line; and
>
> (8) any reasonable combinations of the alternatives listed in subitems (1) to (7).

Minn. R. 7849.0340 also requires an applicant to consider the option of not building the proposed facility.[100]

This Chapter examines the different alternatives that the Applicants evaluated. These include: 1) generation, demand-side management, and non-wires alternatives; 2) various transmission alternatives, including system upgrades, different configurations, and

[98] Minn. Stat. § 216B.243, subd. 3(6).

[99] Minn. Stat. § 216B.243, subd. 3(6) provides that the Commission "must not require evaluation of alternative end points for a high-voltage transmission line qualifying as a large energy facility unless the alternative end points are (i) consistent with end points identified in a federally registered planning authority transmission plan, or (ii) otherwise agreed to for further evaluation by the applicant." The Applicants have not agreed to any alternative endpoints and no alternative end points were identified by MISO.

[100] *Id.*

voltage levels; and 3) the possibility of not building the project at all (*e.g.*, no-build). As outlined in Sections 4.2 through 4.10 below, none of the alternatives considered by the Applicants present a more reasonable or prudent solution than the proposed Project.

4.2 Generation and Non-Wires Alternatives

The Applicants considered various generation and non-wires solutions, including new peaking generation, distributed generation, renewable generation, battery energy storage, demand-side management, and reactive resources, such as capacitor banks, reactors, or STATCOMs that contribute or absorb reactive power from the grid, as alternatives to the Project. To be considered a viable alternative to the Project, a generation or non-wires alternative (or combination of alternatives) must address the combination of needs addressed by the Project, including MISO LRTP Tranche 2.1 Portfolio needs discussed in Section 3.3 and project-specific needs and benefits discussed in Section 3.4. As part of the LRTP Tranche 2.1 Portfolio, the Project relieves thermal and voltage constraints, reduces transmission congestion on some of the most-constrained flowgates in the region, and increases the deliverability of generation resources in North Dakota and Minnesota toward load centers in Northern Minnesota, the Twin Cities, and beyond. Further, as discussed in Section 3.4, the Project increases capacity and improves flexibility for regional transfers between Minnesota and North Dakota. While the various generation and non-wires solutions may individually address some of these Project needs, no generation or non-wires solution exists that can provide the full suite of benefits provided by the Project as part of the LRTP Tranche 2.1 portfolio. For example, a well-placed and appropriately-sized battery energy storage system may relieve some thermal and voltage constraints and improve transmission congestion on a short-term basis, but its effectiveness will be limited by its duration limitations, and it is not a technically viable solution for increasing the capacity of regional transfer interfaces or enabling the delivery of other types of generation. Therefore, there is no alternative generation or non-wires solution that can provide the holistic benefits provided by the Project.

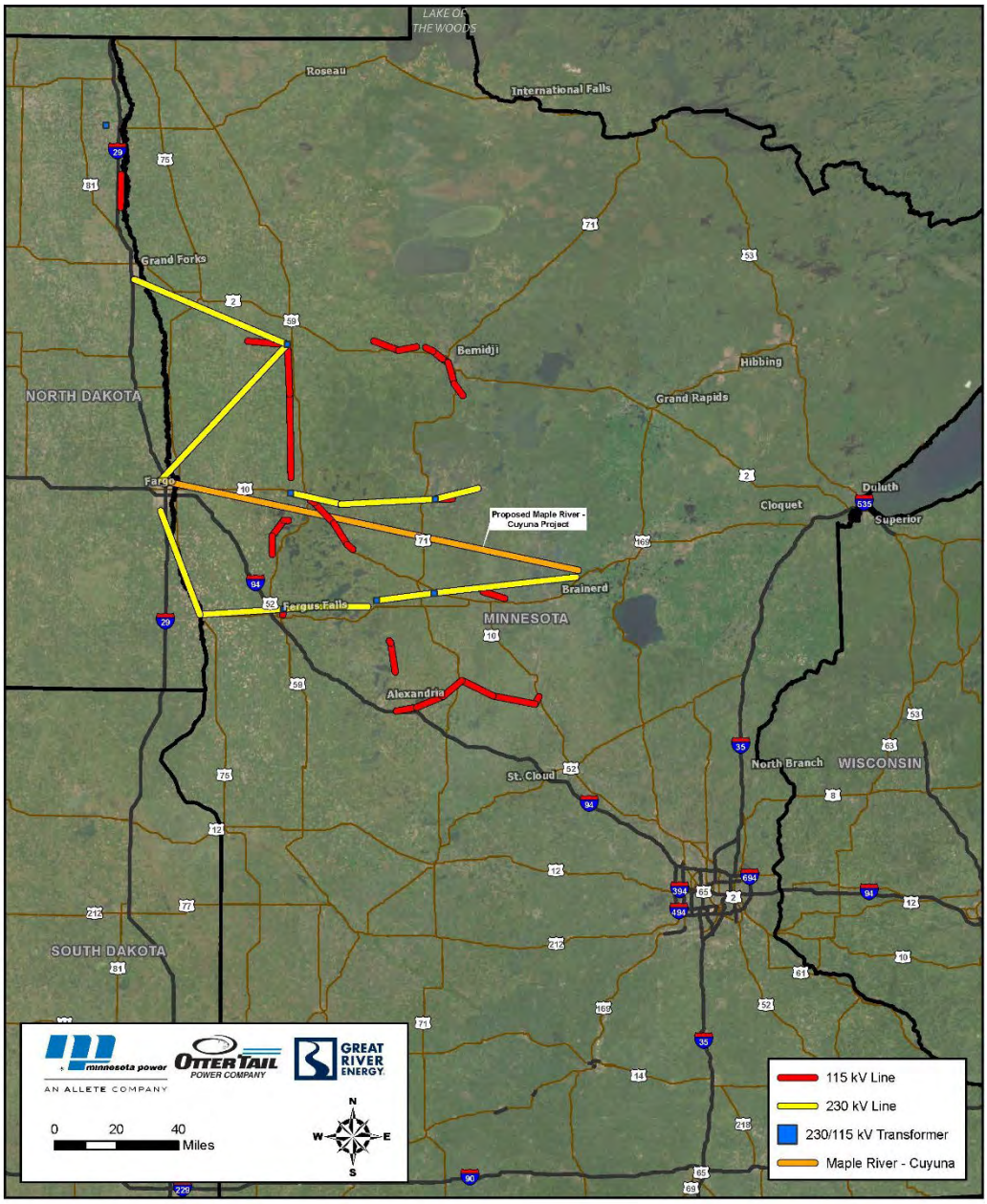
4.3 Upgrade of Existing Facilities

The Applicants considered upgrading existing transmission facilities as an alternative to the Project. To be a viable alternative to the Project, an alternative based on upgrade of existing facilities must address the combination of needs addressed by the Project, including relieving thermal and voltage constraints, reducing transmission congestion on key regional flowgates, and increasing the deliverability of regional generation resources as identified in the MISO LRTP Tranche 2.1 Report and discussion in Section 3.3. Further, as discussed in Section 3.4, any viable alternative to the Project would also need to provide benefits equivalent to the Project by increasing capacity and improving flexibility for regional transfers and load-serving in eastern North Dakota and northern Minnesota. To address just two aspects of the need for the Project, thermal constraints and congested flowgates, an alternative based on upgrade of existing facilities would have to include upgrading or rebuilding nearly 50 existing transmission facilities, which are summarized by voltage class in Table 21 and shown in Figure 24.

Table 21. Existing Transmission Facilities Included in the Upgrade Alternative

Existing Transmission Facility	Line Mileage	Impacted Facilities	Unique Substations	Estimated Upgrade Cost (2024$) (millions)
230 kV Transmission Lines	327.1	11	15	$818.3
230/115 kV Transformers	0	7	8	$94.5
115 kV Transmission Lines	244.4	29	44	$531.5
TOTALS:	**571.5**	**47**	**68**	**$1,444.3**

Figure 24. Existing Transmission Facilities Included in the Upgrade Alternative



Each of the existing transmission facilities summarized in Table 21 was identified in either the MISO LRTP Tranche 2.1 analysis as being a thermal constraint or a congested flowgate that is relieved by the Project[101] or in the Applicants' analysis of transmission constraints relieved by the Project.[102] All of these existing transmission lines would have to be upgraded to achieve part of the Project benefits. The 40 existing 115 kV and 230 kV transmission line facilities identified in Table 22 total 571.5 miles of transmission line upgrade, in addition to 230/115 kV transformers in seven different locations, which together would be estimated to cost at least $1,444.3 million using the MISO MTEP24 Exploratory Cost Estimation Guide. This is higher than the Applicants' high-end estimated cost of the Project.

Even with those existing facilities upgraded or rebuilt at a higher cost than the Project, the existing system upgrade alternative would not address other needs of the Project, including the increased and more flexible regional transfer capability that is only obtainable by constructing the Project as part of the MISO LRTP Tranche 2.1 regional transmission superhighway. There are also major constructability challenges. Implementing this alternative would require long-duration outages on 47 impacted transmission facilities, as well as shorter outages at 68 different substations to install the necessary substation terminal equipment upgrades, complicating project execution and potentially impacting system reliability during construction. Finally, this alternative lacks flexibility for future needs. It is designed only to meet current reliability challenges and does not allow for future system growth or additional changes tied to the ongoing energy transition. As demand increases or system conditions evolve, further upgrades would be needed. For all these reasons, upgrading existing facilities alone is not considered a more reasonable or prudent alternative to the Project.

4.4 Alternative Voltages

The Applicants considered both lower and higher voltage alternatives to the Project. In considering either of these alternatives, it is necessary to recognize that the MISO LRTP Tranche 2.1 Portfolio builds upon and extends the LRTP Tranche 1 portfolio and the existing regional EHV (*e.g.* 345+ kV) transmission backbone. In particular, the North Dakota and Northern Minnesota group of LRTP Tranche 2.1 Projects described in Section 3.3.7 is intended to build upon and facilitate further connectivity of the regional 345 kV network, including a lower impedance path connecting:

- the Cuyuna Substation, via the Northland Reliability Project, with its tie between northern Minnesota, central Minnesota and the Twin Cities area; and
- the Maple River Substation, with its ties to the 345 kV system in North Dakota and the 230 kV system in eastern North Dakota and northwestern Minnesota.

A common thread connecting these areas is the presence of 345 kV transmission as the regional backbone network voltage. A key consideration, therefore, is whether a lower or

[101] *See* Section 3.3.8.

[102] *See* Section 3.4.

higher voltage alternative can meet the needs of the Project by connecting these areas more efficiently or cost-effectively compared to the Project, which is proposed to connect at 345 kV.

4.4.1 Lower Voltage Alternatives

The Applicants considered lower voltage solutions involving additions to the local transmission system as an alternative to the Project. As defined by MISO, the Project establishes a new low-impedance, high capacity (3,000 amp) 345 kV connection between the Project endpoints. For a lower-voltage alternative to be viable, it would need to provide a similar electrical impedance as the Project. To achieve the required impedance and be able to accommodate the necessary power transfer levels, the Applicants' analysis indicates multiple 230 kV or 115 kV corridors would need to be developed.

Table 22 compares the impedance of the proposed configuration of the Project to the number of 230 kV or 115 kV lines of similar length that would be required to achieve an equivalent impedance.[103]

Table 22. Impedance Comparison of the Project and Lower Voltage Solutions

Nominal Voltage of Solution	Single-Circuit Impedance (per unit, 100 MVA base)	Required Number of Circuits
345 kV Project	0.040102 pu	1
230 kV Alternative – Typical	0.244522 pu	7
230 kV Alternative – High Capacity	0.168300 pu	5
115 kV Alternative	0.907475 pu	23

To determine the number of circuits required for each alternative voltage, the single-circuit impedance is divided by the targeted 345 kV Project impedance. A 230 kV alternative would require at least five individual circuits using an atypical high-capacity design, while a 115 kV alternative would require at least 23 individual circuits to match the impedance of the Project. This simple calculation demonstrates why 230 kV and 115 kV are not generally proposed as solutions for the distance associated with the Project.

Table 23 compares the rated capacity of the proposed configuration of the Project , which is specifically defined by MISO in the LRTP Tranche 2.1 final portfolio models, and the number of 230 kV or 115 kV lines that would be necessary to provide equivalent capacity.

[103] As discussed in Section 2.2.2, the Project is proposed to be constructed as a double circuit line but initially operated as a single transmission line by jumpering the conductors of the two circuits together. The impedance of this configuration, which is lower than a typical 345 kV transmission line, has been used for the comparison presented in the table.

Table 23. Capacity Comparison of the Project and Lower Voltage Solutions

Nominal Voltage of Solution	Single-Circuit Capacity (MVA)	Required Number of Circuits
345 kV Project	1792	1
230 kV Alternative – Typical	470	4
230 kV Alternative – High-Capacity	893	3
115 kV Alternative	211	9

To determine the number of circuits required for each alternative voltage, the targeted Project capacity required by the MISO project definition is divided by the single-circuit capacity of each alternative. In this comparison, a 230 kV alternative would require at least three individual circuits using an atypical high-capacity design, while a 115 kV alternative would require at least nine individual circuits to deliver the required capacity for the Project. This simple calculation demonstrates why 230 kV and 115 kV are not generally proposed as solutions for the power transfer levels associated with the Project.

These comparisons assume typical 230 kV and 115 kV designs; while variations in design characteristics, such as conductor type, could subtly affect the results, they would not meaningfully affect the overall conclusion of this evaluation. The increases in the total number of new transmission rights-of-way for the 230 kV and 115 kV alternatives would have considerable human and environmental impacts, in addition to higher costs. Based on this analysis, lower voltages are not a more reasonable or prudent alternative to the Project.

4.4.2 Higher Voltage Alternatives

The Applicants considered higher voltage solutions involving new 765 kV and 500 kV transmission as an alternative to the Project. The Applicants considered a 765 kV alternative; however, there is currently no 765 kV transmission in northern Minnesota or eastern North Dakota, and the closest LRTP Tranche 2.1 proposed 765 kV projects connect at the Big Stone South Substation in eastern South Dakota. The Applicants also considered a 500 kV alternative. Minnesota Power, Xcel Energy, and Great River Energy operate a network of 500 kV transmission lines connecting Minnesota to Manitoba, with interconnections in Minnesota at the Iron Range, Forbes, and Chisago County substations.

For either higher voltage alternative, 500 kV or 765 kV, extensive transformation would be required to step down the voltage for interconnection with the existing 345 kV systems at the Cuyuna and Maple River Substations. These additional transformers would significantly increase project costs, extend material lead times, and require substantially more expansion area at the Project endpoint substations. In contrast, the proposed Project does not require additional transformers because it connects directly to existing 345 kV infrastructure at both of the Project endpoints. Considering the higher construction costs, greater right-of-way needs, and added operational complexity, the increased capacity offered by a 500 kV or 765 kV line does not justify the trade-offs compared to the proposed Project. The Applicants have assessed the current and future needs of the

region and concluded that construction of the Project as a double-circuit 345 kV line operated initially as a single transmission line meets the identified needs, integrates most efficiently with the existing transmission network, and provides the greatest degree of capacity, expandability, and long-term flexibility. Based on this analysis, higher voltages such as 765 kV and 500 kV are not a more reasonable or prudent alternative than the Project.

4.5 Alternative Endpoints

Minn. Stat. § 216B.243, subd. 3(6)(i) states the Commission must not require evaluation of alternative end points for a high-voltage transmission line qualifying as a large energy facility unless the alternative end points are consistent with end points identified in a federally registered planning authority transmission plan. Because the MISO LRTP Tranche 2.1 Project No. 20 dictates endpoints at the existing Cuyuna and Maple River substations, the Applicants did not assess alternative endpoints. An exemption from this requirement was approved by the Commission on October 21, 2025.[104]

4.6 Double-Circuiting and Other Engineering Considerations

Double circuiting is the construction of two separate transmission circuits (three phases per circuit) on the same structure. Placing two transmission circuits on common structures generally reduces right-of-way requirements, which potentially reduces human and environmental impacts. As described in Section 2.2.2, the Project was studied and approved by MISO as a single circuit 345 kV transmission line, but heavy utilization of the new 345 kV line observed in the LRTP study models led MISO to also require that the Project be constructed on double-circuit capable structures and be designed to meet a higher-than-typical SIL rating when operating as a single 345 kV transmission line. In coordination with MISO, the Applicants determined the best way to meet the MISO project definition, including the project-specific high SIL technical requirement, was to string the second circuit conductors on the double-circuit capable structures but operate the transmission line initially as a single 345 kV transmission line. As a result, the Project will be constructed as a double-circuit 345 kV transmission line with all six phase conductors installed at the time of initial construction and utilized in the operation of the Project to meet the MISO technical requirements. Therefore, double circuiting with other existing transmission lines is not a feasible alternative for the Project.

4.7 Alternative Number, Size, and Type of Conductor

Project conductors are subject to change and may be refined based on a conductor optimization study to be completed during detailed design of the Project. At this time, the Applicants anticipate using a T2-ACSR conductor type. The 345 kV transmission line conductor must be capable of carrying 3,000 amps per the MISO project definition. The size of the conductor will be selected to meet or exceed the emergency capacity needed

[104] *In the Matter of the Application for the Maple River – Cuyuna 345 kV Transmission Line Project*, Docket No. E015,ET2,E017/CN-25-109, ORDER APPROVING NOTICE PLAN PETITION AND EXEMPTION REQUEST (Oct. 21, 2025).

for the Project during detailed design studies. Conductors are generally bundled together to optimize corona performance and cost effectiveness, particularly at extra high-voltages of 345 kV and above. A conductor optimization study may consider single (non-bundled) conductors, but the Applicants expect those conductor configurations will not meet performance criteria for audible noise, electric fields, and radio frequency interference, in addition to resulting in higher losses. Based on recent project experiences, the optimal conductor configuration for the Project is most likely to be a two-conductor bundle, as described above. A conductor optimization study may also consider three-conductor bundles, but the Applicants do not expect to see significant technical or economic benefits from additional sub-conductors at 345 kV, particularly in view of the added cost and structural loading requirements from a three-conductor bundle. A conductor optimization study may also consider various sizes of conductor. Utilizing larger conductor can reduce transmission losses; however, the long-term savings must exceed the initial cost increase to be considered as a viable alternative. Beyond the wire cost alone, larger wires translate to increased structural loading which results in higher structure costs. A conductor optimization study would be specifically designed to identify the optimal conductor configuration or configurations for the Project based on technical and economic analysis of selecting different conductor sizes and configurations in view of mechanical and electrical performance criteria, long-term losses, and initial capital costs.

4.8 Direct-Current Alternative

High-voltage direct current (“HVDC”) lines are typically used to transmit large amounts of electricity over long distances, as they experience lower line losses compared to AC lines over such spans. However, HVDC systems require converter stations at each endpoint to convert DC power back into AC for use by customers. A single converter station can cost over $400 million, for a total of $800 million for converter stations at both ends of the line, not including the cost of building the HVDC transmission line itself. The inclusion of HVDC converter stations would significantly increase the overall project cost. HVDC lines are typically proposed for large regional transmission projects that involve hundreds of miles of new transmission line. As a rule of thumb, HVDC becomes a cost-effective alternative to AC transmission when the total line length is greater than 350-400 miles. The total length of the Project is much shorter than this threshold – 165-180 miles in total, depending on the final proposed route. In addition, the Project is designed to enhance regional transmission system reliability and support the underlying AC transmission system by connecting both existing 345 kV substations (Cuyuna and Maple River) and enabling future interconnections to the underlying system. If the Project were constructed as an HVDC line, each of these connections would require its own HVDC converter station, and any future interconnections to the Project would require additional HVDC converter stations. For all of these reasons, there is no justification – in terms of reliability, economy, performance, or otherwise – for an HVDC line in this case.

4.9 Underground Alternative

Undergrounding is an alternative that is seldom used for high-voltage transmission lines like those being proposed for the Project. One of the primary reasons underground high-voltage transmission lines are seldom used outside congested city areas is that they are

significantly more expensive than overhead lines. The cost range depends on the design voltage, the type of underground cable required, the extent of underground obstructions like rock formations, the thermal capability of the soil, the number of river crossings, and other factors, but the construction cost of building the entire length of the Project's proposed transmission underground is estimated to be as much as 5 to 16 times greater per mile than if it were to be constructed overhead as proposed. This cost does not include the large reactors that would likely be required at each substation to counteract the large line charging currents present on underground high-voltage lines. In addition, there are increased line losses and additional maintenance expenses incurred throughout the useful life of an underground high-voltage line which further increase the total additional cost of building an underground line instead of an overhead line.

Beyond initial costs, another important consideration of undergrounding lines is consistency with existing lines and standards. None of the Applicants who will be responsible for maintaining the Project have any buried lines at voltages of 115 kV and above. The addition of underground transmission is outside the Applicants' current standards and would require new installation and maintenance training, tooling, equipment, and new inventory to be carried for maintenance and critical spares resulting in increased costs and/or a reduction in inventory levels of other items, which then results in diminished maintenance and emergency restoration responsiveness and effectiveness.

A common argument in favor of implementing underground lines is that they will minimize the human and environmental impacts above ground. However, there are human and environmental impacts both during and after construction of an underground transmission line. During both underground and overhead transmission line construction, the right-of-way must be cleared of vegetation. For overhead transmission, excavation work is concentrated to line structure foundations; however, for underground transmission excavation work is along the entirety of the line. This results in increased impact especially in sensitive environmental areas. In addition, large areas for access roads capable of supporting heavy construction equipment, trenching activities, and cable installation are needed for underground transmission. After construction, the right-of-way needs to be maintained free of all woody vegetation to reduce soil moisture loss, since high-voltage underground conductors make use of soil moisture for conductor cooling. A permanent road must also be maintained along the right-of-way for maintenance and repair.

Underground lines can also be more challenging to operate and maintain. While overhead lines are typically subject to more frequent outages than underground cables, service can usually be quickly restored. This is accomplished by automatic reclosing of circuit breakers, which results in only a momentary outage of the line. Since circuit breakers on underground lines are typically not reclosed until it can be verified that a fault has not occurred on the underground cable, the smaller number of outages is typically offset by their increased duration. A faulted underground line takes much longer to assess and restore because of the difficulty in locating the fault and accessing the site to make repairs. If the fault is due to a failure in the cable, the segment of failed cable must typically be replaced. This usually involves completely replacing the failed cable between two man-hole splice points, which are ordinarily located every 1,500 to 2,000 feet along the line.

To replace failed cable, it must be possible to bring heavy equipment, including cable reels weighing 30,000 to 40,000 pounds, into the right-of-way during all seasons of the year. If the fault occurs in a wetland area where all-season roads are not maintained, restoration can be delayed due to the need to install wetland matting to gain access to the manholes involved in replacing the failed cable.

Due to the construction, maintenance, reliability, and cost drawbacks of high-voltage underground transmission lines, undergrounding is not a more reasonable and prudent alternative for any segment of the Project.

4.10 No Build Alternative and Consequences of Delay

In accordance with Minn. R. 7849.0340, the Applicants also evaluated the "no-build" alternative (*i.e.*, not constructing new transmission) to address the identified reliability needs. As outlined in Section 4.2, alternatives such as demand-side management, conservation programs, peaking generation, distributed or renewable generation, energy storage, reactive power additions, and upgrades to the existing system were all found to be unreasonable or insufficient to meet the Project's objectives. If the Project is delayed or not built, it would result in local and regional reliability issues, as well as negative policy and economic impacts.

The Project and the broader MISO LRTP Tranche 2.1 Portfolio are needed to maintain regional reliability as utilities in Minnesota and surrounding states integrate a new mix of generation resources – spanning multiple technologies and geographic areas – while modifying the way they use existing fossil-fuel plants and meeting increasing demand for reliable and dependable electricity. These additions and modifications in the 2020s and early 2030s are a key component of Minnesota utilities' IRPs. These IRPs include significant renewable additions and the retirement and/or conversion of legacy fossil-fuel generation. As discussed in Section 3.3.7, the LRTP Tranche 2.1 Portfolio, of which the Project is a part, alleviates transmission congestion and enables interconnection of 116,000 GW of new generation resources. This enables lower-cost generation to be delivered to customers while reducing CO_2 emissions by 127 to 199 million metric tons over 20 to 40 years. The Project also addresses reliability and economic issues as part of the LRTP Tranche 2.1 Portfolio, as further discussed in Section 3.3.7 and Section 3.3.8. If the Project is delayed or not built, these reliability issues will still need to be addressed, likely through solutions that are less efficient and less regionally beneficial. Finally, because the Project was evaluated and optimized by MISO as part of a broader regional transmission portfolio, the reliability impacts of a delay would extend beyond Minnesota and affect the wider region.

5 RIGHT-OF-WAY ACQUISITION, CONSTRUCTION, RESTORATION, AND OPERATION AND MAINTENANCE

5.1 Right-of-Way Requirements and Acquisition

5.1.1 Transmission Line Right-of-Way Width and Acquisition

As described in Section 2, the Project will require a right-of-way of up to 150 feet wide for construction, operation, and maintenance of the new transmission line.[105] The final right-of-way width will vary depending on factors such as proximity to or overlap with existing high-voltage transmission lines and public road rights-of-way, transmission line structure types, transmission line structure locations relative to existing or future improvements, etc. Modifications to the right-of-way width acquired and/or used will be made on a case-by-case basis. The Applicants' representatives will work directly with individual landowners to acquire the necessary easements and other land rights for the construction, operation, and maintenance of the Project once the final route and alignment are determined (*see* Section 2.2).

Preliminary right-of-way discussions with landowners may begin as early as early 2028.[106] In locations where new easements or amendments to existing easements are needed or otherwise beneficial, the Applicants will work with landowners to negotiate the terms of a mutually acceptable agreement. In locations where new rights are not necessary, the Applicants will work with existing landowners to address the Applicants' survey, construction and access plans, potential impacts on the land, and the restoration plan. The land evaluation and acquisition process will include a title search, contact with the landowner, survey, real estate document preparation, discussion, negotiation, and completion of agreements, including options, permanent easements, temporary easements, and/or other agreements necessary to support the initial survey needs of the project and construction, operation and maintenance of the Project.

As part of the land rights acquisition process, the Applicants' right-of-way agents will discuss the construction schedule and construction requirements with the owner of each parcel. Special considerations may be discussed, such as temporary or permanent gates, fencing, and access accommodations. The Applicants' experience with easement discussions is that, in most cases, they are able to work with landowners to address their concerns to reach an agreement for the purchase of the easement.

In all cases, the Applicants will use fair market value data to try in good faith to reach agreements with landowners on a voluntary basis. In some cases, agreements cannot be reached. In those cases, the Applicants may be required to obtain the necessary rights for the Project by exercising their right of eminent domain under Minnesota law. The process of exercising the right of eminent domain is called condemnation. Minnesota law

[105] Some areas may require a wider right-of-way based on final routing and design.

[106] The Applicants may obtain certain land rights ahead of a final Commission decision on the final route for the Project. The Applicants acknowledge that the Commission is not bound by any land rights obtained by the Applicants.

establishes a common process – through Minnesota Statutes ch. 117 – for condemnation actions and has a well-developed body of law for determining valuation issues to ensure that landowners receive just compensation.

Before commencing a condemnation proceeding, typically a condemning authority obtains an appraisal and provides it to the property owner, along with the condemning authority's offer of compensation. To start the formal condemnation process, a utility (or other condemning authority) files a petition in the district court where the property is located and serves that petition on all owners of interests in each of the properties identified in the petition. If the court grants the petition, the court then appoints a three-person condemnation commission that will determine the just compensation for the easement. The three people must be knowledgeable of applicable real estate issues. The commissioners schedule a viewing of the property and then schedule a valuation hearing where the utility and landowners can testify as to the fair market value of the easement or fee. As part of the valuation process, the landowner typically also obtains an appraisal and has certain rights of reimbursement in connection with the costs of obtaining an appraisal. At the commissioners' hearing on valuation, the parties offer their evidence, such as testimony by appraisers or the landowners, about the fair market value impacts the acquisition has on the property's value. The condemnation commission then makes an award in an amount representing just compensation and that award is filed with the court. Each party has the right to appeal the award to the district court for a trial. In the event of an appeal, the jury or judge considers the parties' evidence and renders a verdict. At any point in this process, the case can be dismissed if the parties reach a settlement.

There may be instances where a landowner elects to require the Applicants to purchase the landowner's fee interest in all or some portion of the landowner's contiguous, commercially viable property that is adjacent to the Proposed right-of-way. Owners of certain types of property are granted this right under Minn. Stat. § 216I.12, subd. 4, sometimes referred to as the "Buy-the-Farm" Statute. The Buy-the-Farm Statute applies only to transmission facilities that are 200 kV or more and only certain types of property. Thus, the Buy-the-Farm Statute may apply to parcels crossed by the proposed Project's transmission lines where new easements are being acquired by the Applicants.

5.1.2 Substations

No new substations are anticipated to be constructed as part of the Project. Instead, the Project will connect the existing Minnesota Power Cuyuna Substation and Otter Tail Power Company Maple River Substation. The work to be performed at these substations is discussed in Section 2.2.3.

5.1.3 Communication Infrastructure Modifications

Modifications to communications infrastructure in the Project area will be completed as part of the Project to improve overall communication capabilities of the transmission system. While these modifications to communication infrastructure do not independently require a Certificate of Need from the Commission, the Applicants elected to identify that certain communication infrastructure modifications may be necessary for the Project and

elected to do so in this Application to ensure transparency in the overall work being completed in the Project area.

5.2 Construction Procedures

5.2.1 Transmission Lines

Construction will begin once all necessary federal, state, and local approvals are received, land rights are secured, and the final design is complete.[107] The exact timing and duration will also depend on permit requirements, system demands, and workforce availability. Once land rights are obtained, landowners will be informed before construction starts. This notice will include an updated project schedule and details about upcoming construction activities.

The initial phase of constructing new transmission structures entails surveying the centerline, easement boundaries, and pole locations, followed by the removal of all trees and vegetation within the designated rights-of-way. In areas where the project aligns with existing rights-of-way, overlapping rights-of-way may reduce the need for additional clearing, thereby minimizing vegetation clearing and environmental impact. This phase also includes identifying and marking existing underground utilities via the Gopher State One Call process to prevent damage and injury during construction and conducting soil tests and surveys (geotechnical surveys) to determine foundation requirements.

Tree species that could compromise the safe and reliable operation of the transmission facility will be removed. According to the National Electrical Safety Code (“NESC”), “vegetation that may damage ungrounded supply conductors should be pruned or removed.” Additionally, trees located beyond the easement area that pose a risk of falling into the energized transmission line, commonly referred to as "danger trees," will be removed or trimmed to eliminate the hazard, as permitted by the terms of the acquired easement. Danger trees are typically characterized as dead, weak, or leaning toward the energized conductors.

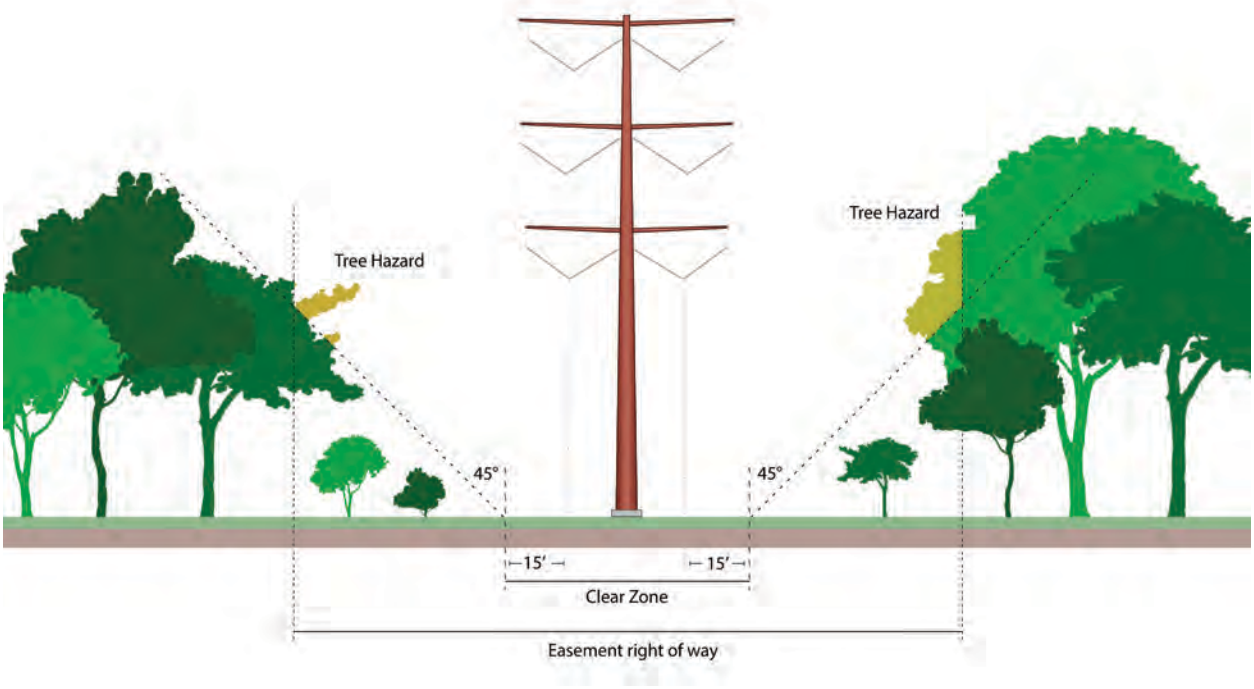
In certain cases, right-of-way clearing may need to occur before finalizing the overall line design and pole placements. This is often due to calendar restrictions aimed at avoiding vulnerable timeframes in the life cycles of specific animal or plant species. In such situations, the right-of-way width is defined while the final line design is still in progress, allowing the clearing activities to proceed concurrently with the design efforts. The final survey staking of pole locations will occur after the vegetation has been removed and just prior to the structure installation. Figure 25 shows standard vegetation management practices.[108] Prior to site clearing and vegetation removal activities, erosion and sediment control measures will be installed in accordance with any municipal stormwater permits

[107] These activities may occur in phases.

[108] The width at which vegetation will be maintained to ground level may increase at structure locations, around guy wires and anchors, and other improvements.

and the Minnesota Pollution Control Agency (“MPCA”) national pollutant discharge elimination system (“NPDES”) Construction Stormwater Permit (Chapter 7).

Figure 25. Standard Vegetation Management Practices



All material resulting from the clearing operations will be managed in accordance with agreements made with the property owner during easement negotiations. Options include chipping the material on-site and spreading it within the right-of-way, stacking it for use by the property owner, or removing it for proper disposal.

The location of proposed access roads, crane paths, temporary storage areas, and laydown yards will be identified by the Applicants’ contractor prior to construction.

The second phase of construction will focus on the installation of transmission line structures and the stringing of conductor wire.

If it becomes necessary to temporarily remove or relocate fences to accommodate construction activities, the installation of either temporary or permanent gates will be coordinated in advance with the landowner. In addition, the right-of-way agent may coordinate with landowners to allow for early crop harvesting when feasible, and compensation will be provided for any verified crop losses. Property owners may also be asked to temporarily move equipment or livestock from the right-of-way to ensure safety and minimize disruptions during construction.

Transmission structures are typically engineered for placement at existing ground elevations, minimizing the need for grading. However, if construction vehicles cannot

safely access or operate near a structure location due to uneven terrain, limited grading may be performed to create a sufficiently level work area.

The Applicants will adhere to established construction practices informed by prior project experiences and industry-recognized Best Management Practices ("BMPs"). BMPs address right-of-way clearance, transmission line structure erection, and stringing transmission lines. Tailored to the specific construction design, these practices integrate prohibitions, maintenance guidelines, inspection procedures, and other activities integral to line construction. In certain instances, construction activities may be adjusted to incorporate BMPs that mitigate impacts on sensitive environments.

Steel transmission line structures are typically installed on concrete foundations to ensure stability and support. The foundation installation process involves drilling a hole approximately 8 feet in diameter and 25 feet deep, though these dimensions may vary based on soil conditions determined during the initial survey and geotechnical testing phases. For angle or dead-end structures, larger foundations may be required, with diameters reaching 12 feet or more.

New steel pole structures will generally be installed on concrete foundations. To install a foundation, a hole is drilled that measures approximately eight feet in diameter for a 345 kV double-circuit transmission structure foundation and 25 feet, or more, deep. An angle or dead-end structure may require a foundation of 12 feet or larger in diameter. The actual diameter and depth of the hole (and foundation) depend on soil conditions that are established during the initial survey and soil testing phases. Concrete is brought to the site by concrete trucks from a local concrete batch plant and filled around a steel rebar support cage. Once the foundation is set, installation of the actual pole on top of the foundation can begin. Poles will be moved from staging areas and delivered to the foundation. Insulators and other hardware are attached while the pole is still on the ground at the installation location. Using a crane, the pole is lifted, placed, and secured to the cured concrete foundation.

Some soil conditions will require that construction mats be placed along the right-of-way or at a pole location to minimize soil disturbances. These mats can also be used to provide access across sensitive areas to minimize impacts including soil compaction, rutting, or damage to plant species. Once the pole has been set, any remaining holes are back-filled with the excavated material or crushed rock. The Applicants prefer to spread any remaining excavated material in the area from which they were removed if landowner permission is obtained. If spreading of the excavated material is not permitted by the landowner, the material will be offered to the landowner or completely removed from the site.

After a number of structures have been erected, the Applicants will begin to install the conductor wire by establishing stringing setup areas. These stringing setup areas are usually located every four miles along a project route, or as needed, and occupy approximately 150-foot by 600-foot area. Conductor stringing operations require brief access to each structure to secure the conductor wire to the insulators and to install shield wire clamps once final sag is established. Temporary guard or clearance structures are

installed, as needed, over existing distribution or communication lines, streets, roads, highways, railways or other obstructions after any necessary notifications are made or permits obtained. This ensures that conductors will not obstruct traffic or contact existing energized conductors or other cables. This also protects the conductors from damage. Crossing of rivers, streams and wetlands will require particular attention during construction. Environmental information required by Minn. R. 7849 is available in Chapter 6.

5.2.2 Substations

Details regarding the work necessary at the existing Cuyuna Substation and Maple River Substation are provided in Section 2.2.3

Substation construction will be performed in compliance with the applicable NESC, Occupational Safety and Health Act, and state and local requirements. Designs will be completed by Minnesota licensed professional engineers, as required by Minnesota Statutes and Rules. Contractors will be committed to safe working practices. The final design of the substations will take into account the local conditions of the substation sites and comply with all applicable safety codes and the Applicants' standards.

The substation modifications will be designed to allow future maintenance to be done with minimum impact on substation operation and provide the necessary clearance from energized equipment to ensure safety. Standard construction and mitigation practices developed from experience with past projects in addition to industry-specific BMPs will be employed. BMPs for the Project will be based on the specific construction design, prohibitions, maintenance guidelines, inspection procedures, and other activities involved in constructing the substations. As with the transmission lines, in some cases these activities will be modified to incorporate a BMP for construction that will assist with minimizing impacts on sensitive environments.

When construction activities are completed, the Applicants will restore the remainder of the construction sites in accordance with the restoration procedures described in Section 5.4.

5.2.3 Workforce Required

The workforce required for construction of the Project's facilities is estimated to be about 75-150 construction workers, depending on the construction sequencing and time of the year. This includes vegetation management crews, transmission line and substation construction workers, safety supervisors, environmental support, and other on- and off-site support staff. Applicants will work with local contractors, to the extent practicable, in the Project area to identify potential opportunities to complete this work using contractors local to the Project area. Additionally, Applicants have strong relationships with the Building Trades and are committed to working with organized labor on the Project, including paying prevailing wages for applicable positions for the construction of the Project, as discussed in Section 2.4.1.

The construction activities will provide a seasonal influx of additional dollars into the communities during the construction phase, with construction materials purchased from local vendors where feasible.

5.3 Restoration Procedures

During construction, limited ground disturbances at the structure sites may occur. Staging areas for temporary storage of materials and equipment are established under agreements with the property owner or agency. Preferably, a previously-disturbed or developed area is used, with sufficient space to lay down material and preassemble certain structural components or hardware and store construction equipment. Parts of the right-of-way or property immediately adjacent to the right-of-way may be used for structure laydown and framing prior to structure installation. Additionally, stringing setup areas are used to store conductors and equipment necessary for stringing operations. Disturbed areas will be restored to their original condition to the maximum extent practicable, or as negotiated with the landowner.

Post-construction reclamation activities will include removing and disposing of debris, removing all temporary facilities, including staging and laydown areas, employing appropriate erosion control measures, reseeding areas disturbed by construction activities with a seed mixture certified as free of noxious or invasive weeds and restoring the areas to their original condition to the extent practicable, restoring agricultural lands to production quality, reseeding areas, and establishing erosion control measures that will be maintained long-term. In instances where soil compaction has occurred, the construction crew or restoration contractor will use various methods to alleviate the compaction, or as negotiated with landowners. Once a Proposed Route is finalized for the Project, the Applicants will provide more detail on transmission line restoration practices in the Vegetation Management Plan filed with the Route Permit Application.

The right-of-way agent will contact the landowners once construction is completed to determine if the clean-up measures have been to their satisfaction and if any other damage may have occurred. If damage has occurred to crops, fences or other property, Applicants will compensate the landowner. In some cases, an outside contractor may be hired to restore the damaged property as near as practicable to its original condition. In the event of unanticipated erosion after restoration activities are considered complete, the Applicants will promptly assess the affected areas and implement additional erosion control measures as necessary.

5.4 Operation and Maintenance

5.4.1 Transmission Lines

Transmission lines will be engineered and maintained in accordance with the NESC and the Applicants' internal standards. These lines are inherently reliable, with unplanned outages occurring infrequently. On average, transmission systems demonstrate annual availability rates exceeding 99 percent. While transmission infrastructure is designed with service lives spanning several decades, high-voltage lines are rarely decommissioned. In

Minnesota Power's 2021 Intangible, Transmission, Distribution, and General Plant Depreciation Petition, the detailed depreciation study found that while older transmission structures were expected to have service lives of approximately 50 years, newer structures used today were expected to have service lives of approximately 75 years.[109] To ensure long-term performance and safety, routine maintenance and periodic replacement of system components are essential.

Periodic access to the transmission line right-of-way is necessary for inspections, maintenance, and any required repairs. Inspections are conducted annually, typically once by air and once on the ground. Ground inspections focus on the right-of-way and areas where topography or obstacles require off-right-of-way access. If issues are discovered, timely repairs will be carried out, and any associated land disturbance will be remediated. If restoration is not feasible, reasonable compensation will be provided to the affected landowner.

The right-of-way will be actively managed to control any encroachments that may interfere with the operation of the transmission line including removal of vegetation that interferes with the operation and maintenance of the transmission line, and maintain safe and reliable operation. This includes removal of vegetation that poses a risk to transmission infrastructure. Native shrubs that do not interfere with safe operations may be permitted to regrow along the outer edges of the right-of-way. Vegetation management techniques may include mechanical clearing, manual cutting, and herbicide application where permitted. Additionally, herbicides may be applied selectively to control noxious weeds, particularly around structures and anchor points.

Parking will be determined as needed along the right-of-way to accommodate maintenance vehicles and equipment. Regular inspections of all equipment will be conducted to ensure functionality, safety, and compliance with operational standards.

5.4.2 Substations

Substations also require a degree of maintenance to keep them functioning in accordance with accepted operating parameters and NESC requirements. Transformers, circuit breakers, batteries, protective relays and other equipment need to be serviced periodically in accordance with the manufacturer's recommendation. The site itself must also be kept free of vegetation, and drainage maintained.

The operating and maintenance costs associated with the transmission lines and substations are provided in Section 2.4.2. Actual transmission line and substation maintenance costs will depend on the setting, the amount of vegetation management necessary, storm damage occurrences, structure types, age of the line, and other variables.

[109] *In the Matter of the 2021 Intangible, Transmission, Distribution, and General Plant Depreciation Petition*, Docket No. E015/M-21-229, INITIAL FILING at Appendix II at 28 (Apr. 1, 2021).

5.4.3 Workforce Required

The operation and maintenance of the transmission line will require a dedicated team of two to four skilled workers. This team will be responsible for conducting regular inspections and performing necessary maintenance to ensure the continued reliability and safety of the transmission system. Annual inspections will be performed on foot or by motorized vehicle, in addition to annual aerial inspections.

5.5 Electric and Magnetic Fields

Electric fields and magnetic fields are invisible lines of force that are present anywhere electricity is produced or used, including around electric appliances and any wire that is conducting electricity. The term “EMF” is typically used to refer to electric fields and magnetic fields that are coupled together; however, for the lower frequencies associated with power lines, electric fields and magnetic fields are decoupled and should be described separately. Electric fields are the result of electric charge, or voltage, on a conductor. The intensity of an electric field is related to the magnitude of the voltage on the conductor and is typically described in terms of kilovolts per meter (“kV/m”). Magnetic fields are the result of the flow of electricity, or current, traveling through a conductor. The intensity of a magnetic field is related to the magnitude of the current flow through the conductor and is typically described in units of magnetic flux density expressed as Gauss (“G”) or milliGauss (“mG”). Electric fields and magnetic fields are found anywhere there are energized, current-carrying conductors, such as near transmission lines, distribution lines, substation transformers, household electrical wiring, and common household appliances.

5.5.1 Electric Fields

Voltage on any wire produces an electric field in the area surrounding the wire. The voltage on the conductors of a transmission line produces an electric field extending from the energized conductors to other nearby objects, such as the ground, structures, vegetation, buildings, and vehicles. The intensity of transmission line electric fields is proportional to the voltage of the line and rapidly decreases with distance from the transmission line conductors. The presence of trees, buildings, and other solid structures nearby can also significantly reduce the magnitude of the electric field. Because the magnitude of the voltage on a transmission line is near-constant, the magnitude of the electric field will be near-constant for the proposed transmission line, regardless of the current flowing on the line.

When an electric field reaches a nearby object, such as a vehicle or a metal fence, it induces a voltage on the object. The magnitude of the induced voltage is dependent on many factors, including the object’s capacitance, shape, size, orientation, location, resistance to ground, and weather conditions. If the object is insulated or semi-insulated from the ground and a person touches it, a small current would pass through the person’s body to the ground. This might be accompanied by a spark discharge and mild shock, similar to what can occur when a person walks across a carpet and touches another object, like a doorknob, or another person.

The main concern with induced voltage is not the magnitude of the voltage induced, but the current that would flow through a person to the ground should the person touch the object. To ensure that any such spark discharge associated with transmission line induced voltage does not reach unsafe levels, the NESC requires that any discharge be less than five milliamperes. The Project will be designed consistent with this NESC requirement.

There is no federal standard for transmission line electric fields. The Commission, however, has historically imposed a maximum electric field limit of eight kV/m measured at one meter above ground for new transmission projects.[110] As demonstrated below, the electric field associated with the Project will be within the Commission's eight kV/m limit.

The predicted intensity of electric fields associated with the various structure configurations of the Project provided in Table 24 for the edge of right-of-way and at the location where the maximum electric field will be experienced. Where the Project parallels existing transmission lines, the presence of another energized line nearby will impact the electric field profile around the parallel lines. Therefore, the predicted intensity of electric fields associated with the various corridor scenarios where the Project's new transmission line parallels existing transmission lines are also provided in Table 24. Because electric fields are particularly dependent on the voltage of the transmission line, the values in Table 24 were calculated at the lines' maximum continuous operating voltage. Maximum continuous operating voltage is defined for the Project as the nominal voltage plus 10 percent, in this case 379.5 kV (for nominally 345 kV lines), whereas the maximum continuous operating voltage for the existing lines is typically contained to the nominal voltage plus 5 percent, in this case 241.5 kV (for nominally 230 kV lines), or 120.8 kV (for nominally 115 kV lines). Values were calculated assuming minimum conductor-to-ground clearance (that is, at mid-span) and a height of one meter above ground. The maximum calculated electric field among all possible configurations is 6.0 kV/m, which is within the Commission's 8.0 kV/m limit. Plots of the lateral profile of electric field for each corridor configuration Table 24 are included in Appendix J.

[110] *In the Matter of the Route Permit Application for a 345 kV Transmission Line from Brookings County, S.D. to Hampton*, Docket No. ET2/TL-08-1474, ORDER GRANTING ROUTE PERMIT (Sept. 14, 2010) (adopting the Administrative Law Judge's Findings of Fact, Conclusions, and Recommendation [Finding ¶ 194]).

Table 24. Calculated Electric Fields for the Project

Corridor Configuration	Line Voltage	Edge of right-of-way	Maximum Overall		
		Intensity (kV/m)	Intensity (kV/m)	Distance from right-of-way Centerline (feet)	Combined right-of-way Width (feet)
Project: Single Circuit 345 kV strung Double Circuit	379.5 kV	0.5	6.0	-18	150
Existing: 230 kV H-Frame Project: Single Circuit 345 kV strung Double Circuit	241.5 kV 379.5 kV	0.6	6.0	69	250
Existing: 230 kV H-Frame Existing: 115 kV H-Frame Project: Single Circuit 345 kV strung Double Circuit	241.5 kV 120.8 kV 379.5 kV	0.7	6.0	119	350
Existing: 115 kV H-Frame Existing: 230 kV H-Frame Project: Double Circuit 345 kV	120.8 kV 241.5 kV 379.5 kV	0.5	6.0	119	350

5.5.2 Magnetic Fields

Current passing through any conductive material, including a wire, produces a magnetic field in the area around the material. The current flowing through the conductors of a transmission line produces a magnetic field that extends from the energized conductors to other nearby objects. The intensity of the magnetic field associated with a transmission line is proportional to the amount of current flowing through the line's conductors, and rapidly decreases with the distance from the conductors. Unlike electric fields, magnetic fields are not significantly impacted by the presence of trees, buildings, or other solid structures nearby. Because the actual current flow on a transmission line could potentially vary widely throughout the day depending on electrical system conditions, the actual magnetic field level in the vicinity of the transmission line could also vary widely from hour to hour.

There are currently no Minnesota regulations pertaining to magnetic field exposure. The Commission has acknowledged that Florida, Massachusetts, and New York have established standards for magnetic field exposure.[111] To provide context for the calculated magnetic field levels associated with the Project, magnetic field levels associated with some common household electric appliances are provided in Table 25.

[111] *In the Matter of the Route Permit Application for the North Rochester to Chester 116 kV Transmission Line Project*, Docket No. E002/TL-11-800, ORDER at 20 (Sept. 12, 2012).

Table 25. Household Magnetic Fields

Appliance	6 Inches from Source	1 Foot from Source	2 Feet from Source
Hair Dryer	300 mG	1 mG	
Electric Shaver	100 mG	20 mG	
Can Opener	600 mG	150 mG	20 mG
Electric Stove	30 mG	8 mG	2 mG
Television	N/A	7 mG	2 mG
Portable Heater	100 mG	20 mG	4 mG
Vacuum Cleaner	300 mG	60 mG	10 mG
Copy Machine	90 mG	20 mG	7 mG
Computer	14 mG	5 mG	2 mG

The predicted intensity of magnetic fields associated with the various structure configurations of the Project are given in Table 26 and Table 27 below, for the edge of right-of-way and at the location where the maximum magnetic field will be experienced. Where the Project parallels existing transmission lines, the presence of another energized line nearby will impact the magnetic field profile around the parallel lines. Therefore, the predicted intensity of magnetic fields associated with the various corridor scenarios where the Project's new 345 kV line parallels existing transmission lines are provided in Table 26. Because magnetic fields are particularly dependent on the current flowing on the transmission line, magnetic field information is provided for two conditions: the maximum continuous rating of the Project's transmission lines, shown in Table 26, and the projected peak loading of the Project's transmission lines when placed into service, shown in Table 27. Maximum continuous rating is defined for the Project as the maximum allowable current flow based on the most limiting series element of the transmission facility as determined by the Company's Facility Ratings Methodology. Projected peak loading for the Project was derived from power system modeling of the Project under system-normal conditions when the Project is scheduled at its maximum capacity. Values were calculated assuming minimum conductor-to-ground clearance (that is, at mid-span) and a height of one meter aboveground. Plots of the lateral magnetic field profile for each configuration are provided in Appendix J.

Out of all the possible transmission line configurations, the maximum magnetic field under typical operating conditions during typical loading is 95 mG with the maximum magnetic field at the edge of the right-of-way under typical operating conditions during typical loading is calculated at 18 mG. These projected levels are below the magnetic field levels associated with most of the household electric appliances shown in Table 25. The maximum possible magnetic field under the highest design assumptions is calculated to be 259 mG for these configurations with effect from the new AC transmission line.

Table 26. Calculated Magnetic Fields for the Project (Maximum Continuous Rating)

Corridor Configuration	Line Current (Amps)	Edge of right-of-way	Maximum Overall		
		Intensity (mG)	Intensity (mG)	Distance from right-of-way Centerline (feet)	Combined right-of-way Width (feet)
Project: Single Circuit 345 kV strung Double Circuit	3000	46	259	0	150
Existing: 230 kV H-Frame Project: Single Circuit 345 kV strung Double Circuit	1025 3000	47	251	-60	250
Existing: 230 kV H-Frame Existing: 115 kV H-Frame Project: Single Circuit 345 kV strung Double Circuit	1025 110 3000	49	259	-110	350
Existing: 115 kV H-Frame Existing: 230 kV H-Frame Project: Double Circuit 345 kV	110 1025 3000	51	250	-10	350

Table 27. Calculated Magnetic Fields for the Project (Project Peak Loading)

Corridor Configuration	Line Current (Amps)	Edge of right-of-way	Maximum Overall		
		Intensity (mG)	Intensity (mG)	Distance from right-of-way Centerline (feet)	Combined right-of-way Width (feet)
Project: Single Circuit 345 kV strung Double Circuit	1097	17	95	0	150
Existing: 230 kV H-Frame Project: Single Circuit 345 kV strung Double Circuit	233 1097	18	92	-55	250
Existing: 230 kV H-Frame Existing: 115 kV H-Frame Project: Single Circuit 345 kV strung Double Circuit	233 50 1097	18	93	-110	350
Existing: 115 kV H-Frame Existing: 230 kV H-Frame Project: Double Circuit 345 kV	50 233 1097	18	91	-10	350

5.5.3 EMF and Health Effects

Significant research has been performed since the 1970s to determine whether exposure to power frequency magnetic fields causes biological responses and health effects. Reviews of this research by public health agencies such as the U.S. National Cancer Institute, the U.S. National Institute of Environmental Health Sciences, and the World Health Organization do not show that exposure to electric power EMF causes or

contributes to adverse health effects. For instance, in 2016, the U.S. National Cancer Institute concluded that:

> Numerous epidemiologic studies and comprehensive reviews of the scientific literature have evaluated possible associations between exposure to non-ionizing EMFs and risk of cancer in children (12-14). (Magnetic fields are the component of non-ionizing EMFs that are usually studied in relation to their possible health effects.) Most of the research has focused on leukemia and brain tumors, the two most common cancers in children. Studies have examined associations of these cancers with living near power lines, with magnetic fields in the home, and with exposure of parents to high levels of magnetic fields in the workplace. No consistent evidence for an association between any source of non-ionizing EMF and cancer has been found.[112]

Minnesota, Wisconsin, and California have also all performed literature reviews or research to examine this issue. In 2002, Minnesota formed an Interagency Working Group to evaluate EMF research and develop policy recommendations to protect the public health from any potential problems arising from EMF effects associated with high-voltage transmission lines. The Working Group included staff from a number of state agencies and published its findings in *A White Paper on Electric and Magnetic Field (EMF) Policy and Mitigation Options.* The Working Group summarized its findings as follows:

> Research on the health effect of EMF has been carried out since the 1970s. Epidemiological studies have mixed results—some have shown no statistically significant association between exposure to EMF and health effects, some have shown a weak association. More recently, laboratory studies have failed to show such an association, or to establish a biological mechanism for how magnetic fields may cause cancer. A number of scientific panels convened by national and international health agencies and the United States Congress have reviewed the research carried out to date. Most concluded that there is insufficient evidence to prove an association between EMF and health effects; however, many of them also concluded that there is insufficient evidence to prove that EMF exposure is safe.[113]

[112] NATIONAL CANCER INSTITUTE, Electromagnetic Fields and Cancer (updated Jan. 3, 2019). Available at: https://www.cancer.gov/about-cancer/causes-prevention/risk/radiation/electromagnetic-fields-fact-sheet.

[113] Minnesota Department of Health, 2002. A White Paper on Electric and Magnetic Field (EMF) Policy and Mitigation Options.

Based on findings like the Working Group and U.S. National Cancer Institute, the Commission has consistently found that "there is insufficient evidence to demonstrate a causal relationship between EMF exposure and any adverse human health effects."[114]

The potential impacts of electric fields include interference with the operation of pacemakers and Implantable Cardioverter/Defibrillators ("ICDs"). Interference with implanted cardiac devices can occur if the electric field intensity is high enough to induce sufficient body currents to cause interaction. Generally, the response depends on the make and model of the device in addition to the individual's height, build and physical orientation with respect to the electric field. Pacemaker manufacturers such as Medtronic and Guidant have indicated that modern cardiac devices are considerably less susceptible to interactions with electric fields than older "unipolar" designs. A 2005 study (Scholten et al.) concludes that the risk of interference inhibition of unipolar cardiac pacemakers from high voltage power lines in everyday life is small. In 2007, Minnesota Power and Xcel Energy conducted studies with Medtronic to evaluate the impact of the electric fields associated with existing 115 kV, 230 kV, 345 kV, and 500 kV transmission on implantable medical devices. The analysis was based on real life public exposure levels under actual transmission lines in Minnesota; no adverse interaction with pacemakers or ICDs occurred (University of Minnesota Power Systems Conference Proceedings, 2007). The analysis concluded that, although interaction may be possible in unique situations, device interaction due to typical public exposure would be rare.

In the unlikely event a pacemaker is impacted, the effect is typically temporary asynchronous pacing. The pacemaker would return to its normal operation when the person moves away from the source of the interference.

5.6 Stray Voltage and Induced Voltage

Stray voltage is a condition that can occur on the electric service entrances to structures from distribution lines—not transmission lines. More precisely, stray voltage is a voltage that exists between the neutral wire of the service entrance and grounded objects in buildings such as barns and milking parlors. The United States Department of Agriculture ("USDA") further defines stray voltage as a small voltage (less than 10 volts) measured between two points that can be simultaneously contacted by an animal (USDA, 1991).

[114] *In the Matter of the Application for a HVTL Route Permit for the Tower Transmission Line Project*, Docket No. ET-2, E015/TL-06-1624, FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER ISSUING A ROUTE PERMIT TO MINNESOTA POWER AND GREAT RIVER ENERGY FOR THE TOWER TRANSMISSION LINE PROJECT AND ASSOCIATED FACILITIES (August 1, 2007); *see also In the Matter of the Route Permit Application by Great River Energy and Xcel Energy for a 345 kV Transmission Line from Brookings County, South Dakota to Hampton, Minnesota*, Docket No. ET-2/TL-08-1474, ORDER ISSUING ROUTE PERMIT (Sept. 14, 2010); OAH Docket No. 7-2500-20283-2, ALJ FINDINGS OF FACT, CONCLUSIONS AND RECOMMENDATION at Finding 216 (April 22, 2010 and amended April 30, 2010) ("there is no demonstrated impact on human health and safety that is not adequately addressed by the existing State standards for exposure"); *In the Matter of the Application of Xcel Energy for a Route Permit for the Lake Yankton to Marshall Transmission Line Project in Lyon County*, Docket No. E002/TL-07-1407, FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER ISSUING A ROUTE PERMIT TO XCEL ENERGY FOR THE LAKE YANKTON TO MARSHALL TRANSMISSION PROJECT at 7-8 (Aug. 29, 2008).

Since stray voltage is present when a voltage exists between the neutral wire of an electrical service entrance and grounded objects in buildings, transmission lines do not, by themselves, create stray voltage because the lines do not connect directly to businesses or residences. Transmission lines can, however, induce a voltage on a distribution circuit that is parallel and immediately under the transmission line. The Project will not parallel any distribution lines.

5.7 Corona-Induced Ozone and Nitrogen Oxide Emissions

Corona, in the context of transmission lines, refers to the breakdown or ionization of air within a few centimeters of conductors. Corona occurs when the electric field intensity, or surface gradient, on the conductor exceeds the breakdown strength of air. Usually, a water droplet or some imperfection such as a sharp edge or scratch on the conductor is necessary to cause corona. Corona may result in a visible violet glow, hissing noise, and production of ozone gas in the air surrounding overhead transmission line conductors (CH2M Hill, 2012). Corona also produces ozone, which is created by chemical reactions between oxides of nitrogen and volatile organic compounds (United States Environmental Protection Agency ("EPA"), 2022a). Ozone is produced in the air surrounding the conductor from the operation of transmission lines (Electric Power Research Institute, 1982). The Company typically engineers transmission lines to limit corona, as it also signifies a loss of electricity (CH2M Hill, 2012).

In general, monitored concentrations of ozone due to corona discharge from transmission lines show no significant incremental ozone concentrations at ground level, and minimal (0 to 8 part per billion ("ppb")) concentrations at an elevation nearer to the transmission line (Jeffers, 1999). Typically, these concentrations are detected only during heavy corona discharge in foul weather conditions. Additional testing has shown that production of nitrogen oxide due to corona discharges is approximately one-fourth of the production of ozone due to corona discharges (Jeffers, 1999).

Ozone also forms in the lower atmosphere from lightning discharges, and from reactions between solar ultraviolet radiation and air pollutants. The natural production rate of ozone is directly proportional to temperature and sunlight, and inversely proportional to humidity. Thus, humidity or moisture, the same factor that increases corona discharges from transmission lines, inhibits the natural production of ozone. Ozone is a very reactive form of oxygen molecules and combines readily with other elements and compounds in the atmosphere. Because of its reactivity it is relatively short-lived.

Both the State and federal governments currently have regulations regarding permissible concentrations of ozone and oxides of nitrogen. The National and State Ambient Air Quality Standards for ozone is 0.070 parts per million ("ppm") on an eight-hour averaging period per Minnesota Rules 7009.0080 and 7009.0090. The national and state standard for nitrogen dioxide ("NO_2"), one of several oxides of nitrogen, is 100 ppb and the annual standard is 53 ppb. The State of Minnesota is currently in compliance with the federal standards for ozone and NO_2. The operation of the proposed transmission lines would not create any potential for the concentration of these pollutants to exceed ambient air standards.

5.8 Radio and Television Interference

Generally, transmission lines do not cause interference with radio, television, or other communication signals and reception. While it is rare in everyday operations, four potential sources for interference do exist, including gap discharges, corona discharges, and shadowing and reflection effects.

Gap discharge interference is the most commonly noticed form of power line interference with radio and television signals, and also typically the most easily fixed. Gap discharges are usually caused by hardware defects or abnormalities on a transmission or distribution line causing small gaps to develop between mechanically connected metal parts. As sparks discharge across the gap, they create the potential for electrical noise. The degree of interference depends on the quality and strength of the transmitted communication signal, the quality of the receiving antenna, and the distance between the receive and the power line. Gap discharges are usually a maintenance issue, since they tend to occur in areas where gaps have formed due to broken or ill-fitted hardware (*e.g.*, clamps, insulators, brackets). Because gap discharges are a hardware issue, they can be repaired relatively quickly once the issue has been identified.

Corona from transmission line conductors can also generate electromagnetic noise at the same frequencies that radio and television signals are transmitted. The air ionization caused by corona generates audible noise, radio noise, light, heat, and small amounts of ozone as noted in Section 5.7. The potential for radio and television signal interference due to corona discharge relates to the magnitude of the transmission line-induced radio frequency noise compared to the strength of the broadcast signals. Because radio frequency noise, like electric and magnetic fields, becomes significantly weaker with distance from the transmission line conductors, very few practical interference problems related to corona-induced radio noise occur with transmission lines. In most cases, the strength of the radio or television broadcast signal within a broadcaster's primary coverage area is great enough to prevent interference.

If interference from transmission line corona associated with the Project does occur for an AM radio station within a station's primary coverage area where good reception existed before the Project was built, satisfactory reception can be obtained by appropriate modification of (or addition to) the receiving antenna system. The situation is unlikely, however, because AM radio frequency interference typically occurs immediately under a transmission line and dissipates rapidly with increasing distance from the line. FM radio receivers usually do not pick up interference from transmission lines because:

- Corona-generated radio frequency noise currents decrease in magnitude with increasing frequency and are quite small in the FM broadcast band (88-108 Megahertz ("MHz")), and
- The interference rejection properties inherent in FM radio systems make them virtually immune to amplitude type disturbances.

The potential for television interference due to radio frequency noise caused by transmission lines is very low now that the United States has completed the transition to digital broadcasting. Digital reception is in most cases considerably more tolerant of noise than analog broadcasts. Due to the higher frequencies of television broadcast signals (54 MHz and above) a transmission line seldom causes reception problems within a station's primary coverage area. In the rare situation where the Project may cause interference within a station's primary coverage area, the problem can usually be corrected with the addition of an outside antenna.

Shadowing and reflection effects are typically associated with large structures, such as high buildings, that may cause reception problems by disturbing broadcast signals and leading to poor radio and television reception. Although the occurrence is rare, a transmission structure or the conductor can create a "shadow" on adjoining properties that obstructs or reduces the transmitted signal. Structures may also cause a "reflection" or scattering of the signal. Reflected signals from a structure result in the original signal "breaking" into two or more signals. Multipath reflection or "scattering" interference can be caused by the combination of a signal that travels directly to the receiver and a signal reflected by the structure that travels a slightly longer distance and is received slightly later by the receiver. If one signal arrives with significant delay relative to the other, the picture quality of digital television broadcast signals may be impacted. With digital broadcasts, the picture can become pixelated or freeze and become unstable. The most significant factors affecting the potential for signal shadow and multipath reflection are structure height above the surrounding landscape and the presence of large flat metallic facades. Television interference due to shadowing and reflection effects is rare but may occur when a large transmission structure is aligned between the receiver and a weak distant signal, creating a shadow effect. In the rare situation where the Project may cause interference within a station's primary coverage area, the problem can usually be corrected with the addition of an outside antenna.

If television or radio interference is caused by or from the operation of the proposed facilities in those areas where good reception was available prior to construction of the Project, Minnesota Power will evaluate the circumstances contributing to the impacts and determine the necessary actions to restore reception to the present level, including the appropriate modification of receiving antenna systems if necessary.

5.9 Audible Noise

An audible hissing and crackling sound can also be produced by corona on transmission lines and electrical equipment when applied voltage exceeds a certain value. This sound is typically only within the threshold of human hearing during rainy or foggy conditions and is often imperceptible due to background noise (CH2M Hill, 2012).

The Project will be designed to ensure that audible noise at the nearest receptor does not exceed State noise standards based on the applicable noise area classifications. If studies conducted during design of the Project indicate potential for the noise standards to be exceeded, the Applicants will incorporate noise-control measures within the design of the substation, or otherwise implement measures to comply with the standards.

The impacts and mitigation of audible noise for the Project are discussed further in Section 6.5.3.

6.1 Project Study Area

The Project Study Area includes portions of Becker, Cass, Clay, Crow Wing, Hubbard, Otter Tail, Wadena, and Wilkin counties as shown in Appendix D, Map 1, Page 1. As described further in Section 6.2, Description of Environmental Setting, and Section 6.3, Physiographic Regions, the landscape within the Project Study Area changes from the west to east because of past glacial activity and other ecological factors that affected the developing landscape over time. These changes are apparent in the hydrology, vegetation, topography, land use, and human settlement patterns within the Project Study Area.

Throughout this chapter, information about existing resources is presented from the west to the east and by physiographic regions, as appropriate.

6.2 Description of Environmental Setting

The landscape of the western portion of the Project Study Area consists of level land at the North Dakota/Minnesota border to gently rolling hills, broken only by wetlands, meandering waterways, and old beach ridges formed by glacial Lake Agassiz, as shown in Appendix D, Map 2. Agricultural fields now dominate this portion of the Project Study Area. The middle portion of the Project Study Area crosses Minnesota's central lakes region and is characterized by steep slopes, high hills, and lakes formed in glacial end moraines and outwash plains. The eastern portion of the Project Study Area is a mix of end moraines, outwash plains, till plains, and drumlin fields amid state forests, lakes, and the Mississippi River. Lakes are very common on the end moraines and some of the outwash plains. Major rivers in the Project Study Area from west to east include the Red River, Buffalo River, Otter Tail River, Shell River, Crow Wing River, Pine River, Gull River, and the Mississippi River. Larger cities in or adjacent to the Project Study Area from west to east include Fargo, Moorhead, Barnesville, Detroit Lakes, Breezy Point, Brainerd, Baxter, Pequot Lakes, and Crosby – Ironton.

6.3 Physiographic Regions

The Minnesota Department of Natural Resources ("MnDNR") and the U.S. Forest Service developed an Ecological Classification System ("ECS") for ecological mapping and landscape classification in Minnesota[115] that is used to identify, describe, and map progressively smaller areas of land with increasingly uniform ecological features. Within the ECS, the State of Minnesota is split into ecological provinces, sections, and subsections. Under this classification system, the western portion of the Project Study Area is in the Red River Valley Section of the Prairie Parkland Province. The Middle portion of the Project Study Area is mainly located in the Minnesota and NE Iowa Morainal Section of the Eastern Broadleaf Forest Province. The Eastern portion of the Project

[115] MnDNR. 2025. Ecological Classification System. Available at: https://www.dnr.state.mn.us/ecs/index.html. Accessed September 2025.

Study Area is located in the North Minnesota Drift and Lake Plains Section of the Laurentian Mixed Forest Province.

Ecological sections are further broken down into subsections. The subsections within the Project Study Area are shown in Appendix D, Map 3. The western portion of the Project Study Area is within the Red River Prairie subsection of the Red River Valley Section. The Middle portion of the Project Study Area overlaps the Hardwood Hills subsection of the Minnesota and NE Iowa Morainal Section. The eastern portion of the Project Study Area overlaps with the Pine Moraines and Outwash Plains subsection of the North Minnesota Drift and Lake Plains Section. Small portions (less than 2 percent) of the St. Louis Moraines and Mille Lacs Uplands subsections occur at the very eastern edge of the Project Study Area.

Table 28 provides the area in acres and percentage of the Project Study Area within each ECS subsection. General physiography and geomorphology for each subsection is outlined below.

Table 28. ECS Subsections in the Project Study Area

ECS Subsection	Counties	Acres	Percentage
Red River Prairie	Clay, Wilkin	298,328	36.6%
St. Louis Moraines	Crow Wing	5,129	0.6%
Hardwood Hills	Becker, Clay, Otter Tail	137,833	16.9%
Pine Moraines & Outwash Plains	Becker, Cass, Crow Wing, Hubbard, Otter Tail, Wadena	362,627	44.5%
Mille Lacs Uplands	Crow Wing	10,101	1.2%

6.3.1 Red River Prairie Subsection

The majority of this subsection[116] is a glacial lake plain with silty, sandy, and clayey lacustrine deposits. It is level, uniform, and featureless, broken only by wetlands, meandering waterways, and old beach ridges. Drainage is to the north via the Red River and its tributaries.

The major landform is a large lake plain (Glacial Lake Agassiz). Minor landforms include a till plain, beach ridges, sand dunes, and water-reworked till. Topography is level to gently rolling.

Soils in the subsection are poorly, somewhat poorly, and moderately well-drained lacustrine clays, silts, and sands make up the majority of soils in this subsection. This subsection is drained by the Red River, which forms the west boundary. The Red River flows north into Canada. There are few lakes present.

[116] MnDNR. 2025. Red River Prairie Subsection. Available at: https://www.dnr.state.mn.us/ecs/251Aa/index.html. Accessed September 2025.

6.3.2 Hardwood Hills Subsection

The Hardwood Hills subsection[117] is characterized by steep slopes, high hills, and lakes formed in glacial end moraines and outwash plains. During the Wisconsin Age glaciation, ice stagnation moraines, end moraines, ground moraines, and outwash plains were formed in this subsection. Kettle lakes are abundant within the moraines and outwash deposits and there are over 400 lakes greater than 160 acres in size within this subsection.

Most of this subsection is covered in 100 to 500 feet of glacial drift over diverse bedrock. Loamy soils are dominant, with loamy sands and sandy loams on outwash plains to loams and clay loams on moraines. The high ridge of the Alexandria Moraine is the headwaters region for many rivers and streams that flow east and west; the Chippewa, Long Prairie, Sauk, and Crow Wing are the major rivers in this subsection and the Mississippi River forms part of the eastern boundary.

The Hardwood Hills subsection is split by the Continental Divide and waters north of the divide eventually flow toward Hudson Bay, while waters south of the divide flow into the Mississippi River system.

6.3.3 Pine Moraines and Outwash Plains Subsection

This subsection[118] is a mix of end moraines, outwash plains, till plains, and drumlin fields. Lakes are very common on the end moraines and some of the outwash plains. Thick glacial drift covers bedrock over most of the subsection. Thicknesses range from 200 to over 600 feet. Kettle lakes are common on pitted outwash plains and within stagnation moraines. There are hundreds of lakes within the subsection that have a surface area greater than 160 acres. The source of the Mississippi River (Itasca Lake in Itasca State Park) is in this subsection. Other large rivers flowing through the outwash plains of the subsection include the Pine and Crow Wing rivers.

6.3.4 St. Louis Moraines Subsection

Rolling to steep slopes characterize much of this subsection.[119] End moraines are the dominant landform. The Mississippi River cuts this subsection virtually in half. The river flows northwest to southeast close to the north-south midpoint of the subsection. Several small, relatively short rivers are present. They include the Prairie, Willow, Hill, and Moose rivers. The drainage network is poorly developed due to landform characteristics. Lakes

[117] MnDNR. 2025. Hardwood Hills Subsection. Available at: https://www.dnr.state.mn.us/ecs/222Ma/index.html. Accessed September 2025.

[118] MnDNR. 2025. Pine Moraines and Outwash Plains Subsection. Available at: https://www.dnr.state.mn.us/ecs/212Nc/index.html. Accessed September 2025.

[119] MnDNR. 2025. St. Louis Moraines Subsection. Available at: https://www.dnr.state.mn.us/ecs/212Nb/index.html. Accessed September 2025.

are numerous. There are at least 66 lakes that have a surface area greater than 160 acres; lakes account for over 10 percent of the surface area.

6.3.5 Mille Lacs Uplands Subsection

This subsection[120] covers the large area of Superior Lobe ground moraines and end moraines in east-central Minnesota. Major rivers running through this subsection include the St. Croix, which forms part of the eastern boundary and the Kettle, Snake, Rum, and Ripple rivers. The drainage network is young and undeveloped, with extensive areas of wetlands present. There are 100 lakes greater than 160 acres in size. Most occur on end moraines.

6.3.6 Topography

The topography within the Project Study Area is shown in Appendix D, Map 2. Topography within the Red River Prairie subsections is generally level, uniform, and featureless, broken only by wetlands, meandering waterways, and old beach ridges. The Red River is the main drainage for this subsection. The Hardwood Hills subsection is characterized by steep slopes, high hills, and lakes formed in glacial end moraines and outwash plains. The Pine Moraines and Outwash Plains subsection are made up of broad outwash plains and rolling to irregularly sloped end moraines. The St. Louis Moraines and Mille Lacs Uplands subsections both have rolling to steep slopes throughout. The Mississippi River is the main drainage channel for all but the Red River Prairie subsection. Elevation ranges from 851 to 1,691 feet above sea level within the Project Study Area.

6.4 Land Cover

According to the 2019 National Landcover Database–Land Use-Land Cover dataset, cultivated cropland is the dominant land cover making up 37 percent of the Project Study Area. Therefore, agriculture is the primary land use. The land cover types within the Project Study Area are identified by acres and percentage in Table 29 and shown in Appendix D, Map 4.

Deciduous forest and emergent herbaceous wetlands are the second and third most dominant land cover types, respectively, accounting for 25 percent of the Project Study Area each. The remaining land cover classifications make up approximately 38 percent of the Project Study Area. There is a clear pattern of agriculture in the western portion of the Project Study Area, changing into more forested areas to the east.

[120] MnDNR. 2025. Mille Lacs Uplands Subsection. Available at: https://www.dnr.state.mn.us/ecs/212Kb/index.html. Accessed September 2025.

Table 29. Land Cover in the Project Study Area

Land Use Category	Acres	Percentage
Cultivated Crops	303,987	37.3%
Deciduous Forest	126,210	15.5%
Developed, Low Intensity	22,800	2.8%
Developed, Open Space	26,670	3.3%
Emergent Herbaceous Wetlands	77,192	9.5%
Evergreen Forest	18,691	2.3%
Grassland/Herbaceous	7,373	0.9%
Mixed Forest	10,919	1.3%
Open Water	42,067	5.2%
Pasture/Hay	98,335	12.1%
Woody Wetlands	69,994	8.6%
Other (less than 0.7%)	9,781	1.2%

The Project is not anticipated to significantly alter the existing land use-land cover within the Project Study Area. Impacts to the existing land cover due to new structure construction would be minimized during the routing process and permitting processes. The Applicants will work to route the transmission line along existing transmission line rights-of-way to the extent possible, and along road rights-of-way, section lines, or property lines in greenfield portions of the route, and will space transmission line structures in a manner that avoids sensitive areas while maintaining safety and design standards and meeting all permitting requirements.

6.5 Human Settlement

The following sections describe elements related to human settlement and land uses within the Project Study Area, which includes a mix of municipalities, farmsteads, commercial and industrial zones, utility infrastructure, and transportation corridors as shown in Appendix D, Map 5. Publicly available data was reviewed to characterize settlement patterns across the area.

6.5.1 Proximity to Residences and Businesses

Residential land use within the Project Study Area is primarily characterized by low-density development, with a predominance of rural and suburban settlement patterns. Major population centers in the region include Fargo, Moorhead, Walker, Bemidji, Brainerd, Fergus Falls, Detroit Lakes, and Park Rapids. Commercial and industrial land uses are generally concentrated within or in proximity to these municipalities. Outside of these urbanized areas, settlement patterns consist largely of dispersed rural communities, with farmsteads and residential structures typically located along transportation corridors and away from centralized population nodes.

The Project routing strategy will prioritize avoidance of municipalities and residential concentrations. Where feasible, transmission line alignments will be co-located with

existing linear infrastructure such as utility corridors and roadways to reduce land use conflicts and visual impacts. Furthermore, the Applicants will engage in coordinated consultation with Tribal governments, state agencies, counties, municipalities, townships, local stakeholders, and affected landowners to identify areas of concern and collaboratively develop routing and design solutions that reduce potential impacts on residential and community infrastructure. The Applicants will secure all necessary land rights, either through fee acquisition or easement agreements, within the Project Study Area to facilitate construction of the route. Project construction and operation activities are not currently anticipated to displace any residential homes or businesses.

Project design will adhere to applicable engineering and safety standards, including those established by the National Electrical Safety Code and the Occupational Safety and Health Administration. These standards govern minimum clearance requirements, structural integrity, vegetation management, and safe interaction with existing utilities and built environments. Compliance with these, and the Applicants' construction standards, will minimize adverse effects on human settlements and infrastructure. These measures will ensure transmission line siting, construction, and operation do not adversely affect areas of human settlement or associated infrastructure.

6.5.2 Public Health and Safety

Public safety will be a central consideration throughout both the construction and operation phases of the proposed Project. During construction, potential safety concerns will include slow-moving construction vehicles on public roadways and project rights-of-way, equipment crossings, conductor stringing activities near or across public access areas, and vegetation clearing operations.

The Project will be designed and constructed in full compliance with all applicable safety standards, including those established by the NESC, the State of Minnesota, and the Applicant's internal safety protocols. Design standards will address:

- minimum clearances to ground, buildings, and other utilities;
- structural strength and integrity of materials;
- right-of-way widths; and
- safe construction and installation practices.

The proposed high-voltage transmission line will be equipped with switching devices and the associated substation will include circuit breakers and protective relays at all transmission line terminations. These devices are designed to safely make, carry, and interrupt current under both normal operating conditions and specified fault conditions. Circuit breakers will isolate faults to protect system components and prevent cascading outages. Electrical facilities isolated by circuit breakers will not be assumed to be de-energized. All downed conductors or damaged electrical infrastructure will be treated as energized and hazardous until verified otherwise by qualified personnel.

During construction, the Applicants will implement a range of protective measures to safeguard the public, including, but not limited to, installation of clear and visible signage in active construction areas; deployment of flaggers at roadway crossings to manage traffic and ensure pedestrian safety; and placement of physical barriers around construction zones to restrict unauthorized access. Guard structures will be installed to prevent contact with energized components and ensure public safety during conductor stringing operations across public roadways or near public access areas. These measures are consistent with established industry best practices and are intended to protect local residents, construction personnel, and the general public throughout the duration of the Project.

6.5.3 Audible Noise

Noise is generally defined as unwanted or disruptive sound that may cause annoyance or interfere with normal auditory perception. It typically consists of a combination of sounds spanning a wide range of frequencies and intensities. Sound levels are quantified in decibels using the A-weighted scale ("dBA"), which accounts for the varying sensitivity of the human ear to different frequencies. The A-weighting emphasizes frequencies most perceptible to human hearing while de-emphasizing those that are less noticeable.

Changes in noise levels are interpreted as follows:

- A 3 dBA change is typically considered the threshold of perceptibility for most individuals.
- A 5 dBA change is clearly noticeable.
- A 10 dBA change is generally perceived as a doubling or halving of loudness.

To provide context for the Project's anticipated noise levels, Table 30 presents representative A-weighted sound levels associated with common sources encountered in everyday environments.

Table 30. Common Noise Sources and Levels

Sound Pressure Levels (dBA)[a]	Common Indoor and Outdoor Noises
110	Rock Concert
100	Construction Noise
70	Vacuum Cleaner
60	Conversational Speech
40	Nighttime Urban Setting
20	Nighttime Rural Setting
10	Threshold of Human Hearing

[a] Source: Minnesota Pollution Control Agency. 2015. A Guide to Noise Control in Minnesota. Available at: https://www.pca.state.mn.us/sites/default/files/p-gen6-01.pdf.

The MPCA has established noise standards based on land use type and the sensitivity of activities occurring within a given area. Within the Project Study Area, the most restrictive applicable standard is 50 dBA (L_{50}) during nighttime hours in residential areas. These standards are codified in Minnesota Rules, Chapter 7030.0040, and are organized by Noise Area Classifications ("NAC"). Noise limits are expressed using two statistical descriptors:

- L_{50}: The noise level exceeded for 30 minutes within a one-hour period.
- L_{10}: The noise level exceeded for 6 minutes within a one-hour period.

NACs are defined based on land use characteristics and the relative sensitivity of those uses to noise:

- NAC-1: Residential and other sensitive uses, including homes, churches, campgrounds, picnic areas, public health and education services, and hotels.
- NAC-2: Commercial uses, including retail, business, government services, and transit terminals.
- NAC-3: Industrial uses, including manufacturing, agriculture, forestry, fairgrounds, and amusement parks.
- NAC-4: Undeveloped or unused land.

Table 31 presents the applicable MPCA noise limits by NAC classification and time of day.

Table 31. MPCA Noise Limits by Noise Area Classification

Noise Area Classification	Daytime		Nighttime	
	L_{10}	L_{50}	L_{10}	L_{50}
1	65	60	55	50
2	70	65	70	65
3	80	75	80	75

[a] Source: MPCA. 2015. A Guide to Noise Control in Minnesota. Available at: https://www.pca.state.mn.us/sites/default/files/p-gen6-01.pdf.

Audible noise from transmission lines occurs most frequently during periods of high humidity, fog, or precipitation, when corona discharge may occur. This phenomenon results from the ionization of moist air near the conductor surface and can produce a crackling or hissing sound. Several factors can influence corona-related noise performance, including conductor voltage, conductor shape and diameter, and surface

irregularities such as dust, water droplets, or minor abrasions.[121] During heavy rain, ambient noise from precipitation typically exceeds any noise generated by the transmission line, rendering it inaudible. Under light rain, fog, or snow, transmission line noise may be audible but is generally comparable to typical household background levels. During dry conditions, audible noise from transmission lines is minimal or imperceptible.

Audible noise will be generated during the construction phase of the Project, primarily from the operation of heavy machinery and increased vehicle traffic associated with construction personnel. Noise-sensitive land uses within the vicinity of the Project Study Area primarily include residential homes. Construction-related noise will be temporary and primarily confined to daytime hours. However, certain conditions, such as system outages, operational constraints, or coordination with customer schedules, may necessitate work outside of standard hours or on weekends. In these instances, the Applicants will coordinate with local jurisdictions and ensure continued compliance with applicable noise regulations. All heavy equipment used during construction will be equipped with sound attenuation devices, such as mufflers, to reduce noise emissions and minimize impacts to nearby sensitive receptors.

Under typical operating conditions, transmission line noise levels are generally below ambient outdoor background levels and are not typically perceptible to the public. Transmission lines will be designed and constructed in accordance with applicable industry standards to minimize potential noise impacts under all operating conditions. Table 32 provides the calculated audible noise for the Project.

Table 32. Calculated Audible Noise for the Project

Corridor Configuration	Line Voltage	Edge of right-of-way	Maximum Overall		
		Intensity (dBA)	Intensity (dBA)	Distance from right-of-way Centerline (feet)	Combined right-of-way Width (feet)
Project: Single Circuit 345 kV strung Double Circuit	379.5 kV	45	47	0	150
Existing: 230 kV H-Frame Project: Single Circuit 345 kV strung Double Circuit	241.5 kV 379.5 kV	48	52	-58	250
Existing: 230 kV H-Frame Existing: 115 kV H-Frame Project: Single Circuit 345 kV strung Double Circuit	241.5 kV 121.8 kV 379.5 kV	48	51	-110	350
Existing: 115 kV H-Frame Existing: 230 kV H-Frame Project: Double Circuit 345 kV	121.8 kV 241.5 kV 379.5 kV	47	52	-8	350

[121] Public Service Commission of Wisconsin. 2013. Environmental Impacts of Transmission Lines. July 2013. Available at: https://psc.wi.gov/Documents/Brochures/Enviromental%20Impacts%20TL.pdf. Accessed September 2025.

Operational noise emissions associated with the Cuyuna Substation are anticipated to be within regulatory limits and consistent with state noise standards. Primary acoustic sources within the substation will include transformers, inverters, and switchgear assemblies. These components typically generate tonal noise characterized by a continuous hum or buzz, which corresponds to the frequency of the alternating current, generally 60 hertz in the U.S. electrical grid. The limited low-frequency content tends to attenuate effectively with distance and integrate into ambient environmental noise levels, thereby minimizing off-site acoustic intrusion. Residences will be far enough from noise sources to meet MPCA noise standards.

To ensure regulatory compliance, the Applicants will install equipment engineered to meet defined acoustic performance criteria and verified to operate within the permissible noise thresholds established under Minnesota state environmental noise regulations.

6.5.4 Aesthetics

The current land use within the Project Study Area consists of forested areas, with additional smaller areas of cropland and rural residential development. Overhead electric transmission and distribution lines, as well as other linear infrastructure (e.g., roads, pipelines) are present throughout the Project Study Area. Right-of-way clearing, and the transmission line's structures and conductors, will have the most visual impacts in areas close to roads and residential areas.

During right-of-way acquisition, routing, permitting, and design, the Applicants will minimize aesthetic impacts to the extent possible. The route will be designed to follow existing infrastructure such as existing transmission lines or roads, wherever possible. Where portions of the transmission line are located outside of existing transmission line or road rights-of-way, the Applicants will evaluate the visual impact of the transmission line to the surrounding resources. Where co-located, Project construction will have a negligible impact on the surrounding aesthetics due to the existing maintained transmission line rights-of-way, which in most cases have been in place for decades.

The Applicants will emphasize preserving the natural landscape whenever practical and implementing construction and operation practices to prevent any unnecessary disturbance of the natural surroundings in the vicinity of the work. Additionally, as transmission lines are currently present throughout the Project Study Area, it is expected that any permanent impacts to recreation will be minimal. See Section 2.2 for anticipated structure types, heights, and spans.

6.5.5 Socioeconomics

The socioeconomic setting of the Project Study Area was evaluated comparing data from the State of Minnesota and the counties within the Project Study Area. No federally designated Tribal Nation reservations are located within the Project Study Area. Unemployment rates within the Project Study Area exhibit moderate variation, ranging from 3.8 percent in Otter Tail County, below the statewide average of 4.2 percent for

Minnesota, to a high of 5.9 percent in Cass County.[122] Median annual household incomes across the Project Study Area fall below the Minnesota state average of $87,556. Income levels range from a low of $56,882 in Wadena County to a high of $77,664 in Clay County.[123] Across all eight counties intersected by the Project Study Area, as well as statewide, the predominant employment sector is social assistance and healthcare, educational services, and retail trade. This labor category represents the largest share of the workforce and reflects regional economic dependence on public services and healthcare-related employment.[124]

Revenue may increase for local businesses from purchases made by utility personnel and contractors during construction. During the construction phase, activities will provide a seasonal influx of additional dollars into the communities with labor procured from local employment resources and construction materials purchased from local vendors where practicable. Long-term societal benefits of the proposed Project will include increased property tax revenue for the counties crossed by the Project, as well as continued clean, reliable electric service to all customers from varying socioeconomic backgrounds, which will support the local economy. Population and socioeconomic data are summarized in Table 33.

[122] County Unemployment Rates. 2025. Available at: https://mn.gov/deed/data/current-econ-highlights/county-unemployment.jsp. Accessed September 2025.

[123] U.S. Census Bureau. 2025. Small Area Income and Poverty Estimates (SAIPE): 2023 Median Household Income by County and State. Available at: https://www.census.gov/library/publications/2025/demo/p30-12.html. Accessed September 2025.

[124] Minnesota Department of Employment and Economic Development. 2025. August 2025 Employment Analysis [PDF report]. Available at: https://mn.gov/deed/assets/Aug%202025%20Employment%20Analysis_final_tcm1045-706239.pdf. Accessed September 2025.

Table 33. Socioeconomic Characteristics within the Project Study Area

Location	Population 2010[a]	Population 2020[b]	Unemployment Rate (%)[c]	Median Household Income[d]	Population below poverty level (%)[e]
State of Minnesota	5,241,914	5,706,494	4.2%	$87,556	9.6%
Becker County	32,274	35,183	4.1%	$71,117	10.6%
Cass County	28,648	30,066	5.9%	$64,937	13.2%
Clay County	57,089	65,318	3.9%	$77,664	11.1%
Crow Wing	61,836	66,123	4.2%	$71,343	9.8%
Hubbard County	20,205	21,344	4.6%	$70,622	11.9%
Otter Tail County	57,539	60,081	3.8%	$70,912	9.4%
Wadena County	13,809	14,065	5.1%	$56,882	13.6%
Wilkin County	6,5636	6,506	3.7%	$69,635	9.1%

[a,b] Source: U.S. Census Bureau. 2021. Decennial Census of Population and Housing, 2010 & 2020. Available at: https://www.census.gov/programs-surveys/decennial-census/decade.html. Accessed September 2025.

[c] Source: County Unemployment Rates. 2025. Available at: https://mn.gov/deed/data/current-econ-highlights/county-unemployment.jsp. Accessed September 2025.

[d] Source: U.S. Census Bureau. 2025. Small Area Income and Poverty Estimates (SAIPE): 2023 Median Household Income by County and State. Available at: https://www.census.gov/library/publications/2025/demo/p30-12.html. Accessed September 2025.

[e] Source: U.S. Census Bureau. 2024. Poverty status in the past 12 months (Table S1701) [Data set]. American Community Survey 2023 1-Year Estimates. Available at: https://data.census.gov/table?q=S1701:+Poverty+Status+in+the+Past+12+Months&y=2023. Accessed September 2025.

6.5.6 Environmental Justice

The EPA defines environmental justice ("EJ") as the "fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income in the development, implementation, and enforcement of environmental laws, regulations, and policies." Fair treatment means that no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental, and commercial operations or policies.[125] Meaningful involvement means:

- people have an appropriate opportunity to participate in decisions about a proposed activity that will affect their environment and/or health;
- the public's contributions can influence the regulatory agency's decision;

[125] U.S. Environmental Protection Agency. 2013. EPA Plan EJ 2014: Environmental Justice Lexicon. Available at: https://www.epa.gov/sites/default/files/2015-02/documents/team-ej-lexicon.pdf. Accessed October 2025.

- community concerns will be considered in the decision-making process; and
- decision makers will seek out and facilitate the involvement of those potentially affected.

The MPCA EJ website provides tools to help identify EJ communities throughout the state and provides guidance for integrating EJ principles such as fair treatment and meaningful involvement of EJ communities. [126] The MPCA uses data on income, poverty levels, and race from the U.S. Census Bureau to identify areas of EJ concern at the census tract level. Areas of EJ concern are defined by MPCA when one or both of the following criteria are met:

- The number of persons of color is greater than 50 percent; or
- More than 40 percent of the households have a household income of less than 185 percent of the federal poverty level.

Table 34 identifies by county the minority populations, low-income populations, and populations with a language other than English spoken at home.

Table 34. Environmental Justice Data for Counties within the Project Study Area

County	2020 Population[a]	Percent Total Minority[b]	Percent of Population at or Below 200 Percent of Federal Poverty Level[c]	Language Other Than English Spoken at Home (2017-2021)[d]
Becker County	35,000	14.5%	33%	4.5%
Cass County	30,688	18.3%	36%	3.5%
Clay County	66,258	16.7%	34%	6.0%
Crow Wing	66,123	9.0%	28.6%	4.1%
Hubbard County	21,700	9.8%	30%	3.0%
Otter Tail County	60,281	8.2%	28%	2.5%
Wadena County	14,135	8.7%	34%	3.0%
Wilkin County	6,413	7.4%	32%	2.0%

[a] "Minority" refers to people who reported their ethnicity and race as something other than White, non-Hispanic.
[b] Source: U.S. Census Bureau. 2021. Decennial Census of Population and Housing, 2010 & 2020. Available at: https://www.census.gov/programs-surveys/decennial-census/decade.html. Accessed September 2025.
[c,d] Source: U.S. Census Bureau. 2022. ACS Demographic and Housing Estimates, Poverty Status, and Language Spoken at Home (2017–2021 ACS 5-Year Estimates): Crow Wing, Becker, Cass, Clay, Hubbard, Otter Tail, Wadena, and Wilkin Counties, Minnesota [Data sets]. Available at: https://data.census.gov/all?q=american+community+survey. Accessed September 2025.

[126] Environmental Justice. n.d. Available at: https://www.pca.state.mn.us/about-mpca/environmental-justice. Accessed September 2025.

Demographic data within the Project Study Area, including minority and low-income population distributions, are summarized in Table 35, which includes state-level and county-level breakdowns for the Project Study Area.

Table 35. Minority Populations by Race and Ethnicity and Low-Income Populations within the Project Study Area

State / County	% White	% Black/ African American	% American Indian or Alaskan Native	% Asian	% Native Hawaiian/ Pacific Islander	% Some Other Race	% Two or More Races	Hispanic or Latino	% Total Minority[a]	% Below Poverty Level
Minnesota	77.5%	7.0%	1.2%	5.3%	0.1%	2.0%	6.9%	6.1%	22.5%	9.6%
Becker County	77.2%	1.1%	5.5%	0.6%	0.1%	1.0%	6.5%	2.8%	22.8%	10.6%
Cass County	75.1%	0.5%	14.2%	0.4%	0.1%	1.0%	8.7%	2.0%	24.9%	13.2%
Clay County	83.2%	3.2%	1.2%	2.2%	0.1%	2.0%	6.1%	3.5%	16.8%	11.1%
Crow Wing County	91.0%	1.1%	1.2%	0.6%	0.1%	0.5%	5.5%	2.2%	9.0%	9.8%
Hubbard County	91.2%	0.4%	1.0%	0.5%	0.0%	0.5%	6.4%	2.1%	8.8%	11.9%
Otter Tail County	93.1%	0.5%	0.6%	0.5%	0.0%	0.4%	5.4%	1.9%	6.9%	9.4%
Wadena County	94.0%	0.3%	0.8%	0.4%	0.0%	0.3%	4.2%	1.8%	6.0%	13.6%
Wilkin County	92.3%	0.3%	0.4%	0.3%	0.0%	0.2%	5.2%	1.6%	7.7%	9.1%

[a] "Minority" refers to people who reported their ethnicity and race as something other than White, non-Hispanic.

Source: U.S. Census Bureau. 2024. ACS Demographic and Housing Estimates, Income and Poverty, and Race and Ethnicity Tables (S1701, DP05, B19013*)* [Data sets]. American Community Survey 1-Year Estimates. Available at: https://data.census.gov/all?q=american+community+survey. Accessed September 2025.

As part of route development, an environmental justice review for the Project will be completed using the methodology outlined in Minn. Stat. § 216B.1691, subd. 1(e), that defines areas with environmental justice concerns in Minnesota:

> (e) "Environmental justice area" means an area in Minnesota that, based on the most recent data published by the U.S. Census Bureau, meets one or more of the following criteria:
>
> (1) 40 percent or more of the area's total population is nonwhite;
>
> (2) 35 percent or more of households in the area have an income that is at or below 200 percent of the federal poverty level;
>
> (3) 40 percent or more of residents over the age of five have limited English proficiency; or
>
> (4) the area is located within Indian country, as defined in United State Code, title 18, section 1151.

Following this guidance, the Applicants will assess whether the Proposed Route intersects any census block groups identified as EJ populations. Minority populations, characterized as comprising individuals who identify as any race or ethnicity other than White, non-Hispanic, will be defined using two criteria:

- the aggregate minority population within the affected block groups exceeds 50 percent, or
- the minority population in a block group is 10 percent higher than the county-wide minority population percentage.

Low-income populations will be identified using the U.S. Census Bureau's annual statistical poverty thresholds. A block group will be considered low-income if the percentage of individuals below the poverty threshold is equal to or greater than the county-wide percentage. The Applicants will also conduct a spatial analysis using U.S. Census block data to determine the proximity of EJ communities to the proposed route and assess whether the Project may disproportionately impact these communities.

6.5.7 Cultural Values

Cultural values reflect shared community traditions and a strong regional identity rooted in rural character and natural resources. In the Project Study Area, the local economy is supported by tourism, outdoor recreation, and agriculture. Natural features such as lakes, rivers, and forested lands, including state and national parks, are central to the area's cultural identity, attracting visitors for recreational activities like fishing, hunting, hiking, and snowmobiling.

No federally designated Tribal Nation reservations are located within the Project Study Area. Tribal Nations with historical ties to lands in the vicinity of the Project Study Area include the White Earth Band of Ojibwe on the White Earth Reservation in Becker County and the Leech Lake Band of Ojibwe, on the Leech Lake Reservation in Cass and Hubbard counties. The Mille Lacs Band of Ojibwe reservation is located adjacent to the Project Study Area to the east along the Crow Wing and Mille Lacs County line. Historic demographics across the Project Study Area include European immigrants of German, Norwegian, Swedish, and Irish descent.[127]

In addition to tourism and agriculture, the Project Study Area has a well-established legacy of resource-based economic activity, particularly in forestry and wood product manufacturing. Historically, counties in the Project Study Area have supported robust logging operations due to their proximity to extensive forested lands. These activities have underpinned the development of related industries, including sawmills, paper production, and the manufacture of wood-based household goods. The forest products sector has not only contributed significantly to regional employment and economic output but has also shaped the cultural identity of these communities through generational involvement in timber harvesting and processing.

According to the Minnesota Department of Employment and Economic Development, the forest product industry, encompassing forestry and logging, wood product manufacturing, and paper manufacturing, has historically maintained a strong presence in northern and central Minnesota, despite broader industry declines. In 2017, these sectors accounted for thousands of jobs and substantial payroll contributions, reflecting their continued importance to the regional economy.[128]

Construction and operation of the Project is not expected to conflict with local cultural values. The area is rural in nature with an economy based on farming and recreation and is anticipated to remain so after construction. The Project will be constructed on a mix of privately owned lands and public (e.g., county and state) lands; therefore, some disruptions to local public recreation or tourism could occur, but such impacts are expected to be temporary. The Applicants will consider the location of cultural values when routing the Project and will coordinate with applicable regulatory authorities, as appropriate. None of these aspects of the culture of the area are anticipated to be significantly impacted or changed because of the construction and/or operation of the Project.

[127] Minnesota State Demographic Center. April 2015. Minnesota now, then, when... An overview of demographic change. Prepared for the Capitol Preservation Commission Subcommittee on Art. Minnesota Department of Administration. Available at: https://mn.gov/admin/assets/2015-04-06-overview-MN-demographic-changes_tcm36-74549.pdf. Accessed September 2025.

[128] Minnesota Department of Employment and Economic Development (MNDEED). January 2019. Logging in: Northeast Minnesota's forest products industry. Available at: https://mn.gov/deed/newscenter/publications/review/january-2019/logging-in.jsp. Accessed September 2025.

6.5.8 Recreation

Recreational opportunities within the Project Study Area are diverse and plentiful. Lands open to the public include recreational activities such as hunting, hiking, camping, boating and fishing, all-terrain vehicle use, bird watching, and nature viewing. The Cass County Land Department manages over 1,000 miles of forest roads to provide access to the land for management purposes, portions of which also serve as recreational trails. Additionally, picnic areas, playgrounds, public accesses, fishing piers, and public swimming beaches are present near populated locations and roadside rests.

Formally managed and regulated lands are present across the Project Study Area including federal easements and managed lands; Aquatic Management Areas ("AMA"); State Game Refuges; National Wildlife Refuges trust lands; state trails; public waters; Waterfowl Production Areas ("WPA"); Wildlife Management Areas ("WMA"); Scientific and Natural Areas ("SNA"); and municipal and county parks and trails. These lands are typically used for recreational purposes, habitat management, and conservation. Nearly 92,000 acres of managed lands and recreation areas are located within the Project Study Area.[129]

AMAs are managed by the MnDNR to protect and conserve aquatic species and critical shore land habitat.[130] Public use of AMAs is allowed for wildlife viewing, non-motorized travel, fishing, hunting, and trapping. AMAs in the Project Study Area cover approximately 727 acres, with nearly a third of those acres occurring in Becker County.

Three SNAs, covering a total of 1,600 acres, are located within the Project Study Area, in Clay, Wilkin, and Hubbard counties. The 769-acre Badoura Jack Pine Woodland SNA is managed by the MnDNR, and the Bluestem Prairie and Richard M. and Mathilde Rice Elliot SNAs (330 acres and 500 acres respectively) are managed by the Nature Conservancy to conserve and protect native plant communities, rare species, and geological features.[131] Recreational opportunities include wildlife viewing, hiking, nature photograph, snowshoeing, and cross-county skiing.

WPAs are part of the United States Fish and Wildlife Service ("USFWS") Refuge System, but unlike National Wildlife Refuges, they tend to be dispersed across counties and townships versus within a distinct, contiguous area. WPAs are predominantly located

[129] PAD-US. 2022. Available at: https://www.usgs.gov/programs/gap-analysis-project/science/pad-us-data-download#:~:text=U.S.%20Geological%20Survey%20%28USGS%29%20Gap%20Analysis%20Project%20%28GAP%29%2C,release%2C%20https%3A%2F%2Fdoi.org%2F10.5066%2FP96WBCHS.%20NOTE%20ON%20COMPARING%20VERSIONS%20OF%20PAD-US%3A. Accessed October 2025.

[130] MnDNR. 2025. Aquatic Management Areas. Available at: https://www.dnr.state.mn.us/amas/index.html. Accessed September 2025.

[131] PAD-US. 2022. Available at: https://www.usgs.gov/programs/gap-analysis-project/science/pad-us-data-download#:~:text=U.S.%20Geological%20Survey%20%28USGS%29%20Gap%20Analysis%20Project%20%28GAP%29%2C,release%2C%20https%3A%2F%2Fdoi.org%2F10.5066%2FP96WBCHS.%20NOTE%20ON%20COMPARING%20VERSIONS%20OF%20PAD-US%3A. Accessed October 2025.

within or near the North Dakota/Minnesota border and within regions dominated by kettle lakes and wetlands. Nearly 97 percent of the more than 22,250 acres of WPAs are located in Becker, Clay, and Otter Tail counties.[132]

WMAs are managed by the MnDNR to protect and conserve wildlife habitat and are present throughout the Project Study Area. WMAs are predominantly concentrated near surface waters and wetlands, and of the over 4,408 acres of WMAs in the Project Study Area, 3,478 are in Hubbard County. WMAs are typically open to the public for wildlife viewing, hiking, and hunting, with over 200 WMA public facilities located within the Project Study Area.[133]

The Cuyuna Country State Recreation Area, covering over 4,500 acres in Crow Wing County, is the only state park present within the Project Study Area. State forests are present in Cass, Hubbard, Crow Wing, and Wadena counties and are open to the public for recreational activities such as camping, hiking, canoeing, kayaking, fishing, hunting, picnicking, swimming, and snowshoeing. Timber activities associated with forest lands are discussed in Section 6.6.2.

Designated State Water Trails are present throughout the Project Study Area, including the Otter Tail River State Water Trail, beginning in Becker County, and flowing westward through Otter Tail County; the Mississippi River State Water Trail, which begins in Itasca State Park in Cass County; the Red River of the North State Water Trail in Clay and Wilkin counties; and the Crow Wing River State Water Trail, which crosses Clay, Crow Wing, and Hubbard Counties. State Water Trails are managed by the MnDNR to provide opportunities for public recreation including canoeing, kayaking, paddleboarding, and camping.[134] Additionally, the Mississippi is a designated Wild and Scenic Recreational River, which originates in Cass County and crosses Crow Wing and Hubbard Counties, as well.

Several State Trails are present within the Project Study Area. The Heartland State Trail in Hubbard and Cass counties; the Paul Bunyan State Trail in Hubbard, Cass, and Crow Wing counties; the Cuyuna Lakes State Trail in Crow Wing County; and the Central Lakes State Trail in Otter Tail County provide year-round recreational opportunities. Snowmobile trails are found throughout the Project Study Area and generally follow existing county

[132] PAD-US. 2022. Available at: https://www.usgs.gov/programs/gap-analysis-project/science/pad-us-data-download#:~:text=U.S.%20Geological%20Survey%20%28USGS%29%20Gap%20Analysis%20Project%20%28GAP%29%2C,release%2C%20https%3A%2F%2Fdoi.org%2F10.5066%2FP96WBCHS.%20NOTE%20ON%20COMPARING%20VERSIONS%20OF%20PAD-US%3A. Accessed October 2025.

[133] PAD-US. 2022. Available at: https://www.usgs.gov/programs/gap-analysis-project/science/pad-us-data-download#:~:text=U.S.%20Geological%20Survey%20%28USGS%29%20Gap%20Analysis%20Project%20%28GAP%29%2C,release%2C%20https%3A%2F%2Fdoi.org%2F10.5066%2FP96WBCHS.%20NOTE%20ON%20COMPARING%20VERSIONS%20OF%20PAD-US%3A. Accessed October 2025.

[134] MnDNR. 2025. Minnesota state water trails. Available at: https://www.dnr.state.mn.us/watertrails/index.html. Accessed October 2025.

and township roads, though many state parks and hiking trails also snow snowmobiling during the winter months.

In general, public recreation areas and managed lands can be avoided through routing design, as needed. If these areas cannot be avoided, the Applicants will work with the federal, state, county, and local agencies to develop appropriate mitigation measures to minimize impacts on public recreational use of these areas. Mitigation measures could include avoiding construction during seasons of peak use, signage, and ensuring public access to recreation areas is not restricted. Disturbances to recreational activities are expected to be transient and confined to the duration of construction, with no long-term adverse effects on recreational access or use.

6.5.9 Public Services and Transportation

The Project Study Area is located in a forested, agricultural, and rural residential area where public services such as electricity, natural gas, and water systems, along with fire protection and law enforcement, are available. Public transportation services are present in larger municipalities and railroads are present throughout the Project Study Area. Public services and transportation in the Project Study Area are depicted in Appendix D, Map 6.

6.5.9.1 Transportation

Larger municipalities tend to be concentrated along roadways such as Interstate 94, U.S. Highways 10 and 75, State Highways MN 6, 29, 34, 87, 210, and 371, or County Highways 1, 8 10, 13, 21, and 36.[135] Three railways operate within the Project Study Area, which connect larger population centers, such as Detroit Lakes, Brainerd, and Moorhead. The owners and operators of the railroads are Burlington Northern Santa Fe Railroad, SOO Line Railroad, and the Otter Tail Valley Railroad Company. Three public airports and five private airports are present within the Project Study Area, as summarized in Table 36 and shown in Appendix D, Map 6.

[135] MnDOT. 2025. Official Minnesota State Highway Map. Available at: https://www.dot.state.mn.us/statemap. Accessed October 2025.

Table 36. Public and Private Airports in the Project Study Area

County	Airport Name	Type
Cass	Myers Field	Private
	East Gull Lake Airport	Public
Clay	Jerger's Field	Private
	Blue Sky Airport	Private
	Mathew Field	Private
	Barnesville Municipal Airport	Public
Crow Wing	Breezy Point Airport	Private
Otter Tail	Pelican Rapids Municipal Airport	Public
Source: Federal Aviation Administration. n.d. Available at: https://adds-faa.opendata.arcgis.com/datasets/e747ab91a11045e8b3f8a3efd093d3b5_0/explore?location=0.905367%2C-1.633886%2C1.85. Accessed October 2025.		

6.5.9.2 Utilities

Numerous electric transmission lines exist throughout the Project Study Area, as shown in Appendix D, Map 6. Transmission lines currently cross the Buffalo River in Clay County; the Otter Tail River in Otter Tail County; the Crow Wing and Mississippi Rivers in Crow Wing County; the Gull, Pine, and South Fork Pine Rivers in Cass County; and the Wing and Partridge Rivers in Wadena County. Electrical substations that support the network of transmission lines are scattered throughout the Project Study Area; these features are generally sited on the outer edges of municipalities or away from population centers in rural areas.

Oil and gas transmission and distribution pipelines are present throughout the Project Study Area.[136] Transmission pipelines are typically sited to avoid densely populated areas, whereas distribution pipelines are designed to serve population centers directly. As route development progresses, pipeline locations will be identified with greater specificity to inform engineering and siting decisions. In instances where the proposed transmission line alignment intersects, or is located in proximity to, existing pipeline infrastructure, the Applicants will incorporate applicable engineering standards to ensure safe co-location and operational compatibility and will obtain all necessary crossing agreements, permits, or permissions from pipeline operators and relevant regulatory authorities prior to commencing construction.

Potential impacts to public services and transportation infrastructure associated with the Project can generally be avoided or mitigated through strategic route selection, engineering design, regulatory coordination, and construction planning. Where feasible, the Project will be co-located with existing utility corridors or other linear infrastructure to minimize the need for new right-of-way and reduce potential disruptions. In instances where new right-of-way is required, routing will be optimized to avoid adverse effects on public services and transportation systems. If avoidance is not practicable, the Applicants

[136] PHMSA National Pipeline Mapping System. Available at: https://pvnpms.phmsa.dot.gov/PublicViewer/. Accessed October 2025.

will engage with relevant federal, state, and local agencies to develop and implement impact minimization strategies.

During construction, temporary roadway closures or detours may be necessary to facilitate equipment mobilization, construction activities, and site restoration. In such cases, the Applicants will coordinate with applicable transportation authorities to establish mitigation measures that reduce disruption to public services and traffic flow. These measures may include scheduling construction outside of peak traffic periods, implementing detour routes, deploying appropriate signage, and ensuring uninterrupted access to critical public service infrastructure.

6.6 Land-Based Economies

6.6.1 Agriculture

According to the U.S. Department of Agriculture's 2022 Census of Agriculture, approximately 5,766 farms, encompassing more than 2,475,000 acres of agricultural land are present within the eight Project counties. Cultivated crops account for approximately 37 percent of the total land area within the Project Study Area. Among these, soybeans represent the predominant crop by acreage, followed by forage crops, both of which are central to regional agricultural production.[137] According to the Minnesota Department of Agriculture ("MDA") Organic Farm Directory[138] and the MDA Minnesota Apiary Registry,[139] registered organic producers and apiaries are present within the Project Study Area.

The Natural Resources Conservation Service ("NRCS") defines prime farmland as land possessing the optimal combination of physical and chemical characteristics necessary for the sustainable production of food, feed, fiber, and oilseed crops. Prime farmland must also be available for agricultural use. Within the Project Study Area, approximately 190,028 acres of land meet the criteria for prime farmland. The extent to which prime farmland may be converted for Project use will be determined during final design and routing. As of 2017, Minnesota had approximately 11.5 million acres of prime farmland.[140]

Farmland of statewide importance, as classified by the NRCS, includes lands that support the production of high-value crops such as fruits, vegetables, and tree nuts, but may

[137] United States Department of Agriculture (USDA). 2022. 2022 Census of Agriculture. Available at: https://www.nass.usda.gov/Publications/AgCensus/2022/Online_Resources/County_Profiles/Minnesota/. Accessed September 2025.

[138] Minnesota Department of Agriculture. 2015-2016. Organic Farms Directory. Available at: https://www.mda.state.mn.us/sites/default/files/2018-05/organicdirectoryfromweb.pdf.

[139] Minnesota Department of Agriculture. 2025. BeeCheck Map MN. Available at: https://mn.beecheck.org/map. Accessed October 2025.

[140] NRCS. 2025. Prime and other important farmlands – Soil Data Access. U.S. Department of Agriculture. Available at: https://www.nrcs.usda.gov/publications/Legend%20and%20Prime%20Farmland%20-%20Query%20by%20Soil%20Survey%20Area.html. Accessed September 2025.

exhibit limitations such as steeper slopes or reduced soil moisture retention. There are approximately 154,568 acres of land designated as farmland of statewide importance within the Project Study Area.[141] Except for land occupied by and immediately adjacent to transmission line structures, agricultural lands crossed by the Project can continue to be farmed after construction.

Farm operations within the Project Study Area are summarized by county in Table 37.

Table 37. Farm Operations by County

Farm Operation	Becker County	Cass County	Clay County	Crow Wing County	Hubbard County	Otter Tail County	Wadena County	Wilkin County
Number of farm operations	1,531	1,042	1,066	1,132	1,001	3,083	837	456
Total acreage of farm operations	379,798	157,933	379,719	161,726	160,514	729,682	173,173	278,925
Average size of farm operations (acres)	248	152	356	143	160	237	207	612
Total crop and livestock sales (U.S. Dollars)	162,853	22,617	284,456	28,994	26,365	491,403	63,883	160,984

Source: United States Department of Agriculture (USDA). 2022. 2022 Census of Agriculture. Available at: https://www.nass.usda.gov/Publications/AgCensus/2022/Online_Resources/County_Profiles/Minnesota/. Accessed September 2025.

Temporary use of cropland and pasture during construction may result in displacement of livestock and short-term disruption to crop production. Upon route approval, Applicants will coordinate with landowners to facilitate early harvests where feasible and will compensate for verified crop losses. Permanent impacts to farmland will occur where structures are installed, as detailed in Section 6.6.1. Outside of these areas, agricultural use within the right-of-way may continue, provided it does not interfere with transmission line operation. Agricultural equipment operation near structures is anticipated. Construction zones will be managed to prevent livestock access; fencing and gates will be maintained per landowner specifications. Center-pivot irrigation systems, occurring primarily near the Town of Hubbard in Hubbard County, as well west of Dunvilla in Otter Tail County, will be crossed within existing transmission corridors to the extent possible. Pre-construction coordination with landowners will address structure locations and identify drain tile and irrigation system locations to reduce disruption to agricultural operations and ensure compatibility with transmission facilities.

[141] NRCS. 2025. Prime and other important farmlands – Soil Data Access. U.S. Department of Agriculture. Available at: https://www.nrcs.usda.gov/publications/Legend%20and%20Prime%20Farmland%20-%20Query%20by%20Soil%20Survey%20Area.html. Accessed September 2025.

After construction is complete, the Applicants will disc and decompact soils and complete restoration activities, by returning the disturbed area back to agricultural use. The Applicants will confirm restoration satisfaction with landowners and address any additional damages to crops, fences, or property. Transmission line and substation operations are not expected to significantly affect agricultural activities beyond the footprint of permanent structures. Annual inspections will be conducted via ground and aerial methods, with prior landowner notification. Inspectors will ensure gates are secured and minimize crop disturbance. The Applicants will compensate landowners for damaged drain tile or crop losses resulting from construction activities or structure placement.

6.6.1.1 Forestry

There are approximately 45,618 acres of MnDNR-owned forested land within the Project Study Area, comprised of State Forests and forested lands classified as "Other" that are not associated with a specific named state forest and are managed solely for timber production; approximately 7,420 acres are included in the latter category.[142] No national forests are located within the Project Study Area. Except for Clay and Wilkin counties, state forests are present in all counties within the Project Study Area and are shown in Table 38.

Forestlands are actively managed to optimize social, ecological, and economic outcomes for the State of Minnesota.[143] Management objectives include supporting public recreation (see Section 6.5.8), facilitating the sustainable extraction of natural resources such as timber and aggregate, preserving habitat for both game and non-game wildlife species, and protecting water resources and wetlands. Concurrently, these activities are structured to generate consistent economic returns to local taxing jurisdictions through responsible land use and resource development.[144] The proposed substation area will not be located in state forests, state forest lands, or private commercial forest lands.

Forestry resources land that within the Project Study Area are summarized in Table 38.

[142] MnDNR. 2025. State Forest Statutory Boundaries and Management Units. Minnesota Geospatial Commons. Available at: https://gisdata.mn.gov/dataset/bdry-state-forest [gisdata.mn.gov]. Accessed October 2025.

[143] MnDNR. 2025. Minnesota State Forests. Available at: https://www.dnr.state.mn.us/state_forests/index.html. Accessed October 2025.

[144] Hubbard County. 2025. Natural Resource Management. Available at: https://co.hubbard.mn.us/natural_resource_management. Accessed September 2025.

Table 38. State Forest Resources in the Project Study Area

Forest Name	Forest Type	County	Acres in Project Study Area
Pillsbury	State Forest	Cass	859
Badoura	State Forest	Cass, Hubbard	12,914
Foot Hills	State Forest	Cass	17,583
Huntersville	State Forest	Cass, Hubbard, Wadena	5,879
Crow Wing	State Forest	Crow Wing	963
State Forest Subtotal			**38,198**
N/A	State Forest Other	Becker	1,661
N/A	State Forest Other	Cass	1,740
N/A	State Forest Other	Crow Wing	2,284
N/A	State Forest Other	Hubbard	1,154
N/A	State Forest Other	Otter Tail	84
N/A	State Forest Other	Wadena	497
State Forest Other Subtotal			**7,420**
Total			**45,618**

Source: MnDNR. 2025. State Forest Statutory Boundaries and Management Units. Minnesota Geospatial Commons. Available at: https://gisdata.mn.gov/dataset/bdry-state-forest. Accessed October 2025.

The Project may result in permanent impacts on commercial forest products, as forested land will be cleared within the right-of-way and herbaceous vegetation will be allowed to grow in its place. As the route is identified, the Applicants will co-locate with existing utility infrastructure wherever practical, which will limit tree clearing within a shared right-of-way. The Applicants will work with the MnDNR and counties to mitigate and minimize impacts to adjacent forest resources on state and county land.

Commercial forestry and private landowners will be compensated for loss of timber resulting from clearing the Project right-of-way. Construction staging areas will be located in areas with minimal tree cover to the maximum extent practicable. Impacts to forested areas cleared for construction outside of the Proposed Right-of-Way and permanent access roads will be temporary, as those areas would be allowed to revegetate naturally.

6.6.2 Tourism

Tourism opportunities are plentiful throughout the Project Study Area. The Heritage Hjemkomst Interpretive Center in Clay County attracts visitors from all over the world[145] and Hubbard County is home to Minnesota's oldest state park, Itasca State Park, which

[145] Heritage Hjemkomst Interpretive Center. n.d. Available at: https://www.familydaysout.com/attractions/heritage-hjemkomst-interpretive-center. Accessed October 2025.

contains the Mississippi River headwaters.[146] Outdoor activities such as snowmobiling, lake resorts, and rodeos bring are prevalent within the Project Study Area, and each county hosts an annual county fair highlighting their resources and traditions, Tourist resources identified within the Project Study Area will be carefully considered during route development to avoid direct impacts.

Direct visitor spending broken down by county is shown in Table 39.

[146] Minnesota Department of Natural Resources. n.d. State parks—Minnesota DNR. Available at: https://www.dnr.state.mn.us/faq/mnfacts/state_parks.html. Accessed October 2025.

Table 39. Direct Visitor Spending by County (2023)

	Visitor Spending (millions)							
County	**Lodging**	**Food and Beverage**	**Recreation**	**Retail**	**Transport**	**Second Home**	**Total**	**Percentage Share of State**
Becker County	$5.2	$11.0	$3.8	$7.7	$8.8	$2.6	$39.0	0.3%
Cass County	$94.0	$31.9	$20.6	$17.8	$18.0	$31.8	$214.2	1.6%
Clay County	$13.1	$18.3	$7.3	$15.5	$10.8	$5.9	$71.0	0.5%
Crow Wing County	$96.8	$56.3	$27.1	$37.0	$30.5	$42.2	$289.8	2.2%
Hubbard County	$11.5	$8.8	$3.3	$5.2	$4.9	$15.6	$49.1	0.4%
Otter Tail County	$25.6	$23.8	$10.5	$16.6	$15.2	$30.7	$122.5	0.9%
Wadena	$2.6	$4.5	$1.6	$3.2	$3.3	$2.8	$18.2	0.1%
Wilkin	$0.4	$0.9	$0.3	$0.3	$2.1	$0.8	$4.8	0.0%
Total	**$249.2**	**$155.5**	**$74.5**	**$103.3**	**$93.6**	**$132.4**	**$808.6**	**6.0%**

Source: Minnesota County Tables. 2023. Available at: https://mn.gov/tourism-industry/assets/Minnesota%20County%20Tables%20-%202023_tcm1135-660871.pdf. Accessed October 2025.

6.6.3 Mining

Based on data from the Aggregate Source Information System ("ASIS"),[147] there are 156 active aggregate mining sites located throughout the Project Study Area. These sites are comprised of sand and gravel pits, borrow pits, and open pit mines or quarries. Potential impacts, such as a temporary suspension of excavation activities to ensure safe wire stringing, could occur at gravel pit locations within the Project Study Area. As the route is developed, the Applicants will use ASIS data to avoid mines to the degree possible and will collaborate with gravel pit owners to minimize impacts. The Project is not anticipated to impact ongoing mining activities.

6.7 Archeological and Historic Resources

Previously identified archaeological sites (e.g., precontact artifact assemblages, burial mounds and earthworks, historic occupation remnants and artifact scatters) are present in the Project Study Area, primarily along the margins of rivers (e.g., Mississippi and Red Rivers) and other surface waters including numerous lakes. The Project Study Area also contains historic architectural resources, the majority of which are located within municipalities (e.g., houses, churches, commercial and industrial buildings, schools, banks, and railroads). Rural farmsteads and homesteads have also been documented throughout the Project Study Area.

Available cultural resources data retrieved from the Office of the State Archaeologist's Portal ("OSA Portal") and Minnesota's Statewide Historic Inventory Portal ("MNSHIP") on September 30, 2025, indicate that 250 archaeological sites and 522 historic architectural resources have been documented within the Project Study Area. The Project Study Area includes parts of Becker, Cass, Clay, Crow Wing, Hubbard, Otter Tail, Todd, Wadena, and Wilkin Counties. Several of the identified cultural resources are listed in or eligible for listing in the National Register of Historic Places ("NRHP"). A summary of listed and eligible resources, broken down cultural resource type, is included in Table 40.

[147] Minnesota Department of Transportation (MnDOT). 2023. Aggregate Source Information System Map. Available at: https://www.dot.state.mn.us/materials/asis_GE.html. Accessed September 2025.

Table 40. National Register of Historic Places Listed and Eligible Resources

	Historic Architectural Resources		Archaeological Sites	
County	**NRHP-Listed**	**NRHP-Eligible**	**NRHP-Listed**	**NRHP-Eligible**
Becker	-	-	-	-
Cass	1	-	2	4
Clay	3	3	1	-
Crow Wing	5	-	1	19
Hubbard	-	-	2	1
Otter Tail	1	-	-	-
Wadena	-	-	1	2
Wilkin	-	-	-	-
Multiple Counties	-	5	-	-

The Applicants will complete a Phase Ia literature review to characterize the prehistoric and historic context along identified route options and further examine the previously recorded archaeological sites and historic architectural resources to determine recommendations regarding avoidance for any sites determined eligible for or listed in the NRHP. A summary of the Phase Ia literature review findings will be presented in the Route Permit Application.

Effects on NRHP-listed or eligible cultural resources can be minimized by routing the proposed transmission line to avoid these types of resources. If impacts to a specific cultural resource cannot be avoided by the Project, that cultural resource would require a formal significance evaluation to determine if it meets the eligibility requirements for listing on the NRHP, if its eligibility has not been previously determined. If found significant, mitigation strategies may be undertaken to reduce impacts. If cultural resources are listed in the NRHP, or if they are considered eligible for listing, they may be afforded protection under federal and state regulations.

The Applicants provided notice to all Minnesota Tribal governments per the Notice Plan, and officials from these Tribal Nations were invited to the open houses held in June 2025 and October 2025. The Applicants will work with the appropriate state, federal and Tribal agencies during the routing process to avoid known cultural resources as much as possible.

6.8 Hydrologic Features

There are eight major watershed basins (HUC-04) and 81 major surface water watersheds (HUC-08) covering Minnesota. The Project Study Area includes two HUC-04 watersheds, the Red River of the North (0902) within the western portion and the

Mississippi Headwaters (0701) in the eastern portion, each representing approximately 50 percent of the Project Study Area as shown in Appendix D, Map 7.[148]

According to the MnDNR Public Water Inventory ("PWI") dataset, there are 339 PWI basins, 268 PWI wetlands, and 220 PWI watercourses located within the Project Study Area, as shown in Appendix D, Map 8. Five of these PWI basin or wetland features in the Project Study Area are greater than 1,000 acres in size, including Badoura Bog, North Long Lake, Pelican Lake, Lake Melissa, and Wolf Lake.[149]

The Project Study Area is located within three United States Army Corps of Engineers ("USACE") wetland delineation regions: Great Plains, Midwest, and Northcentral and Northeast. The Great Plains region includes a semi-arid climate, low level of topographic relief, and a large amount of grasslands, with smaller coverage of forest. The Midwest region is characterized by its generally flat to rolling topography, fertile soils, and moderate to abundant rainfall.[150] Wetlands in both the Great Plains and Midwest regions are generally characterized as prairie wetlands or riverine wetlands.[151] The Northcentral and Northeast region includes a wide range of forest types, humid temperate climate with cold winters, a shorter growing season, and seasonally frozen soils in several areas. Wetlands in this region are diverse, including shores, lake plains, kettle depressions, outwash deposits, bogs, coastal plains, and fens.[152]

According to the MnDNR National Wetland Inventory ("NWI") database, the Project Study Area contains approximately 167,442 acres of wetlands, including lakes, comprising approximately 21 percent of the Project Study Area, as shown in Appendix D, Map 8 and

[148] MnDNR. 2009. Watersheds Data for Minnesota. Available at: https://www.mngeo.state.mn.us/chouse/water_watersheds.html. Accessed September 2025.

[149] MnDNR. 2025. Public Waters Basin and Watercourse Delineations. Available at: https://gisdata.mn.gov/dataset/water-mn-public-waters. Accessed September 2025.

[150] U. S. Army Corps of Engineers. 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0), ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-10-16. Vicksburg, MS: U.S. Army Engineer Research and Development Center. Available at: https://www.mvp.usace.army.mil/Portals/57/docs/regulatory/Website%20Organization/Midwest%20Regional%20Supplement%20(Version%202).pdf.

[151] U.S. Army Corps of Engineers. 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region (Version 2.0), ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-10-1. Vicksburg, MS: U.S. Army Engineer Research and Development Center. Available at: https://www.mvp.usace.army.mil/portals/57/docs/regulatory/website%20organization/great%20plains%20regional%20supplement.pdf.

[152] U. S. Army Corps of Engineers. 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0), ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-10-16. Vicksburg, MS: U.S. Army Engineer Research and Development Center. Available at: https://www.mvp.usace.army.mil/Portals/57/docs/regulatory/Website%20Organization/Midwest%20Regional%20Supplement%20(Version%202).pdf.

Table 41.The majority of the wetlands are classified as freshwater emergent wetlands, freshwater shrub wetlands, freshwater forested wetlands, or freshwater ponds.[153]

Table 41. MnDNR National Wetland Inventory Wetlands within the Project Study Area

Wetland Type	Acres in Project Study Area
Freshwater Emergent Wetland	65,023
Freshwater Forested Wetland	14,859
Freshwater Forested/Emergent Wetland	387
Freshwater Forested/Shrub Wetland	2,511
Freshwater Pond	7,492
Freshwater Shrub Wetland	28,388
Freshwater Shrub/Emergent Wetland	4,805
Lake	41,013
Riverine	2,964

Impacts on hydrologic features will be minimized to the extent possible by routing the Project to avoid surface waters. Provided the large number of wetlands and streams within the Project Study Area, some impacts are likely to occur. For the construction of the transmission line, temporary impacts via construction mats are anticipated within wetland areas and smaller streams, with ephemeral or intermittent flow regime. Habitat conversion impacts are likely to occur within forested wetlands, as right-of-way and trees beyond the right-of-way identified as danger trees are cleared and maintained. Permanent impacts may occur within wetlands to accommodate the installation of transmission line structures and associated grading. No permanent impacts to streams are anticipated.

Calcareous fens are rare distinctive peat accumulating wetlands that depend on a constant supply of calcium and other mineral rich groundwater. This unique microenvironment can support highly diverse and unique rare plant communities. According to the MnDNR's Identification List of Known Calcareous Fens, there is one known calcareous fen located within the Western portion of the Project Study Area and 12 within five miles of the Project Study Area as shown in Appendix D, Map 8.[154] The Project would be routed to avoid disturbances to known calcareous fens.

6.8.1 Floodplains

Federal Emergency Management Agency ("FEMA") floodplain data is available within Clay, Wilkin, and Crow Wing counties within the Project Study Area. FEMA data is not available for Becker, Otter Tail, Hubbard, Wadena, and Cass counties. The major

[153] MnDNR. 2019. National Wetland Inventory for Minnesota. Available at: https://gisdata.mn.gov/dataset/water-nat-wetlands-inv-2009-2014. Accessed September 2025.

[154] MnDNR. 2025. Calcareous Fens - Source Feature Points. Available at: https://gisdata.mn.gov/dataset/biota-nhis-calcareous-fens. Accessed September 2025.

floodplains in the Project Study Area occur adjacent to large waterbodies and watercourses. Regulatory floodways are mapped along the Red River, Buffalo River, South Branch Buffalo River, and the Mississippi River. In most locations, 100-year and 500-year floodplain areas exist beyond the regulatory floodways. Additional 100-year and 500-year floodplain areas exist along larger perennial streams, ponds, and lakes. Most of the Project Study Area is mapped as areas with minimal flood hazard (Zone X), as shown in Appendix D, Map 8.[155]

It is anticipated that the Project would have no effect on the flood elevations within the Project Study Area because the Project construction is not expected to result in changes to ground surface elevations. Project design will prioritize the installation of transmission line structures and associated grading outside of FEMA floodplain areas to the extent possible. In addition, coordination will be completed with FEMA and local floodplain administrators during the route evaluation process to avoid an increase in flood elevations.

6.8.2 Groundwater

Groundwater in Minnesota is divided into six aquifer provinces based on glacial geology and bedrock.[156] The Project Study Area is located within two groundwater provinces. The Western portion is located within the Western Groundwater Province, and the Eastern portion is located within the Central Groundwater Province. The majority of the Project Study Area (69 percent) is located within the Central Groundwater Province.

The Central Groundwater Province is characterized by buried sand aquifers and relatively extensive surficial sand plains, part of a thick layer of sediment deposited by glaciers overlaying the bedrock. This province has thick glacial sediment, and sand and gravel aquifers are common.[157] The Project is not anticipated to adversely impact groundwater resources within any of the provinces.

6.8.3 Karst

A karst feature is characterized as a landscape underlain by limestone that has been eroded by dissolution, producing caves, fissures, or sinkholes. According to the MnDNR Karst Feature Inventory, there are no karst features located within the Project Study Area.[158] The nearest karst feature is located approximately 50 miles southeast of the Project Study Area. The Applicants will conduct geotechnical analyses where appropriate

[155] Federal Emergency Management Agency (FEMA). 2025. National Flood Hazard Layer. Available at: https://www.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd. Accessed September 2025.

[156] MnDNR. 2021. Groundwater Provinces of Minnesota. Available at: https://gisdata.mn.gov/dataset/geos-groundwater-provinces-mn. Accessed September 2025.

[157] MnDNR. 2021. Groundwater Provinces of Minnesota. Available at: https://gisdata.mn.gov/dataset/geos-groundwater-provinces-mn. Accessed September 2025.

[158] MnDNR. 2025. Karst Feature Inventory Points. Available at: https://gisdata.mn.gov/dataset/geos-karst-feature-inventory-pts. Accessed September 2025.

to evaluate whether karst areas are present at structure locations and structure foundation design will account for the presence of karst, as needed.

6.9 Vegetation and Wildlife

6.9.1 Vegetation

The western portion of the Project Study Area is located in the Red River Prairie ECS subsection, as shown in Appendix D, Map 3. The middle portion crosses the Hardwood Hills ECS subsection, while the eastern portion is in the Pines Moraine and Outwash Plains ECS subsection. Two other subsections on the east end of the Project Area account for less than 2 percent of the Project Study Area. Thorough descriptions of each subsection are provided in Section 6.1.2.

Tallgrass prairie and wet prairie were the dominant vegetation before settlement in the Red River Prairie ECS subsection.[159] The upland prairie was dominated by bluestems, Indian grass, and several other grasses. Wet prairie was dominated by bluejoint grass, cordgrass, cattails, rushes, and sedges. Narrow, forested floodplains were common along larger streams and rivers. Broader zones of woodland or brushland were common in "fire shadows" along streams; size and configuration depended on prevailing wind and stream alignment.

In the Hardwood Hills subsection,[160] irregular topography and presence of numerous lakes and wetlands provided a partial barrier to fire, resulting in more woodland or forest compared to the Minnesota River Prairie subsection. At pre-settlement, mixed hardwood forests were found in the eastern portion of the subsection, while tallgrass prairie was found on flatter terrain in the west.

Pre-settlement vegetation in the Pines Moraine and Outwash Plains subsection[161] included jack pine, in a mix with northern pin oak, on excessively drained portions of broad outwash plains. Large areas of the other landforms were dominated by aspen-birch and pine forests (mixed red and white pine). Red pine-white pine forests occupied the rolling to irregularly sloped end moraines. Mixed hardwood and pine forests, dominated by a diverse mix of northern hardwoods and white pine, were found in the most fire-protected areas at the northern and eastern edges of the subsection. Fire protection was offered by irregular topography, broad wetlands, and relatively large lakes.

The Project Study Area is dominated by agricultural land (increasing from east to west), with corn and soybeans representing the most common crops. Forests become more common as you go east in the Project Study Area, as shown in Appendix D, Map 4. See

[159] MnDNR. 2025. Red River Prairie Subsection. Available at: https://www.dnr.state.mn.us/ecs/251Aa/index.html. Accessed September 2025.

[160] MnDNR. 2025. Hardwood Hills Subsection. Available at: https://www.dnr.state.mn.us/ecs/222Ma/index.html. Accessed September 2025.

[161] MnDNR. 2025. Pine Moraines and Outwash Plains Subsection. Available at: https://www.dnr.state.mn.us/ecs/212Nc/index.html. Accessed September 2025.

Section 6.4 for a breakdown of current land use. In addition, areas of native vegetation are found scattered throughout the Project Study Area in lands mapped or managed by the MnDNR; these include native prairie remnants, numerous conservation easements, native plant communities, SNAs, and Sites of Biodiversity Significance as shown in Appendix D, Map 9.

Potential impacts on vegetation in the Project Study Area would occur where clearing of trees and other vegetation is necessary for Project construction and maintenance. Construction and maintenance activities also have the potential to result in the introduction or spread of noxious weeds.

During the route development process, the Applicants will minimize clearing in forested areas and in remnants of native vegetation areas to the extent practicable and will work with agencies to develop the appropriate BMPs and mitigation measures to minimize potential impacts to vegetation resources from the proposed Project facilities.

6.9.2 Wildlife

Several lands that are preserved or managed for wildlife and associated habitat are scattered throughout the Project Study Area, including Aquatic Management Areas, conservation easements, WMAs, and USFWS National Wildlife Refuges and WPAs as shown in Appendix D, Map 10.

The Project Study Area's agricultural landscape and abundant deciduous forest, combined with the preserved or managed wildlife lands, provide habitat for a diversity of resident and migratory wildlife species. These species include large and small mammals, songbirds, waterfowl, raptors, fish, reptiles, mussels, and insects. These species use the Project Study Area for forage, shelter, breeding, or as stopover during migration.

Temporary impacts on wildlife may occur during construction from increased noise and human activity, which could cause some species to temporarily abandon their habitat. Permanent habitat loss, conversion, or fragmentation may occur in areas that are permanently cleared for construction and maintenance of the Project. Once the Project is operational, there is potential for avian and transmission line interactions in the form of collisions and potential electrocution. This potential impact is already present along the existing infrastructure but there would be a new potential impact anywhere new transmission line construction occurs.

As routing for the Project is refined, the Applicants will strive to avoid preserved or managed wildlife lands to the extent practicable and will work with applicable resource agencies to develop the appropriate BMPs and mitigation measures to minimize the potential for Project activities impacting these sensitive wildlife resources.

The Applicants will also incorporate BMPs, as well as implement design and engineering measures where necessary that are consistent with the Avian Power Line Interaction Committee's ("APLIC") guidelines to minimize the potential for avian collisions.[162]

6.9.3 Rare and Unique Resources

Data on federal and state-protected species were reviewed for the Project using the USFWS Information for Planning and Consultation ("IPaC") online tool and the MnDNR Natural Heritage Inventory System ("NHIS") database (License Agreement #2023-052). Although this review does not represent a comprehensive survey, it provides information on the potential for the presence of protected species within the Project Study Area.

6.9.3.1 Native Plant Communities and Sites of Biodiversity Significance

Native plant communities ("NPC") are groups of native plants not significantly altered by human activities or by introduced species. The MnDNR classifies NPCs in Minnesota by considering a variety of features, including hydrology, vegetation, soils, topography, and natural disturbance regimes (*e.g.*, fire, floods, drought). NPC classifications are used throughout Minnesota for vegetation management, conservation, and land-use planning. The classification is based on plant species composition and was developed through field data collected from sample plots. The classification system is hierarchical with units described at levels ranging from landscape scale systems to local communities.[163]

The Project Study Area crosses 2,692 native plant ecological systems. Within these ecological systems there are 85 unique NPC classes. NPCs within these classes are further categorized by NPC type and subtype. NPCs within the Project Study Area are ranked between S1 to S5. NPCs ranked between S1-S3 are of higher quality than those ranked S4-S5. NPCs are not legally protected and development within NPCs is not prohibited.

Through the Minnesota Biological Survey ("MBS"), MnDNR systematically collects, interprets, and delivers baseline data on the distribution and ecology of rare plants, rare animals, NPC classes, and functional landscapes and designates sites which exhibit these characteristics as Sites of Biodiversity Significance ("SOBS").

SOBS are assigned one of four ranks based on several factors, including the quality (*e.g.*, size and condition) of NPC within the site, the presence and numbers of rare species populations, and the site's context within the landscape (e.g., whether the site is isolated in a landscape dominated by cropland or developed land, or whether it is contiguous with or close to other areas with intact NPCs). There are four ranks of SOBS: outstanding (having the best occurrences of the rarest species, NPCs, and most ecologically

[162] APLIC and USFWS. 2005. Available at: https://www.aplic.org/uploads/files/2634/APPguidelines_final-draft_Aprl2005.pdf. Accessed September 2025.

[163] MnDNR. 2025. Minnesota's Native Plant Communities. Available at: https://www.dnr.state.mn.us/npc/index.html. Accessed September 2025.

intact/functional landscape), high, moderate, and below.[164] SOBS are present throughout the Project Study Area. Four sites are ranked as Outstanding; 32 sites are ranked as High; 112 sites are ranked as Moderate; and 50 sites are ranked as Below. As routing for the Project is refined, the Applicants will avoid highly ranked NPCs and SOBS where practicable and will develop the appropriate BMPs related to such resources.

6.9.3.2 State Listed Species

The Applicants' consultant, Merjent, utilized the MnDNR's NHIS database (License Agreement #2023-052) to identify state-listed threatened and endangered species that may have the potential to occur within the Project Study Area. Several state-listed species have been documented within the vicinity of the Project Study Area, as described in Table 42. Species with a Special Concern status are not legally protected by Minnesota's Endangered Species Statute.

Table 42. State Protected Species within One Mile of the Project Study Area

Common Name	Scientific Name	State Status
Blanding's turtle	*Emydoidea blandingii*	Threatened
Blunt-lobed grapefern	*Sceptridium oneidense*	Threatened
Bog bluegrass	*Poa paludigena*	Threatened
Burrowing owl	*Athene cunicularia*	Endangered
Butternut	*Juglans cinerea*	Endangered
Clinton's bulrush	*Trichophorum clintonii*	Threatened
Clustered broomrape	*Orobanche fasciculata*	Threatened
Cuckoo flower	*Cardamine pratensis*	Threatened
Dakota skipper	*Hesperia dacotae*	Endangered
Fluted-shell	*Lasmigona costata*	Threatened
Garita skipperling	*Oarisma garita*	Threatened
Henslow's sparrow	*Centronyx henslowii*	Endangered
Loggerhead shrike	*Lanius ludovicianus*	Endangered
Louisiana broomrape	*Orobanche ludoviciana*	Threatened
Oakes' pondweed	*Potamogeton oakesianus*	Endangered
Poweshiek skipperling	*Oarisma poweshiek*	Endangered
Pugnose shiner	*Miniellus anogenus*	Threatened
Purple-flowered bladderwort	*Utricularia purpurea*	Endangered
Rock sandwort	*Minuartia dawsonensis*	Threatened
Short-beaked arrowhead	*Sagittaria brevirostra*	Endangered
Slender madtom	*Noturus exilis*	Endangered

[164] MnDNR. 2025. MBS Site Biodiversity Significance Ranks. Minnesota Biological Survey. Available at: https://www.dnr.state.mn.us/eco/mbs/biodiversity_guidelines.html. Accessed September 2025.

Common Name	Scientific Name	State Status
Slender prairie moonwort	*Botrychium campestre var. lineare*	Endangered
Spatulate moonwort	*Botrychium spathulatum*	Endangered
Sterile sedge	*Carex sterilis*	Threatened
Swamp blackberry	*Rubus semisetosus*	Threatened
Upswept moonwort	*Botrychium ascendens*	Endangered
Western prairie fringed orchid	*Platanthera praeclara*	Endangered
Wilson's phalarope	*Phalaropus tricolor*	Threatened
American goshawk	*Accipiter atricapillus*	Special Concern
Big brown bat	*Eptesicus fuscus*	Special Concern
Black sandshell	*Ligumia recta*	Special Concern
Blanketflower	*Gaillardia aristata*	Special Concern
Blunt sedge	*Carex obtusata*	Special Concern
Canada lynx	*Lynx canadensis*	Special Concern
Cerulean warbler	*Steophaga cerulea*	Special Concern
Common gallinule	*Gallinula galeata*	Special Concern
Creek heelsplitter	*Lasmigona compressa*	Special Concern
Drummond's campion	*Silene drummondii ssp. drummondii*	Special Concern
Few-flowered spikerush	*Eleochris quinqueflora*	Special Concern
Great Plains toad	*Anaxyrus cognatus*	Special Concern
Greater prairie chicken	*Tympanuchus cupido*	Special Concern
Hall's sedge	*Carex hallii*	Special Concern
Hill's thistle	*Cirsium pumilum var. hillii*	Special Concern
Lake sturgeon	*Acipenser fulvescens*	Special Concern
Lark sparrow	*Chondestes grammacus*	Special Concern
Leadplant flower moth	*Schinia lucens*	Special Concern
Least darter	*Etheostoma microperca*	Special Concern
Least moonwort	*Botrychium simplex*	Special Concern
Little brown bat	*Myotis lucifugus*	Special Concern
Marbled godwit	*Limosa fedoa*	Special Concern
Mudpuppy	*Necturus maculosus*	Special Concern
Narrow-leaved water plantain	*Alisma gramineum*	Special Concern
Northern barrens tiger beetle	*Cicindela patruela patruela*	Special Concern
Northern grasshopper mouse	*Onychomys leucogaster*	Special Concern
Northern long-eared bat	*Myotis septentrionalis*	Special Concern
Northern single-spike sedge	*Carex scirpoidea ssp. scirpoidea*	Special Concern

Common Name	Scientific Name	State Status
Nuttall's sunflower	*Helianthus nuttallii ssp. rydbergii*	Special Concern
Olive-colored southern naiad	*Najas guadalupensis ssp. olivacea*	Special Concern
Pale moonwort	*Botrychium pallidum*	Special Concern
Plains hog-nosed snake	*Heterodon nasicus*	Special Concern
Plains pocket mouse	*Perognathus flavescens*	Special Concern
Plains reedgrass	*Calamagrostis montanensis*	Special Concern
Pleated gentian	*Gentiana affinis var. affinis*	Special Concern
Prairie moonwort	*Botrychium campestre var. capestre*	Special Concern
Prairie vole	*Microtus ochrogaster*	Special Concern
Purple martin	*Progne subis*	Special Concern
Red-shouldered hawk	*Buteo lineatus*	Special Concern
Regal fritillary	*Argynnis idalia*	Special Concern
Slender naiad	*Najas gracillima*	Special Concern
Small white lady's-slipper	*Cypripedium candidum*	Special Concern
Spike oat	*Avenula hookeri*	Special Concern
Spiral ditchgrass	*Ruppia cirrhosa*	Special Concern
St. Lawrence grapefern	*Sceptridum rugulosum*	Special Concern
Trumpeter swan	*Cygnus buccinator*	Special Concern
Twig rush	*Cladium mariscoides*	Special Concern
Vermont bristle-berry	*Rubus vermontanus*	Special Concern
Water-willow	*Decodon verticillatus*	Special Concern
White adder's mouth	*Malaxis monophyllos var. brachypoda*	Special Concern
Yellow rail	*Coturnicops noveboracensis*	Special Concern

6.9.4 Federally Listed Species

The USFWS IPaC online tool was queried on September 30, 2025, for a list of federally threatened and endangered species, proposed species, candidate species, and designated critical habitat that may be present within the Project Study Area. The IPaC query identified seven species that may be present, and two species with federally designated critical habitats within the Project Study Area, as described in Table 43.

Table 43. Federally Listed Species and Designated Critical Habitat within the Project Study Area

Common Name	Scientific Name	Federal Status
Northern long-eared bat	*Myotis septentrionalis*	Endangered
Gray wolf	*Canis lupus*	Threatened
Dakota skipper[a]	*Hesperia dacotae*	Threatened
Western prairie fringed orchid	*Platanthera praeclara*	Threatened
Poweshiek skipperling	*Oarisma poweshiek*	Designated Critical Habitat
Monarch butterfly	*Danaus plexippus*	Proposed Threatened
Suckley's cuckoo bumble bee	*Bombus suckleyi*	Proposed Endangered
Western regal fritillary	*Argynnis idalia occidentalis*	Proposed Threatened
[a] Species also had designated critical habitat within Project boundary.		

6.9.4.1 Northern Long-eared Bat

The northern long-eared bat (("NLEB"), *Myotis septentrionalis*) is a federally endangered medium-sized bat of the Vespertilionidae family. Approximately 3.0 to 3.7 inches in length with a wingspan of 9 to 10 inches; the species derives its name from oversized ears relative to other members of the genus *Myotis*. In summer, the species roosts in both live trees and snags, and can be found roosting alone or in colonies under loose bark or in crevices and hollows. A habitat generalist, roost tree selection appears to be opportunistic; the species uses a variety of tree sizes and species, typically greater than or equal to 3 inches in diameter at breast height. The species is generally associated with forested habitats, including mesic hardwood, floodplain, and fire-dependent forests, particularly those near water sources. Occasionally, the species will use smaller forest patches connected by shelterbelts; however, this habitat is usually within 1,000 feet of other forested or wooded habitat as the species tends to stay close to more densely forested areas while foraging. Males and non-reproductive females may also roost in cooler places such as caves and mines. It has also been found, rarely, roosting in structures such as barns and sheds. The species overwinters in small crevices or cracks in hibernacula (*e.g.*, caves and mines with constant temperatures, high humidity, and no air currents).[165]

The primary threat to the northern long-eared bat is white-nose syndrome. Other sources of mortality such as collisions with wind turbines, loss of summer habitat, and changes which alter the microhabitat of hibernacula have not been observed to produce significant population declines; however, as white-nose syndrome impacts more populations, impacts from these activities may become more pronounced.[166]

[165] USFWS. 2025. Northern Long-eared Bat (Myotis septentrionalis). Available at: https://www.fws.gov/species/northern-long-eared-bat-myotis-septentrionalis. Accessed September 2025.

[166] USFWS. 2025. Northern Long-eared Bat (Myotis septentrionalis). Available at: https://www.fws.gov/species/northern-long-eared-bat-myotis-septentrionalis. Accessed September 2025.

Potential impacts on individual NLEBs may occur if clearing or construction takes place when the species is breeding, foraging, or raising pups in its summer habitat. Bats may be injured or killed if occupied trees are cleared during this active window, and the species may be disturbed during clearing or construction activities due to noise or human presence. Tree clearing activities conducted when the species is in hibernation and not present on the landscape will not result in direct impacts on individual bats but could result in indirect impacts due to removal of suitable foraging and roosting habitat.

In Minnesota, the species is most likely to be found in forested wetlands and riparian areas. However, individual trees, fence rows, or small wooded lots (less than 10 acres) that are greater than 1,000 feet from forested/wooded areas are considered unsuitable for the species, as are pure stands of less than three-inch diameter-at-breast-height trees that are not mixed with larger trees and trees found in highly developed urban areas. Maternity roost trees have been identified in Sections T138 R31 S10 and S11 of the Project Study Area. Route planning will avoid roosting tree locations. There are no hibernacula identified within one mile of the Project Study Area; therefore, potential impacts are not expected to occur to these features. The Applicants will consult with the USFWS to develop additional necessary avoidance and minimization measures for this species and will comply with any applicable USFWS requirements.

6.9.4.2 Gray Wolf

The gray wolf is the largest of the wild dog species and is found in a variety of habitats throughout North America. They are typically distinguishable from coyotes by their larger size, shorter, more rounded ears, and broader muzzle. Gray wolves prey primarily on large ungulates, including white-tailed deer (*Odocoileus virginianus*), elk (*Cervus elaphus*), moose (*Alces alces*), bison (*Bison bison*), and caribou (*Rangifer tarandus*), depending on location. They will occasionally take smaller prey, including beaver (*Castor canadensis*), insects, various small mammals, and domestic animals. Additionally, wolves will usurp carcasses and scavenge carrion opportunistically from kills made by other carnivores.

A habitat generalist, the gray wolf originally occupied most habitat types in North America. They show no preference for one cover type over another and successfully utilize alpine, forest, grassland, shrubland, and woodland habitats across their range. Once thought to require wilderness areas with little to no human disturbance, recent range expansions have demonstrated the species' ability to tolerate higher rates of anthropogenic development than previously thought. Given abundant prey and low rates of human-caused mortality, wolves can survive in proximity to human-dominated environments.[167]

Suitable habitat for the gray wolf is present within the Project Study Area; however, due to the transient nature of the gray wolf, it is unlikely that gray wolves would persist within the Project Study Area during construction. Therefore, impacts on the gray wolf are

[167] USFWS. 2025. Species Profile for Gray Wolf (Canis lupus). Available at: https://ecos.fws.gov/ecp/species/4488. Accessed September 2025; USFWS. 2025. Gray Wolf (Canis lupus). Available at: https://www.fws.gov/species/gray-wolf-canis-lupus. Accessed September 2025.

anticipated to be minor and short term. The Applicants will support the lead federal agency in consultation with the USFWS to develop necessary avoidance and mitigation measures for this species.

6.9.4.3 Dakota Skipper

The Dakota skipper is a small-to-medium sized butterfly characterized by a short, sturdy body and a quick, skipping flight. Adult males are tawny-orange to brown on dorsal surfaces with lighter, dusty yellow-orange ventral surfaces; forewings display conspicuous dark markings. Dakota skipper adults have a lifespan of only one to two weeks and can be seen during the breeding and egg-laying season between mid-June and mid-July. Adult skipper flight periods may be tied to the purple cornflower blooming period in prairie habitats where this species is present. The species is present in suitable habitat year-round as the larvae overwinter at the base of plants on which they forage in the spring.

The species is an obligate of untilled, high-quality native prairie containing a variety of wildflowers and grasses. Dakota skippers do not thrive in heavily grazed or cultivated areas but can be found in both wetlands and uplands. The preferred wetland habitat is associated with plant species consisting of little bluestem (*Schizachyrium scoparium var. scoparium*), wood lily (*Lilium philadelphicum*), and harebell (C*ampanula rotundifolia*).[168] In Minnesota, the Dakota skipper may be found primarily in native dry-mesic to dry prairie where mid-height grasses such as little bluestem, prairie dropseed (*Sporobolus heterolepis*), and side-oats grama (B*outeloua curtipendula var. curtipendula*) dominate. The status of the Dakota skipper in Minnesota is tenuous: intensive survey efforts since 2012 have found only one remaining Dakota skipper population in Minnesota.[169]

Designated critical habitat is defined as those areas that are considered crucial for the conservation of a species, and that may require special management or protection. This designation is based on the presence of certain primary constituent features (“PCE”), which are physiological or biological features of habitat that are considered essential for the conservation of the species.

Critical habitat has been designated for the Dakota skipper and is present in Clay County at the Bluestem Prairie Scientific and Natural Area. The PCEs of Dakota skipper critical habitat include wet-mesic tallgrass or mixed-grass remnant prairie occurring on or near glacial lake deposits or high-quality dry-mesic remnant prairie containing native forbs and grasses, glacial soils with micro-climate conditions suitable for larval survival and native prairie vegetation, less than five percent tree or shrub cover in dry prairies and less than 25 percent cover in wet mesic prairies, and less than five percent invasive or nonnative plant species. Undeveloped grassland habitat dominated by perennial grasses with no

[168] USFWS. 2025. Dakota Skipper. Available at: https://www.fws.gov/species/dakota-skipper-hesperia-dacotae. Accessed September 2025.

[169] MnDNR. 2025. Rare Species Guide: Hesperia dacotae. Available at: https://www.dnr.state.mn.us/rsg/profile.html?action=elementDetail&selectedElement=IILEP65140 DNR. Accessed October 2025.

barriers must be present within 0.6 mile of native high quality remnant prairie that connects high-quality wet-mesic to dry tallgrass prairie or moist meadow habitats. Native grasses and native flowering forbs must be available for larvae and adult food and shelter, specifically Prairie dropseed (*Sporobolus heterolepis*) or little bluestem (*Schizachyrium scoparium)*. Additionally, one or more specific flowering forbs must be in bloom during the Dakota skipper flight period.[170]

To avoid adverse impacts on Dakota skipper designated critical habitat, the Applicants will site the Project to avoid intersecting the designated critical habitat to the maximum extent possible. For habitat outside of designated critical habitat, in advance of construction, the Applicants will conduct desktop reviews to identify potentially suitable habitat. Should habitat be identified during the desktop review, field surveys to determine the extent of potentially suitable Dakota skipper habitat that may be affected by the Project will be conducted. If suitable habitat cannot be avoided, the Applicants will consult with the USFWS and MnDNR to determine the next steps and develop appropriate avoidance and minimization measures.

6.9.4.4 Monarch Butterfly

The monarch butterfly is a large butterfly with an approximate three- to four-inch wingspan and characterized by bright orange coloring on the wings with distinctive black borders and veining, serving as a warning sign to predators of their toxicity. In North America, the species is split into two populations (eastern and western), both well known for their long-distance migration. During the fall, both populations begin migrating to their overwintering locations, where they require a specific microclimate with a temperature that prevents excessive lipid depletion but also prevents freezing. At overwintering sites, monarchs undergo reproductive diapause until the spring when males and females begin mating before dispersing north again. The eastern population migrates from Mexico to Canada, reproducing two to three generations while migrating. The western population migrates north and east from coastal California toward the Rockies and Pacific Northwest, also reproducing into multiple generations.

Throughout the migration corridor and during the breeding cycles, monarchs can be found in a wide variety of habitats including prairies, grasslands, urban gardens, road ditches, and agricultural fields if there is a healthy and abundant supply of nectar resources for foraging that are diverse and of sufficient quality. The patch size and location of this type of habitat is important for monarchs as well. Milkweed must also be of sufficient quality

[170] USFWS. 2015. Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Dakota Skipper and Poweshiek Skipperling. Available at: https://www.fws.gov/sites/default/files/federal_register_document/2015-24184.pdf. Accessed September 2025.

and quantity as it is the sole host plant for oviposition and for the larvae to feed until the larvae pupate into a butterfly.[171]

Suitable habitat for monarchs may be present. If the USFWS determines the species should be listed and protections for the species will coincide with Project planning, permitting, and/or construction, the Applicants will review Project activities for potential impacts to the species, develop appropriate avoidance and mitigation measures, and consult with the USFWS as appropriate.

6.9.4.5 Suckley's Cuckoo Bumble Bee

The Suckley's cuckoo bumble bee's ("Suckley's") range spans from the Yukon south to Arizona and as far as Newfoundland in a widely distributed range of elevations. Suckley's are obligatory social parasites of social bumble bees and cannot successfully reproduce without the availability of suitable host colonies. Host bumble bee nests are often found in abandoned underground holes in a variety of habitat types including meadows, fallow fields, croplands, urban areas, and forests. When females of this species come out of hibernation, they take over the nest of a suitable host colony (most notably, western bumble bees (*Bombus occidentalis*) and Nevada bumble bees *(Bombus nevadensis)* and the host workers provide for the Suckley's young. A generalist, adult females, eggs, larvae, male drone, and new females all require a diversity of native floral resources for pollen and nectar. Little is known about the overwintering sites; however, thermal suitability is required throughout their life cycle. Females overwinter underground in areas separate from nesting habitat, likely using loose substrates such as leaf litter, duff, or rotting logs.[172]

Suitable habitat for Suckley's cuckoo bumble bee may be present. If the USFWS determines the species should be listed and protections for the species will coincide with Project planning, permitting, and/or construction, the Applicants will review Project activities for potential impacts to the species, develop appropriate avoidance and mitigation measures, and consult with the USFWS as appropriate.

6.9.4.6 Western Regal Fritillary

The western regal fritillary is found in large, intact, contiguous native tallgrass prairie habitats in portions of Arkansas, Colorado, Illinois, Indiana, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, Oklahoma, South Dakota, Wisconsin, and Wyoming. Regal fritillaries can range widely with females potentially traveling up to 100 miles searching for three main habitat components: violet hostplants for larvae, nectar plants for adults, and native grasses to provide protection throughout the life cycle. Adults can

[171] USFWS. 2024. Monarch Butterfly (Danaus plexippus) Species Status Assessment Report, Version 2.3 (December 2024). Available at: https://www.fws.gov/sites/default/files/documents/2025-01/ssa_monarch-butterfly_2024.pdf. Accessed September 2025.

[172] USFWS. 2024. Suckley's Cuckoo Bumble Bee (Bombus suckleyi) Species Status Assessment, Alaska Region, Version 1 (August 2024). Available at: https://iris.fws.gov/APPS/ServCat/DownloadFile/263505. Accessed September 2025.

be found foraging in both upland and wet prairie habitats; however, habitat can only be considered suitable for all life stages if violet species are present to provide shelter and forage for larvae. The density of violets seems to correlate positively to the number of butterflies within a given area. Habitat alteration has reduced the species' range and abundance.[173]

Suitable habitat for western regal fritillary may be present. If the USFWS determines the species should be listed and protections for the species will coincide with Project planning, permitting, and/or construction, the Applicants will review Project activities for potential impacts to the species, develop appropriate avoidance and mitigation measures, and consult with the USFWS as appropriate.

6.9.4.7 Western Prairie Fringed Orchid

Western prairie fringed orchid is a perennial orchid of the North American tall grass prairie and is found most often on unplowed, calcareous prairies and sedge meadows. Soil moisture is a critical determinant of growth, flowering, and distribution. Pollination is required for seed production, and the species is pollinated by only a few species of sphinx moths. Seeds are wind-dispersed and may also be adapted for dissemination through the soil profile by water. This species is dependent on mycorrhizal fungi for seed germination and nutritional support before plants are capable of photosynthesis. The persistence of western prairie fringed orchid is dependent on periodic disturbance by fire, mowing, or grazing, but these practices may also cause adverse effects and must be carefully implemented.[174] In northern Minnesota, the species is typically found in northern wet prairie, northern mesic prairie, and occasionally prairie wet meadow/carr, while in southern Minnesota most populations occur in either southern mesic or southern wet prairie.[175]

Potentially suitable habitat for the species is present in the Project Study Area. In advance of construction, the Applicants will conduct desktop reviews to identify potentially suitable habitat. Should habitat be identified during the desktop review, field surveys to determine the extent of potentially suitable western prairie fringed orchid habitat that may be affected by the Project will be conducted. If suitable habitat cannot be avoided, the Applicants will consult with the USFWS and MnDNR to determine next steps and develop appropriate avoidance and minimization measures.

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[173] USFWS. 2024. Endangered and Threatened Wildlife and Plants; Endangered Status for the Eastern Regal Fritillary and Threatened Status with Section 4(d) Rule for the Western Regal Fritillary, Proposed Rule. Available at: https://www.govinfo.gov/content/pkg/FR-2024-08-06/pdf/2024-16982.pdf. Accessed September 2025.

[174] USFWS. 2025. Western Prairie Fringed Orchid. Available at: https://www.fws.gov/species/western-prairie-fringed-orchid-platanthera-praeclara. Accessed September 2025.

[175] MnDNR. 2025. Rare Species Guide: Western Prairie Fringed Orchid. Available at: https://www.dnr.state.mn.us/rsg/profile.html?action=elementDetail&selectedElement=PMORC1Y0S0 Accessed October 2025.

6.9.4.8 Poweshiek Skipperling

The Poweshiek skipperling is a small and slender-bodied butterfly, with a wingspan ranging from 0.9 to 1.2 inches.[176] The Poweshiek skipperling has a single annual generation. Adults have been recorded from the last week of June into the first week of August in Minnesota, but in a typical year most adults fly between the end of June and the middle of July. Eggs hatch in about ten days, and the partly grown larvae overwinter and complete development the following spring.[177]

Habitat preferences of the Poweshiek skipperling include untilled prairie fens, grassy lake and stream margins, moist meadows, and wet-mesic to dry tallgrass prairie. The species relies on a variety of nectar plants for feeding. Smooth ox-eye (*Heliopsis helianthoides*), purple coneflower, stiff tickseed (*Coreopsis palmata*), black-eyed susan (*Rudbeckia hirta*), and palespike lobelia (*Lobelia spicata*) are common food sources, but preferred plants vary across the species' range. In Minnesota, the butterfly utilizes both high, dry, tallgrass and low, wet prairie remnants. In drier habitats, skipperlings are likely to use purple coneflower almost exclusively, and adult emergence is closely tied to the coneflower's lifecycle.[178]

Poweshiek skipperlings are thought to be extirpated from Minnesota.[179] The last confirmed sightings of this butterfly in Minnesota were in 2007, despite extensive annual surveys beginning in 2013 covering a large fraction of the many sites in Minnesota where the species used to occur. The only known remaining population in the western part of its range, where more than 95 percent of the species' global population occurred, is in Manitoba, Canada, a few kilometers north of the Minnesota border.[180]

As shown in Table 43, the IPaC results did not identify the Poweshiek skipperling as a species that may be present within the Project Study Area; only designated critical habitat for the species was identified.

The Poweshiek skipperling is extirpated from Minnesota;[181] however, critical habitat has been designated for the species and is present in Clay and Wilkin counties. The PCEs of

[176] USFWS. 2025. Poweshiek Skipperling. Available at: https://www.fws.gov/species/poweshiek-skipperling-oarisma-poweshiek. Accessed October 2025.

[177] MnDNR. 2025. Rare Species Guide: Poweshiek Skipperling. Available at: https://www.dnr.state.mn.us/rsg/profile.html?action=elementDetail&selectedElement=IILEP57010. Accessed October 2025.

[178] USFWS. 2025. Poweshiek Skipperling. Available at: https://www.fws.gov/species/poweshiek-skipperling-oarisma-poweshiek. Accessed October 2025.

[179] USFWS. 2025. Poweshiek Skipperling. Available at: https://www.fws.gov/species/poweshiek-skipperling-oarisma-poweshiek. Accessed October 2025.

[180] MnDNR. 2025. Rare Species Guide: Poweshiek Skipperling. Available at: https://www.dnr.state.mn.us/rsg/profile.html?action=elementDetail&selectedElement=IILEP57010. Accessed October 2025.

[181] USFWS. 2025. Poweshiek Skipperling. Available at: https://www.fws.gov/species/poweshiek-skipperling-oarisma-poweshiek. Accessed October 2025.

Poweshiek skipperling critical habitat include wet-mesic to dry tallgrass remnant prairies, prairie fen habitats, and/or remnant moist meadows containing predominantly native grasses and forbs for larval and adult food and shelter, undisturbed glacial soils for larval survival, low wet areas adjacent to prairies for shelter, less than 5 percent trees or shrubs in dry prairies, and less than 25 percent trees or shrubs in wet mesic prairies, and less than 5 percent nonnative invasive species. In addition, dispersal grassland habitat that is within 1 kilometer (0.6 mile) of native high-quality remnant prairie that connects high quality wet-mesic to dry tallgrass prairies, moist meadows, or prairie fen habitats. Dispersal grassland habitat consists of undeveloped open areas dominated by perennial grassland with limited or no barriers to dispersal including tree or shrub cover less than 25 percent of the area and no row crops such as corn, beans, potatoes, or sunflowers.[182]

To avoid adverse impacts on Poweshiek skipperling designated critical habitat, the Applicants will site the Project to avoid intersecting the designated critical habitat to the maximum extent possible. For habitat outside of designated critical habitat, in advance of construction, the Applicants will conduct desktop reviews to identify potentially suitable habitat. Should habitat be identified during the desktop review, field surveys to determine the extent of potentially suitable Poweshiek skipperling habitat that may be affected by the Project will be conducted. If suitable habitat cannot be avoided, the Applicants will consult with the USFWS and MnDNR to determine the next steps and develop appropriate avoidance and minimization measures.

6.9.5 Bald and Golden Eagles

Bald eagles (*Haliaeetus leucocephalus*) are protected by both the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act ("BGEPA"). The BGEPA prohibits the take of a bald or golden eagle adults, juveniles, or chicks including their parts, nests, or eggs without a permit. Take is defined by the BGEPA as to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb. The BGEPA also addresses impacts resulting from human-induced alterations occurring around previously used nesting sites. Work conducted within 660 feet of an active eagle nest during the nesting season may disturb nesting eagles to such a degree that adults abandon the nest, resulting in take of eggs and/or chicks; an active nest is one where eggs or chicks are present. In Minnesota, the bald eagle nesting season is generally January 15 to August 15.[183]

Bald eagles may be present in Minnesota year-round; the species overwinters near the Mississippi River in Wabasha and Red Wing, and breeds and nests in northeastern and

[182]USFWS. 2015. Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Dakota Skipper and Poweshiek Skipperling. Available at: https://www.fws.gov/sites/default/files/federal_register_document/2015-24184.pdf. Accessed September 2025.

[183] USFWS. 1940. Bald and Golden Eagle Protection Act. Available at: https://www.fws.gov/law/bald-and-golden-eagle-protection-act. Accessed October 2025.

north central Minnesota.[184] The species is primarily found near rivers, lakes, marshes, and other waterbodies where opportunities to fish are plentiful. Bald eagles nest in tall trees with clear lines of sight and large sturdy branches for perching and nest building.

If construction activities will take place in suitable eagle nesting habitat during the species nesting season, surveys to identify active nests within 660 feet of work areas will be conducted in early spring (*i.e.*, late March/early April) of the year of construction. If active nests are identified within the disturbance buffer, the Applicants will consult with the USFWS to determine next steps and develop appropriate avoidance and minimization measures.

6.9.6 General Measures

The Applicants will continue to coordinate with the MnDNR and USFWS to avoid and minimize Project impacts on sensitive species. The following general measures will be used to help avoid or minimize impacts on rare natural resources during and after the completion of the proposed Project:

- Constructing within, or adjacent to, an existing right-of-way where possible, minimizing impacts to habitat.
- Using BMPs to prevent the erosion of soils in the areas of impact.
- Implementing sound water and soil conservation practices during construction and operation of the Project to protect topsoil and adjacent water resources and minimize soil erosion. Practices may include containing excavated material, protecting exposed soil, and stabilizing restored soil.
- Re-vegetating disturbed areas with native species and wildlife conservation species, where applicable if the landowner agrees.
- Implementing raptor protection measures, including following APLIC Avian Safe Design recommendations and placement of bird flight diverters on the line after consultation with USFWS and MnDNR, if needed.
- Reporting any eagle or other migratory bird nests discovered during survey of the line or in the land acquisition process to the USFWS and adhering to guidance provided by the agency.

[184] MnDNR. 2025. Bald Eagles. Available at: https://www.familydaysout.com/attractions/heritage-hjemkomst-interpretive-center. Accessed October 2025.

In addition to the Certificate of Need requested in this Application, a Route Permit from the Commission will be required. The Applicants may also need other local, state and federal approvals depending on the final route selected and conditions encountered during construction. A list of potential permits, approvals, or consultations that could be required is provided in Table 44. Typical municipal permit categories are listed, but specific permits may vary from county to county. Once the Commission approves a Route Permit, all local zoning, building, and land use rules, regulations, or ordinances are preempted per Minn. Stat. § 216I.18, subd. 1. Chapter 8 contains a record of outreach to regulatory agencies, stakeholders, and Tribal Nations to date.

Table 44. Summary of Potential Permits, Licenses, Approvals, and Consultations

Permits, Licenses, Approvals, and Consultations	Administering Agency
LOCAL	
Utility Permit/Utility Installation Permit	County, Township, City
Land and Shore Alteration Permit	County, Township, City
Oversize/Overweight Permit and / or Moving Permit	County, Township, City
Access / Driveway Entrance / Approach Permit	County, Township, City
Municipal Stormwater Permits	County, Township, City
STATE	
Certificate of Need	Commission
Route Permit	Commission
State Endangered Species Consultation	MnDNR, Natural Heritage and Nongame Research Program
License to Cross Public Lands and Waters	MnDNR Division of Lands and Minerals
Construction Dewatering Permit	MnDNR
State Lease for Access Roads	MnDNR Division of Lands and Minerals
National Pollutant Discharge Elimination System / State Disposal System Construction Stormwater General Permit	MPCA
Section 401 Clean Water Act Water Quality Certification	MPCA
Spill Prevention, Control and Countermeasure Plan	MPCA Emergency Response Program
Wetland Conservation Act – Wetland Type Confirmation and Delineation Concurrence	Minnesota Board of Water and Soil Resources (“BWSR”) or Local Government Units
Wetland Conservation Act – Utility Exemption	BWSR
Water Appropriation Permit	MnDNR Ecological and Water Resources
Public Waters Work Permit	MnDNR Ecological and Water Resources

Permits, Licenses, Approvals, and Consultations	Administering Agency
Minnesota Field Archaeology Act Compliance Minnesota Historic Sites Act Compliance Minnesota Private Cemeteries Act Compliance	State Historic Preservation Office (“SHPO”) Tribal Historic Preservation Office (“THPO”) Minnesota Indian Affairs Council
Driveway/Access Permit	Minnesota Department of Transportation (“MnDOT”)
Utility Accommodation on Trunk Highway Right-of-Way	MnDOT
Oversize/Overweight Permit	MnDOT
FEDERAL	
Section 404 Clean Water Act Permit	USACE, St. Paul District
Section 10 Rivers and Harbors Act Permit	USACE, St. Paul District
Endangered Species Act Section 7 Consultation Migratory Bird Treaty Act Consultation Bald and Golden Eagle Protection Act Consultation	USFWS
Section 106 National Historic Preservation Act Consultation	SHPO/THPO
Part 7460 Airport Obstruction Evaluation (Notice of Proposed Construction)	Federal Aviation Administration (“FAA”)
Notice of Actual Construction or Alteration	FAA
Land and Water Conservation Fund Conversion Approval	National Park Service (via MnDNR)
Farmland Protection Policy Act / Farmland Conversion Impact Rating	US Department of Agriculture / Natural Resources Conservation Service
OTHER	
Utility License Agreements	Utilities (Pipelines, Transmission Lines)
Crossing Agreements	Other Utilities (Railways)

As part of the pre-application process, the Applicants initiated outreach to Tribal Nations and to federal, state, and local agencies to communicate information about the proposed Project and to invite comments and request information that could be used during the routing and design process. Table 45 identifies agencies and Tribal Nations that were contacted and the dates that the communications occurred through meetings, emails, and project notification / project update letters. Project introduction letters were sent on June 9, 2025. Invitations for the June open houses were sent on June 13, 2025, and invitations for the October open houses were sent on October 6, 2025. These communications are in addition to the public outreach outlined in Section 8.5. *See* Appendix K and Appendix L for copies of communications with agencies and Tribal Nations. *See* Appendix M for public outreach materials used for the Project.

Table 45. Agency and Tribal Nation Outreach

Name	Dates of Communications
Federal	
U.S. Army Corps of Engineers	6/9/25, 6/16/25, 10/6/25
U.S. Department of Agriculture	6/9/25, 6/16/25, 10/6/25
U.S. Fish and Wildlife Service	6/9/25, 6/13/25, 6/16/25, 10/6/25
Federal Aviation Administration	6/9/25, 6/16/25, 10/6/25
Tribal	
1854 Treaty Authority	6/9/25, 6/13/25, 10/6/25
Bois Forte Band of Chippewa	6/9/25, 6/13/25, 10/6/25
Fond du Lac Band of Lake Superior Chippewa	6/9/25, 6/13/25, 10/6/25
Grand Portage Bank of Lake Superior Chippewa	6/9/25, 6/13/25, 10/6/25
Leech Lake Band of Ojibwe	6/9/25, 6/13/25, 10/6/25
Lower Sioux Indian Community	6/9/25, 6/13/25, 10/6/25
Mille Lacs Band of Ojibwe	6/9/25, 6/13/25, 10/6/25
Minnesota Chippewa Tribe	6/9/25, 6/13/25, 10/6/25
Prairie Island Indian Community	6/9/25, 6/13/25, 10/6/25
Red Lake Nation	6/9/25, 6/13/25, 10/6/25
Shakopee Mdewakanton Sioux Community	6/9/25, 6/13/25, 10/6/25
Upper Sioux Community	6/9/25, 6/13/25, 10/6/25
White Earth Nation	6/9/25, 6/13/25, 10/6/25
State	
Minnesota Board of Soil and Water Resources	10/6/25
Minnesota Department of Agriculture	6/9/25, 6/16/25, 10/6/25
Minnesota Department of Commerce	6/9/25, 6/16/25, 10/6/25
Minnesota Department of Health	6/9/25, 6/16/25, 10/6/25

Name	Dates of Communications
Minnesota Department of Natural Resources	6/9/25, 6/13/25, 6/16/25, 7/28/25, 10/6/25
Minnesota Department of Transportation	6/9/25, 6/16/25, 10/6/25
Minnesota Indian Affairs Council	6/9/25, 6/16/25, 10/6/25
Minnesota Pollution Control Agency	6/9/25, 6/16/25, 10/6/25
Minnesota Public Utilities Commission	6/9/25, 6/16/25, 10/6/25
Minnesota State Historic Preservation Office	6/9/25, 6/16/25, 10/6/25
Minnesota Office of the State Archaeologist	6/9/25, 6/16/25, 10/6/25
Minnesota Association of Townships	10/6/25
Local	
Akron Township	6/9/25, 6/16/25
Aldrich Township	6/9/25, 6/16/25
Alliance Township	6/9/25, 6/16/25, 10/6/25
Andrea Township	6/9/25, 6/16/25
Ansel Township	6/9/25, 6/16/25, 10/6/25
Atherton Township	6/9/25, 6/16/25, 10/6/25
Audubon City	10/6/25
Audubon Township	6/9/25, 6/16/25, 10/6/25
Aurdal Township	6/9/25, 6/16/25
Badoura Township	6/9/25, 6/16/25, 10/6/25
Barnesville City	6/9/25,10/6/25
Barnesville Township	6/16/25, 10/6/25
Battle Lake City	6/9/25, 6/13/25
Baxter City	6/9/25, 6/16/25, 10/6/25
Becker County	6/9/25, 6/16/25, 10/6/25
Becker Township	6/9/25, 6/16/25, 10/6/25
Blueberry Township	6/9/25, 6/16/25, 10/6/25
Bluffton City	6/9/25, 6/16/25
Brainerd City	6/9/25, 6/16/25, 10/6/25
Breezy Point City	10/6/25
Bull Moose Township	6/9/25, 6/16/25, 10/6/25
Bungo Township	6/9/25, 6/16/25, 10/6/25
Burlington Township	6/9/25, 6/16/25, 10/6/25
Buse Township	6/9/25, 6/16/25
Byron Township	6/9/25, 6/16/25, 10/6/25
Candor Township	6/9/25, 6/16/25, 10/6/25
Carlisle Township	6/9/25, 6/16/25
Cass County	6/9/25, 6/16/25
Center Township	6/9/25, 6/16/25, 10/6/25

Name	Dates of Communications
Clay County	6/9/25, 6/16/25
Corliss Township	6/9/25, 6/16/25
Compton Township	6/9/25, 6/16/25
Cormorant Township	6/9/25, 6/16/25, 10/6/25
Crosby City	6/9/25, 6/16/25
Crow Wing County	6/9/25, 6/16/25
Crow Wing Lake Township	6/9/25, 6/16/25, 10/6/25
Dane Prairie Township	6/9/25, 6/16/25
Deer Creek City	6/9/25, 6/16/25
Deerfield Township	6/9/25, 6/16/25, 10/6/25
Deerhorn Township	6/9/25, 6/16/25, 10/6/25
Dent City	6/9/25, 6/16/25
Detroit Lakes City	10/7/25
Detroit Township	6/9/25, 6/16/25, 10/7/25
Dilworth City	6/9/25, 6/13/25, 6/16/25, 10/7/25
Dunn Township	6/9/25, 6/16/25, 10/7/25
Eagle Township	6/9/25, 6/16/25
East Gull Lake City	6/9/25, 10/7/25
Eglon Township	6/9/25, 6/16/25, 10/7/25
Elizabeth City	6/9/25, 6/16/25
Elizabeth Township	6/9/25, 6/16/25
Elkton Township	6/9/25, 6/16/25, 10/7/25
Elmwood Township	6/9/25, 6/16/25, 10/7/25
Erhard City	6/9/25, 6/16/25
Erhards Grove Township	6/9/25, 6/16/25
Erie Township	6/9/25, 6/16/25, 10/7/25
Evergreen Township	6/9/25, 6/16/25, 10/7/25
Everts Township	6/9/25, 6/16/25
Fairview Township	6/9/25, 6/16/25, 10/7/25
Fargo Township	6/9/25, 6/16/25
Fergus Falls City	6/9/25, 6/16/25
Fergus Falls Township	6/9/25
Flowing Township	6/9/25, 6/16/25, 10/7/25
Friberg Township	6/9/25, 6/16/25
Georgetown Township	6/9/25, 6/16/25, 10/7/25
Girard Township	6/9/25, 6/16/25
Glyndon City	10/7/25
Glyndon Township	6/9/25, 6/16/25, 10/7/25
Gorman Township	6/9/25, 6/16/25
Green Valley Township	6/9/25, 6/16/25, 10/7/25

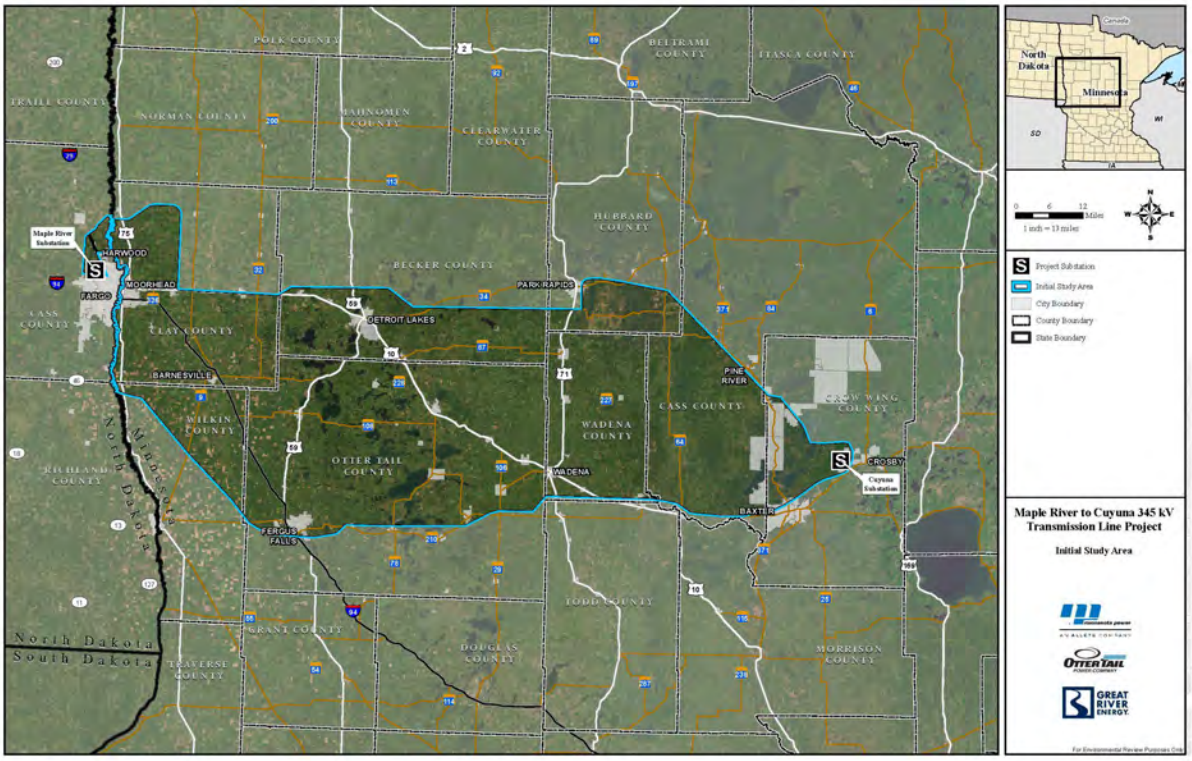
Name	Dates of Communications
Harwood Township	6/9/25, 6/16/25
Hawley Township	6/9/25, 6/16/25, 10/7/25
Height of Land Township	6/9/25, 6/16/25, 10/7/25
Henning City	6/9/25, 6/13/25
Henning Township	6/9/25, 6/16/25
Henrietta Township	6/9/25, 6/16/25
Hobart Township	6/9/25, 6/16/25, 10/7/25
Holy Cross Township	6/9/25, 6/16/25, 10/7/25
Homestead Township	6/9/25, 6/16/25
Hubbard County	6/9/25, 6/16/25, 17/6/25, 11/12/25
Hubbard Township	6/9/25, 6/16/25,
Humboldt Township	6/9/25, 6/16/25, 10/7/25
Huntersville Township	6/9/25, 6/16/25, 10/7/25
Ideal Township	6/9/25, 6/16/25, 10/7/25
Inman Township	6/9/25, 6/16/25
Irondale Township	6/9/25, 6/16/25, 10/7/25
Ironton City	6/9/25, 6/16/25, 10/7/25
Jenkins City	6/9/25, 6/16/25, 10/7/25
Jenkins Township	6/9/25, 6/16/25, 10/7/25
Kragnes Township	6/9/25, 6/16/25, 10/7/25
Kurtz Township	6/9/25, 6/16/25, 10/7/25
Lake Edward Township	6/9/25, 6/16/25, 10/7/25
Lake Eunice Township	6/9/25, 6/16/25, 10/7/25
Lake Park City	10/7/25
Lake Park Township	6/9/25, 6/16/25, 10/7/25
Lake Shore City	6/9/25, 6/16/25
Lake View Township	6/9/25, 6/16/25, 10/7/25
Leaf Lake Township	6/9/25, 6/16/25
Loon Lake Township	6/9/25, 6/16/25, 10/7/25
Manston Township	6/9/25, 6/16/25
Maple Township	6/9/25, 6/16/25, 10/6/25
Maplewood Township	6/9/25
May Township	6/9/25, 6/16/25, 10/6/25
McKinley Township	6/9/25, 6/16/25, 10/6/25
Meadows Township	6/9/25, 6/16/25
Menahga City	6/9/25, 6/16/25
Mitchell Township	6/9/25, 6/16/25
Moland Township	6/9/25, 6/16/25, 10/7/25
Moorhead City	10/6/25, 10/7/25
Moorhead Township	6/9/25, 6/16/25

Name	Dates of Communications
Morken Township	6/9/25, 6/16/25, 10/7/25
Nevis Township	6/9/25, 6/16/25, 10/7/25
New York Mills City	6/9/25, 6/16/25
Newton Township	6/9/25, 6/16/25
Nisswa City	6/9/25, 6/16/25, 10/7/25
Norwegian Grove Township	6/9/25, 6/16/25, 10/7/25
Oak Lawn Township	6/9/25, 6/16/25, 10/7/25
Oak Valley Township	6/9/25, 6/16/25
Oakport Township	6/9/25, 6/16/25, 10/7/25
Orwell Township	6/9/25, 6/16/25
Oscar Township	6/9/25, 6/16/25
Otter Tail County	6/9/25, 6/16/25, 10/28/25
Ottertail City	6/9/25, 6/13/25
Otto Township	6/9/25, 6/16/25
Park Rapids City	6/9/25, 6/16/25
Parke Township	6/9/25, 6/16/25, 10/7/25
Pelican Rapids City	6/9/25, 6/13/25
Pelican Township – Crow Wing	6/9/25, 6/16/25, 10/7/25
Pelican Township – Otter Tail	6/9/25, 6/16/25, 10/7/25
Perham City	6/9/25, 6/16/25
Perham Township	6/9/25, 6/16/25
Pequot Lakes City	6/9/25, 6/13/25, 10/7/25
Pillager City	6/9/25, 10/7/25
Pine Lake Township	6/9/25, 6/16/25
Pine River City	6/9/25, 6/16/25
Pine River Township	6/9/25, 6/16/25, 10/7/25
Pleasant Township	6/9/25, 6/16/25
Poplar Township	6/9/25, 6/16/25, 10/7/25
Prairie View Township	6/9/25, 6/16/25, 10/7/25
Reed Township	6/9/25, 6/16/25
Richville City	6/9/25, 6/16/25
Riverton City	6/9/25, 6/13/25, 10/7/25
Riverton Township	6/9/25, 6/16/25, 10/7/25
Rothsay City	6/9/25, 6/16/25
Runeberg Township	6/9/25, 6/16/25, 10/7/25
Sabin City	10/7/25
Scambler Township	6/9/25, 6/16/25, 10/7/25
Sebeka City	6/9/25, 6/16/25
Shell River Township	6/9/25, 6/16/25, 10/7/25
Silver Leaf Township	6/9/25, 6/16/25, 10/7/25

Name	Dates of Communications
Skree Township	6/9/25, 6/16/25, 10/7/25
Spring Prairie Township	10/7/25
Spruce Grove Township	6/9/25, 6/16/25, 10/7/25
Stanley Township	6/9/25, 6/16/25
Staples City	6/9/25, 6/16/25
Straight River Township	6/9/25, 6/16/25, 10/7/25
Sverdrup Township	6/9/25, 6/16/25
Sylvan Township	6/9/25, 6/16/25, 10/7/25
Tanberg Township	6/9/25, 6/16/25
Tansem Township	6/9/25, 6/16/25, 10/7/25
Thomas Township	6/9/25, 6/16/25
Toad Lake Township	6/9/25, 6/16/25, 10/7/25
Todd Township	6/9/25, 6/16/25
Trommald City	10/7/25
Trondhjem Township	6/9/25, 6/16/25
Underwood City	6/9/25, 6/16/25
Vergas City	6/9/25, 6/16/25
Verndale City	6/9/25, 6/16/25
Viding Township	6/9/25, 6/16/25, 10/7/25
Wadena City	6/9/25, 6/16/25
Wadena County	6/9/25, 6/16/25
Wadena Township	6/9/25, 6/16/25
Walden Township	6/9/25, 6/16/25, 10/7/25
West Crow Wing Unorganized Territory	10/7/25
White Oak Township	6/9/25, 6/16/25, 10/7/25
Wilkin County	6/9/25, 6/16/25, 12/16/25
Wilson Township	6/9/25, 6/16/25, 10/7/25
Wolf Lake City	6/9/25, 6/16/25, 10/7/25
Wolf Lake Township	6/9/25, 6/16/25, 10/7/25
Wolford Township	6/9/25, 6/16/25, 10/7/25
Wolverton Township	6/9/25, 6/16/25

In May 2025, the Applicants defined an Initial Study Area that encompassed a large area between the Maple River Substation and the Cuyuna Substation and that contained existing electric transmission lines representing potential routing opportunities for the proposed Project, as shown in Figure 26.

Figure 26. Initial Study Area



In June 2025, the Applicants sent Project introduction letters with a map of the Initial Study Area to Tribal government contacts and to federal, state, and local agencies whose constituents may have an interest in the proposed Project, in accordance with Minn. Stat. § 216I.05, subd. 5. The letter introduced the Project, requested input, and offered meetings to discuss the Project and gather information regarding public and environmental resources that may be located within the Initial Study Area. The information gathered was used to further refine the Project area and potential routing opportunities in the following months.

From July 2025 through January 2026, the Applicants attended meetings with government agencies to provide preliminary project details and a timeline of major milestones. The Applicants also requested input with respect to the resources under their jurisdiction as well as the identification of federal and state permits and/or approvals that may be required for the Project.

In early January 2026, the Applicants provided direct mail notice of the pending Certificate of Need application filing to all landowners reasonably likely to be affected by the proposed transmission line as required by Minn. R. 7829.2550, Subp. 3(A); to all mailing addresses in the area that are reasonably likely to be affected by the proposed transmission line as required by Minn. R. 7829.2550, Subp. 3(B); to each of the 11 federally recognized Tribal Nations in Minnesota, as well as the Minnesota Indian Affairs Council, in compliance with Minn. R. 7829.2550, Subp. 3(C); and to governments of

towns, statutory cities, home rule charter cities, and counties whose jurisdictions are reasonably likely to be affected by the proposed transmission line, as required by Minn. R. 7829.2550, Subp. 3(D). A copy of the letter, affidavits of mailing, and each mailing list were filed with the Commission on January 23, 2026.

In addition, in early January 2026, the Applicants published notice of the pending Certificate of Need application filing in newspapers of local, regional, and statewide circulation. A list of the newspapers that published the required notice, copies of the published notices, and affidavits of publication were filed with the Commission on January 23, 2026.

A summary of communications with public agencies and Tribal government representatives is included below. The Applicants will continue to meet with federal, state, and local agencies and Tribal Nations as the Project moves forward.

8.1 Federal Agencies

On June 9, 2025, on behalf of the Applicants, Merjent transmitted Project introduction letters to the federal agencies listed in Table 45 above. On June 16, 2025, the Applicants invited agencies to attend the first round of Project open houses, and on October 7, 2025, the Applicants invited the same list of agencies to attend the second round of Project open houses. In early January 2026, the Applicants sent a direct mail notice letter to the federal agencies identified in the compliance filing made with the Commission on January 23, 2026.

8.1.1 U.S. Fish and Wildlife Service

On August 4, 2025, USFWS provided an early comment letter which included recommendations to coordinate with USFWS about National Wildlife Refuge System lands, avoid or minimize potential impacts on migratory birds, assess potential impacts on eagles, minimize habitat fragmentation, and preserve or enhance native plant communities.

On December 11, 2025, Project representatives met with USFWS to introduce the Project. Topics of discussion included greenfield development, critical habitat, co-locating the new project adjacent to existing transmission lines, potential impacts on birds, Conservation Lands, and the permitting process. Minnesota Power will set up monthly meetings with the Applicants for Project coordination.

8.2 Tribal Nations

On June 9, 2025, on behalf of the Applicants, Merjent transmitted Project introduction letters to the Tribal government contacts and Tribal Historic Preservation Officers listed in Table 45. On June 13, 2025, and October 6, 2025, the Applicants invited the same lists of Tribal government officials to attend the Project open houses. The Applicants identified the list of Tribal government officials through the MPUC eDockets Service Lists for Tribal Government Contacts and Tribal Historic Preservation Offices. In early January 2026, the Applicants sent a direct mail notice letter to the Tribal Officials and Tribal Historic

Preservation Officers identified in the compliance filing made with the Commission on January 23, 2026.

8.2.1 Mille Lacs Band of Ojibwe

On June 9, 2025, the Mille Lacs Band of Ojibwe responded to the Project introduction letter expressing interest in consulting on the Project specifically in Crow Wing County, Cass County, Hubbard County, and Wadena County. Mille Lacs Band of Ojibwe requested status updates for Becker County, Clay County, and Wilkin County but deferred consultation to the Tribes to the west. On July 28, 2025, the Applicants responded that the Project is in the early stages of development, but the Applicants will continue to update the Mille Lacs Band of Ojibwe as the Project progresses.

8.2.2 Shakopee Mdewakanton Sioux Community

On June 9, 2025, the Shakopee Mdewakanton Sioux Community responded to the Project introduction letter and requested archeological studies when available. On July 28, 2025, the Applicants committed to providing the results of the Phase I Literature Review of the Proposed Route when it is available. On October 7, 2025, the Tribal Nation responded to the invitation to attend the second round of Project open houses and stated that the areas of concern are not in the Shakopee Mdewakanton Sioux Community's immediate area and deferred direct consultation to Tribes closer. The Tribal Nation requested to be kept informed of the Project as it progresses.

8.2.3 Leech Lake Band of Ojibwe

On July 2, 2025, the Leech Lake Band of Ojibwe submitted a letter stating the Tribal Nation does not have any recorded historic properties within the Project area.

8.3 State Agencies

On June 9, 2025, on behalf of the Applicants, Merjent transmitted Project introduction letters to the state agencies listed in Table 45. On June 13, 2025, and June 16, 2025, the Applicants invited agencies to attend the first round of Project open houses, and on October 7, 2025, the Applicants invited the same list of agencies to attend the second round of Project open houses. In early January, the Applicants sent a direct mail notice letter to the state agencies identified in the compliance filing made with the Commission on January 23, 2026.

8.3.1 Minnesota Department of Health

On June 10, 2025, the Minnesota Department of Health ("MDH") responded to the Project introduction letter regarding potential impacts on groundwater and wells, which included recommended mitigation methods for the Applicants to consider. MDH requested that the Applicants identify locations of Drinking Water Supply Management Areas, notify all well owners within 200 feet of the Proposed Route, and consider and mitigate potential impacts to nearby surface waters during the construction phase, as Moorhead and Fergus Falls source drinking water from surface waterbodies. MDH also requested that

transmission lines be sited far enough away from existing wells to allow safe access. On June 19, 2025, the Applicants agreed to consider the recommendations in the comment letter as the Applicants begin detailed routing.

8.3.2 Minnesota Department of Natural Resources

On July 28, 2025, the Applicants met with representatives from the MnDNR Ecological and Water Resources Division to provide an overview of the Project and request feedback. Topics of discussion included public engagement, watershed districts in the Red River Valley, Land and Water Conservation Fund Act land, vegetation management, wildlife management areas, protected species, and Project infrastructure. On September 23, 2025, MnDNR provided some publicly available geographic information system ("GIS") data for federal aid for acquisition, State Mineral Leases, Minnesota Geospatial Commons. In response, Merjent provided preliminary routes to narrow MnDNR's review of the routing opportunities. On October 16, 2025, MnDNR provided early coordination comments focusing on areas of significant resource concerns. The MnDNR identified state parks and recreation areas and Minnesota Scientific and Natural Areas as avoidance areas. In addition, they identified fens, Sites of Biodiversity Significance, native plant communities, MnDNR managed areas, mineral potential and aggregate resources, and endangered or threatened species as resources to consider throughout the routing process.

On December 3, 2025, Project representatives met with representatives from the MnDNR Lands and Minerals Division to provide a Project overview and solicit routing recommendations. Topics of discussion included the double circuit configuration, structure heights, and state lands data sources. MnDNR staff shared sources of available information and will set up monthly meetings with the Applicants for Project coordination.

8.3.3 Minnesota Department of Transportation

On June 9, 2025, the MnDOT responded to the Project introduction letter, requesting an introductory meeting at least three months prior to the submittal of a route permit application and providing resources on MnDOT's future projects and planning, utility permitting, and guidance on expectations around early project coordination and review. The Project anticipates having a preliminary Proposed Route in the first or second quarter of 2026 and will schedule a meeting with MnDOT staff at that time.

8.3.4 Minnesota State Historic Preservation Office

On July 17, 2025, the Minnesota State Historic Preservation Office responded to the Project introduction letter recommending that a Phase I Archaeological Survey be completed, requesting the Applicants consider effects on above ground designated historic properties, and requesting that the cultural report include how the Project will avoid impacting cultural resources and a map of the Project components in relation to identified cultural resources. On July 17, 2025, the Applicants agreed to continue coordination throughout the Certificate of Need and Route Permit process.

8.4 Local Government Units

8.4.1 Counties

On June 9, 2025, on behalf of the Applicants, Merjent transmitted Project introduction letters The Applicants sent an initial Project introduction letter to Becker County, Cass County, Clay County, Crow Wing County, Hubbard County, Otter Tail County, Wadena County, and Wilkin County. The Applicants attended in-person meetings with officials from each county from October 2025 to January 2026 to introduce the Project and provide updates on the Project, including an overview of the Preliminary Routes, agency and stakeholder feedback, and upcoming Project milestones. County officials were also invited to the in-person open houses in June and October 2025 and will be invited to attend the third round of open houses in March or April of 2026. Several county board members and other county officials attended the open houses in June and October 2025.

On October 2, 2025, the land commissioner from Cass County provided the Applicants with county procedures and information needs for easements.

8.4.2 Cities and Townships

On June 9, 2025, on behalf of the Applicants, Merjent transmitted Project introduction letters to Cities and Townships within the Open House Notice Area, and an invitation to the in-person open houses on June 13, 2025, and June 16, 2025. As the routing process progressed, the Cities and Townships located within the Preliminary Routes were invited to the second round of open houses on October 7, 2025. Several town board members and other township officials attended the open houses in June and October 2025. On January 6 and January 14, 2026, the Applicants sent a direct mail notice letter to the cities and townships listed in the compliance filing made with the Commission on January 23, 2026.

On October 21, 2025, the Audubon Township Board provided a statement of formal opposition to the Project through the township and identified concerns for impacts on the Hamden Slough National Wildlife Refuge, agricultural lands and livestock, property values, public safety, rural tourism and small business growth. Project representatives contacted the Board on November, 24, 2025 to offer a meeting to discuss the Board's concerns. The Applicants met with the Board on January 5, 2026.

8.5 Public Outreach

8.5.1 Outreach Kickoff and Engagement Planning

The Applicants developed a public engagement plan in March 2025 that included in-person public open houses, web-based "virtual" open houses, social media posts, a dedicated email and hotline to field questions and comments, a Project website with an

interactive map, and supporting digital materials (*e.g.*, fact sheets) that could be downloaded.[185]

8.5.2 Key Communication Channels

The following communication channels were made available throughout the Project.

8.5.2.1 Project Website

The Project website (MRCTransmissionProject.com) was launched on June 20, 2025 and will remain open throughout Project permitting and construction. The website provides an overview of the Project and key milestones, information regarding the permitting process, an interactive mapping tool, and opportunities to engage by providing comments, asking questions, and requesting meetings. The website will continue to be updated through Project development, permitting, and construction. Any comments and requests to be added to the mailing list received through the Project website contact form were recorded and directly acknowledged. Specific questions or requests with a need for follow-up information were forwarded to the Applicants for a response.

8.5.2.2 Project Email and Information Line

A Project email address (connect@MRCTransmissionProject.com) and an information hotline (1-888-419-5670) were created to provide contact points to receive and respond to questions, comments, and requests for meetings with the Applicants. Any comments and requests to be added to the mailing list received through the Project email and information hotline were recorded and directly acknowledged. Specific questions or requests needing follow-up information were forwarded to the Applicants for a response.

8.5.3 Engagement Events

The Applicants hosted in-person open houses in June and October 2025. June 2025 open houses provided opportunities to learn more about the Project, discuss and ask questions about the Initial Study Area (*see* Figure 26), and provide comments to inform Project route development. Direct mail or email invitations to attend the June open houses were sent to landowners and public officials. Those direct invitees were selected by identifying an Open House Notice Area (*see* Figure 27) based on potential routing opportunities adjacent to existing transmission line corridors. The Project identified all landowners and local units of government within a 3-mile-wide corridor centered on existing transmission lines. Other members of the public were invited to attend the June open houses with announcements on the Project's website, social media posts, and press releases to local media outlets.

The Applicants incorporated the feedback received during June open houses, along with agency feedback, into a refined set of Preliminary Routes (*see* Figure 28) that were presented during the October 2025 open houses. The Preliminary Routes also served as the notice area for landowner and public official invitations to the October open houses.

[185] *See* Appendix L for engagement materials.

The October open houses provided opportunities to learn about the Project, review the Preliminary Routes, and provide comments.

Applicants plan to host a third round of public open houses to present a preliminary preferred route in March or April of 2026. Information gathered throughout the Tribal and agency outreach and public engagement process will be used to inform the Project's proposed route, to be presented in the Route Permit application to be submitted in the second half of 2026.

In both June and October 2025, in-person open houses were complemented by a virtual open house replicating the meeting materials and key information, made available for review and download on the project website.

June 2025 Open Houses

Notifications

- Email – An email providing the dates, times, and locations of the open houses was sent to Tribal officials, federal, state, and local agencies, and project stakeholders. The email provided Project staff contact information and offered an opportunity to set up separate meetings to discuss Project routing and permitting. A total of 326 emails were transmitted on June 13, 2025, and June 16, 2025.

- Landowner Postcard - A postcard was mailed on June 12, 2025, to a total of 38,066 landowners within the June 2025 Open House Notice Area, which was based on existing transmission lines in the Initial Study Area. The mailing list was generated from county parcel data records within the Open House Notice Area. The postcard included information about the dates, times, and location of the open houses.

- Press Release – 16 media outlets received the release on June 20, 2025. Media outreach resulted in local media coverage, including articles in the Brainerd Dispatch, Pine and Lakes Echo Journal, Herald Review, and Lakeland News PBS.

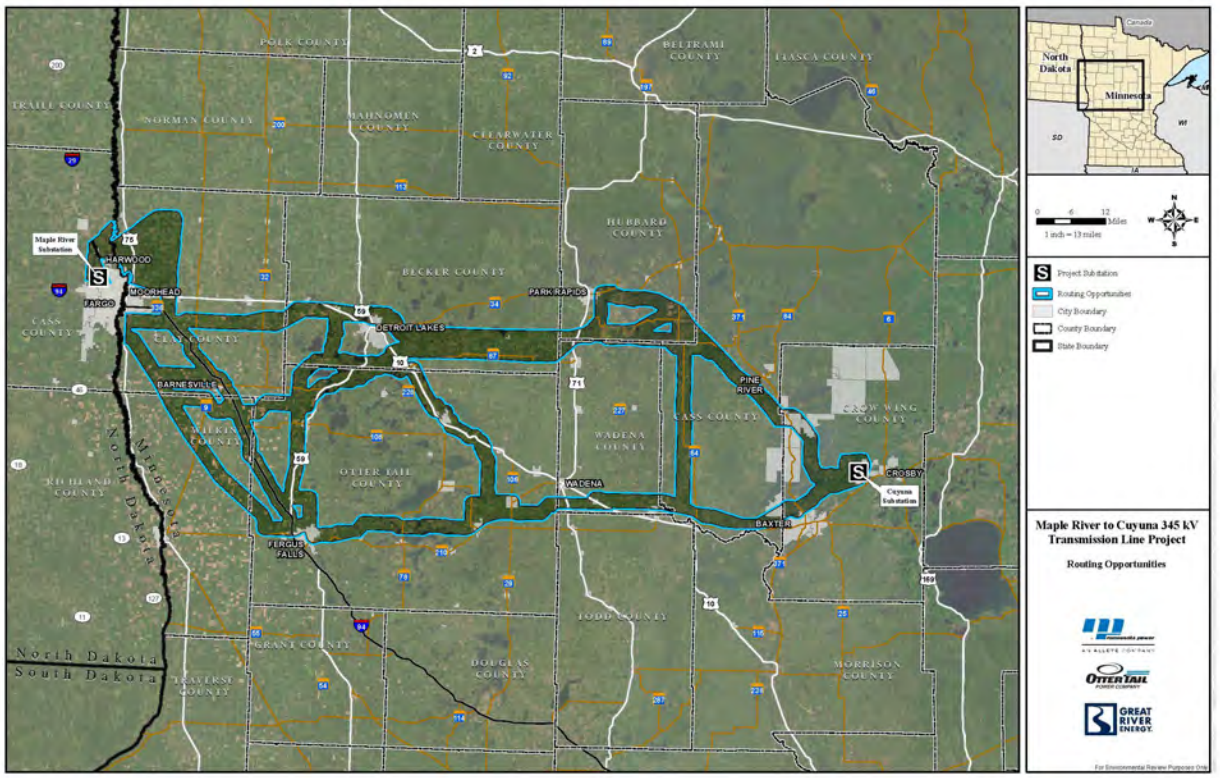
- Social Media – Boosted Facebook posts on June 19, 2025, were used to promote the in-person public open houses, new project email address, hotline, and website.

- In-Person Public Open Houses - There were ten open houses held within the Initial Study Area with both midday and early evening options. The schedule of open houses is provided in Table 46 and the areas that were provided notice are shown in Figure 27.

Table 46. Open House Locations

Date	Time and Location	Time and Location
June 23, 2025	1:00 - 3:00 pm Glyndon Community Center 212 Partridge Avenue SE Glyndon, MN 56547	6:00 - 8:00 PM Harwood Community Center 210 Freedland Dr Harwood, ND 58042
June 24, 2025	1:00 - 3:00 PM Bigwood Event Center 925 Western Ave Fergus Falls, MN 56537	6:00 - 8:00 PM Barnesville Event Center 101 2nd Street NE Barnesville, MN 56514
June 25, 2025	12:00 - 2:00 PM MN State Community and Technical College - Detroit Lakes Campus 900 Highway 34 E Detroit Lakes, MN 56501	5:00 – 7:00 PM Maslowski Wellness & Research Center 17 5th St SW Wadena, MN 56482
June 26, 2025	1:00 - 3:00 PM Park Rapids American Legion Otto Hendricks on Post 212 900 East 1st Street Park Rapids, MN 56470	6:00 - 8:00 PM Pine River-Backus Public High School 401 Murray Ave Pine River, MN 56474
June 30, 2025	1:00 - 3:00 PM The Lodge at Brainerd Lakes 6967 Lake Forest Rd Baxter, MN 56425	6:00 - 8:00 PM Taconite Canteen & Event Center 240 Curtis Ave Ironton, MN 56455

Figure 27. June 2025 Open House Notice Area



At least 325 attendees participated in the open houses. Each open house provided the same information including Project displays and detailed maps for the attendees to review and provide comment. Attendees were paired with Project staff walking through the displays and maps, responding to questions and noting topics of concern. GIS stations and mapping specialists were available to view specific locations of concern, to discuss potential constraints for specific parcels, and to record comments. Event materials are available in Appendix L.

8.5.3.1 October 2025 Open Houses

Notifications

- Stakeholder Email – An email providing the dates, times, and locations of the open houses was sent to Tribal officials, federal, state, and local agencies, and project stakeholders. The email also offered Project staff contact information and an invitation to coordinate stakeholder-specific meetings as requested. A total of 417 emails were transmitted on October 6, 2025.
- Landowner Postcard - A postcard was mailed on September 29, 2025, to a total of 27,881 landowners within the Preliminary Routes. The mailing list was generated from county parcel data records. The postcard included information about the dates, times, and locations of the open houses, as well as the project email address, hotline, and website. iPress Release - 16 media outlets received the

release on October 2, 2025. Media outreach resulted in local media coverage, including articles in the Brainerd Dispatch, Detroit Lakes Tribune, and Pelican Rapids Press.

- Social Media - Boosted Facebook posts on October 2, 2025, were used to promote the in-person public open houses, new project email address, hotline, and website.

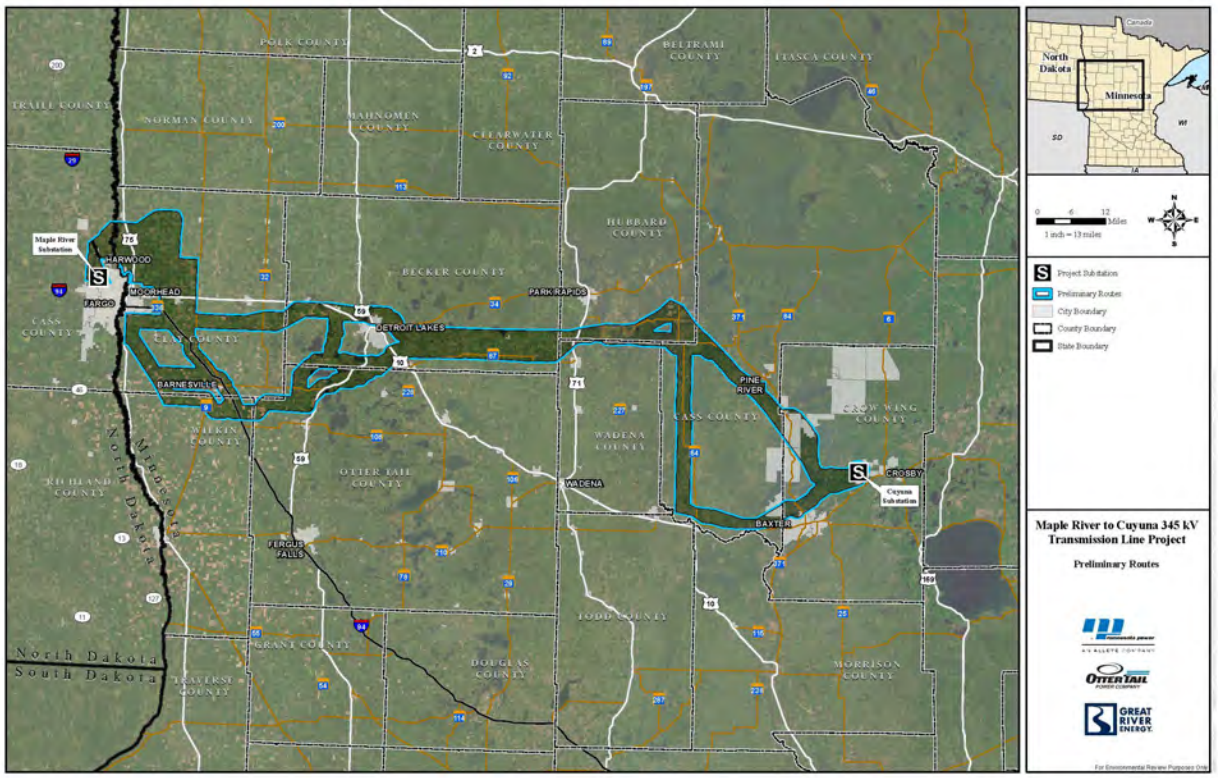
In-Person Public Open Houses

There were eight open houses held along the Preliminary Routes with both midday and early evening options. The schedule of open houses is provided in Table 47 and the areas that were provided notice of these open houses are shown in Figure 28.

Table 47. Second Round of Open Houses

Date	Time and Location	Time and Location
October 20, 2025	12:00 - 2:00 PM Harwood Community Center 210 Freedland Dr Harwood, ND 58042	5:30 - 7:30 PM TAK Music Venue 1710 Center Ave W Dilworth, MN 56529
October 21, 2025	12:00 - 2:00 PM Barnesville Event Center 101 Second St. SE Barnesville, MN 56514	5:30 - 7:30 PM Historic Holmes Theatre 806 Summit Ave Detroit Lakes, MN 56501
October 22, 2025	12:00 - 2:00 PM MN State Central Lakes College, Staples Campus, Room C168 1830 Airport Road Staples, MN 56479	5:30 - 7:30 PM Hubbard Community Center 12141 County 6 Park Rapids, MN 56470
October 23, 2025	12:00 - 2:00PM The Lodge at Brainerd Lakes 6967 Lake Forest Rd Baxter, MN 56425	5:30 – 7:30 PM Pelican Lakes Conservation Club and Community Center 8922 Thrane Dr Breezy Point, MN 56472

Figure 28. October 2025 Open House Notice Area/Preliminary Routes



A total of approximately 374 attendees participated in the open houses. Each open house provided the same information including Project displays and detailed maps for the attendees to review and provide comment. Attendees were paired with Project staff walking through the displays and maps, responding to questions and noting topics of concern. GIS stations and mapping specialists were available to view specific locations of concern, to discuss potential constraints for specific parcels, and to record comments. Event materials are available in Appendix L.

9.1 Certificate of Need Criteria

Pursuant to Minn. Stat. § 216B.243, the Commission has established criteria under Minn. R. 7849.0120 that it will apply to determine whether an applicant has established that a new proposed high-voltage transmission line is needed and shall be granted a Certificate of Need. The Applicants have described in this Application the reasons why the Commission should grant a Certificate of Need to build the Project, as described in this Application. Those reasons are summarized below.

9.1.1 Denial Would Adversely Affect the Energy Supply

Denial of a Certificate of Need for the Project would adversely affect the future adequacy, reliability, or efficiency of energy supply to the Applicants, their customers and members, and to electric customers in the Upper Midwest. As the Applicants and their customers have transitioned away from reliance on fossil fuel generation to more renewable sources, and fossil-fueled generators throughout the state have retired or ceased operations, the regional power system requires updates and new facilities. The Project, as part of the LRTP Tranche 2.1 portfolio, is needed to enhance grid reliability in the Upper Midwest as grid operating conditions become more variable, increase grid efficiency as energy is transferred from where it is produced to where it is needed, and meet the growing demand for reliable clean energy in the Upper Midwest. If the Project is not approved, each of these areas of performance of the regional transmission system would suffer negative impacts as would customers across Minnesota and the Upper Midwest.

9.1.2 No Reasonable and Prudent Alternative

As discussed in Chapter 4, a more reasonable and prudent alternative was not demonstrated by the study work and analysis conducted by the Applicants. The Applicants evaluated multiple alternatives including: (1) size alternatives (different voltages or conductor arrays, AC/DC, and double-circuit); (2) generation and non-wires alternatives; (3) no build alternatives and reasonable combinations of alternatives. After evaluating these alternatives, the Applicants concluded that none of these alternatives is a more reasonable and prudent alternative to the Project.

9.1.3 Project will Provide Benefits to Society in a Manner Compatible with Protecting the Environment

The Project will support the state's decarbonization goals and ensure that the power grid in northern Minnesota continues to operate reliably as energy resources in Minnesota and the regional power system continue to evolve. As generation resources shift from large baseload fossil-fuel fired facilities to more renewables and natural gas-fired generating facilities, the Project is one part of the solution to: (1) provide system support as fossil-fueled baseload generation is retired; (2) enhance system resiliency during extreme weather events (such as during polar vortex events); (3) facilitate increased capacity to safely and reliably deliver energy from where it is produced to where it is

needed by customers, particularly during the winter season; and (4) plan proactively to meet changing customer power needs due to decarbonization and electrification. In addition, consistent with the Commission's routing criteria, the Project will be routed in a manner compatible with protecting the natural and socioeconomic environment.

9.1.4 Project will Comply with All Applicable Requirements

The Applicants have identified the other permits and approvals that may be required for the Project in Chapter 8. The Applicants have demonstrated that it will comply with all applicable requirements and obtain all necessary permits.

9.1.5 Request for Commission Approval

For all the reasons set forth in this Application and as supported by the Appendices hereto, the Applicants respectfully request that the Commission issue a Certificate of Need authorizing construction of the Project.

Term	Definition
AC	Alternating Current
AMA	Aquatic Management Area
Amps	Amperes
APC	Adjusted Production Costs
APLIC	Avian Power Line Interaction Committee
Applicants	Minnesota Power, Great River Energy, and Otter Tail Power Company
Application	This application for a Certificate of Need submitted by Applicants
ASIS	Aggregate Source Information System
BBER	University of Minnesota Duluth's Bureau of Business and Economic Research
BGEPA	Bald and Golden Eagle Protection Act
BMPs	Best Management Practices
BWSR	Minnesota Board of Water and Soil Resources
CAGR	Compound Annual Growth Rates
CAPX2020	Capacity Expansion Needed by 2020 now known as Grid North Partners
CO_2	Carbon Dioxide
Commission	Minnesota Public Utilities Commission
dBA	A-weighted scale decibel
DER	Distributed Energy Resources
ECS	Ecological Classification System
EHV	Extra High Voltage
EJ	Environmental Justice
EMF	Electric and Magnetic Fields
EPA	U.S. Environmental Protection Agency
Exemption Request	The Applicant's Exemption Request
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
G	Gauss
GIS	Geographic Information System
GWh	Gigawatt-Hours

Term	Definition
HVDC	High-voltage Direct Current
ICDs	Implantable Cardioverter/Defibrillators
IEEE	Institute of Electrical and Electronic Engineers
IPaC	USFWS Information for Planning and Consultation
IRP	Integrated Resource Plan
kV	Kilovolt
kV/m	Kilovolts per meter
LBA	Local Balancing Authority Area
LGU	Local Government Units
LHVTL	Large High-Voltage Transmission Line
Local Economic Impact Study	University of Minnesota, Duluth's Local Economic Impact Study
LRTP	Long-Range Transmission Plan
LRZ	Local Resource Zone
MBS	Minnesota Biological Survey
MDH	Minnesota Department of Health
mG	milliGauss
MHz	Megahertz
MISO	Midcontinent Independent System Operator, Inc.
MISO Tariff	MISO's Open Access Transmission, Energy and Operating Reserve Markets Tariff
MnDNR	Minnesota Department of Natural Resources
MnDOT	Minnesota Department of Transportation
MNSHIP	Minnesota Statewide Historic Inventory Portal
MPCA	Minnesota Pollution Control Agency
MRO	Midwest Reliability Organization
MTEP	MISO Transmission Expansion Plan
MTEP21 Futures	Future scenarios developed by MISO in 2021
MTEP24	MISO Transmission Expansion Plan 2024
MVP	Multi-Value Project
MW	Megawatt
MWh	Megawatt-Hours
NAC	Noise Classification Area
NDEX	North Dakota Import/Export
NERC	North American Electric Reliability Corporation

Term	Definition
NESC	National Electrical Safety Code
NHIS	Minnesota Department of Natural Resources Natural Heritage Inventory System
NLEB	Northern long-eared bat
NO_2	Nitrogen Dioxide
NOMN	Northern Minnesota
North Flow	System conditions arising from winter peak loading and heavy south-to-north transfers.
Notice Area	The general area where the Project may be routed.
NPC	Native plant communities
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Record of Historic Places
NWI	National Wetlands Inventory
O&M	Operations and maintenance
OSA	Office of the State Archaeologist
PCE	Primary Constituent Features
ppb	Parts Per Billion
ppm	Parts Per Million
Project	The Maple River – Cuyuna 345 kV Transmission Project
PROMOD	Production Cost Modeling Software
Proposed Route	The final proposed route in the Route Permit Application
PSS/E	Power System Simulator for Engineering
PWI	Public Water Inventor
RIIA	Renewable Integration Impact System
RTO	Regional Transmission Organization
SHPO	Minnesota State Historic Preservation Office
SHAW	Shoulder High Average Wind
SHW	Shoulder High Wind
SIL	Surge Impedance Loading
SNA	Scientific and Natural Area
SOBS	Sites of Biological Significance
SOL	System Operating Limit
SPCC	Spill Prevention, Control, and Countermeasure Plan
Suckley's	Suckly's Cuckoo Bumble Bee

Term	Definition
SUM	Summer Peak
THPO	Tribal Historic Preservation Office
T2-ACSR	Twisted Pair Aluminum Conductor Steel Reinforced
TO	Transmission Owner
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
V	Volts
VSSI	Voltage Sag Severity Index
WLR	Winter Low Renewable
WMA	Wildlife Management Area
WNF	Winter North Flow
WPA	Waterfowl Protection Area

APPENDIX A

MAPLE RIVER – CUYUNA 345 KV TRANSMISSION LINE PROJECT

NOTICE PLAN PETITION

Taft/

2200 IDS Center, 80 South 8th Street
Minneapolis, MN 55402-2210
Tel: 612.977.8400 | Fax: 612.977.8650
taftlaw.com

August 27, 2025

—Via Electronic Filing—

Mr. Mike Bull
Acting Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101

Re: Notice Plan Petition
In the Matter of the Application for a Certificate of Need for the Maple River to Cuyuna 345 kV Transmission Line Project
Docket No. E015,ET2,E017/CN-25-109

Dear Mr. Bull:

Minnesota Power, Great River Energy, and Otter Tail Power Company respectfully submit this Notice Plan for approval by the Minnesota Public Utilities Commission ("Commission") pursuant to Minnesota Rule 7829.2550. In accordance with Minnesota Rule 7829.2550, subp. 1, copies of this Notice Plan have been provided to the Minnesota Department of Commerce, the Minnesota Office of Attorney General-Residential Utilities and Antitrust Division, and to persons listed on the "General List of Persons Interested in Power Plants and Transmission Lines" as maintained by the Commission under Minnesota Rule 7850.2100, subp. 1(A).

If you have questions or need additional information, please contact me.

Sincerely,

/s/ Kodi J. Verhalen
Kodi J. Verhalen
Taft Stettinius & Hollister LLP
On behalf of Minnesota Power, Great River Energy, and Otter Tail Power Company

cc: Service List
General Service List of Persons Interested in Power Plants and Transmission Lines

STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION

Katie J. Sieben	Chair
Hwikwon Ham	Commissioner
Audrey C. Partridge	Commissioner
Joseph K. Sullivan	Commissioner
John A. Tuma	Commissioner

IN THE MATTER OF THE APPLICATION FOR A CERTIFICATE OF NEED FOR THE MAPLE RIVER - CUYUNA 345 KV TRANSMISSION LINE PROJECT	Docket No. E015,ET2,E017/CN-25-109 **NOTICE PLAN PETITION**

Public Comments on Notice Plan Petition can be submitted to the Minnesota Public Utilities Commission Until 4:30 p.m. on September 16, 2025

Replies to Comments can be submitted to the Minnesota Public Utilities Commission until 4:30 p.m. on October 6, 2025

The Minnesota Public Utilities Commission's address is: Minnesota Public Utilities Commission, 121 7th Place East, Suite 350, St. Paul, MN 55101-2147

I. INTRODUCTION

Minnesota Power, Great River Energy, and Otter Tail Power Company (collectively, "Applicants") submit this Notice Plan for approval by the Commission pursuant to Minn. R. 7829.2550. This Notice Plan is intended to provide notice to all persons reasonably likely to be affected by the Maple River – Cuyuna 345 kV Transmission Project ("Project"). The Applicants intend to submit a Certificate of Need application pursuant to Minn. Stat. § 216B.243 in February 2026 and submit a Route Permit application pursuant to Minn. Stat. § 216I.05 in the third quarter of 2026.

The Project consists of construction of a new 345 kV single-circuit transmission line, on double-circuit capable structures, connecting Minnesota Power's Cuyuna Substation in Crow Wing County to Otter Tail Power Company's Maple River Substation in Cass County, North Dakota.

The Project was studied, reviewed, and approved by the Midcontinent Independent System Operator, Inc. ("MISO") as part of its Long-Range Transmission Planning ("LRTP") Tranche 2.1 portfolio of projects included in MISO's 2024 Transmission Expansion Plan ("MTEP24"). The LRTP Tranche 2.1 portfolio is made up of 24 projects, including Project Number 20, the Maple River – Cuyuna 345 kV Transmission Project. The Project, as part of the LRTP Tranche 2.1 portfolio, is needed to support the reliability of the regional transmission system, particularly in northwestern and central Minnesota and eastern North Dakota; provide additional transmission capacity and regional transfer capability to reliably integrate new renewable generation; meet growing electrical demand, enhance resiliency during extreme weather events, and enable cost-effective regional energy transfers supporting economical grid operations.

A Certificate of Need is required under Minn. Stat. § 216B.243 before a high voltage transmission line of the voltages and lengths proposed for the Project is constructed. Minn. R. 7829.2550 requires a Notice Plan to be submitted for review by the Commission at least three months before filing a Certificate of Need application. Applicants intend to submit an application for a Certificate of Need in February 2026. Applicants, therefore, submit this Notice Plan for the Commission's approval.

II. NOTICE PLAN PROPOSAL

This Notice Plan is prepared as an initial step in the Certificate of Need regulatory process. Preparation of a Notice Plan, and its review and approval by the Commission, will ensure that interested persons are aware of the proceeding and have the opportunity to participate. The area proposed to be included in notices under this Plan ("Notice Area") is depicted in **Attachment A, Figure 1**.

The Notice Area consists of a series of corridors that are generally three miles wide and centered on existing high voltage transmission lines. The Notice Area expands up to nearly 14 miles wide in some areas to provide routing flexibility. The Notice Area crosses portions of stretches across Becker, Cass, Clay, Crow Wing, Hubbard, Otter Tail, Wadena,

and Wilkin Counties. While the Notice Plan is the first step in the regulatory process, Applicants have already begun gathering stakeholder, agency, Tribal, and public input on possible route alternatives. This outreach has included public open houses, and the creation of a Project website that includes Project information, ways to provide input, and interactive, detailed maps. The Project website can be viewed at: mrctransmissionproject.com. With this proposed Notice Plan, the Applicants will continue this public outreach and provide the notices listed below in compliance with Minn. R. 7829.2550.

A. Direct Mail Notice

Attachment A includes a letter that will be mailed to landowners, residents, local units of government, elected officials, and agencies within the Notice Area.

1. Landowners

Minn. R. 7829.2550, subp. 3(A), requires an applicant for a Certificate of Need to provide direct mail notice to all landowners reasonably likely to be affected by the proposed transmission line. Applicants propose to provide direct mail notice to all landowners who own property within the Notice Area. Applicants have obtained tax landowner names and addresses within the Notice Area using geospatial information system ("GIS") county parcel records from Becker, Cass, Clay, Crow Wing, Hubbard, Otter Tail, Wadena, and Wilton Counties.

2. Mailing Addresses

Minn. R. 7829.2550, subp. 3(B), requires an applicant for a Certificate of Need to provide direct mail notice to all mailing addresses in the area that are reasonably likely to be affected by the proposed transmission line. Applicants propose to provide direct mail notice to all residential and commercial mailing addresses within the Notice Area. Applicants have obtained a list of mailing addresses in the Notice Area from Becker, Cass, Clay, Crow Wing, Hubbard, Otter Tail, Wadena, and Wilton Counties.

3. Tribal Government Officials

Minn. R. 7829.2550, subp. 3(C), requires an applicant for a Certificate of Need for a high voltage transmission line to provide direct mail notice to Tribal governments whose jurisdictions are reasonably likely to be affected by the proposed transmission line. Applicants will provide direct mail notice to each of the 11 federally recognized Tribal Nations in Minnesota, as well as the Minnesota Indian Affairs Counsel, as listed in **Attachment B**. Applicants will provide direct mail notice to the Tribal Nations and other Tribal government officials and administrators listed in **Attachment B.**

4. Local Governments

Minn. R. 7829.2550, subp. 3(C), requires an applicant to provide direct mail notice to governments of towns, statutory cities, home rule charter cities, and counties whose jurisdictions are reasonably likely to be affected by the proposed transmission line. Applicants propose to provide direct mail notice to lead administration personnel in the towns, cities, and counties. Applicants will also provide notice to the elected officials of those local units of government and to those state senators and state representatives whose districts are within the Notice Area. A complete list of these government recipients is included in **Attachment B**.

B. Newspaper Notice

Minn. R. 7829.2550, subp. 3(D), requires an applicant to publish notice in newspapers of local, regional, and statewide circulation. Specifically, Applicants proposes to place notice advertisements in the following newspapers:

Table 1. Newspaper Notice

Name of Newspaper	County of Circulation
Star Tribune	Statewide
Detroit Lakes Tribune	Becker County
Pine Cone Press-Citizen	Cass County
The Extra	Clay County
InForum	Clay County
Brainerd Dispatch	Crow Wing County
Crosby-Ironton Courier	Crow Wing County
Park Rapids Enterprise	Hubbard County
Fergus Falls Daily Journal	Otter Tail County, Wilkin County
Wadena Pioneer Journal	Wadena County
The Review Messenger	Wadena County
Wahpeton Daily News	Wilkin County

In addition to the Notice Plan newspaper notice requirement, Minn. R. 7829.2500, subp. 5 requires that after a Certificate of Need application is filed that an applicant publish newspaper notice of the filing in a newspaper of general circulation throughout the state. Given that under the proposed Notice Plan, the Applicants will publish newspaper notice of the Certificate of Need proceeding shortly before a Certificate of Need application is filed in the newspapers of local, regional, and statewide circulation, the Applicants request a variance of Minn. R. 7829.2500, subp. 5, to remove this additional newspaper notice requirement.

The three requirements for a rule variance under Minn. R. 7829.3200, subp. 1 are: (1) enforcement of the rule would impost an excessive burden upon the applicant or others

affected by the rule; (2) granting the variance would not adversely affect the public interest; and (3) granting the variance would not conflict with standards imposed by law. These three requirements are met here.

The requirement under Minn. R. 7829.2500, subp. 5 would be an excessive burden as it requires duplicate notice (and associated expense) without a corresponding benefit. The public will receive notice of the Project and ways to participate in the regulatory proceedings via the pre-application filing in the Minnesota Star Tribune and other papers of local and regional circulation. Therefore, the public interest would not be adversely affected by the requested variance. Finally, the Commission has previously granted such a variance[1] and there is no conflict with any standards imposed by law. Applicants respectfully request the Commission grant this variance.

C. Notice Content

Minn. R. 7829.2550, subp. 4 sets forth the information that must be incorporated into the notice letter including: a map showing the end points of the line and existing transmission facilities in the area; right-of-way requirements for the proposed line and a statement of intent to acquire property rights for the right-of-way; notice that the transmission upgrade cannot be constructed unless the Commission certifies that it is needed; Commission contact information; utility website information that includes its biennial transmission projects report; a statement that an environmental report will be prepared; an explanation of how to get on the Project's mailing list; and a list of applicable regulatory laws and rules that govern the request for Project approval. Applicants' proposed notice mailing meets these requirements. The notice letter references the preparation of an environmental assessment rather than an environmental report, as anticipated for the proposed proceeding and the use of the alternative process for the routing of the Project.

The map (**Attachment A, Figure 1**) that will be included with the notice letter will depict the entire Project notice area including end points, existing transmission lines and substations, counties, townships, and notable landmarks to aid in orientation.

D. Distribution of Notice Plan Filing

As required under Minn. R. 7829.2550, subp. 1, this Notice Plan filing has been sent to the Department, the Office of the Attorney General – Residential Utilities Division, and to those parties listed on the "General List of Persons Interested in Power Plants and Transmission Lines" as maintained in eDockets.

[1] *In the Matter of the Application of Xcel Energy for a Certificate of Need for Two Gen-Tie Lines from Sherburne County to Lyon County, Minnesota,* Docket No. E002/CN-22-131, ORDER APPROVING THE NOTICE PLAN PETITION AND EXEMPTION REQUEST at 1 and 6 (June 28, 2022).

E. Notice Timing

Minn. R. 7829. 2550, subp. 6, requires the applicant to implement the Notice Plan within 30 days of its approval by the Commission. Applicants request that the Commission vary the Notice Plan implementation rule requirement to allow notice to more closely coincide with the filing of the Certificate of Need application. Therefore, Applicants request that the Commission grant a variance and direct the notices identified in this Notice Plan to occur not more than 90 days and no less than two weeks prior to the filing of the Certificate of Need application.

The three requirements for a rule variance under Minn. R. 7829.3200, subp. 1 are met here. The notice requirements outlined in the rule would burden all parties by separating notice provided to interested stakeholders from the start of the proceeding. Further, granting a variance would neither adversely affect the public interest nor conflict with standards imposed by law. The Commission has previously requested a similar variance in other Certificate of Need dockets.[2]

[2] *In re Application of Minnesota Power for a Certificate of Need for the Duluth Loop Reliability Project in St. Louis Cnty.,* Docket No. E015/CN-21-140, ORDER APPROVING NOTICE PLAN AND GRANTING VARIANCES AND EXEMPTIONS at 3, 6 (May 17, 2021); *In the Matter of the Application of Byron Solar Project, LLC for a Certificate of Need for the up to 200 MW Byron Solar Project and 345 kV Transmission Line in Olmstead and Dodge Counties, Minnesota*, Docket No. IP-7041/CN-20-764, ORDER APPROVING NOTICE PLAN, APPROVING EXEMPTION REQUESTS, AND GRANTING VARIANCES (Jan. 15, 2021).

F. Project Service List

Pursuant to Minn. R. 7829.0700, subp. 1, the Applicants request that the following persons be placed on the Commission's Office Service List for this matter, and requests electronic service for these persons:

Jackson J. Evans Minnesota Power 30 West Superior Street Duluth, MN 55802 jjevans@allete.com	Brian Meloy Great River Energy 12300 Elm Creek Blvd Maple Grove, MN 55369 bmeloy@grenergy.com
Drew Janke Minnesota Power 30 West Superior Street Duluth, MN 55802 djanke@mnpower.com	Mark Strohfus Great River Energy 12300 Elm Creek Blvd Maple Grove, MN 55369 mstrohfu@grenergy.com
Hannah Mitchell Minnesota Power 30 West Superior Street Duluth, MN 55802 hmitchell@mnpower.com	Owen Henriksen Great River Energy 12300 Elm Creek Blvd Maple Grove, MN 55369 ohenriksen@grenergy.com
Jennifer Kuklenski Minnesota Power 30 West Superior Street Duluth, MN 55802 jkuklenski@mnpower.com	Robert Endris Otter Tail Power Company 215 S. Cascade St. Fergus Falls, MN 56537 rendris@otpco.com
Kodi Jean Verhalen Taft Stettinius & Hollister LLP 2200 IDS Center 80 South 8th Street Minneapolis, MN 55402-2157 kverhalen@taftlaw.com	Craig Steingaard Otter Tail Power Company 215 S. Cascade St. Fergus Falls, MN 56537 csteingaard@otpco.com
Valerie T. Herring Taft Stettinius & Hollister LLP 2200 IDS Center 80 South 8th Street Minneapolis, MN 55402-2157 vherring@taftlaw.com	

III. CONCLUSION

Applicants respectfully request that the Commission (1) approve this Notice Plan prepared in advance of the filing of a Certificate of Need application to construct the Project; and (2) grant a variance from the additional publication in a statewide newspaper under Minn. R. 7829.2500, subp. 5 and; (3) grant a variance to modify the time for implementation of the Notice Plan under Minn. R. 7829.2550, subp. 6 to no more than 90 days and no less than two weeks prior to the filing of the Certificate of Need application.

August 27, 2025

Respectfully submitted,

TAFT STETTINIUS & HOLLISTER LLP

/s/ Kodi J. Verhalen

Kodi J. Verhalen
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ATTORNEYS FOR MINNESOTA POWER, GREAT RIVER ENERGY, AND OTTER TAIL POWER COMPANY

Attachment A

Example Notice Letter

DATE, 2025

NOTICE OF PROPOSED TRANSMISSION LINE PROJECT

Re: In the Matter of Application for a Certificate of Need for the Maple River – Cuyuna 345 kV Transmission Project
Docket No. E015,ET2,E017/CN-25-109

PLEASE TAKE NOTICE that Minnesota Power, Great River Energy, and Otter Tail Power Company (the "Applicants") are applying to the Minnesota Public Utilities Commission (also "Commission") for a Certificate of Need for the Maple River – Cuyuna 345 kV Transmission Project ("Project").

Project Description

The Project consists of construction of a new 345 kV single-circuit transmission line, on double-circuit capable structures, connecting Minnesota Power's Cuyuna Substation in Crow Wing County to Otter Tail Power Company's Maple River Substation in Cass County, North Dakota.

Project Need

The Project was studied, reviewed, and approved by the Midcontinent Independent System Operator, Inc. ("MISO") as part of its Long-Range Transmission Planning ("LRTP") Tranche 2.1 portfolio of projects included in MISO's 2024 Transmission Expansion Plan ("MTEP24"). The LRTP Tranche 2.1 portfolio is made up of 24 projects, including Project Number 20, the Maple River – Cuyuna 345 kV Transmission Project. The Project, as part of the LRTP Tranche 2.1 portfolio, is needed to support the reliability of the regional transmission system, particularly in northwestern and central Minnesota and eastern North Dakota; provide additional transmission capacity and regional transfer capability to reliably integrate new renewable generation; meet growing electrical demand, enhance resiliency during extreme weather events, and enable cost-effective regional energy transfers supporting economical grid operations.

Regulatory Review Process

Before the Applicants can construct the Project, the Minnesota Public Utilities Commission ("Commission") must determine whether the Project is needed (Certificate of Need) and if so, will determine the route along which the Project will be built (Route Permit).

The Certificate of Need process is governed by Minnesota Law, including Minnesota Statutes section 216B.243, and Minnesota Rules Chapter 7849, specifically Rules parts 7849.0010 to 7849.0400 and 7849.1000 to 7849.2100. A copy of the Certificate of Need

application, once submitted, can be obtained by visiting the Commission's website at www.mn.gov/puc/ in Docket No. E015,ET2,E017/CN-25-109.

In addition to certifying the need for the Project, the Commission must also grant a Route Permit for the Project before it may be constructed. The routing of the Project is also governed by Minnesota Law, including Minnesota Statutes Chapter 216I. A copy of the Route Permit application, once submitted, can be obtained by visiting the Commission's website in Docket No. E015,ET2,E017/TL-25-110. The Applicants will be submitting an application for Route Permit with a proposed route for the new 345 kV transmission line. Other routes can be proposed to be evaluated during the Route Permit proceeding. Routes that have been shown at public meetings are preliminary and subject to change.

The Commission will not make its determinations on the Certificate of Need or Route Permit until it has completed a thorough review process that encourages public involvement and analyzes the impacts of the Project and various route alternatives. The Commission will complete an Environmental Report ("ER") for the Certificate of Need and an Environmental Impact Statement ("EIS") or an Environmental Assessment ("EA") for the Route Permit.[3] However, should the Commission choose to use a joint proceeding for the Certificate of Need and Route Permit, any ER requirements will be incorporated into the EIS or EA and the EIS or ER will be the sole environmental review document prepared for the Project.

The Commission will review all of the data from the public process and will decide if the Project is needed and if it is needed, which route should be approved. Selection of a final route by the Commission will be based on an evaluation of the routes guided by the actors identified in Minnesota Statues section 216I, subd. 11, and stakeholder input received during the regulatory process.

The table below provides a high-level summary of the major steps in the regulatory process.

[3] Whether an EIS or an EA will be prepared for the Route Permit process will depend on the route proposed for the Project.

Summary of Certificate of Need Regulatory Schedule

Action	Approximate Date
Pre-application study and public meeting and stakeholder outreach	2nd and 4th Quarters 2025
Certificate of Need Application submitted to Commission	February 2026
Public Information and Scoping Meetings (public meeting and comment)	2nd Quarter 2026
ER Issued[4]	3rd Quarter 2026
Public Hearings (public meeting and comment period)	4th Quarter 2026
Commission Decision	1st Quarter 2027

Right-of-Way for the Project

Before beginning construction, the Applicants will acquire property rights for the right-of-way, typically through an easement that will be negotiated with the landowner for each parcel. The Applicants anticipate acquiring easements with a minimum right-of-way of approximately 150-feet wide for the 345 kV transmission line. Where these transmission lines parallel existing lines, less new right-of-way may be required because the new transmission line may share a portion of the existing right-of-way.

Proposed Structures for the Project

The specific type and size of structures to be used will depend on the route identified in this process along with land use/land cover, topography, water/wetlands and soil types. The current structure design is anticipated to be 120- to 180-foot high single pole weathering steel structures with arms on both sides of the structure. For this type of structure, the Applicants anticipate having five to eight structures for each mile of the line.

Additional Information and Mailing Lists

To subscribe to the Project's Certificate of Need docket and to receive email notifications when information is filed in that docket, please visit www.mn.gov/puc/ and click on "eDockets," then click on "Go to eDockets," and then click on "Sign In" in the top right corner. Then, click on "Subscriptions" and "Create a Subscription." In the "Docket #" box, type 25-109 and click "Create." These same steps can be followed to subscribe to the Project's Route Permit Docket No. E015,ET2,E017/TL-25-110.

If you would like to have your name added to the Certificate of Need proceeding mailing list (Docket No. E015,ET2,E017/CN-25-109), you may register by contacting Robin Benson at Minnesota Public Utilities Commission, 121 7th Place E., Suite 350, St. Paul,

[4] If the Certificate of Need and Route Permit applications are processed jointly by the Commission, an EIS or EA will be prepared as the environmental document for the Project.

MN 55101-2147, Fax: 651-297-7073 or robin.benson@state.mn.us. Please be sure to note: 1) how you would like to receive notices (regular mail or email) and 2) your complete mailing or email address.

A separate mailing list is maintained for the Route Permit proceeding (E015,ET2,E017/TL-25-110). To be placed on the Project Route Permit mailing list, you may register by contacting the public advisor in the consumer affairs office at the Commission at consumer.puc@state.mn.us, or (651) 296-0406 or 1-800-657-3782. Please be sure to note: 1) how you would like to receive notices (regular mail or email) and 2) your complete mailing or email address.

If you have any questions about the state regulatory process, you may contact the Minnesota state regulatory staff listed below:

Minnesota Public Utilities Commission
Energy Infrastructure Permitting Staff
Staff Name
121 7th Place East, Suite 350
St. Paul, Minnesota 55101
Staff Phone Number
1-800-657-3782
Staff Email
Website: www.mn.gov/puc/

Please visit the Project website at: mrctransmissionproject.com for more information.

Project phone and e-mail addresses are:

- 1-888-419-5670
- connect@mrctransmissionproject.com

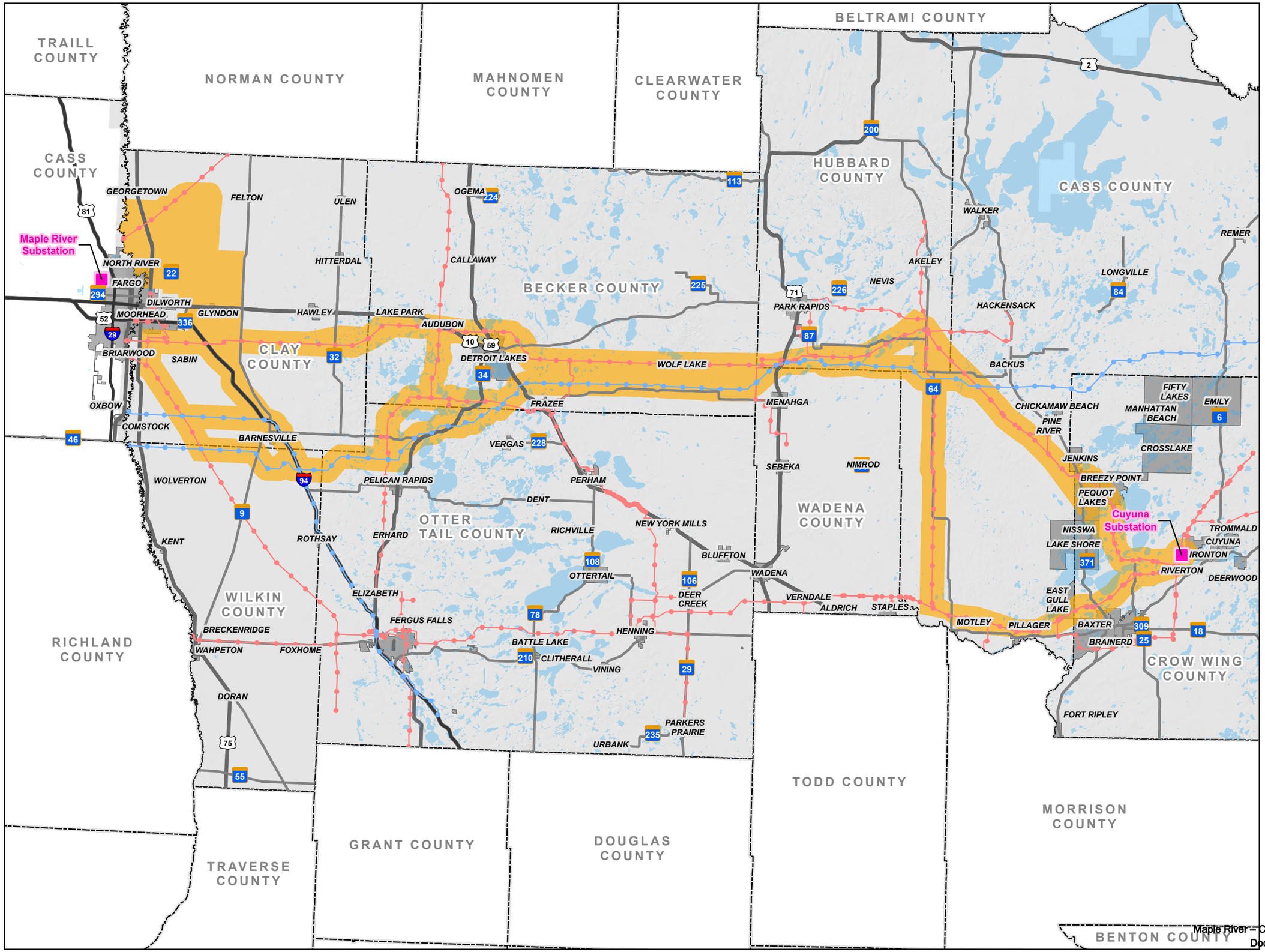
Transmission Planning Process in Minnesota

Minnesota Statutes § 216B.2425, subd. 2 requires that each electric transmission-owning utility in the state file a biennial transmission planning report with the Commission in the fall of each odd-numbered year. These reports provide information on the transmission planning process used by the utilities in the state of Minnesota and information about other transmission line projects. The 2023 Biennial Transmission Projects Report is available at: www.minnelectrans.com. The 2023 Biennial Transmission Projects Report was submitted on November 1, 2023. An updated planning report will be submitted later in 2025.

Sincerely,

Figure 1. Maple River – Cuyuna Notice Area

Attachment A



**Maple River-
Cuyuna Project**

Minnesota Tribal Nations

Tribal Name	First Name	Last Name	Title	Street Address	City	State	Zip Code	Work Phone	Fax Number	Email	URL
1854 Treaty Authority	Sonny	Myers	Executive Director	4428 Haines Rd	Duluth	MN	55811	218-722-8907 ext #7004	218-722-7003	smyers@1854treatyauthority.org	https://www.1854treatyauthority.org/contact/contact-us-2.html
Bois Forte Band of Chippewa	Carlos	Hernandez	Chairperson	5344 Lake Shore Dr	Nett Lake	MN	55772	218-335-8200	218-757-3312	carloshernandez@boisforte-nsn.gov	https://boisforte.com/
Bois Forte Band of Chippewa	Miranda	Lilya	Tribal Historic Preservation Officer	5344 Lake Shore Dr	Nett Lake	MN	55772	218-335-8200	218-757-3312	mlilya@boisforte-nsn.gov	https://boisforte.com/
Bois Forte Band of Chippewa	Jaylen	Strong	Tribal Historic Preservation Officer	5344 Lake Shore Dr	Nett Lake	MN	55772	218-335-8200	218-757-3312	jaylen.strong@boisforte-nsn.gov	https://boisforte.com/
Fond du Lac Band of Lake Superior Chippewa	Bruce	Savage	Chairman	1720 Big Lake Rd	Cloquet	MN	55720	218-879-4593	218-757-0064	brucesavage@fdlband.org	https://fdlband.org/
Fond du Lac Band of Lake Superior Chippewa	Evan	Schroeder	Tribal Historic Preservation Officer	1720 Big Lake Rd	Cloquet	MN	55720	218-879-4593	218-757-0064	evanschroeder@fdlrez.com	https://fdlband.org/
Grand Portage Band of Lake Superior Chippewa	Bobby	Deschampe	Chair	83 Stevens Rd	Grand Portage	MN	55605	218-475-2277		robertdeschampe@grandportage.com	https://www.grandportageband.com/
Grand Portage Bank of Lake Superior Chippewa	Rob	Hull	Tribal Historic Preservation Officer	83 Stevens Rd	Grand Portage	MN	55605	218-475-2277		thpo@grandportage.com	https://www.grandportageband.com/
Leech Lake Bank of Ojibwe	Faron	Jackson, Sr.	Chairman	190 Sailstar Drive NW	Cass Lake	MN	56633	218-335-8200	218-335-8309	faron.jackson@llojibwe.net	https://llojibwe.org/
Leech Lake Bank of Ojibwe	Ashley	Harrison	Tribal Historic Preservation Officer	190 Sailstar Drive NW	Cass Lake	MN	56633	218-335-8200	218-335-8309	ashley.harrison@llojibwe.net	https://llojibwe.org/
Leech Lake Bank of Ojibwe	Gina	Lemon	Tribal Historic Preservation Officer	190 Sailstar Drive NW	Cass Lake	MN	56633	218-335-8200	218-335-8309	gina.lemon@llojibwe.net	https://llojibwe.org/
Lower Sioux Indian Community	Robert L.	Larsen	President	39527 Reservation Hwy 1	Morton	MN	56270	507-697-6185	507-697-8916	robert.larsen@lowersioux.com	https://lowersioux.com/
Lower Sioux Indian Community	Cheyanne	St. John	Tribal Historic Preservation Officer	39527 Reservation Hwy 1	Morton	MN	56270	507-697-6185	507-697-8916	cheyanne.stjohn@lowersioux.com	https://lowersioux.com/
Mille Lacs Band of Ojibwe	Melanie	Benjamin	Chief Executive	43408 Oodena Dr	Onamia	MN	56359	320-532-4181	320-532-7505	Melanie.Benjamin@millelacsband.com	https://millelacsband.com/
Mille Lacs Band of Ojibwe	Mike	Wilson	Tribal Historic Preservation Officer	43408 Oodena Dr	Onamia	MN	56359	320-532-4181	320-532-7505	mike.wilson@millelacsband.com	https://millelacsband.com/

Tribal Name	First Name	Last Name	Title	Street Address	City	State	Zip Code	Work Phone	Fax Number	Email	URL
Minnesota Chippewa Tribe	Michael	LaRoque	President	15542 State Hwy 371 NW	Cass Lake	MN	56633	218-335-8581	218-335-8496		https://mnchippewatribe.org/
Prairie Island Indian Community	Grant	Johnson	President	5636 Sturgeon Lake Rd	Welch	MN	55089	800-554-5473	651-267-4009	grant.johnson@piic.org	https://prairieisland.org/
Prairie Island Indian Community	Noah	White	Tribal Historic Preservation Officer	5636 Sturgeon Lake Rd	Welch	MN	55089	800-554-5473	651-267-4009	noah.white@piic.org	https://prairieisland.org/
Red Lake Nation	Darrell	Seki, Sr.	Chairman	15484 Migizi Dr	Red Lake	MN	56671	218-679-3341	218-679-2188	dseki@redlakenation.org	https://www.redlakenation.org/
Red Lake Nation	Kade	Ferris	Tribal Historic Preservation Officer	15484 Migizi Dr	Red Lake	MN	56671	218-679-3341	218-679-2188	kade.ferris@redlakenation.org	https://www.redlakenation.org/
Shakopee Mdewakanton Sioux Community	Cole W.	Miller	Chairman	1905 Mystic Lake Dr S	Shakopee	MN	55379	952-445-8900	952-233-4256	cole.miller@shakopeedakota.org	https://shakopeedakota.org/
Shakopee Mdewakanton Sioux Community	Leonard	Wabasha	Tribal Historic Preservation Officer	1905 Mystic Lake Dr S	Shakopee	MN	55379	952-496-6120	952-233-4256	leonard.wabasha@shakopeedakota.org	https://shakopeedakota.org/
Upper Sioux Community	Kevin	Jensvold	Chairman	5722 Travers Ln	Granite Falls	MN	56241	320-564-3853	320-564-2550	kevinj@uppersiouxcommunity-nsn.gov	https://www.uppersiouxcommunity-nsn.gov/
Upper Sioux Community	Samantha	Odegaard	Tribal Historic Preservation Officer	5722 Travers Ln	Granite Falls	MN	56241	320-564-3853	320-564-2550	samanthao@uppersiouxcommunity-nsn.gov	https://www.uppersiouxcommunity-nsn.gov/
White Earth Nation	Michael	Fairbanks	Chairman	35500 Eagle View Rd	Ogema	MN	56569	218-983-3285		michael.fairbanks@whiteearth-nsn.gov	https://www.whiteearth.com/
White Earth Nation	Jaime	Arsenault	Tribal Historic Preservation Officer	35500 Eagle View Rd	Ogema	MN	56569	218-983-3285		jaime.arsenault@whiteearth-nsn.gov	https://www.whiteearth.com/

Tribal Organizations

Organization	First Name	Last Name	Title	Street Address	City	State	Zip Code	Work Phone	Fax Number	Email	URL
Minnesota Indian Affairs Council	Shannon	Geshick	Executive Director	161 St. Anthony Ave, Suite 919	St. Paul	MN	55103			shannon.geshick@state.mn.us	https://mn.gov/indian-affairs/
Minnesota Department of Commerce	Chase	Christopher	Tribal Liaison	85 7th Place E, Suite 280	St. Paul	MN	55101			chase.christopherson@state.mn.us	https://mn.gov/commerce/

Federal, State, and Local Agencies and Elected Officials

Organization	Name	Title	Address	City	State	Zip Code
Federal Agencies						
Federal Aviation Administration	Marla Duchatellier	Air Traffic Technician	6020 28th Ave S, Ste. 201	Minneapolis	MN	55450
Federal Aviation Administration	Ashley Wilson	Air Traffic Specialist	6020 28th Ave S, Ste. 201	Minneapolis	MN	55450
Federal Aviation Administration	Lindsay Terry	Manager	6020 28th Ave S, Ste. 201	Minneapolis	MN	55450
Federal Aviation Administration	Jacob Martin	Assistant Manager	6020 28th Ave S, Ste. 201	Minneapolis	MN	55450
U.S. Army Corps of Engineers	Benjamin Orne	Project Manager	332 Minnesota St, Suite E1500	St. Paul	MN	55101
U.S. Army Corps of Engineers	Jeremy Kinney	Project Manager	332 Minnesota St., Suite E1500	St. Paul	MN	55101
U.S. Department of Agriculture – Natural Resources Conservation Service	Troy Daniell	Minnesota State Conservationist	375 Jackson St.	St. Paul	MN	55101
U.S. Department of Agriculture – Natural Resources Conservation Service	Ryan Galbreath	State Resource Conservationist	375 Jackson Street, Suite 600	St. Paul	MN	55101
U.S. Department of Agriculture – Natural Resources Conservation Service, Moorhead	Robert Guetter	District Conservationist	1615 30th Ave S	Moorhead	MN	56560
U.S. Department of Agriculture – Natural Resources Conservation Service, Park Rapids	Jody Peek	District Conservationist	603 North Central Ave, Suite 100	Park Rapids	MN	56470
U.S. Department of Agriculture – Natural Resources Conservation Service, Wadena	Josh Hanson	District Conservationist	4 Alfred St NE	Wadena	MN	56482
U.S. Department of Agriculture – Natural Resources Conservation Service, Grand Rapids	Candi Fuller	District Conservationist	1889 E Hwy 2	Grand Rapids	MN	55744
U.S. Fish and Wildlife Service	Robert Tawes	Field Office Supervisor	3815 American Blvd E	Bloomington	MN	55425
U.S. Fish and Wildlife Service	Katie O'Brien	Endangered Species Biologist	3815 American Blvd E	Bloomington	MN	55425
U.S. Fish and Wildlife Service		Minnesota Ecological Services Field Office	3815 American Blvd E	Bloomington	MN	55744

Organization	Name	Title	Address	City	State	Zip Code
U.S. Fish and Wildlife Service	Alisha Haken	Assistant Refuge Manager	35704 County Highway 26	Rochert	MN	56578
U.S. Fish and Wildlife Service	Neil Powers	Project Leader	18965 County Highway 82	Fergus Falls	MN	56537-7726
U.S. Fish and Wildlife Service	Ryan Frohling	Project Leader	1732 North Tower Road	Detroit Lakes	MN	56501-7959
U.S. Fish and Wildlife Service	Kent Sundseth	Project Leader	35704 County Highway 26	Rochert	MN	56578-9638
State Agencies						
Minnesota Association of Townships	Kevin Comnick	Director	P.O. Box 267	St. Michael	MN	55376
Minnesota Board of Soil and Water Resources	Ryan Hughes	Manager	525 S Lake Ave, #400	Duluth	MN	55802
Minnesota Board of Water and Soil Resources	John Jaschke	Executive Director	520 Lafayette Road North	St. Paul	MN	55155
Minnesota Board of Water and Soil Resources	Mary Juhl	Communications Coordinator	520 Lafayette Road North	St. Paul	MN	55155
Minnesota Board of Water and Soil Resources	Suzanne Rhees	Special Projects Coordinator	530 Lafayette Road North	St. Paul	MN	55155
Minnesota Department of Agriculture	Stephan Roos	Planner	625 Robert St N	St. Paul	MN	55155
Minnesota Department of Health	Christopher Parthun	Principal Planner	P.O. Box 64975	St. Paul	MN	55164
Minnesota Department of Health	Nick Budde	Hydrologist	P.O. Box 64975	St. Paul	MN	55164
Minnesota Department of Health	Dereck Richter	Principal Planner	P.O. Box 64975	St. Paul	MN	55164
Minnesota Department of Health	Danielle Luzinski	Statewide Surface Water Hydrologist	P.O. Box 64975	St. Paul	MN	55164
Minnesota Department of Natural Resources	Ben Bergey	Regional Director (NW)	2115 Birchmont Beach Rd NE	Bemidji	MN	56601
Minnesota Department of Natural Resources	Clarissa Spicer	Regional Director (NE)	1201 East Highway 2	Grand Rapids	MN	55744
Minnesota Department of Natural Resources	Kate Fairman	Environmental Review Operations Lead	500 Lafayette Rd	St. Paul	MN	55155

Organization	Name	Title	Address	City	State	Zip Code
Minnesota Department of Natural Resources	Becky Horton	EIS Project Manager	500 Lafayette Rd	St. Paul	MN	55155
Minnesota Department of Natural Resources	Diane Johnson	Realty Specialist, Utility License Crossing	2115 Birchmont Beach Rd, NE	Bemidji	MN	56601
Minnesota Department of Natural Resources	Jessica Parson	NE Region Ecologist	1201 E Hwy 2	Grand Rapids	MN	55744
Minnesota Department of Natural Resources	Patty Thielen	NE Region Director	1601 Minnesota Dr	Brainerd	MN	56401
Minnesota Department of Natural Resources	Owen Baird	Northwest Region 1 Environmental Assessment Ecologist	1601 Minnesota Drive	Brainerd	MN	56401
Minnesota Department of Natural Resources	Joseph Henderson	Lands & Minerals Director	500 Lafayette Road	St. Paul	MN	55155-4045
Minnesota Department of Natural Resources	Cheryl Kelley-Dobie	Lands & Minerals Assistant Director	500 Lafayette Road	St. Paul	MN	55155-4045
Minnesota Department of Natural Resources	Michael Liljegren	Lands & Minerals Assistant Director	500 Lafayette Road	St. Paul	MN	55155-4045
Minnesota Department of Natural Resources	Ted Anderson	Lands & Minerals Assistant Director	1525 3rd Avenue East	Hibbing	MN	55746
Minnesota Department of Natural Resources	Pam Arndt	Regional Operations Coordinator (NW)	2115 Birchmont Beach Rd	Bemidji	MN	56601
Minnesota Department of Natural Resources	Amy Marrier	Regional Operations Coordinator (NE)	1201 East Highway 2	Grand Rapids	MN	55744
Minnesota Department of Natural Resources	Molly Barrett	Natural Heritage Review Specialist	500 Lafayette Rd	St. Paul	MN	55155
Minnesota Department of Natural Resources	Jim Drake	Natural Heritage Review Specialist	500 Lafayette Rd	St. Paul	MN	55155
Minnesota Department of Natural Resources	Chuck Carpenter	Northeast Regional Manager	1201 E Hwy 2	Grand Rapids	MN	55744
Minnesota Department of Natural Resources	Samantha Bump	Energy Review Planner	500 Lafayette Road Box 25	St. Paul	MN	55155-4025
Minnesota Department of Transportation	Joe Pignato	Land Management Office Director	395 John Ireland Blvd Mailstop 630	St. Paul	MN	55155
Minnesota Department of Transportation	Stacy Kotch Egstad	Utility Routing and Siting Coordinator	395 John Ireland Blvd Mailstop 630	St. Paul	MN	55155
Minnesota Department of Transportation	Shane Gries	Right of Way Permits	1123 Mesaba Ave	Duluth	MN	55811
Minnesota Indian Affairs Council	Shannon Geshick	Executive Director	161 St. Anthony Ave, Ste. 919	St. Paul	MN	55103

Organization	Name	Title	Address	City	State	Zip Code
Minnesota Indian Affairs Council	George Goggleye Jr.	Cultural Resources Manager	161 St. Anthony Ave, Ste. 919	St. Paul	MN	55103
Minnesota Indian Affairs Council	Lilly Geraghty	Cultural Resources Manager	161 St. Anthony Ave, Ste. 919	St. Paul	MN	55103
Minnesota Indian Affairs Council	Isaac Weston	Cultural Resources Manager	161 St. Anthony Ave, Ste. 919	St. Paul	MN	55103
Minnesota Pollution Control Agency	Jim Dexter	Environmental Review Specialist	520 Lafayette Rd, Box 25	St. Paul	MN	55155
Minnesota Pollution Control Agency	Kirsten Barta	Regional General Permits	520 Lafayette Rd, Box 25	St. Paul	MN	55155
Minnesota State Historic Preservation Office	Leslie Coburn	Manager, Environmental Review Specialist	50 Sherburne Ave, Suite 203	St. Paul	MN	55155
Minnesota State Historic Preservation Office	Kelly Gragg-Johnson	Environmental Review Specialist	50 Sherburne Ave, Suite 203	St. Paul	MN	55155
Office of the State Archaeologist	Amanda Gronhovd	MN State Archaeologist	328 W Kellogg Blvd	St. Paul	MN	55102
Public Utilities Commission	Bret Eknes	Supervisor	121 7th Place E, Suite 350	St. Paul	MN	55101
County Commissioners						
Becker County	Erica Jepson	District 1 Commissioner	14312 460th Ave	Frazee	MN	56544
Becker County	David Meyer	District 2 Commissioner	1203 Roosevelt Ave	Detroit Lakes	MN	56501
Becker County	Phil Hansen	District 3 Commissioner	24921 N Melissa Dr	Detroit Lakes	MN	56501
Becker County	Richard Vareberg	District 4 Commissioner	19458 US Hwy 59	Detroit Lakes	MN	56501
Becker County	Barry Nelson	District 5 Commissioner	12972 Co Hwy 11	Audubon	MN	56511
Cass County	Neal Gaalswyk	District 1 Commissioner	Maplewood Drive E	Gull Lake	MN	56401
Cass County	Robert Kangas	District 2 Commissioner	3921 40th Ave SW	Pine River	MN	56474
Cass County	Rusty Lilyquist	District 3 Commissioner	1394 County 7	Longville	MN	56655-3192
Cass County	Scott Bruns	District 4 Commissioner	P.O. Box 1059	Walker	MN	56484

Organization	Name	Title	Address	City	State	Zip Code
Cass County	Rick Haaland	District 5 Commissioner	P.O. Box 781	Cass Lake	MN	56633
Clay County	Paul Krabbenhoft	District 1 Commissioner	P.O. Box 280	Moorhead	MN	56560
Clay County	Ezra Baer	District 2 Commissioner	P.O. Box 280	Moorhead	MN	56560
Clay County	Jenny Mongeau	District 3 Commissioner	P.O. Box 280	Moorhead	MN	56560
Clay County	Kevin Campbell	District 4 Commissioner	P.O. Box 280	Moorhead	MN	56560
Clay County	David Ebinger	District 5 Commissioner	P.O. Box 280	Moorhead	MN	56560
Crow Wing County	Paul Koering	District 1 Commissioner	326 Laurel St Suite 13	Brainerd	MN	56401
Crow Wing County	Jon Lubke	District 2 Commissioner	326 Laurel St Suite 13	Brainerd	MN	56401
Crow Wing County	Steve Barrows	District 3 Commissioner	326 Laurel St Suite 13	Brainerd	MN	56401
Crow Wing County	Rosemary Franzen	District 4 Commissioner	326 Laurel St Suite 13	Brainerd	MN	56401
Crow Wing County	Jamie Lee	District 5 Commissioner	326 Laurel St Suite 13	Brainerd	MN	56401
Hubbard County	David De La	District 1 Commissioner	18602 Estate Dr	Park Rapids	MN	56470
Hubbard County	Charlene Christenson	District 2 Commissioner	24496 Hazel Wood Dr.	Park Rapids	MN	56470
Hubbard County	Tom Krueger	District 3 Commissioner	12621 Bethel Trl.	Nevis	MN	56467
Hubbard County	Steve Keranen	District 4 Commissioner	25544 Hillview Road	Nevis	MN	56467
Hubbard County	Ted Van Kempen	District 5 Commissioner	22091 County 118	Laporte	MN	56461
Otter Tail County	Dan Bucholz	District 1 Commissioner	45227 N Little Pine Rd	Perham	MN	56573
Otter Tail County	Wayne Johnson	District 2 Commissioner	38992 183rd Ave	Pelican Rapids	MN	56572
Otter Tail County	Kurt Mortenson	District 3 Commissioner	19713 Co Hwy 39	Underwood	MN	56586
Otter Tail County	Robert (Bob) Lahman	District 4 Commissioner	12166 595th Ave	Parkers Prairie	MN	56361-4820
Otter Tail County	Sean Sullivan	District 5 Commissioner	1003 North Vine Street	Fergus Falls	MN	56537
Wadena County	Ron Noon	District 1 Commissioner	415 Jefferson Street S	Wadena	MN	56482

Organization	Name	Title	Address	City	State	Zip Code
Wadena County	Mike Weyer	District 2 Commissioner	415 Jefferson Street S	Wadena	MN	56482
Wadena County	Bill Stearns	District 3 Commissioner	415 Jefferson Street S	Wadena	MN	56482
Wadena County	Murlyn Kreklau	District 4 Commissioner	415 Jefferson Street S	Wadena	MN	56482
Wadena County	Jon Kangas	District 5 Commissioner	415 Jefferson Street S	Wadena	MN	56482
Wilkin County	Eric Klindt	District 1 County Commissioner	4450 310th Ave	Campbell	MN	56522
Wilkin County	Jonathan Green	District 2 County Commissioner	809 13th Street N	Breckenridge	MN	56520
Wilkin County	Jon Braton Sr.	District 3 County Commissioner	1282 230th Ave	Barnesville	MN	56514
Wilkin County	Rick Busko	District 4 County Commissioner	702 Oak St	Breckenridge	MN	56520
Wilkin County	Dennis Larson	District 5 County Commissioner	834 7th St S	Breckenridge	MN	56520
County Agencies						
Becker County	Carrie Smith	County Administrator	915 Lake Ave 3rd Floor	Detroit Lakes	MN	56501
Becker County	Kyle Vareberg	Planning and Zoning Department	915 Lake Ave 3rd Floor	Detroit Lakes	MN	56501
Becker County	Lee Brekke	Assessors Department	915 Lake Ave Ste 2	Detroit Lakes	MN	56501
Cass County	Josh Stevenson	County Administrator	Courthouse Annex, 2nd Floor 303 Minnesota Avenue W	Walker	MN	56484
Cass County	Mark Gossman	Lands	218 Washburn Avenue E	Backus	MN	56435
Cass County	Mark Peterson	Assessors Department	Courthouse Annex, 1st Floor 303 Minnesota Avenue W	Walker	MN	56484
Clay County	Jill Murray	Assessors Department	3510 12th Ave S P.O. Box 280	Moorhead	MN	56560
Clay County	Matt Jacobson	Planning Director	3512 12th Ave S P.O. Box 280	Moorhead	MN	56560
Clay County	Stephen Larson	County Administrator	3513 12th Ave S P.O. Box 280	Moorhead	MN	56560
Crow Wing County	Jory Danielson	Administrative Services Director	326 Laurel Street, Suite 22	Brainerd	MN	56401
Crow Wing County	Gary Griffin	Lands Services Director	322 Laurel Street Suite 15	Brainerd	MN	56401
Crow Wing County	Sandra Brueland	Property Assessor Supervisor	322 Laurel Street Suite 15	Brainerd	MN	56401
Hubbard County	Jeff Cadwell	County Administrator	301 Court Ave	Park Rapids	MN	56470
Hubbard County	Cory Kimball	Lands Commissioner	301 Court Ave	Park Rapids	MN	56470
Otter Tail County	Heather Jacobson	Assessor	505 W Fir Avenue	Fergus Falls	MN	56537
Otter Tail County	Nick Leonard	Deputy County Administrator	500 West Fir Avenue	Fergus Falls	MN	56538

Organization	Name	Title	Address	City	State	Zip Code
Otter Tail County	Lynne Penke Valdes	Deputy County Administrator	501 West Fir Avenue	Fergus Falls	MN	56539
Otter Tail County	Christopher LeClair	Land & Resource Management Director	540 W Fir Avenue	Fergus Falls	MN	56540
Wadena County	Jennifer Westrum	Interim County Administrator	415 Jefferson Street S	Wadena	MN	56482
Wadena County	Deana Malone	Planning and Zoning Department	415 Jefferson Street S Room 234 Courthouse	Wadena	MN	56483
Wadena County	Jason Jorgensen	Assessor	415 Jefferson Street S	Wadena	MN	56482
Wilkin County	Michelle Snobl	Assessor	300 5th St S	Breckenridge	MN	56520
Wilkin County	Stephanie Sandbakken	County Administrator	505 S. 8th Street	Breckenridge	MN	56521
Wilkin County	Breanna Koval	Director of Environmental Services	505 S. 8th Street	Breckenridge	MN	56521
Cities						
City of Audubon	Wesley Hegna	Assessor	24674 470th St	Laporte	MN	56461
City of Audubon	Meghan Eastman	Clerk	357 4th Street PO Box 263	Audubon	MN	56511
City of Audubon	Zakery Beckner	Vice Mayor	357 4th Street PO Box 263	Audubon	MN	56511
City of Audubon	Melissa Hiemenz	Safety Committee Liaison	357 4th Street PO Box 263	Audubon	MN	56511
City of Audubon	Kevin Hamernik	Water and Sewer Liaison	357 4th Street PO Box 263	Audubon	MN	56511
City of Audubon	Tyler Lende	Mayor	357 4th Street PO Box 263	Audubon	MN	56511
City of Barnesville	Jason Rick	Mayor	102 Front Street N. PO Box 550	Barnesville	MN	56514
City of Barnesville	Dawn Stuvland	Council	102 Front Street N. PO Box 550	Barnesville	MN	56514
City of Barnesville	Scott Bauer	Council	102 Front Street N. PO Box 550	Barnesville	MN	56514
City of Barnesville	Don Goedtke	Council	102 Front Street N. PO Box 550	Barnesville	MN	56514
City of Barnesville	Alyssa Bergman	Council	102 Front Street N. PO Box 550	Barnesville	MN	56514
City of Barnesville	Brad Field	Council	102 Front Street N. PO Box 550	Barnesville	MN	56514
City of Barnesville	Tonya Stokka	Council	102 Front Street N. PO Box 550	Audubon	MN	56511
City of Baxter	Darrel Olson	Mayor	13190 Memorywood Dr	Baxter	MN	56425
City of Baxter	Mark Cross	Council Member	13190 Memorywood Dr	Baxter	MN	56425
City of Baxter	Connie Lyscio	Council Member	13190 Memorywood Dr	Baxter	MN	56425
City of Baxter	Patrick Sundberg	Council Member	13190 Memorywood Dr	Baxter	MN	56425
City of Baxter	Zach Tabatt	Council Member	13190 Memorywood Dr	Baxter	MN	56425

Organization	Name	Title	Address	City	State	Zip Code
City of Brainerd	Dave Badeaux	Mayor	501 Laurel Street	Brainerd	MN	56401
City of Brainerd	Tad Erickson	Ward 1 Committee Member	501 Laurel Street	Brainerd	MN	56401
City of Brainerd	Kevin Yeager	Committee Member	501 Laurel Street	Brainerd	MN	56401
City of Brainerd	Jeff Czeczok	Ward 3 Committee Member	501 Laurel Street	Brainerd	MN	56401
City of Brainerd	Mike O'Day	President of Council	501 Laurel Street	Brainerd	MN	56401
City of Brainerd	Gabe Johnson	Ward 4 Committee Member	501 Laurel Street	Brainerd	MN	56401
City of Brainerd	Kevin H. Stunek	Committee Member	501 Laurel Street	Brainerd	MN	56401
City of Brainerd	Kelly Bevans	Committee Member	501 Laurel Street	Brainerd	MN	56401
City of Breezy Point	Todd Raggenkamp	Mayor	8319 County Road 11	Breezy Point	MN	56472
City of Comstock	Pamela Guest	Clerk	15855 17th St S PO Box 39	Comstock	MN	56525
City of Crosby	Diane Cash	Mayor	2 Second St SW	Crosby	MN	56441
City of Crosby	Jim Traylor	Council Member	2 Second St SW	Crosby	MN	56441
City of Crosby	Paul Heglund	Council Member	2 Second St SW	Crosby	MN	56441
City of Crosby	Shawn Jarvela	Council Member	2 Second St SW	Crosby	MN	56441
City of Crosby	Vern Lewis	Council Member	2 Second St SW	Crosby	MN	56441
City of Detroit Lakes	L&K (Lowell & Karen) Skoog	Assessor	54165 175th St	Menahga	MN	56464
City of Detroit Lakes	Loren Tolkkinen, SLL Inc.	Assessor	15282 390th St	Menahga	MN	56464
City of Detroit Lakes	Kelcey Klemm	Administrator	1025 ROOSEVELT AVE	Detroit Lakes	MN	56501
City of Detroit Lakes	Kari Tyson	Clerk	1025 ROOSEVELT AVE	Detroit Lakes	MN	56501
City of Detroit Lakes	Matt Brenk	Mayor	1025 Roosevelt Avenue	Detroit Lakes	MN	56501
City of Detroit Lakes	Shaun Carlson	Alderman First Ward (Public Safety)	1025 Roosevelt Avenue	Detroit Lakes	MN	56501
City of Detroit Lakes	Ron Zeman	Alderman First Ward	1025 Roosevelt Avenue	Detroit Lakes	MN	56501
City of Detroit Lakes	Mike Stearns	Alderman Second Ward	1025 Roosevelt Avenue	Detroit Lakes	MN	56501
City of Detroit Lakes	Wendy Spry	Alderman Second Ward	1025 Roosevelt Avenue	Detroit Lakes	MN	56501
City of Detroit Lakes	Aaron Dallmann	Alderman Third Ward	1025 Roosevelt Avenue	Detroit Lakes	MN	56501
City of Detroit Lakes	Matt Boeke	Alderman Third Ward	1025 Roosevelt Avenue	Detroit Lakes	MN	56501

Organization	Name	Title	Address	City	State	Zip Code
City of Detroit Lakes	Craig Caulfield	Alderman at Large	1025 Roosevelt Avenue	Detroit Lakes	MN	56501
City of Detroit Lakes	Jaimie Deraney	Alderman at Large	1025 Roosevelt Avenue	Detroit Lakes	MN	56501
City of Detroit Lakes	Jackie Buboltz	Alderman at Large	1025 Roosevelt Avenue	Detroit Lakes	MN	56501
City of Dilworth	Chad Olson	Mayor	1st Avenue SE	Dilworth	MN	56529
City of Dilworth	Chad Olson	Mayor	1st Avenue SE	Dilworth	MN	56529
City of Dilworth	Julie Nash	Council	1st Avenue SE	Dilworth	MN	56529
City of Dilworth	Dave Steichen	Council	1st Avenue SE	Dilworth	MN	56529
City of Dilworth	Kevin Peterson	Council	1st Avenue SE	Dilworth	MN	56529
City of East Gull Lake	Laura Christensen	Administrator	10790 Gull Point Rd	East Gull Lake	MN	56401
City of East Gull Lake	Dave Kavanaugh	Mayor	1685 Kavanaugh Dr	East Gull Lake	MN	56401
City of East Gull Lake	Tim Bergin	Council	1311 East Point Dr	East Gull Lake	MN	56401
City of East Gull Lake	James Ruttger	Council	915 Green Gables Rd	East Gull Lake	MN	56401
City of East Gull Lake	Carol Demgen	Council	878 Birch Lane East	Gull Lake	MN	56401
City of East Gull Lake	Scott Hoffmann	Council	11405 East Steamboat Bay Dr	East Gull Lake	MN	56401
City of Frazee	Jared Suihkonen (County)	Assessor	915 Lake Ave	Detroit Lakes	MN	56501
City of Frazee	Stephanie Poegel	Administrator	PO Box 387	Frazee	MN	56544
City of Frazee	Mike Sharp	Mayor	PO Box 387	Frazee	MN	56544
City of Glyndon	Joe Olson	Mayor	36 3rd Street SE	Glyndon	MN	56547
City of Glyndon	Bryant DeVries	Council	36 3rd Street SE	Glyndon	MN	56547
City of Glyndon	Shonna Severson	Council	36 3rd Street SE	Glyndon	MN	56547
City of Glyndon	Patrick McCoy	Council	36 3rd Street SE	Glyndon	MN	56547
City of Glyndon	Steven Ring	Council	36 3rd Street SE	Glyndon	MN	56547
City of Hawley	Sean Mork	Mayor	305 6th St Box 69	Hawley	MN	56549
City of Hawley	David Asleson	Council	305 6th St Box 69	Hawley	MN	56549
City of Hawley	Brad Eldred	Council	305 6th St Box 69	Hawley	MN	56549
City of Hawley	Stacey Riedberger	Council	305 6th St Box 69	Hawley	MN	56549

Organization	Name	Title	Address	City	State	Zip Code
City of Hawley	Marc Ness	Council	305 6th St Box 69	Hawley	MN	56549
City of Ironton	Emma Pratt	City Clerk	309 3rd Street PO Box 97	Ironton	MN	56455
City of Ironton	Joshua Jacobson	Mayor	309 3rd Street PO Box 97	Ironton	MN	56455
City of Ironton	Shawn Hamdorf	Council Member	309 3rd Street PO Box 97	Ironton	MN	56455
City of Ironton	Dean French	Council Member	309 3rd Street PO Box 97	Ironton	MN	56455
City of Ironton	Eric Heglund	Council Member	309 3rd Street PO Box 97	Ironton	MN	56455
City of Ironton	Matthew Bugnacki	Council Member	309 3rd Street PO Box 97	Ironton	MN	56455
City of Jenkins	Krista Okerman	City Clerk	33861 Cottage Ave	Jenkins	MN	56474
City of Jenkins	Andrew Rudlang	Mayor	33861 Cottage Ave	Jenkins	MN	56474
City of Jenkins	Jerimey Flategraff (Mayor Pro-Tem)	Council Member	33861 Cottage Ave	Jenkins	MN	56474
City of Jenkins	Roman Siltman	Council Member	33861 Cottage Ave	Jenkins	MN	56474
City of Jenkins	Ryan Barnett	Council Member	33861 Cottage Ave	Jenkins	MN	56474
City of Jenkins	Jory Carlson	Council Member	33861 Cottage Ave	Jenkins	MN	56474
City of Lake Shore	Laura Fussy	Clerk	8583 Interlachen Road	Lake Shore	MN	56468
City of Lake Shore	Andy Stewart	Mayor	1274 Diana Dr	Lake Shore	MN	56468
City of Lake Shore	Henry Cote	Council	8098 Channel View Rd	Lake Shore	MN	56468
City of Lake Shore	Wayne Anderson	Council	8480 Nottingham RD	Lake Shore	MN	56468
City of Lake Shore	Vern Gevik	Council	8182 Co 78 Unit 106	Lake Shore	MN	56468
City of Lake Shore	Darcy Peterson	Council	8557 Interlachen Rd	Lake Shore	MN	56468
City of Lake Park	L & K (Lowell & Karen) Skoog	Assessor	54165 175th St	Menahga	MN	56464
City of Lake Park	Sarah Mikkelsen	Clerk	PO Box 239	Lake Park	MN	56554
City of Lake Park	Sarah Mikkelsen	Treasurer	PO Box 239	Lake Park	MN	56554
City of Lake Park	John Beaudine	Mayor	PO Box 239	Lake Park	MN	56554
City of Menahga	Jody Bjornson	Mayor	115 2nd Street NE	Menahga	MN	56464
City of Menahga	Mike Netland	Council Member	115 2nd Street NE	Menahga	MN	56464
City of Menahga	Durwin Tomperi	Council Member	115 2nd Street NE	Menahga	MN	56464

Organization	Name	Title	Address	City	State	Zip Code
City of Menahga	Keith Waaraniemi	Council Member	115 2nd Street NE	Menahga	MN	56464
City of Menahga	Bill Hodge	Council Member	115 2nd Street NE	Menahga	MN	56464
City of Moorhead	Shelly Carlson	Mayor	PO Box 779	Moorhead	MN	56561-0779
City of Moorhead	Ryan Nelson	Council Member	PO Box 779	Moorhead	MN	56561-0779
City of Moorhead	Nicole Mattson	Council Member	PO Box 779	Moorhead	MN	56561-0779
City of Moorhead	Emily Moore	Council Member	PO Box 779	Moorhead	MN	56561-0779
City of Moorhead	Heather Nesemeier	Council Member	PO Box 779	Moorhead	MN	56561-0779
City of Moorhead	Chuck Hendrickson	Council Member	PO Box 779	Moorhead	MN	56561-0779
City of Moorhead	Sebastian McDougall	Council Member	PO Box 779	Moorhead	MN	56561-0779
City of Moorhead	Travis Schmidt	Director of Moorhead Public Service	2901 S Frontage Road Suite 2	Moorhead	MN	56561-0779
City of Moorhead	Tom Trowbridge	Moorhead City Engineers	2901 S Frontage Road Suite 2	Moorhead	MN	56561-0779
City of Moorhead	Dan Mahli	Moorhead City Manager	2901 S Frontage Road Suite 2	Moorhead	MN	56561-0779
City of Moorhead	Bob Zimmerman	Moorhead City Engineers	2901 S Frontage Road Suite 2	Moorhead	MN	56561-0779
City of Nisswa	Jennifer Carnahan	Mayor	5442 City Hall Street PO box 410	Nisswa	MN	56468
City of Nisswa	Mark Froehle	Council Member	5442 City Hall Street PO box 410	Nisswa	MN	56468
City of Nisswa	Joseph Hall	Council Member	5442 City Hall Street PO box 410	Nisswa	MN	56468
City of Nisswa	Bruce London	Council Member	5442 City Hall Street PO box 410	Nisswa	MN	56468
City of Nisswa	Jesse Zahn	Council Member	5442 City Hall Street PO box 410	Nisswa	MN	56468
City of Ottertail	Amanda Thorson	Clerk	PO Box 245 - 239 Hwy 78 N.	Ottertail	MN	56571
City of Park Rapids	Pat Mikesh	Mayor	906 Trail Drive	Park Rapids	MN	56470
City of Park Rapids	Liz Stone	Council Member	210 Park Avenue North	Park Rapids	MN	56470
City of Park Rapids	Joe Christensen	Council Member	300 Mill Road	Park Rapids	MN	56470
City of Park Rapids	Tim Little	Council Member	615 Lindy Drive	Park Rapids	MN	56470
City of Park Rapids	Jeremy Engholm	Council Member	1101 Timbers Drive	Park Rapids	MN	56470
City of Pelican Rapids	Brent Frazeier	Mayor	100 SE 1st Street PO Box 255	Pelican Rapids	MN	56572
City of Pelican Rapids	Danielle Harthum	Clerk/Treasurer	PO Box 350	Pelican Rapids	MN	56572

Organization	Name	Title	Address	City	State	Zip Code
City of Pequot Lakes	Tyler Gardner	Mayor	4638 Main Street	Pequot Lakes		
City of Pillager	Lori Blumke	Clerk	306 Elm Ave W	Pillager	MN	56473
City of Pillager	Adam Sparrow	Mayor	306 Elm Ave W	Pillager	MN	56473
City of Pillager	H. Robert Freelove	Council	306 Elm Ave W	Pillager	MN	56473
City of Pillager	Joe Klein	Council	306 Elm Ave W	Pillager	MN	56473
City of Pillager	Wade Mortenson	Council	306 Elm Ave W	Pillager	MN	56473
City of Pillager	Leroy Smith	Council	306 Elm Ave W	Pillager	MN	56473
City of Pine River	Tamara Hansen	Mayor	200 Front St N	Pine River	MN	56474
City of Riverton	David C. Peterson	Mayor	16663 Main Street	Riverton	MN	56455
City of Staples	Ron Murray	Mayor	122 6th Street NE	Staples	MN	56479
City of Staples	Doug Case	Council Member	122 6th Street NE	Staples	MN	56479
City of Staples	Roy Miles	Council Member	122 6th Street NE	Staples	MN	56479
City of Staples	Mary Theurer	Council Member	122 6th Street NE	Staples	MN	56479
City of Staples	John Jewison	Council Member	122 6th Street NE	Staples	MN	56479
City of Staples	Mary Jo Goff	Council Member	122 6th Street NE	Staples	MN	56479
City of Staples	Blake Gerard	Council Member	122 6th Street NE	Staples	MN	56479
City of Underwood	Judy Everett	Clerk	120 Main Street S.	Underwood	MN	56586
City of Vergas	Dwight Lundgren	Mayor	PO Box 32 131 E Main St	Vergas	MN	56587
City of Vergas	Paul Pinke	Council	PO Box 32 131 E Main St	Vergas	MN	56587
City of Vergas	Dean Haarstick	Council	PO Box 32 131 E Main St	Vergas	MN	56587
City of Vergas	James Stenger	Council	PO Box 32 131 E Main St	Vergas	MN	56587
City of Vergas	Bruce Albright	Council	PO Box 32 131 E Main St	Vergas	MN	56587
Wolf Lake City	L & K (Lowell & Karen) Skoog	Assessor	54165 175th St	Menahga	MN	56464
Wolf Lake City	Becky Lake	Clerk	PO Box 5	Wolf Lake	MN	56593
Wolf Lake City	Jill Salmen	Treasurer	PO Box 5	Wolf Lake	MN	56593
Wolf Lake City	Michelle Suhsen	Mayor	PO Box 5	Wolf Lake	MN	56593
Townships						

Organization	Name	Title	Address	City	State	Zip Code
Alliance Township	Jerald L Butenhoff	Chairman	10449 140 Ave S	Barnesville	MN	56514-9129
Alliance Township	Mark Rustad	Supervisor	9288 140th Ave S	Sabin	MN	56580-9542
Alliance Township	Paul Anderson	Supervisor	15534 70th St S	Sabin	MN	56580-9542
Alliance Township	Rae Ann Berg	Clerk	12479 100th ST S	Sabin	MN	56580-9542
Ansel Township	Linda Kuschel	Clerk	3288 84th Ave SW	Sebeka	MN	56477
Ansel Township	Sarah Kuschel	Deputy Clerk	3226 84th Ave SW	Sebeka	MN	56477
Ansel Township	Mike Volk	Supervisor	7642 28th St. SW	Staples	MN	56479
Ansel Township	Miles Kuschel	Supervisor	3226 84th Ave SW	Sebeka	MN	56477
Ansel Township	Dale DeVriendt	Supervisor	8790 County Rd 20 SW	Sebeka	MN	56477
Atherton Township	Bruce Nelson	Chairman	2606 0140th St	Barnesville	MN	56514
Atherton Township	Brandon Scheffler	Supervisor	PO Box 625	Barnesville	MN	56514
Atherton Township	Kenneth Packer	Supervisor	2240 150th St	Barnesville	MN	56514
Atherton Township	Amanda Scheffler	Clerk	PO Box 625	Barnesville	MN	56514
Atherton Township	Wanda Braton	Treasurer	1282 230th Ave	Barnesville	MN	56514
Audubon Township	Luke Langerud	Chairperson	20597 177th St	Audubon	MN	56511
Audubon Township	Jacob Hein	Supervisor	19340 Co Rd 103	Audubon	MN	56511
Audubon Township	Peter Anderson	Supervisor	16248 Bird Dog Rd	Audubon	MN	56511
Audubon Township	Melissa Paskey	Clerk	22081 185th St	Audubon	MN	56511
Audubon Township	Jay Meacham	Treasurer	18000 Co Hwy 11	Audubon	MN	56511
Audubon Township	Wesley Hegna	Assessor	24674 470th St	Laporte	MN	56461
Badoura Township	Tim Scouton	Clerk	12588 County 110	Nevis	MN	56467
Badoura Township	David Andress	Supervisor	15771 319th Ave	Akeley	MN	56433

Organization	Name	Title	Address	City	State	Zip Code
Badoura Township	Raymond Peterson	Supervisor	32848 County 113	Backus	MN	56352
Badoura Township	Theora Goodrich	Township Chair	28933 State 87	Nevis	MN	56467
Barnesville Township	Frank Schindler	Chairman	17807 150 St S	Barnesville	MN	56514
Barnesville Township	Kelly Peppel	Supervisor	17737 180th St S	Barnesville	MN	56514
Barnesville Township	Chuck Anderson	Supervisor	13919 150 St S	Barnesville	MN	56514
Barnesville Township	Ted Ducharme	Clerk	PO Box 627	Barnesville	MN	56514
Becker Township	Mary Fitcher	Clerk	10999 75th Ave SW	Motley	MN	56466
Becker Township	Chad Wallgren	Supervisor	9770 95th Ave SW	Staples	MN	56479
Becker Township	Gary Trout	Supervisor	11598 75th Ave SW	Motley	MN	56466
Becker Township	Mike Fitcher	Supervisor	10999 75th Ave SW	Motley	MN	56466
Blueberry Township	Jayne Pickar	Clerk	PO Box 348	Menahga	MN	56464
Blueberry Township	Shar Lusti	Treasurer	38508 Blueberry View Dr	Menahga	MN	56464
Blueberry Township	Dennis Carlson	Supervisor	39132 109th Ave	Menahga	MN	56464
Blueberry Township	Mark Markkula	Supervisor	13741 Jacks Beach Rd	Menahga	MN	56464
Blueberry Township	Jim Kangas	Chairman	12830 378th St	Menahga	MN	56464
Bull Moose Township	Grace Salie	Clerk	5509 State 87 SW	Backus	MN	56435
Bull Moose Township	Caryn Johnson	Supervisor	636 72nd Ave SW	Backus	MN	56435
Bull Moose Township	Donald (D.J.) Downie	Supervisor	5503 State 87 SW	Backus	MN	56435
Bungo Township	Linda Neumann	Clerk	4146 52nd Ave SW	Pine River	MN	56474
Bungo Township	William 'Bill' Thomas	Supervisor	5520 36th St SW	Pine River	MN	56474
Bungo Township	Bill Dabill	Supervisor	5059 24th St SW	Pine River	MN	56474
Bungo Township	Wynn Neumann	Supervisor	5701 36th St SW	Pine River	MN	56474

Organization	Name	Title	Address	City	State	Zip Code
Burlington Township	Richard Billett	Chairperson	11597 Frazee Rd	Frazee	MN	56544
Burlington Township	John Hodgson	Supervisor	14133 Co Hwy 29 (PO Box 142)	Frazee	MN	56544
Burlington Township	Tyler Trieglaff	Supervisor	33928 120th St	Frazee	MN	56544
Burlington Township	Brian Fulmer	Clerk	15307 320th Ave	Frazee	MN	56544
Burlington Township	Kylene Hoard	Treasurer	15019 320th Ave	Frazee	MN	56544
Burlington Township	Wesley Hegna	Assessor	24674 470th St	Laporte	MN	56461
Byron Township	Becki Rassler	Clerk	7831 80th St SW	Staples	MN	56479
Byron Township	Joanne Wolmutt-Cavin	Supervisor	8030 70th St SW	Staples	MN	56479
Candor Township	Bradley Syltie	Chairman	30355 Wing Trl	Vergas	MN	56587
Candor Township	Lowell Bradbury	Supervisor	28466 Candor Hall Rd	Vergas	MN	56587
Candor Township	Bruce Moe	Supervisor	47837 Leek Lake Drive	Vergas	MN	56587
Candor Township	Ryan Hansen	Treasurer	28873 Candor Hall Road	Vergas	MN	56587
Candor Township	Sharon Sauer	Clerk	51902 Co Hwy 17	Detroit Lakes	MN	56501
Center Township	Coralea Borden	Clerk	13110 Borden Road	Merrifield	MN	56465
Center Township	Steve Gilbert	Supervisor	24491 County Road 19	Merrifield	MN	56465
Center Township	Leon Yeager	Supervisor	24491 County Road 19	Merrifield	MN	56465
Cormorant Township	Steve Sorenson	Chairperson	10194 Sherbrooke Beach Ln	Pelican Rapids	MN	56472
Cormorant Township	John Buhaug	Supervisor	11335 147th St	Lake Park	MN	56554
Cormorant Township	Tony (Paul) Hubbard	Supervisor	13875 Thunderbolt Ranch Rd	Lake Park	MN	56554
Cormorant Township	Claudia Hanson	Clerk	14321 Oak Ridge Rd	Lake Park	MN	56554
Cormorant Township	Cindy Wipperling	Treasurer	13793 Thunderbolt Ranch Rd	Lake Park	MN	56554
Cormorant Township	Lisa Marschall	Assessor	15288 490th Ave	Menahga	MN	56464

Organization	Name	Title	Address	City	State	Zip Code
Crow Wing Lake Township	Jaclyn Michlin	Chair	13013 Blackberry Dr	Nevis	MN	56467
Crow Wing Lake Township	Randy Avenson	Vice Chair	13013 Blackberry Dr	Nevis	MN	56467
Crow Wing Lake Township	Larry Smith	Supervisor	13013 Blackberry Dr	Nevis	MN	56467
Crow Wing Lake Township	Brian Ford	Clerk	13013 Blackberry Dr	Nevis	MN	56467
Crow Wing Lake Township	Mark Frank	Treasurer	13013 Blackberry Dr	Nevis	MN	56467
Crow Wing Lake Township	Darin Katzenmeyer	Assessor	13013 Blackberry Dr	Nevis	MN	56467
Deerfield Township	Megan Young	Clerk	1839 Co 41 NW	Backus	MN	56435
Deerfield Township	Cleo Bach	Supervisor	1946 County 41 NW	Backus	MN	56435
Deerfield Township	Neil Dwire	Supervisor	1026 County 41 NW	Backus	MN	56435
Deerfield Township	Terry Holden	Supervisor	409 County 41 NW	Backus	MN	56435
Deerhorn Township	Jay Nord	Chairperson	1833 130th St	Wolverton	MN	56594
Deerhorn Township	Stuart Nichol	Supervisor	1924 140th St	Wolverton	MN	56594
Deerhorn Township	Scott Smith	Supervisor	1924 140th St	Wolverton	MN	56594
Deerhorn Township	Stephanie Maier	Clerk	2111 110th St	Wolverton	MN	56596
Deerhorn Township	Michael Peet	Treasurer	1650 110th St	Wolverton	MN	56597
Detroit Township	Kevin Olson	Chairperson	20549 230th Ave	Detroit Lakes	MN	56501
Detroit Township	Charles Jasken	Supervisor	25420 Almquist Rd	Detroit Lakes	MN	56501
Detroit Township	John Skarie	Supervisor	25681 County Road 149	Detroit Lakes	MN	56501
Detroit Township	Lisa Skarie	Clerk	25681 Co Rd 149	Detroit Lakes	MN	56501
Detroit Township	Barbara Schmidt	Deputy-Clerk	719 Dandrew LN	Detroit Lakes	MN	56501
Detroit Township	Pam Jasken	Treasurer	25420 Almquist Rd	Detroit Lakes	MN	56501
Detroit Township	Jared Suihkonen (County)	Assessor	915 Lake Ave	Detroit Lakes	MN	56501

Organization	Name	Title	Address	City	State	Zip Code
Dunn Township	David L. Johnson	Chairman	48242 215th Ave	Pelican Rapids	MN	56572
Dunn Township	Mary Nyquist	Vice Chair	21519 Broadwater Dr	Pelican Rapids	MN	56572
Dunn Township	Robert Dalman	Supervisor	49302 245th Ave	Pelican Rapids	MN	56572
Dunn Township	Adrian Lund	Supervisor	23122 Pelican Bass Lane	Pelican Rapids	MN	56572
Dunn Township	Duane Seifert	Supervisor	47474 US HWY 59	Pelican Rapids	MN	56572
Dunn Township	Susan Pepelnjak	Treasurer	48097 E Lake Lizzie Ct	Pelican Rapids	MN	56572
Dunn Township	Sandra Tingelstad	Clerk	20835 S Sand Lake Rd	Pelican Rapids	MN	56572
Eglon Township	Tara Anderson	Clerk	PO Box 416	Hawley	MN	56549
Eglon Township	Steve Rodke	Chairman	5419 Hwy 32 S	Hawley	MN	56549
Eglon Township	Brent Helgeson	Supervisor	26968 60th Ave S	Hawley	MN	56549
Eglon Township	Mark Ekre	Supervisor	5493 274th St S	Hawley	MN	56549
Elkton Township	Mark Carr	Chairman	13308 110 Ave S	Sabin	MN	56580
Elkton Township	David Heng	Supervisor	17389 90th Ave S	Barnesville	MN	56514
Elkton Township	Scott Wright	Supervisor	9757 150th St S	Barnesville	MN	56514
Elkton Township	Laura Johnson	Clerk	14737 80th Ave S	Glyndon	MN	56547
Elmwood Township	Todd Schuler	Chairman	8314 80th Ave S	Sabin	MN	56580
Elmwood Township	Darryl Johnk	Supervisor	9793 90th St S	Sabin	MN	56580
Elmwood Township	Lori Pender	Supervisor	11663 90 Ave S	Baker	MN	56580
Elmwood Township	Judy Hansen	Clerk	PO Box 142	Sabin	MN	56580
Erie Township	Neal Sundet	Chairperson	20146 Co Hwy 29	Rochert	MN	56578
Erie Township	Kyle Vareberg	Supervisor	19529 330th Ave	Detroit Lakes	MN	56501
Erie Township	Brett Friesen	Supervisor	32129 State Hwy 34	Detroit Lakes	MN	56501

Organization	Name	Title	Address	City	State	Zip Code
Erie Township	Karen Stenerson-Eifealdt	Clerk	30298 170th St	Detroit Lakes	MN	56501
Erie Township	Becky Renner	Treasurer	31664 State Highway 34	Detroit Lakes	MN	56501
Erie Township	Wesley Hegna	Assessor	24674 470th St	Laporte	MN	56461
Evergreen Township	Todd Holmer	Chairperson	42985 120th St	Frazee	MN	56544
Evergreen Township	Brett Jepson	Supervisor	14312 460th Ave	Frazee	MN	56544
Evergreen Township	Scott Ulschmid	Supervisor	12579 Co Hwy 39	Frazee	MN	56544
Evergreen Township	Rana Holmer	Clerk	42985 120th St	Frazee	MN	56544
Evergreen Township	Betty Janke	Treasurer	12887 Co Hwy 41	Frazee	MN	56544
Evergreen Township	Luke Johnson (County)	Assessor	915 Lake Ave	Detroit Lakes	MN	56501
Fairview Township	Katie Eastman	Clerk	4508 108th St SW	Pillager	MN	56473
Fairview Township	Jenny Gunsbury	Deputy Clerk	10681 Hunters Ridge Trl SW	Nisswa	MN	56468
Fairview Township	Walt Richmond	Supervisor	10924 Richmond Rd SW	Pillager	MN	56473
Fairview Township	James Weizenegger	Supervisor	11419 Pillsbury Forest Rd SW	Nisswa	MN	56468
Fairview Township	Roger Osell	Supervisor	3560 Rockwood Rd SW	Pequot Lakes	MN	56472
Flowing Township	Richard E Menholt	Chairman	13035 Hwy 9 N	Felton	MN	56536
Flowing Township	Glen Coleman	Supervisor	12503 Hwy 9 N	Felton	MN	56536
Flowing Township	Tom Dobrzynski	Supervisor	11156 100th Ave N	Felton	MN	56536
Flowing Township	Rachell Bakken	Clerk	9939 HWY 9 N	Felton	MN	56536
Georgetown Township	John Lee	Chairman	17027 20th St N	Georgetown	MN	56546
Georgetown Township	Gary Wambach	Supervisor	15622 5th St N	Georgetown	MN	56546
Georgetown Township	Mark Richards	Supervisor	1590 190th Ave NW	Georgetown	MN	56546
Georgetown Township	Linda M Hermann	Clerk	620 160 Ave N	Georgetown	MN	56546

Organization	Name	Title	Address	City	State	Zip Code
Glyndon Township	Fred Kuehl	Chairman	8903 28th Ave S	Glyndon	MN	56547
Glyndon Township	John Winter	Supervisor	4433 100th St S	Glyndon	MN	56547
Glyndon Township	Ed Dorset	Supervisor	10050 60th Ave S	Glyndon	MN	56547
Glyndon Township	Justin Thompson	Clerk	8583 12th Ave S	Glyndon	MN	56547
Green Valley Township	Aaron Skaro	Chairperson	56469 170th St	Menahga	MN	56464
Green Valley Township	Nicholas Aho	Supervisor	16435 550th Ave	Menahga	MN	56464
Green Valley Township	Colleen Taylor	Supervisor	20449 Co Rd 125	Park Rapids	MN	56470
Green Valley Township	Sarah Maninga	Clerk	16858 550th St	Menahga	MN	56464
Green Valley Township	Dave Keranen	Treasurer	54438 175th St	Menahga	MN	56464
Green Valley Township	Lisa Marschall	Assessor	15288 490th Ave	Menahga	MN	56464
Hawley Township	Denise Graunke	Clerk	420 190th St S	Hawley	MN	56549
Hawley Township	Daren Tangen	Chairman	2994 220th St S	Hawley	MN	56549
Hawley Township	Everett Nelson	Supervisor	PO Box 923	Hawley	MN	56549
Hawley Township	Rick Weaver	Supervisor	2896 190th St S	Hawley	MN	56549
Height of Land Township	Craig Hall	Chairperson	37895 SW Height of Land Dr	Rochert	MN	56578
Height of Land Township	Jona Jacobson	Supervisor	37195 170th St	Frazee	MN	56544
Height of Land Township	Perry Brown	Supervisor	37201 State Hwy 34	Detroit Lakes	MN	56501
Height of Land Township	Jackie Post	Clerk	20427 400th Ave	Frazee	MN	56544
Height of Land Township	Nancy Stenger	Treasurer	35079 State Hwy 34	Detroit Lakes	MN	56501
Height of Land Township	Luke Johnson (County)	Assessor	915 Lake Ave	Detroit Lakes	MN	56501
Hobart Township	Tim Hockett	Supervisor	49852 Black Diamond Rd	Frazee	MN	56544
Hobart Township	Larry Hoffman	Chairman	PO Box 142	Vergas	MN	56587

Organization	Name	Title	Address	City	State	Zip Code
Hobart Township	Scott Ehlke	Supervisor	34673 County Hwy 4	Frazee	MN	56544
Hobart Township	Kathy Glawe	Treasurer	35315 County Hwy 36	Vergas	MN	56487
Hobart Township	Russ Berstler	Clerk	37893 470th St	Frazee	MN	56544
Holy Cross Township	Tim Leiseth	Chairman	12630 40th St S	Moorhead	MN	56560
Holy Cross Township	Darin Brandt	Supervisor	15060 50th St S	Moorhead	MN	56560
Holy Cross Township	Rick Brakke	Supervisor	4901 120 Ave S	Moorhead	MN	56560
Holy Cross Township	Mark T Anderson	Clerk	4495 160th Ave S	Moorhead	MN	56560
Hubbard Township	Loren Tolkkinen	Local Assessor Contact	15282 390th St	Menahga	MN	56464
Humboldt Township	Darrel Thomas	Chairman	602 13th St NE	Barnesville	MN	56514
Humboldt Township	David Grommesh	Supervisor	140 7th Ave NE	Barnesville	MN	56514
Humboldt Township	Nathan Thompson	Supervisor	21990 Hwy 34	Barnesville	MN	56514
Humboldt Township	Corey O'leary	Clerk	16137 216th St S	Barnesville	MN	56514
Huntersville Township	Dorothy Kennelly	Chairperson	23269 380th St	Menahga	MN	56464
Huntersville Township	Judy Salonek	Clerk	23080 Old Bridge Rd	Menahga	MN	56464
Huntersville Township	Treasurer	Treasurer	22340 Duck Lake Rd	Menahga	MN	56464
Huntersville Township	Kelly Dudley	Supervisor	35441 243rd Ave	Menahga	MN	56464
Huntersville Township	Ken Salonek	Supervisor	23080 Old Bridge Rd	Menahga	MN	56464
Ideal Township	Craig Wallace	Clerk	35458 Butternut Point Road	Pequot Lakes	MN	56472
Ideal Township	David Peterson	Supervisor	35458 Butternut Point Road	Pequot Lakes	MN	56472
Ideal Township	John Bilek	Supervisor	35458 Butternut Point Road	Pequot Lakes	MN	56472
Ideal Township	Ronald Ommen	Supervisor	35458 Butternut Point Road	Pequot Lakes	MN	56472
Irondale Township	Angela Fort	Clerk	19121 County Road 12	Ironton	MN	56455

Organization	Name	Title	Address	City	State	Zip Code
Irondale Township	Philip Juracek	Supervisor	19121 County Road 12	Ironton	MN	56455
Irondale Township	Scott Saehr	Planning & Zoning Administrator	19121 County Road 12	Ironton	MN	56455
Jenkins Township	Jim Olsen	Clerk	PO Box 523	Pequot Lakes	MN	56472
Kragnes Township	Jeremy Clark	Chairman	293 110th Ave N	Moorhead	MN	56560
Kragnes Township	Alan Christianson	Supervisor	9473 10th St NW	Moorhead	MN	56560
Kragnes Township	Duane Brendemuhl	Supervisor	2416 120th Ave N	Moorhead	MN	56560
Kragnes Township	Jeff Richards	Clerk	12397 5th St N	Moorhead	MN	56560
Kurtz Township	James C Nelson	Chairman	4567 70th Ave S	Moorhead	MN	56560
Kurtz Township	Kent Karlstrom	Supervisor	6258 14 St S	Moorhead	MN	56560
Kurtz Township	Brian Leiseth	Supervisor	4372 110 Ave S	Moorhead	MN	56560
Kurtz Township	Jill Nelson	Clerk	4567 70th Ave S	Moorhead	MN	56560
Lake Edward Township	Loni Burnard	Clerk	23977 County Road 4	Nisswa	MN	56468
Lake Eunice Township	Jason Rosing	Chairperson	17925 Eilertson Lake Rd	Audubon	MN	56511
Lake Eunice Township	Ed Clem	Supervisor	13802 Pearl Lake Dr	Detroit Lakes	MN	56501
Lake Eunice Township	Wayne Jacobson	Supervisor	11530 Townhall Rd	Audubon	MN	56511
Lake Eunice Township	Al Bergquist	Supervisor	21074 County Hwy 22	Detroit Lakes	MN	56501
Lake Eunice Township	Gerald Johnson	Supervisor	11658 Townhall Rd	Audubon	MN	56511
Lake Eunice Township	Heather Anderson	Clerk	15320 Blackhawk Rd	Audubon	MN	56511
Lake Eunice Township	Ann Hixson	Treasurer	12368 Shorewood Beach Rd	Detroit Lakes	MN	56501
Lake Park Township	Tyler Bjerke	Chairperson	16557 County Hwy 1	Lake Park	MN	56554
Lake Park Township	Bradley Lindstrom	Supervisor	16912 County Hwy 1	Lake Park	MN	56554
Lake Park Township	Andy Kelly	Supervisor	16881 200th St	Lake Park	MN	56554

Organization	Name	Title	Address	City	State	Zip Code
Lake Park Township	Mary Lewis	Clerk	20401 County Hwy 5	Lake Park	MN	56554
Lake Park Township	Lonna Musolf	Treasurer	16694 120th Ave	Lake Park	MN	56554
Lake Park Township	Lisa Marschall	Assessor	15288 490th Ave	Menahga	MN	56464
Lake View Township	Brian Saunders	Chairperson	24766 S Melissa Dr	Detroit Lakes	MN	56501
Lake View Township	William (Billy) Jordan	Supervisor	23907 Sandy Beach Dr	Detroit Lakes	MN	56501
Lake View Township	John Okeson	Supervisor	13167 West Lake Sallie Dr	Detroit Lakes	MN	56501
Lake View Township	Dana Fagerlie	Clerk	25218 County Hwy 22	Detroit Lakes	MN	56501
Lake View Township	Jim Watland	Treasurer	14060 E Fox Lake Rd	Detroit Lakes	MN	56501
Lake View Township	Jared Suihkonen (County)	Assessor	915 Lake Ave	Detroit Lakes	MN	56501
Loon Lake Township	Tim Murphy	Clerk	1646 Cherokee Trl SW	Pequot Lakes	MN	56472
Loon Lake Township	Patricia Bohnet	Deputy Clerk	1636 64th St SW	Pequot Lakes	MN	56472
Loon Lake Township	Kurtis Moody	Supervisor	5910 17th Ave SW	Pequot Lakes	MN	56472
Loon Lake Township	Randy J. Ryan	Supervisor	PO Box 515	Pequot Lakes	MN	56472
Maple Township	Alisha Alderson	Clerk	6557 25th Ave SW	Pequot Lakes	MN	56472
Maple Township	Marian Maine	Deputy Clerk	7053 37th Ave SW	Pequot Lakes	MN	56472
Maple Township	Gerald D. Campbell	Supervisor	6497 41st St SW	Pequot Lakes	MN	56472
May Township	Bianca Wyffels	Clerk	5834 112th St SW	Pillager	MN	56473
May Township	Chad Converse	Supervisor	12113 61st Ave SW	Motley	MN	56466
May Township	Jason Barg	Supervisor	5108 112th St SW	Pillager	MN	56473
May Township	Kim Lewis	Supervisor	PO Box 369	Pillager	MN	56473
McKinley Township	Stephanie Burns	Clerk	8561 16th St SW	Backus	MN	56435
McKinley Township	William L. Brown	Supervisor	1384 State 64 SW	Backus	MN	56435

Organization	Name	Title	Address	City	State	Zip Code
McKinley Township	James Latterner	Supervisor	542 92nd Ave SW	Menahga	MN	56464
Moland Township	Justin Magnuson	Chairman	11046 57th Ave N	Glyndon	MN	56547
Moland Township	Brett Kuehl	Supervisor	8534 90th St N	Glyndon	MN	56547
Moland Township	Jeff Winters	Supervisor	3149 80th St N	Glyndon	MN	56547
Moland Township	Christian Klonowski	Clerk/Treasurer	PO Box 112	Dilworth	MN	56549
Moorhead Township	Kevin Martin	Chairman	4532 40 Ave S	Moorhead	MN	56560
Moorhead Township	Kevin Johnk	Supervisor	4049 50th St S	Moorhead	MN	56560
Moorhead Township	Carol Kurtyka	Supervisor	4860 12th Ave S	Moorhead	MN	56560
Moorhead Township	Matt Raisl	Clerk	4379 40th Ave S	Moorhead	MN	56560
Morken Township	Paul Loegering	Chairman	8438 100th Ave N	Felton	MN	56536
Morken Township	Christopher Renner	Supervisor	10303 140th Ave N	Felton	MN	56536
Morken Township	Brian Dahl	Supervisor	12753 110th St N	Felton	MN	56536
Morken Township	Loren Ingebretsen	Clerk	10298 90th St N	Felton	MN	56536
Nevis Township	Loren Tolkkinen	Local Assessor Contact	15282 390th St	Menahga	MN	56464
Norwegian Grove Township	Jeff Holt	Chairman	14391 430th Street	Pelican Rapids	MN	56572
Norwegian Grove Township	Larry B Hovland	Supervisor	13705 423rd Street	Pelican Rapids	MN	56572
Norwegian Grove Township	Eric Nelson	Supervisor	14708 South Lake Olaf Road	Pelican Rapids	MN	56572
Norwegian Grove Township	Jane Knorr	Clerk	12790 County Highway 30	Pelican Rapids	MN	56572
Norwegian Grove Township	Mary Bongers	Treasurer	PO Box 826	Pelican Rapids	MN	56572
Oak Lawn Township	Deborah Borg	Clerk	PO Box 333	Brainerd	MN	56401
Oakport Township	Tim Brendemuhl	Chairman	8463 2 St N	Moorhead	MN	56560
Oakport Township	Kurt Skjerven	Supervisor	4840 50th St N	Moorhead	MN	56560

Organization	Name	Title	Address	City	State	Zip Code
Oakport Township	Jerry Gee	Supervisor	23 80th Ave N	Moorhead	MN	56560
Oakport Township	Leah Skjerven	Clerk	4840 50th St N	Moorhead	MN	56560
Parke Township	Colin Melby	Chairman	7316 250 St S	Hawley	MN	56549
Parke Township	James Jennen	Supervisor	9313 300th St S	Hawley	MN	56549
Parke Township	Tim Aakre	Supervisor	26474 70th Ave S	Hawley	MN	56549
Parke Township	Nancy Bjorndahl	Clerk	24669 60th Ave S	Hawley	MN	56549
Pelican Township	Linda Benson	Clerk	PO Box 10	Nisswa	MN	56468
Pelican Township	Lance Haugrud	Chairman	45780 180th Avenue	Pelican Rapids	MN	56572
Pelican Township	Mitchell Egge	Vice Chair	41677 Bur Oak Hills	Pelican Rapids	MN	56572
Pelican Township	Brady Ballard	Supervisor	21851 410th Street	Pelican Rapids	MN	56572
Pelican Township	Llyod Nelson	Clerk	PO Box 873	Pelican Rapids	MN	56572
Pelican Township	Shiela Johnson	Treasurer	PO Box 183	Pelican Rapids	MN	56572
Pine Lake Township	Pete Snortum	Supervisor	48584 428th St.	Perham	MN	56573
Pine Lake Township	Robert (Bob) Sieling	Chairman	41691 County Hwy 53	New York Mills	MN	56567
Pine Lake Township	Alan Starzl	Supervisor	48356 428th St	Perham	MN	56573
Pine Lake Township	Kenneth R. Guck	Treasurer	44431 Mosquito Hts Rd	Perham	MN	56573
Pine River Township	Barbara Wagner	Clerk	PO Box 767	Pine River	MN	56474
Pine River Township	Mike Nadeau	Supervisor	3067 16th St SW	Backus	MN	56435
Pine River Township	Steve Skaro	Supervisor	1915 State 371 SW	Backus	MN	56435
Pine River Township	William (Bill) Fitch	Supervisor	1396 Big Bear Lane	Backus	MN	56435
Poplar Township	Susan Peet	Clerk	7800 60th St SW	Staples	MN	56479
Poplar Township	Doug Shequen	Supervisor	7541 56th St SW	Staples	MN	56479

Organization	Name	Title	Address	City	State	Zip Code
Poplar Township	Craig Bartels	Supervisor	8285 68th St SW	Staples	MN	56479
Poplar Township	Troy Mevissen	Supervisor	8059 56th St SW	Staples	MN	56479
Prairie View Township	Robert Hovland	Chairman	1483 320th Ave	Rothsay	MN	56579
Prairie View Township	Llyal Braton	Supervisor	1186 290th Ave	Barnesville	MN	56514
Prairie View Township	Bill Braton	Supervisor	1250 290th Ave	Barnesville	MN	56514
Prairie View Township	Kathy Braton	Clerk	1250 290th Ave	Barnesville	MN	56514
Prairie View Township	Doug Duran	Chairperson	3081 120th St	Barnesville	MN	56514
Riverton Township	Jakob Pender	Chairman	5408 157th St S	Glyndon	MN	56541
Riverton Township	Lee Alm	Supervisor	17505 40th Ave S	Hawley	MN	56549
Riverton Township	Philip Swan	Supervisor	5323 157th St S	Glyndon	MN	56547
Riverton Township	Jill Toms	Clerk	PO Box 44	Glyndon	MN	56547
Runeberg Township	Philip Ylitalo	Chairperson	54759 110th St	Menahga	MN	56464
Runeberg Township	Mark Spadgenske	Supervisor	54795 State Hwy 87	Menahga	MN	56464
Runeberg Township	Kelly Etzler	Supervisor	58569 110th Street	Menahga	MN	56464
Runeberg Township	Kristine Spadgenske	Clerk	54795 State Hwy 87	Menahga	MN	56464
Runeberg Township	Ray Skaro	Treasurer	56217 State Hwy 87	Menahga	MN	56464
Runeberg Township	Lisa Marschall	Assessor	15288 490th Ave	Menahga	MN	56464
Scambler Township	Nancy Hebert	Chairperson	48990 205th Avenue	Pelican Rapids	MN	56572
Scambler Township	Robert Seifert	Supervisor	46739 County Highway 23	Pelican Rapids	MN	56572
Scambler Township	Philip Rotz	Supervisor	47337 205th Avenue	Pelican Rapids	MN	56572
Scambler Township	Peg Gilbertson	Supervisor	20750 N Sand Lake Road	Pelican Rapids	MN	56572
Scambler Township	Dee Dee Stephenson	Clerk	41661 Bagley Bay Lane	Pelican Rapids	MN	56572

Organization	Name	Title	Address	City	State	Zip Code
Scambler Township	Christine Shulstad	Treasurer	20811 470th Street	Pelican Rapids	MN	56572
Shell River Township	Meri Cartensen	Clerk	1707 370th St	Menahga	MN	56464
Shell River Township	Michelle Newhouse	Treasurer	36234 County Rd 23	Menahga	MN	56464
Shell River Township	Lynn Johnson	Supervisor	35683 County Road 23	Menahga	MN	56464
Shell River Township	Joseph Johnson	Chairperson	36582 179th Ave	Menahga	MN	56464
Shell River Township	Robert White	Supervisor	20480 394th St	Pelican Rapids	MN	56572
Silver Leaf Township	Jeremy Mitchell	Chairperson	38378 County Rd 150	Frazee	MN	56544
Silver Leaf Township	Erik Ehnert	Supervisor	15614 County Hwy 31	Frazee	MN	56544
Silver Leaf Township	Charles Mayfield	Supervisor	35519 130th St	Frazee	MN	56544
Silver Leaf Township	Nancy Bachmann	Clerk	38704 County Rd 150	Frazee	MN	56544
Silver Leaf Township	Rebecca Fett	Treasurer	35752 130th St	Frazee	MN	56544
Silver Leaf Township	Wesley Hegna	Assessor	24674 470th St	Laporte	MN	56461
Skree Township	Jeffrey Pender	Chairman	10847 200th St S	Barnesville	MN	56514
Skree Township	Randy Bjornson	Supervisor	21996 90 Ave S	Hawley	MN	56549
Skree Township	Paul Austin	Supervisor	9388 180th St S	Barnesville	MN	56514
Skree Township	Dawn Shulstad	Clerk	11820 230th St	Barnesville	MN	56514
Spring Creek Township	Vance Jirava	Chairperson	17793 County Hwy 18	Ogema	MN	56549
Spring Creek Township	Robert Haverkamp	Supervisor	17793 County Hwy 18	Ogema	MN	56549
Spring Creek Township	Kimberly Jirava	Clerk	18421 County Hwy 18	Ogema	MN	56549
Spruce Grove Township	Arlen Huwe	Chairperson	47219 State Hwy 87	Frazee	MN	56544
Spruce Grove Township	Michael Peeters	Supervisor	48498 100th St	Menahga	MN	56464
Spruce Grove Township	Mark Skoog	Supervisor	15625 520th Ave	Menahga	MN	56464

Organization	Name	Title	Address	City	State	Zip Code
Spruce Grove Township	Anastasia Mickelson	Clerk	14411 County Hwy 43	Frazee	MN	56544
Spruce Grove Township	Mavis Huwe	Treasurer	47219 State Hwy 87	Frazee	MN	56544
Staight River Township	Darin Katzenmeyer	Local Assessor Contact	11971 129th Ave	Menahga	MN	56464
Sverdrup Township	Dan Stenoien	Chairman	25710 320th Avenue	Underwood	MN	56586
Sverdrup Township	Dan Pederson	Supervisor	27192 310th Avenue	Underwood	MN	56586
Sverdrup Township	Chad Gronner	Supervisor	28257 235th Street	Underwood	MN	56586
Sverdrup Township	MarKean Martelle	Clerk	730 W Lincoln Avenue	Fergus Falls	MN	56537
Sverdrup Township	Vivki Severson	Treasurer	23247 Severson Lane	Underwood	MN	56586
Sylvan Township	Jenna Ruggles	Clerk	12956 24th Ave SW	Pillager	MN	56473
Sylvan Township	Colleen Putnam	Deputy Clerk	12956 24th Ave SW	Pillager	MN	56473
Sylvan Township	Greg Booth	Supervisor	12248 Clark Dr SW	Brainerd	MN	56401
Sylvan Township	Bob Johnson	Supervisor	1844 Oakridge Rd SW	Pillager	MN	56473
Sylvan Township	Keith Card	Supervisor	13791 13th Ave SW	Pillager	MN	56473
Sylvan Township	Arlene Schmit	Supervisor	3247 Crow Wing River Dr SW	Pillager	MN	56473
Tansem Township	Chris Seifert	Chairman	14634 260th St S	Hawley	MN	56549
Tansem Township	Steve Strandlien	Supervisor	29342 180th Ave S	Pelican Rapids	MN	56572
Tansem Township	Jamie Rice	Supervisor	29705 170th Ave S	Pelican Rapids	MN	56572
Tansem Township	Lenora Arntson	Clerk	17590 250th St S	Barnesville	MN	56514
Toad Lake Township	Randy Wurst	Chairperson	42002 115th St	Frazee	MN	56544
Toad Lake Township	James Yliniemi	Supervisor	46476 200th St	Osage	MN	56570
Toad Lake Township	Peter Levijoki	Supervisor	19045 428th Ave	Frazee	MN	56544
Toad Lake Township	Linda Levijoki	Clerk	19045 428th Ave	Frazee	MN	56544

Organization	Name	Title	Address	City	State	Zip Code
Toad Lake Township	Katie Aho	Treasurer	17676 Co Hwy 39	Frazee	MN	56544
Toad Lake Township	Lisa Marschall	Assessor	15288 490th Ave	Menahga	MN	56464
Todd Township	Jim Schauer	Chairman	804 Crocus Hill Street E	Park Rapids	MN	56470
Todd Township	Keith Mikus	Supervisor	804 Crocus Hill Street E	Park Rapids	MN	56470
Todd Township	Bob Meier	Supervisor	804 Crocus Hill Street E	Park Rapids	MN	56470
Todd Township	Pat Cadreau	Clerk	804 Crocus Hill Street E	Park Rapids	MN	56470
Todd Township	Sue Zinniel	Treasurer	804 Crocus Hill Street E	Park Rapids	MN	56470
Viding Township	Brad Pake	Chairman	6434 150th Ave N	Felton	MN	56536
Viding Township	Scott Tommerdahl	Supervisor	7552 150th Ave N	Felton	MN	56536
Viding Township	Keith Stevenson	Supervisor	20755 70th St N	Georgetown	MN	56546
Viding Township	Jane Kangas	Clerk	16547 80th St N	Borup	MN	56519
Wadena Township	Trisha Kraemer	Clerk	PO Box 222	Wadena	MN	56482
Wadena Township	Llyod Lanz	Treasurer	13349 County Rd 101	Wadena	MN	56482
Wadena Township	David Evans	Supervisor	11973 121st Ave	Wadena	MN	56482
Wadena Township	David Kraemer	Supervisor	PO Box 222	Wadena	MN	56482
Wadena Township	Mark Wohlert	Chairperson	11648 110th Street	Wadena	MN	56482
Walden Township	Kim Norman	Clerk	2435 48th Ave SW	Pine River	MN	56474
Walden Township	Joel Erickson	Supervisor	4531 44th St SW	Pine River	MN	56474
Walden Township	Dylan Liane	Supervisor	2550 36th Ave SW	Pine River	MN	56474
Walden Township	Michael Austad	Supervisor	2593 36th Ave SW	Pine River	MN	56474
Wilson Township	Lainey Peterson	Clerk	2080 25th St SW	Pine River	MN	56474
Wilson Township	Marlin Torkelson	Supervisor	2193 44th St SW	Pine River	MN	56474

Organization	Name	Title	Address	City	State	Zip Code
Wilson Township	Alan Johnson	Supervisor	2626 24th Ave SW	Pine River	MN	56474
Wilson Township	Greg Witt	Supervisor	3846 16th Ave SW	Pine River	MN	56474
Wilson Township	Charles Swenson	Supervisor	1832 34th St SW	Pine River	MN	56474
Wilson Township	Mark Buchite	Supervisor	4781 12th Ave SW	Pine River	MN	56474
Wolf Lake Township	Harry Aho	Chairperson	47782 186th St	Frazee	MN	56544
Wolf Lake Township	Roger Boyce	Supervisor	52686 County Hwy 40	Menahga	MN	56464
Wolf Lake Township	Michael Chapman	Supervisor	18700 510th Ave	Osage	MN	56570
Wolf Lake Township	Lori Aho	Clerk	47782 186th St	Frazee	MN	56544
Wolf Lake Township	Mary Neal	Treasurer	50100 E Townhall Rd	Frazee	MN	56544
Wolford Township	Kimberly Marquart,	Clerk	26016 State Highway 6	Crosby	MN	56441
White Oak Township	Shelly Nelson	Chairperson	21662 Minnesota 64	Akeley	MN	56433
White Oak Township	DeeAnn Hayes	Supervisor	21662 Minnesota 64	Akeley	MN	56433
White Oak Township	Michael Bates	Supervisor	21662 Minnesota 64	Akeley	MN	56433
White Oak Township	Jeff Lindstrom	Clerk	21662 Minnesota 64	Akeley	MN	56433
White Oak Township	Marlys Lehn	Treasurer	21662 Minnesota 64	Akeley	MN	56433
Unorganized Territories						
Federal and State Legislators						
U.S. House of Representatives	Pete Stauber	Representative - MN 8th District	5094 Miller Trunk Hwy, Suite 900	Hermantown	MN	55811
U.S. House of Representatives	Michelle Fischbach	Representative - MN 7th District	2513 8th Street S	Moorhead	MN	56560
U.S. Senate	Amy Klobuchar	U.S. Senator	820 9th Street North, Room 105	Virgina	MN	55792
U.S. Senate	Tina Smith	U.S. Senator	60 Plato Blvd, Suite #220	St. Paul	MN	55107

Organization	Name	Title	Address	City	State	Zip Code
Minnesota State Senate	Rob Kupec	State Senator, District 4	95 University Avenue W	St. Paul	MN	55155
Minnesota State Senate	Paul Utke	State Senator, District 5	95 University Avenue W	St. Paul	MN	55155
Minnesota State Senate	Keri Heintzeman	State Senator, District 6	95 University Avenue W	St. Paul	MN	55155
Minnesota State Senate	Jordan Rasmusson	State Senator, District 9	95 University Avenue W	St. Paul	MN	55155
Minnesota House of Representatives	Jim Joy	Representative, District 4	2nd Floor Centennial Office Building 658 Cedar Street	St. Paul	MN	55155
Minnesota House of Representatives	Krista Knudsen	Representative, District 5A	2nd Floor Centennial Office Building 658 Cedar Street	St. Paul	MN	55155
Minnesota House of Representatives	Mike Wiener	Representative, District 5B	2nd Floor Centennial Office Building 658 Cedar Street	St. Paul	MN	55155
Minnesota House of Representatives	Ben Davis	Representative, District 6A	2nd Floor Centennial Office Building 658 Cedar Street	St. Paul	MN	55155
Minnesota House of Representatives	Josh Heintzeman	Representative, District 6B	2nd Floor Centennial Office Building 658 Cedar Street	St. Paul	MN	55155
Minnesota House of Representatives	Jeff Backer	Representative, District 9A	2nd Floor Centennial Office Building 658 Cedar Street	St. Paul	MN	55155

COMMERCE DEPARTMENT

September 16, 2025

Sasha Bergman
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. E015,ET2,E017/CN-25-109

Dear Ms. Bergman:

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

In the Matter of the Application for a Certificate of Need for the Maple River – Cuyuna 345 kV Transmission Line Project: Notice Plan Petition.

The Petition was filed by Minnesota Power, Great River Energy, and Otter Tail Power Company on August 27, 2025.

The Department recommends **clarifications be filed in reply comments** and is available to answer any questions the Minnesota Public Utilities Commission may have.

Sincerely,

/s/ Dr. SYDNIE LIEB
Assistant Commissioner of Regulatory Analysis

SR/ad
Attachment

COMMERCE DEPARTMENT

Before the Minnesota Public Utilities Commission

Comments of the Minnesota Department of Commerce

Docket No. E015,ET2,E017/CN-25-109

I. INTRODUCTION

Minnesota Power (MP) Great River Energy (GRE), and Otter Tail Power Company (OTP) (collectively, the Applicants) submitted a notice plan petition for approval by the Minnesota Public Utilities Commission (Commission).[1] The Notice Petition was filed pursuant to Minn. R. 7829.2550[2] and is intended to provide notice to all persons reasonably likely to be affected by the Maple River – Cuyuna 345 kV Transmission Project (Project). The Project consists of a new 345 kV single-circuit transmission line, on double-circuit capable structures, connecting MP's Cuyuna Substation in Crow Wing County to OTP's Maple River Substation in Cass County, North Dakota. The Applicants intend to submit a Certificate of Need (CN) application pursuant to Minn. Stat. § 216B.243[3] in February 2026 and a route permit application pursuant to Minn. Stat. § 216I.05[4] in the third quarter of 2026.

The proposed Project was studied, reviewed, and approved by the Midcontinent Independent System Operator, Inc. (MISO) as part of its Long-Range Transmission Planning (LRTP) Tranche 2.1 portfolio of projects included in the 2024 MISO Transmission Expansion Plan (MTEP24). The Applicants state that the proposed Project is needed to enhance grid reliability, particularly in northwestern and central Minnesota and eastern North Dakota.

II. PROCEDURAL BACKGROUND

August 27, 2025	The Applicants filed the Notice Petition, seeking approval of a notice plan for the Project.

III. DEPARTMENT ANALYSIS

A. GOVERNING STATUTES AND RULES

The Applicants filed the Notice Petition pursuant to Minnesota Rules 7829.2550, subp. 1 which states, in part "[t]hree months before filing a certificate of need application for a high-voltage transmission line as defined by Minnesota Statutes, section 216B.2421, the applicant shall file a proposed plan for providing notice to all persons reasonably likely to be affected by the proposed line."

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[1] *In the Matter of the Application for a Certificate of Need for the Maple River to Cuyuna 345 kV Transmission Line Project,* MP, GRE, and OTP, Notice Petition, August 27, 2025, Docket No. E015,ET2,E017/CN-25-109, (eDockets) 20258-222474-01, (hereinafter "Notice Petition").

[2] *See* Minn. R. 7829.2550.

[3] *See* Minn. Stat. § 216B.243.

[4] *See* Minn. Stat. § 216I.05.

Minn. Stat. § 216B.2421[5] includes in its definition of a Large Energy Facility (LEF) "any high-voltage transmission line with a capacity of 300 kilovolts or more and greater than one mile in length in Minnesota." Given that the proposed Project is a 345 kV transmission line substantially longer than one mile, the proposed Project falls within the definition of "large energy facility" and, therefore, requires a notice plan.

B. TYPES OF NOTICE

Minnesota Rules 7829.2550, subp. 3,[6] requires types of notice as follows:

- direct mail notice, based on county tax assessment rolls, to landowners reasonably likely to be affected by the proposed transmission line;
- direct mail notice to all mailing addresses within the area reasonably likely to be affected by the proposed transmission line;
- direct mail notice to tribal governments and to the governments of towns, statutory cities, home rule charter cities, and counties whose jurisdictions are reasonably likely to be affected by the proposed transmission line; and
- newspaper notice to members of the public in areas reasonably likely to be affected by the proposed transmission line.

The area proposed to be included in notices (Notice Area) is shown in Attachment A of the Notice Petition. The Notice Petition further states that the Notice Area:

> consists of a series of corridors that are generally three miles wide and centered on existing high voltage transmission lines. The Notice Area expands up to nearly 14 miles wide in some areas to provide routing flexibility. The Notice Area crosses portions of stretches across Becker, Cass, Clay, Crow Wing, Hubbard, Otter Tail, Wadena, and Wilkin Counties.[7]

The list of individuals and entities to be provided notice is to be complied by Applicants is as follows:

- Regarding landowner notice—Applicants have obtained tax landowner names and addresses within the Notice Area using geospatial information system ("GIS") county parcel records.[8]
- Regarding notice to mailing addresses—Applicants have obtained a list of mailing addresses in the Notice Area from Becker, Cass, Clay, Crow Wing, Hubbard, Otter Tail, Wadena, and Wilkin Counties.[9]

[5] *See* Minn. Stat. § 216B.2421.
[6] *See* Minn. R. 7829.2550.
[7] Notice Petition at 2-3.
[8] Notice Petition at 3.
[9] Notice Petition at 3.

- Regarding notice to tribal governments—Applicants will provide direct mail notice to each of the 11 federally recognized Tribal Nations in Minnesota, as well as the Minnesota Indian Affairs Counsel.[10]
- Regarding notice to local governmental jurisdictions—Applicants propose to provide direct mail notice to lead administration personnel and elected officials in local governments and to those state senators and state representatives whose districts are within the Notice Area.[11]
- Regarding newspaper notice—Applicants propose to place notice advertisements in several newspapers listed in Table 1 of the Notice Petition.[12]

After reviewing the Petition's Table 1, Figure 1 of Attachment A, Attachment B-1 and Attachment B-2, the Department notes several discrepancies:

- The cities of Sabin, Breezy Point, and Motley appear to be in or near the notice corridors on the map in Attachment A but are not listed as receiving notice.
- The city of Underwood is listed as receiving notice but is far from the corridors on the map in Attachment A and no other city nearby is getting notice.
- Sverdup Township is listed as receiving notice but is just north of Underwood and not near the notice area depicted in Attachment A.
- Pine Lake Township is listed as receiving notice but is just east of Perham and adjoining townships are not getting notice.
- Spring Creek Township is listed as receiving notice but is just west of Ogema and adjoining townships are not getting notice.
- Wadena Township is listed as receiving notice but is just south and east of city of Wadena and not near the notice area depicted in Attachment A.

The Department recommends the Applicants review the map depicted in Attachment A and lists of local governments to be provided notice as shown in Attachment B-2 and reconcile the differences in reply comments.

C. CONTENT OF NOTICE

Minnesota Rules 7829.2550, subp. 4[13] require the notices to provide the following information:

[10] Notice Petition at 3.
[11] Notice Petition at 4; see Attachment B-2 of the Notice Petition for detailed information.
[12] Notice Petition at 4.
[13] *See* Minn. R. 7829.2550.

- a map showing the end points of the line and existing transmission facilities in the area;
- a description of general right-of-way requirements for a line of the size and voltage proposed and a statement that the applicant intends to acquire property rights for the right-of-way that the proposed line will require;
- a notice that the line cannot be constructed unless the Commission certifies that it is needed;
- the Commission's mailing address, telephone number, and website;
- if the applicant is a utility subject to chapter 7848, the address of the website on which the utility applicant will post or has posted its biennial transmission projects report required under that chapter;
- a statement that the Environmental Quality Board[14] will be preparing an environmental report on each high-voltage transmission line for which certification is requested;
- a brief explanation of how to get on the mailing list for the Environmental Quality Board's proceeding; and
- a statement that requests for certification of high-voltage transmission lines are governed by Minnesota law, including specifically chapter 4410, parts 7849.0010 to 7849.0400, and 7849.1000 to 7849.2100, and Minnesota Statutes, section 216B.243.

The Department reviewed the text of the proposed landowner/resident/governmental official notice provided in Attachment A of the Notice Petition and concludes that the proposal contains the required information. The Department notes that the Applicants did not provide the text for the newspaper notice in the Notice Petition. The Department recommends the Applicants provide the proposed text for the newspaper notice in reply comments.

D. DUPLICATIVE NOTICE

Table 1 of the Notice Petition shows that the Applicants propose to publish notice in the Star Tribune, a paper of statewide circulation. This notice will be published shortly before the CN application is filed. Thus, the Applicants request that the Commission vary the requirement under Minn. R. 7829.2500,[15] subp. 5 and remove the additional requirement to publish notice of the application in a statewide paper after the CN application is filed with the Commission.

Minn. R. 7829.3200 governs such variance requests and establishes the following criteria:

1. enforcement of the rule would impose an excessive burden upon the applicant or others affected by the rule;

[14] This function has since been transferred to the Commission. See Laws of Minn. 2005, ch. 97, art. 3.
[15] *See* Minn. R. 7829.2500.

2. granting the variance would not adversely affect the public interest; and
3. granting the variance would not conflict with standards imposed by law.[16]

The Applicants conclude that the requirements for a variance are met as follows:

1. The requirement would be an excessive burden as it requires duplicate notice and associated expense without a corresponding benefit;
2. the public interest would not be adversely affected because the public will receive the pre-application newspaper notice; and
3. the Commission has previously granted such a variance and there is no conflict with any standards imposed by law.[17]

The Department agrees with the Applicants' assessment and recommends that the Commission approve the proposed rule variance regarding duplicative notice.

E. NOTICE TIMING

Minnesota Rules 7829.2550, subp. 6, requires an applicant to implement the notice plan within 30 days of its approval by the Commission.[18] In this case the Applicants request that the Commission grant a variance and direct the notices occur no more than 90 days and no less than two weeks prior to the filing of the CN application.

The Applicants conclude that the requirements for a variance are met as follows:

1. the notice requirements would burden all parties by separating notice provided to interested stakeholders from the start of the proceeding;
2. granting the variance would not adversely affect the public interest; and
3. granting a variance would not conflict with standards imposed by law.

The Applicants also note that the Commission has approved similar variance requests in past CN dockets. The Department agrees with the Applicants assessment and recommends that the Commission approve the proposed rule variance regarding notice timing.

IV. DEPARTMENT RECOMMENDATIONS

Based on analysis of the information in the record, the Department has prepared recommendations, which are provided below. The recommendations correspond to the subheadings of Section III above.

[16] *See* Minn. R. 7829.3200.
[17] Notice Petition at 5.
[18] *See* Minn. R. 7829.2500

B. TYPES OF NOTICE

- The Department recommends the Applicants review the map depicted in Attachment A and lists of local governments to be provided notice as shown in Attachment B-2 and reconcile the differences in reply comments.

C. CONTENT OF NOTICE

- The Department recommends the Applicants provide the proposed text for the newspaper notice in reply comments.

D. DUPLICATIVE NOTICE

- The Department recommends that the Commission approve the proposed rule variance regarding duplicative notice.

E. NOTICE TIMING

- The Department recommends that the Commission approve the proposed rule variance regarding notice timing.

Taft/

2200 IDS Center, 80 South 8th Street
Minneapolis, MN 55402-2210
Tel: 612.977.8400 | Fax: 612.977.8650
taftlaw.com

October 6, 2025

—Via Electronic Filing—

Sasha Bergman
Executive Secretary
Minnesota Public Utilities Commission
121 Seventh Place East, Suite 350
St. Paul, MN 55101-2147

Re: Notice Plan Petition – Reply Comments
In the Matter of the Application for a Certificate of Need for the Maple River to Cuyuna 345 kV Transmission Line Project
Docket No. E015,ET2,E017/CN-25-109

Dear Ms. Bergman:

Minnesota Power, Great River Energy, and Otter Tail Power Company (collectively the "Applicants"), submit these Reply Comments to the Initial Comments filed by the Minnesota Department of Commerce, Division of Energy Resources ("Department") on the Applicants' Notice Plan Petition for the Maple River – Cuyuna 345 kV Transmission Project ("Project").

In its Comments on the Notice Plan Petition, the Department recommends the Applicants review the map depicted in Attachment A and lists of local governments to be provided notice as shown in Attachment B-2 and reconcile the differences in reply comments, and recommends the Applicants provide the proposed text for the newspaper notice in reply comments.[1]

Department Comments

After reviewing the Petition's Table 1, Figure 1 of Attachment A, and Attachment B-2, of the Applicants' August 27, 2025 Notice Plan Petition notice list (the "August 27, 2025 List") the Department noted the following discrepancies:[2]

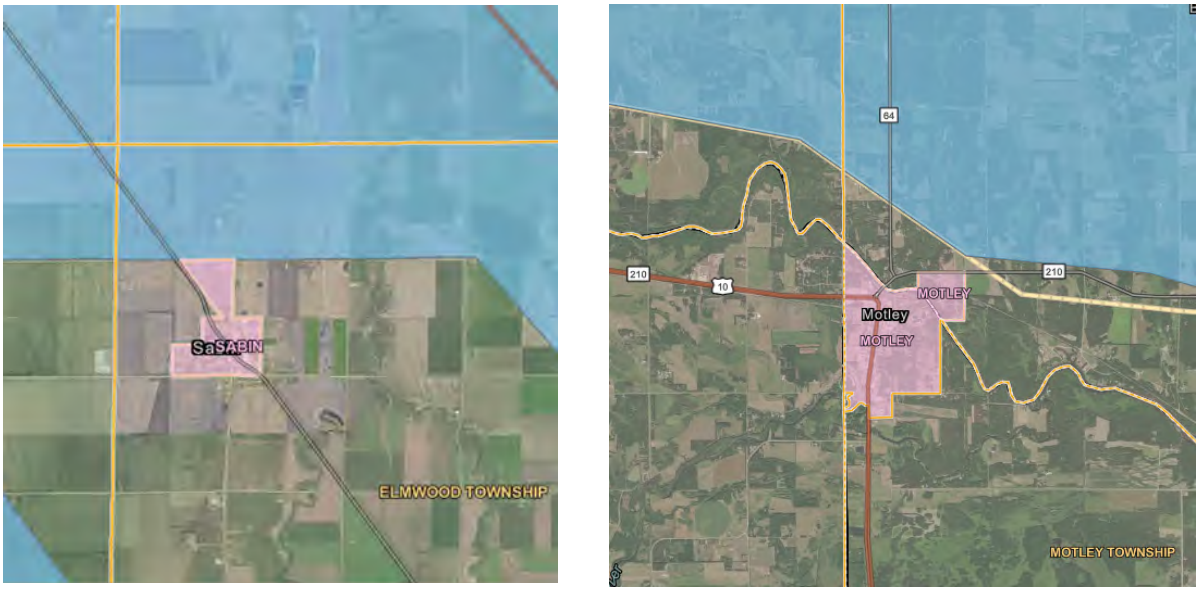
- The cities of Sabin, Breezy Point, and Motley appear to be in or near the notice corridors on the map in Attachment A but are not listed as receiving notice.
- The city of Underwood is listed as receiving notice but is far from the corridors on the map in Attachment A and no other city nearby is getting notice.

[1] *In the Matter of the Application for a Certificate of Need for the Maple River – Cuyuna 345 kV Transmission Line Project*, Docket No. E015,ET2,E017/CN-25-109, Comments of the Minnesota Department of Commerce at 3-4, and 6 (Sep. 16, 2025) (eDocket No. 20259-223065-01).
[2] No discrepancies were noted to Attachment B-1 to the August 27, 2025 Notice Plan Petition.

- Sverdrup Township is listed as receiving notice but is just north of Underwood and not near the notice area.
- Pine Lake Township is listed as receiving notice but is just east of Perham and adjoining townships are not getting notice.
- Spring Creek Township is listed as receiving notice but is just west of Ogema and adjoining townships are not getting notice.
- Wadena Township is listed as receiving notice but is just south and east of city of Wadena and not near the notice area.

The cities of Sabin and Motely are confirmed to be outside the Notice Area as shown in **Figure 1**. Given that Sabin is immediately adjacent to the Notice Area, the Applicants have included this city on the Notice Plan Petition notice list. The City of Breezy Point was on the original Notice Plan Petition notice list filed on August 27, 2025. However, upon further review, not all the elected officials were included, and they have now been added to the notice list.

Figure 1. Cities of Sabin and Motley



The Applicants have reviewed the Notice Area and concur with the Department. Accordingly, the City of Underwood, Sverdrup Township, Pine Lake Township, Spring Creek Township, and Wadena Township have been removed from the updated notice list. These local units of government were included on an early Project introduction letter mailing list but are not within the more narrowly defined Notice Area. Their inclusion in the Notice Plan notice list was inadvertent. The revised Federal, State, and Local Units of Government notice list (Attachment B-2 to the August 27, 2025 Notice Plan Petition) is included as **Attachment A**.

Additional Notice Plan List Changes

During review of the August 27, 2025 List, Applicants identified inadvertent omissions and over-inclusions on the notice list. As to omissions, Applicants identified that, while these local governments were on the notice list filed on August 27, 2025, due to a clerical error, not all officials were included on the notice list for the following cities and townships (in addition to the City of Breezy Point, discussed above). These additional officials have been added to the revised notice list at **Attachment A**.

Cities	Townships
Dilworth	Hubbard
Pequot Lakes	Jenkins
Riverton	Lake Edward
	Nevis
	Oak Lawn
	Pelican Township (Crow Wing County)
	Pelican Township (Otter Tail County)
	Straight River
	Wolford

During this review, the Applicants' consultant identified that the City of Trommald, Unorganized West Crow Wing, and two State Representatives were omitted from the August 27, 2025 List. These have been added to the list at **Attachment A** to these Reply Comments.

As to over-inclusions, the Applicants identified that certain local units of government, which were included on an early Project introduction letter mailing list, are outside the finalized Project Notice Area and should not have appeared on the Notice Plan notice list. These include the cities of Comstock, Crosby, Frazee, Hawley, Lake Shore, Menahga, Ottertail, Park Rapids, Pelican Rapids, Pine River, Staples, and Vergas and Todd Township. The Applicants have removed these local units of government from the updated notice list. Further, the Applicants have worked with their consultant to ensure that the risk of errors like these in the future are minimized.

Attachment A shows all of these revisions. Text shown in red are additions to the Notice Plan Federal, State, and Local Units of Government notice list (Attachment B-2 to the August 27, 2025 filing). Cells highlighted in yellow and provided at the end of **Attachment A** will be removed from the Notice Plan Federal, State, and Local Units of Government notice list (Attachment B-2 to the August 27, 2025 filing).

Newspaper Notice

The Department notes that the Applicants did not provide the text for the newspaper notice in the Notice Petition. The Applicants intend to use the text of the notice letters for newspaper notices. The Applicants provide a mockup newspaper notice as **Attachment B**.

If you have questions or need additional information, please contact me.

Sincerely,

/s/ Kodi J. Verhalen
Kodi J. Verhalen
Taft Stettinius & Hollister LLP

On behalf of Minnesota Power, Great River Energy, and Otter Tail Power Company

cc: Service List

Federal, State, and Local Units of Government (October 6, 2025)

Organization	Name	Title	Address	City	State	Zip Code
Federal Agencies						
Federal Aviation Administration	Marla Duchatellier	Air Traffic Technician	6020 28th Ave S, Ste. 201	Minneapolis	MN	55450
Federal Aviation Administration	Ashley Wilson	Air Traffic Specialist	6020 28th Ave S, Ste. 201	Minneapolis	MN	55450
Federal Aviation Administration	Lindsay Terry	Manager	6020 28th Ave S, Ste. 201	Minneapolis	MN	55450
Federal Aviation Administration	Jacob Martin	Assistant Manager	6020 28th Ave S, Ste. 201	Minneapolis	MN	55450
U.S. Army Corps of Engineers	Benjamin Orne	Project Manager	332 Minnesota St, Suite E1500	St. Paul	MN	55101
U.S. Army Corps of Engineers	Jeremy Kinney	Project Manager	332 Minnesota St., Suite E1500	St. Paul	MN	55101
U.S. Department of Agriculture – Natural Resources Conservation Service	Troy Daniell	Minnesota State Conservationist	375 Jackson St.	St. Paul	MN	55101
U.S. Department of Agriculture – Natural Resources Conservation Service	Ryan Galbreath	State Resource Conservationist	375 Jackson Street, Suite 600	St. Paul	MN	55101
U.S. Department of Agriculture – Natural Resources Conservation Service, Moorhead	Robert Guetter	District Conservationist	1615 30th Ave S	Moorhead	MN	56560
U.S. Department of Agriculture – Natural Resources Conservation Service, Park Rapids	Jody Peek	District Conservationist	603 North Central Ave, Suite 100	Park Rapids	MN	56470
U.S. Department of Agriculture – Natural Resources Conservation Service, Wadena	Josh Hanson	District Conservationist	4 Alfred St NE	Wadena	MN	56482
U.S. Department of Agriculture – Natural Resources Conservation Service, Grand Rapids	Candi Fuller	District Conservationist	1889 E Hwy 2	Grand Rapids	MN	55744
U.S. Fish and Wildlife Service	Robert Tawes	Field Office Supervisor	3815 American Blvd E	Bloomington	MN	55425
U.S. Fish and Wildlife Service	Katie O'Brien	Endangered Species Biologist	3815 American Blvd E	Bloomington	MN	55425
U.S. Fish and Wildlife Service		Minnesota Ecological Services Field Office	3815 American Blvd E	Bloomington	MN	55744

Organization	Name	Title	Address	City	State	Zip Code
U.S. Fish and Wildlife Service	Alisha Haken	Assistant Refuge Manager	35704 County Highway 26	Rochert	MN	56578
U.S. Fish and Wildlife Service	Neil Powers	Project Leader	18965 County Highway 82	Fergus Falls	MN	56537-7726
U.S. Fish and Wildlife Service	Ryan Frohling	Project Leader	1732 North Tower Road	Detroit Lakes	MN	56501-7959
U.S. Fish and Wildlife Service	Kent Sundseth	Project Leader	35704 County Highway 26	Rochert	MN	56578-9638
State Agencies						
Minnesota Association of Townships	Kevin Comnick	Director	P.O. Box 267	St. Michael	MN	55376
Minnesota Board of Soil and Water Resources	Ryan Hughes	Manager	525 S Lake Ave, #400	Duluth	MN	55802
Minnesota Board of Water and Soil Resources	John Jaschke	Executive Director	520 Lafayette Road North	St. Paul	MN	55155
Minnesota Board of Water and Soil Resources	Mary Juhl	Communications Coordinator	520 Lafayette Road North	St. Paul	MN	55155
Minnesota Board of Water and Soil Resources	Suzanne Rhees	Special Projects Coordinator	530 Lafayette Road North	St. Paul	MN	55155
Minnesota Department of Agriculture	Stephan Roos	Planner	625 Robert St N	St. Paul	MN	55155
Minnesota Department of Health	Christopher Parthun	Principal Planner	P.O. Box 64975	St. Paul	MN	55164
Minnesota Department of Health	Nick Budde	Hydrologist	P.O. Box 64975	St. Paul	MN	55164
Minnesota Department of Health	Dereck Richter	Principal Planner	P.O. Box 64975	St. Paul	MN	55164
Minnesota Department of Health	Danielle Luzinski	Statewide Surface Water Hydrologist	P.O. Box 64975	St. Paul	MN	55164
Minnesota Department of Natural Resources	Ben Bergey	Regional Director (NW)	2115 Birchmont Beach Rd NE	Bemidji	MN	56601
Minnesota Department of Natural Resources	Clarissa Spicer	Regional Director (NE)	1201 East Highway 2	Grand Rapids	MN	55744

Organization	Name	Title	Address	City	State	Zip Code
Minnesota Department of Natural Resources	Kate Fairman	Environmental Review Operations Lead	500 Lafayette Rd	St. Paul	MN	55155
Minnesota Department of Natural Resources	Becky Horton	EIS Project Manager	500 Lafayette Rd	St. Paul	MN	55155
Minnesota Department of Natural Resources	Diane Johnson	Realty Specialist, Utility License Crossing	2115 Birchmont Beach Rd, NE	Bemidji	MN	56601
Minnesota Department of Natural Resources	Jessica Parson	NE Region Ecologist	1201 E Hwy 2	Grand Rapids	MN	55744
Minnesota Department of Natural Resources	Patty Thielen	NE Region Director	1601 Minnesota Dr	Brainerd	MN	56401
Minnesota Department of Natural Resources	Owen Baird	Northwest Region 1 Environmental Assessment Ecologist	1601 Minnesota Drive	Brainerd	MN	56401
Minnesota Department of Natural Resources	Joseph Henderson	Lands & Minerals Director	500 Lafayette Road	St. Paul	MN	55155-4045
Minnesota Department of Natural Resources	Cheryl Kelley-Dobie	Lands & Minerals Assistant Director	500 Lafayette Road	St. Paul	MN	55155-4045
Minnesota Department of Natural Resources	Michael Liljegren	Lands & Minerals Assistant Director	500 Lafayette Road	St. Paul	MN	55155-4045
Minnesota Department of Natural Resources	Ted Anderson	Lands & Minerals Assistant Director	1525 3rd Avenue East	Hibbing	MN	55746
Minnesota Department of Natural Resources	Pam Arndt	Regional Operations Coordinator (NW)	2115 Birchmont Beach Rd	Bemidji	MN	56601
Minnesota Department of Natural Resources	Amy Marrier	Regional Operations Coordinator (NE)	1201 East Highway 2	Grand Rapids	MN	55744
Minnesota Department of Natural Resources	Molly Barrett	Natural Heritage Review Specialist	500 Lafayette Rd	St. Paul	MN	55155
Minnesota Department of Natural Resources	Jim Drake	Natural Heritage Review Specialist	500 Lafayette Rd	St. Paul	MN	55155
Minnesota Department of Natural Resources	Chuck Carpenter	Northeast Regional Manager	1201 E Hwy 2	Grand Rapids	MN	55744
Minnesota Department of Natural Resources	Samantha Bump	Energy Review Planner	500 Lafayette Road Box 25	St. Paul	MN	55155-4025

Organization	Name	Title	Address	City	State	Zip Code
Minnesota Department of Transportation	Joe Pignato	Land Management Office Director	395 John Ireland Blvd Mailstop 630	St. Paul	MN	55155
Minnesota Department of Transportation	Stacy Kotch Egstad	Utility Routing and Siting Coordinator	395 John Ireland Blvd Mailstop 630	St. Paul	MN	55155
Minnesota Department of Transportation	Shane Gries	Right of Way Permits	1123 Mesaba Ave	Duluth	MN	55811
Minnesota Indian Affairs Council	Shannon Geshick	Executive Director	161 St. Anthony Ave, Ste. 919	St. Paul	MN	55103
Minnesota Indian Affairs Council	George Goggleye Jr.	Cultural Resources Manager	161 St. Anthony Ave, Ste. 919	St. Paul	MN	55103
Minnesota Indian Affairs Council	Lilly Geraghty	Cultural Resources Manager	161 St. Anthony Ave, Ste. 919	St. Paul	MN	55103
Minnesota Indian Affairs Council	Isaac Weston	Cultural Resources Manager	161 St. Anthony Ave, Ste. 919	St. Paul	MN	55103
Minnesota Pollution Control Agency	Jim Dexter	Environmental Review Specialist	520 Lafayette Rd, Box 25	St. Paul	MN	55155
Minnesota Pollution Control Agency	Kirsten Barta	Regional General Permits	520 Lafayette Rd, Box 25	St. Paul	MN	55155
Minnesota State Historic Preservation Office	Leslie Coburn	Manager, Environmental Review Specialist	50 Sherburne Ave, Suite 203	St. Paul	MN	55155
Minnesota State Historic Preservation Office	Kelly Gragg-Johnson	Environmental Review Specialist	50 Sherburne Ave, Suite 203	St. Paul	MN	55155
Office of the State Archaeologist	Amanda Gronhovd	MN State Archaeologist	328 W Kellogg Blvd	St. Paul	MN	55102
Public Utilities Commission	Bret Eknes	Supervisor	121 7th Place E, Suite 350	St. Paul	MN	55101
County Commissioners						
Becker County	Erica Jepson	District 1 Commissioner	14312 460th Ave	Frazee	MN	56544
Becker County	David Meyer	District 2 Commissioner	1203 Roosevelt Ave	Detroit Lakes	MN	56501
Becker County	Phil Hansen	District 3 Commissioner	24921 N Melissa Dr	Detroit Lakes	MN	56501

Organization	Name	Title	Address	City	State	Zip Code
Becker County	Richard Vareberg	District 4 Commissioner	19458 US Hwy 59	Detroit Lakes	MN	56501
Becker County	Barry Nelson	District 5 Commissioner	12972 Co Hwy 11	Audubon	MN	56511
Cass County	Neal Gaalswyk	District 1 Commissioner	Maplewood Drive E	Gull Lake	MN	56401
Cass County	Robert Kangas	District 2 Commissioner	3921 40th Ave SW	Pine River	MN	56474
Cass County	Rusty Lilyquist	District 3 Commissioner	1394 County 7	Longville	MN	56655-3192
Cass County	Scott Bruns	District 4 Commissioner	P.O. Box 1059	Walker	MN	56484
Cass County	Rick Haaland	District 5 Commissioner	P.O. Box 781	Cass Lake	MN	56633
Clay County	Paul Krabbenhoft	District 1 Commissioner	P.O. Box 280	Moorhead	MN	56560
Clay County	Ezra Baer	District 2 Commissioner	P.O. Box 280	Moorhead	MN	56560
Clay County	Jenny Mongeau	District 3 Commissioner	P.O. Box 280	Moorhead	MN	56560
Clay County	Kevin Campbell	District 4 Commissioner	P.O. Box 280	Moorhead	MN	56560
Clay County	David Ebinger	District 5 Commissioner	P.O. Box 280	Moorhead	MN	56560
Crow Wing County	Paul Koering	District 1 Commissioner	326 Laurel St Suite 13	Brainerd	MN	56401
Crow Wing County	Jon Lubke	District 2 Commissioner	326 Laurel St Suite 13	Brainerd	MN	56401
Crow Wing County	Steve Barrows	District 3 Commissioner	326 Laurel St Suite 13	Brainerd	MN	56401
Crow Wing County	Rosemary Franzen	District 4 Commissioner	326 Laurel St Suite 13	Brainerd	MN	56401

Organization	Name	Title	Address	City	State	Zip Code
Crow Wing County	Jamie Lee	District 5 Commissioner	326 Laurel St Suite 13	Brainerd	MN	56401
Hubbard County	David De La	District 1 Commissioner	18602 Estate Dr	Park Rapids	MN	56470
Hubbard County	Charlene Christenson	District 2 Commissioner	24496 Hazel Wood Dr.	Park Rapids	MN	56470
Hubbard County	Tom Krueger	District 3 Commissioner	12621 Bethel Trl.	Nevis	MN	56467
Hubbard County	Steve Keranen	District 4 Commissioner	25544 Hillview Road	Nevis	MN	56467
Hubbard County	Ted Van Kempen	District 5 Commissioner	22091 County 118	Laporte	MN	56461
Otter Tail County	Dan Bucholz	District 1 Commissioner	45227 N Little Pine Rd	Perham	MN	56573
Otter Tail County	Wayne Johnson	District 2 Commissioner	38992 183rd Ave	Pelican Rapids	MN	56572
Otter Tail County	Kurt Mortenson	District 3 Commissioner	19713 Co Hwy 39	Underwood	MN	56586
Otter Tail County	Robert (Bob) Lahman	District 4 Commissioner	12166 595th Ave	Parkers Prairie	MN	56361-4820
Otter Tail County	Sean Sullivan	District 5 Commissioner	1003 North Vine Street	Fergus Falls	MN	56537
Wadena County	Ron Noon	District 1 Commissioner	415 Jefferson Street S	Wadena	MN	56482
Wadena County	Mike Weyer	District 2 Commissioner	415 Jefferson Street S	Wadena	MN	56482
Wadena County	Bill Stearns	District 3 Commissioner	415 Jefferson Street S	Wadena	MN	56482
Wadena County	Murlyn Kreklau	District 4 Commissioner	415 Jefferson Street S	Wadena	MN	56482
Wadena County	Jon Kangas	District 5 Commissioner	415 Jefferson Street S	Wadena	MN	56482

Organization	Name	Title	Address	City	State	Zip Code
Wilkin County	Eric Klindt	District 1 County Commissioner	4450 310th Ave	Campbell	MN	56522
Wilkin County	Jonathan Green	District 2 County Commissioner	809 13th Street N	Breckenridge	MN	56520
Wilkin County	Jon Braton Sr.	District 3 County Commissioner	1282 230th Ave	Barnesville	MN	56514
Wilkin County	Rick Busko	District 4 County Commissioner	702 Oak St	Breckenridge	MN	56520
Wilkin County	Dennis Larson	District 5 County Commissioner	834 7th St S	Breckenridge	MN	56520
County Agencies						
Becker County	Carrie Smith	County Administrator	915 Lake Ave 3rd Floor	Detroit Lakes	MN	56501
Becker County	Kyle Vareberg	Planning and Zoning Department	915 Lake Ave 3rd Floor	Detroit Lakes	MN	56501
Becker County	Lee Brekke	Assessors Department	915 Lake Ave Ste 2	Detroit Lakes	MN	56501
Cass County	Josh Stevenson	County Administrator	Courthouse Annex, 2nd Floor 303 Minnesota Avenue W	Walker	MN	56484
Cass County	Mark Gossman	Lands	218 Washburn Avenue E	Backus	MN	56435
Cass County	Mark Peterson	Assessors Department	Courthouse Annex, 1st Floor 303 Minnesota Avenue W	Walker	MN	56484
Clay County	Jill Murray	Assessors Department	3510 12th Ave S P.O. Box 280	Moorhead	MN	56560
Clay County	Matt Jacobson	Planning Director	3512 12th Ave S P.O. Box 280	Moorhead	MN	56560
Clay County	Stephen Larson	County Administrator	3513 12th Ave S P.O. Box 280	Moorhead	MN	56560
Crow Wing County	Jory Danielson	Administrative Services Director	326 Laurel Street, Suite 22	Brainerd	MN	56401
Crow Wing County	Gary Griffin	Lands Services Director	322 Laurel Street, Suite 15	Brainerd	MN	56401

Organization	Name	Title	Address	City	State	Zip Code
Crow Wing County	Sandra Brueland	Property Assessor Supervisor	322 Laurel Street, Suite 15	Brainerd	MN	56401
Hubbard County	Jeff Cadwell	County Administrator	301 Court Ave	Park Rapids	MN	56470
Hubbard County	Cory Kimball	Lands Commissioner	301 Court Ave	Park Rapids	MN	56470
Otter Tail County	Heather Jacobson	Assessor	505 W Fir Avenue	Fergus Falls	MN	56537
Otter Tail County	Nick Leonard	Deputy County Administrator	500 West Fir Avenue	Fergus Falls	MN	56538
Otter Tail County	Lynne Penke Valdes	Deputy County Administrator	501 West Fir Avenue	Fergus Falls	MN	56539
Otter Tail County	Christopher LeClair	Land & Resource Management Director	540 W Fir Avenue	Fergus Falls	MN	56540
Wadena County	Jennifer Westrum	Interim County Administrator	415 Jefferson Street S	Wadena	MN	56482
Wadena County	Deana Malone	Planning and Zoning Department	415 Jefferson Street S, Room 234 Courthouse	Wadena	MN	56483
Wadena County	Jason Jorgensen	Assessor	415 Jefferson Street S	Wadena	MN	56482
Wilkin County	Michelle Snobl	Assessor	300 5th St S	Breckenridge	MN	56520
Wilkin County	Stephanie Sandbakken	County Administrator	505 S. 8th Street	Breckenridge	MN	56521
Wilkin County	Breanna Koval	Director of Environmental Services	505 S. 8th Street	Breckenridge	MN	56521
Cities						
City of Audubon	Wesley Hegna	Assessor	24674 470th St	Laporte	MN	56461
City of Audubon	Meghan Eastman	Clerk	357 4th Street PO Box 263	Audubon	MN	56511

Organization	Name	Title	Address	City	State	Zip Code
City of Audubon	Zakery Beckner	Vice Mayor	357 4th Street PO Box 263	Audubon	MN	56511
City of Audubon	Melissa Hiemenz	Safety Committee Liaison	357 4th Street PO Box 263	Audubon	MN	56511
City of Audubon	Kevin Hamernik	Water and Sewer Liaison	357 4th Street PO Box 263	Audubon	MN	56511
City of Audubon	Tyler Lende	Mayor	357 4th Street PO Box 263	Audubon	MN	56511
City of Barnesville	Jason Rick	Mayor	102 Front Street N. PO Box 550	Barnesville	MN	56514
City of Barnesville	Dawn Stuvland	Council	102 Front Street N. PO Box 550	Barnesville	MN	56514
City of Barnesville	Scott Bauer	Council	102 Front Street N. PO Box 550	Barnesville	MN	56514
City of Barnesville	Don Goedtke	Council	102 Front Street N. PO Box 550	Barnesville	MN	56514
City of Barnesville	Alyssa Bergman	Council	102 Front Street N. PO Box 550	Barnesville	MN	56514
City of Barnesville	Brad Field	Council	102 Front Street N. PO Box 550	Barnesville	MN	56514
City of Barnesville	Tonya Stokka	Council	102 Front Street N. PO Box 550	Audubon	MN	56511
City of Baxter	Darrel Olson	Mayor	13190 Memorywood Dr	Baxter	MN	56425
City of Baxter	Mark Cross	Council Member	13190 Memorywood Dr	Baxter	MN	56425
City of Baxter	Connie Lyscio	Council Member	13190 Memorywood Dr	Baxter	MN	56425
City of Baxter	Patrick Sundberg	Council Member	13190 Memorywood Dr	Baxter	MN	56425
City of Baxter	Zach Tabatt	Council Member	13190 Memorywood Dr	Baxter	MN	56425

Organization	Name	Title	Address	City	State	Zip Code
City of Brainerd	Dave Badeaux	Mayor	501 Laurel Street	Brainerd	MN	56401
City of Brainerd	Tad Erickson	Ward 1 Committee Member	501 Laurel Street	Brainerd	MN	56401
City of Brainerd	Kevin Yeager	Committee Member	501 Laurel Street	Brainerd	MN	56401
City of Brainerd	Jeff Czeczok	Ward 3 Committee Member	501 Laurel Street	Brainerd	MN	56401
City of Brainerd	Mike O'Day	President of Council	501 Laurel Street	Brainerd	MN	56401
City of Brainerd	Gabe Johnson	Ward 4 Committee Member	501 Laurel Street	Brainerd	MN	56401
City of Brainerd	Kevin H. Stunek	Committee Member	501 Laurel Street	Brainerd	MN	56401
City of Brainerd	Kelly Bevans	Committee Member	501 Laurel Street	Brainerd	MN	56401
City of Breezy Point	Todd Raggenkamp	Mayor	8319 County Road 11	Breezy Point	MN	56472
City of Breezy Point	Deb Runksmeier	Deputy Clerk/Office Manager	8319 County Road 11	Breezy Point	MN	56472
City of Breezy Point	Allie Polsfuss	City Administrator	8319 County Road 11	Breezy Point	MN	56472
City of Breezy Point	Steve Jensen	Council Member	8319 County Road 11	Breezy Point	MN	56472
City of Breezy Point	Michael Moroni	Council Member	8319 County Road 11	Breezy Point	MN	56472
City of Breezy Point	Rebecca Ball	Council Member	8319 County Road 11	Breezy Point	MN	56472
City of Breezy Point	Brad Scott	Council Member	8319 County Road 11	Breezy Point	MN	56472
City of Detroit Lakes	L&K (Lowell & Karen) Skoog	Assessor	54165 175th St	Menahga	MN	56464

Organization	Name	Title	Address	City	State	Zip Code
City of Detroit Lakes	Loren Tolkkinen, SLL Inc.	Assessor	15282 390th St	Menahga	MN	56464
City of Detroit Lakes	Kelcey Klemm	Administrator	1025 Roosevelt Avenue	Detroit Lakes	MN	56501
City of Detroit Lakes	Kari Tyson	Clerk	1025 Roosevelt Avenue	Detroit Lakes	MN	56501
City of Detroit Lakes	Matt Brenk	Mayor	1025 Roosevelt Avenue	Detroit Lakes	MN	56501
City of Detroit Lakes	Shaun Carlson	Alderman First Ward (Public Safety)	1025 Roosevelt Avenue	Detroit Lakes	MN	56501
City of Detroit Lakes	Ron Zeman	Alderman First Ward	1025 Roosevelt Avenue	Detroit Lakes	MN	56501
City of Detroit Lakes	Mike Stearns	Alderman Second Ward	1025 Roosevelt Avenue	Detroit Lakes	MN	56501
City of Detroit Lakes	Wendy Spry	Alderman Second Ward	1025 Roosevelt Avenue	Detroit Lakes	MN	56501
City of Detroit Lakes	Aaron Dallmann	Alderman Third Ward	1025 Roosevelt Avenue	Detroit Lakes	MN	56501
City of Detroit Lakes	Matt Boeke	Alderman Third Ward	1025 Roosevelt Avenue	Detroit Lakes	MN	56501
City of Detroit Lakes	Craig Caulfield	Alderman at Large	1025 Roosevelt Avenue	Detroit Lakes	MN	56501
City of Detroit Lakes	Jaimie Deraney	Alderman at Large	1025 Roosevelt Avenue	Detroit Lakes	MN	56501
City of Detroit Lakes	Jackie Buboltz	Alderman at Large	1025 Roosevelt Avenue	Detroit Lakes	MN	56501
City of Dilworth	L. Peyton Mastera	City Administrator	PO BOX 187	Dilworth	MN	56529
City of Dilworth	Chad Olson	Mayor	1st Avenue SE	Dilworth	MN	56529
City of Dilworth	Julie Nash	Council	1st Avenue SE	Dilworth	MN	56529

Organization	Name	Title	Address	City	State	Zip Code
City of Dilworth	Dave Steichen	Council	1st Avenue SE	Dilworth	MN	56529
City of Dilworth	Kevin Peterson	Council	1st Avenue SE	Dilworth	MN	56529
City of East Gull Lake	Laura Christensen	Administrator	10790 Gull Point Rd	East Gull Lake	MN	56401
City of East Gull Lake	Dave Kavanaugh	Mayor	1685 Kavanaugh Dr	East Gull Lake	MN	56401
City of East Gull Lake	Tim Bergin	Council	1311 East Point Dr	East Gull Lake	MN	56401
City of East Gull Lake	James Ruttger	Council	915 Green Gables Rd	East Gull Lake	MN	56401
City of East Gull Lake	Carol Demgen	Council	878 Birch Lane East	Gull Lake	MN	56401
City of East Gull Lake	Scott Hoffmann	Council	11405 East Steamboat Bay Dr	East Gull Lake	MN	56401
City of Glyndon	Joe Olson	Mayor	36 3rd Street SE	Glyndon	MN	56547
City of Glyndon	Bryant DeVries	Council	36 3rd Street SE	Glyndon	MN	56547
City of Glyndon	Shonna Severson	Council	36 3rd Street SE	Glyndon	MN	56547
City of Glyndon	Patrick McCoy	Council	36 3rd Street SE	Glyndon	MN	56547
City of Glyndon	Steven Ring	Council	36 3rd Street SE	Glyndon	MN	56547
City of Ironton	Emma Pratt	City Clerk	309 3rd Street PO Box 97	Ironton	MN	56455
City of Ironton	Joshua Jacobson	Mayor	309 3rd Street PO Box 97	Ironton	MN	56455
City of Ironton	Shawn Hamdorf	Council Member	309 3rd Street PO Box 97	Ironton	MN	56455

Organization	Name	Title	Address	City	State	Zip Code
City of Ironton	Dean French	Council Member	309 3rd Street PO Box 97	Ironton	MN	56455
City of Ironton	Eric Heglund	Council Member	309 3rd Street PO Box 97	Ironton	MN	56455
City of Ironton	Matthew Bugnacki	Council Member	309 3rd Street PO Box 97	Ironton	MN	56455
City of Jenkins	Krista Okerman	City Clerk	33861 Cottage Ave	Jenkins	MN	56474
City of Jenkins	Andrew Rudlang	Mayor	33861 Cottage Ave	Jenkins	MN	56474
City of Jenkins	Jerimey Flategraff (Mayor Pro-Tem)	Council Member	33861 Cottage Ave	Jenkins	MN	56474
City of Jenkins	Roman Siltman	Council Member	33861 Cottage Ave	Jenkins	MN	56474
City of Jenkins	Ryan Barnett	Council Member	33861 Cottage Ave	Jenkins	MN	56474
City of Jenkins	Jory Carlson	Council Member	33861 Cottage Ave	Jenkins	MN	56474
City of Lake Park	L & K (Lowell & Karen) Skoog	Assessor	54165 175th St	Menahga	MN	56464
City of Lake Park	Sarah Mikkelsen	Clerk	PO Box 239	Lake Park	MN	56554
City of Lake Park	Sarah Mikkelsen	Treasurer	PO Box 239	Lake Park	MN	56554
City of Lake Park	John Beaudine	Mayor	PO Box 239	Lake Park	MN	56554
City of Moorhead	Shelly Carlson	Mayor	PO Box 779	Moorhead	MN	56561-0779
City of Moorhead	Ryan Nelson	Council Member	PO Box 779	Moorhead	MN	56561-0779
City of Moorhead	Nicole Mattson	Council Member	PO Box 779	Moorhead	MN	56561-0779

Organization	Name	Title	Address	City	State	Zip Code
City of Moorhead	Emily Moore	Council Member	PO Box 779	Moorhead	MN	56561-0779
City of Moorhead	Heather Nesemeier	Council Member	PO Box 779	Moorhead	MN	56561-0779
City of Moorhead	Chuck Hendrickson	Council Member	PO Box 779	Moorhead	MN	56561-0779
City of Moorhead	Sebastian McDougall	Council Member	PO Box 779	Moorhead	MN	56561-0779
City of Moorhead	Travis Schmidt	Director of Moorhead Public Service	2901 S Frontage Road Suite 2	Moorhead	MN	56561-0779
City of Moorhead	Tom Trowbridge	Moorhead City Engineers	2901 S Frontage Road Suite 2	Moorhead	MN	56561-0779
City of Moorhead	Dan Mahli	Moorhead City Manager	2901 S Frontage Road Suite 2	Moorhead	MN	56561-0779
City of Moorhead	Bob Zimmerman	Moorhead City Engineers	2901 S Frontage Road Suite 2	Moorhead	MN	56561-0779
City of Nisswa	Jennifer Carnahan	Mayor	5442 City Hall Street PO box 410	Nisswa	MN	56468
City of Nisswa	Mark Froehle	Council Member	5442 City Hall Street PO box 410	Nisswa	MN	56468
City of Nisswa	Joseph Hall	Council Member	5442 City Hall Street PO box 410	Nisswa	MN	56468
City of Nisswa	Bruce London	Council Member	5442 City Hall Street PO box 410	Nisswa	MN	56468
City of Nisswa	Jesse Zahn	Council Member	5442 City Hall Street PO box 410	Nisswa	MN	56468
City of Pequot Lakes	Tyler Gardner	Mayor	4638 Main Street	Pequot Lakes	MN	56472
City of Pequot Lakes	Pete Clement	Council Member	4638 Main Street	Pequot Lakes	MN	56472
City of Pequot Lakes	Laura Larson	Council Member	4638 Main Street	Pequot Lakes	MN	56472

Organization	Name	Title	Address	City	State	Zip Code
City of Pequot Lakes	Scott Pederson	Council Member	4638 Main Street	Pequot Lakes	MN	56472
City of Pequot Lakes	Dan Ronning	Council Member	4638 Main Street	Pequot Lakes	MN	56472
City of Pillager	Lori Blumke	Clerk	306 Elm Ave W	Pillager	MN	56473
City of Pillager	Adam Sparrow	Mayor	306 Elm Ave W	Pillager	MN	56473
City of Pillager	H. Robert Freelove	Council Member	306 Elm Ave W	Pillager	MN	56473
City of Pillager	Joe Klein	Council Member	306 Elm Ave W	Pillager	MN	56473
City of Pillager	Wade Mortenson	Council Member	306 Elm Ave W	Pillager	MN	56473
City of Pillager	Leroy Smith	Council Member	306 Elm Ave W	Pillager	MN	56473
City of Riverton	David C. Peterson	Mayor	16663 Main Street	Riverton	MN	56455
City of Riverton	Pamela Dobson	Council Member	16663 Main Street	Riverton	MN	56455
City of Riverton	Ila R. Martin	Council Member	16663 Main Street	Riverton	MN	56455
City of Riverton	Lana Schmidt	Council Member	16663 Main Street	Riverton	MN	56455
City of Riverton	Denise Frahm	Council Member	16663 Main Street	Riverton	MN	56455
City of Riverton	Alexandra Booth	Council Member	16663 Main Street	Riverton	MN	56455
City of Sabin	Bob Dablow,	Mayor	PO Box 225 2 Main St.	Sabin	MN	56580
City of Sabin	Tom Berglind	Vice Mayor	PO Box 225 2 Main St.	Sabin	MN	56580

Organization	Name	Title	Address	City	State	Zip Code
City of Sabin	Wendy Otte	Council Member	PO Box 225 2 Main St.	Sabin	MN	56580
City of Sabin	Tyler Spriggs	Council Member	PO Box 225 2 Main St.	Sabin	MN	56580
City of Sabin	Lloyd Helgeson	Council Member	PO Box 225 2 Main St.	Sabin	MN	56580
City of Sabin	Drew Schwan	Council Member	PO Box 225 2 Main St.	Sabin	MN	56580
City of Trommald	Mona R. Geske	Clerk	24124 Cardinal Ave	Trommald	MN	56441
City of Trommald	Jim Hille	Mayor	24124 Cardinal Ave	Trommald	MN	56441
City of Trommald	Jackie Wood	Council Member	24124 Cardinal Ave	Trommald	MN	56441
City of Trommald	Robert Chamberlin	Council Member	24124 Cardinal Ave	Trommald	MN	56441
City of Trommald	Amanda Peka	Council Member	24124 Cardinal Ave	Trommald	MN	56441
City of Trommald	Eugene Wgeishofski	Council Member	24124 Cardinal Ave	Trommald	MN	56441
Wolf Lake City	L & K (Lowell & Karen) Skoog	Assessor	54165 175th St	Menahga	MN	56464
Wolf Lake City	Becky Lake	Clerk	PO Box 5	Wolf Lake	MN	56593
Wolf Lake City	Jill Salmen	Treasurer	PO Box 5	Wolf Lake	MN	56593
Wolf Lake City	Michelle Suhsen	Mayor	PO Box 5	Wolf Lake	MN	56593
Townships						
Alliance Township	Jerald L Butenhoff	Chairman	10449 140 Ave S	Barnesville	MN	56514-9129
Alliance Township	Mark Rustad	Supervisor	9288 140th Ave S	Sabin	MN	56580-9542

Organization	Name	Title	Address	City	State	Zip Code
Alliance Township	Paul Anderson	Supervisor	15534 70th St S	Sabin	MN	56580-9542
Alliance Township	Rae Ann Berg	Clerk	12479 100th ST S	Sabin	MN	56580-9542
Ansel Township	Linda Kuschel	Clerk	3288 84th Ave SW	Sebeka	MN	56477
Ansel Township	Sarah Kuschel	Deputy Clerk	3226 84th Ave SW	Sebeka	MN	56477
Ansel Township	Mike Volk	Supervisor	7642 28th St. SW	Staples	MN	56479
Ansel Township	Miles Kuschel	Supervisor	3226 84th Ave SW	Sebeka	MN	56477
Ansel Township	Dale DeVriendt	Supervisor	8790 County Rd 20 SW	Sebeka	MN	56477
Atherton Township	Bruce Nelson	Chairman	2606 0140th St	Barnesville	MN	56514
Atherton Township	Brandon Scheffler	Supervisor	PO Box 625	Barnesville	MN	56514
Atherton Township	Kenneth Packer	Supervisor	2240 150th St	Barnesville	MN	56514
Atherton Township	Amanda Scheffler	Clerk	PO Box 625	Barnesville	MN	56514
Atherton Township	Wanda Braton	Treasurer	282 230th Ave	Barnesville	MN	56514
Audubon Township	Luke Langerud	Chairperson	20597 177th St	Audubon	MN	56511
Audubon Township	Jacob Hein	Supervisor	19340 Co Rd 103	Audubon	MN	56511
Audubon Township	Peter Anderson	Supervisor	16248 Bird Dog Rd	Audubon	MN	56511
Audubon Township	Melissa Paskey	Clerk	22081 185th St	Audubon	MN	56511

Organization	Name	Title	Address	City	State	Zip Code
Audubon Township	Jay Meacham	Treasurer	18000 Co Hwy 11	Audubon	MN	56511
Audubon Township	Wesley Hegna	Assessor	24674 470th St	Laporte	MN	56461
Badoura Township	Tim Scouton	Clerk	12588 County 110	Nevis	MN	56467
Badoura Township	David Andress	Supervisor	15771 319th Ave	Akeley	MN	56433
Badoura Township	Raymond Peterson	Supervisor	32848 County 113	Backus	MN	56352
Badoura Township	Theora Goodrich	Township Chair	28933 State 87	Nevis	MN	56467
Barnesville Township	Frank Schindler	Chairman	17807 150 St S	Barnesville	MN	56514
Barnesville Township	Kelly Peppel	Supervisor	17737 180th St S	Barnesville	MN	56514
Barnesville Township	Chuck Anderson	Supervisor	13919 150 St S	Barnesville	MN	56514
Barnesville Township	Ted Ducharme	Clerk	PO Box 627	Barnesville	MN	56514
Becker Township	Mary Fitcher	Clerk	10999 75th Ave SW	Motley	MN	56466
Becker Township	Chad Wallgren	Supervisor	9770 95th Ave SW	Staples	MN	56479
Becker Township	Gary Trout	Supervisor	11598 75th Ave SW	Motley	MN	56466
Becker Township	Mike Fitcher	Supervisor	10999 75th Ave SW	Motley	MN	56466
Blueberry Township	Jayne Pickar	Clerk	PO Box 348	Menahga	MN	56464
Blueberry Township	Shar Lusti	Treasurer	38508 Blueberry View Dr	Menahga	MN	56464

Organization	Name	Title	Address	City	State	Zip Code
Blueberry Township	Dennis Carlson	Supervisor	39132 109th Ave	Menahga	MN	56464
Blueberry Township	Mark Markkula	Supervisor	13741 Jacks Beach Rd	Menahga	MN	56464
Blueberry Township	Jim Kangas	Chairman	12830 378th St	Menahga	MN	56464
Bull Moose Township	Grace Salie	Clerk	5509 State 87 SW	Backus	MN	56435
Bull Moose Township	Caryn Johnson	Supervisor	636 72nd Ave SW	Backus	MN	56435
Bull Moose Township	Donald (D.J.) Downie	Supervisor	5503 State 87 SW	Backus	MN	56435
Bungo Township	Linda Neumann	Clerk	4146 52nd Ave SW	Pine River	MN	56474
Bungo Township	William 'Bill' Thomas	Supervisor	5520 36th St SW	Pine River	MN	56474
Bungo Township	Bill Dabill	Supervisor	5059 24th St SW	Pine River	MN	56474
Bungo Township	Wynn Neumann	Supervisor	5701 36th St SW	Pine River	MN	56474
Burlington Township	Richard Billett	Chairperson	11597 Frazee Rd	Frazee	MN	56544
Burlington Township	John Hodgson	Supervisor	14133 Co Hwy 29 (PO Box 142)	Frazee	MN	56544
Burlington Township	Tyler Trieglaff	Supervisor	33928 120th St	Frazee	MN	56544
Burlington Township	Brian Fulmer	Clerk	15307 320th Ave	Frazee	MN	56544
Burlington Township	Kylene Hoard	Treasurer	15019 320th Ave	Frazee	MN	56544
Burlington Township	Wesley Hegna	Assessor	24674 470th St	Laporte	MN	56461

Organization	Name	Title	Address	City	State	Zip Code
Byron Township	Becki Rassler	Clerk	7831 80th St SW	Staples	MN	56479
Byron Township	Joanne Wolmutt-Cavin	Supervisor	8030 70th St SW	Staples	MN	56479
Candor Township	Bradley Syltie	Chairman	30355 Wing Trl	Vergas	MN	56587
Candor Township	Lowell Bradbury	Supervisor	28466 Candor Hall Rd	Vergas	MN	56587
Candor Township	Bruce Moe	Supervisor	47837 Leek Lake Drive	Vergas	MN	56587
Candor Township	Ryan Hansen	Treasurer	28873 Candor Hall Road	Vergas	MN	56587
Candor Township	Sharon Sauer	Clerk	51902 Co Hwy 17	Detroit Lakes	MN	56501
Center Township	Coralea Borden	Clerk	13110 Borden Road	Merrifield	MN	56465
Center Township	Steve Gilbert	Supervisor	24491 County Road 19	Merrifield	MN	56465
Center Township	Leon Yeager	Supervisor	24491 County Road 19	Merrifield	MN	56465
Cormorant Township	Steve Sorenson	Chairperson	10194 Sherbrooke Beach Ln	Pelican Rapids	MN	56472
Cormorant Township	John Buhaug	Supervisor	11335 147th St	Lake Park	MN	56554
Cormorant Township	Tony (Paul) Hubbard	Supervisor	13875 Thunderbolt Ranch Rd	Lake Park	MN	56554
Cormorant Township	Claudia Hanson	Clerk	14321 Oak Ridge Rd	Lake Park	MN	56554
Cormorant Township	Cindy Wipperling	Treasurer	13793 Thunderbolt Ranch Rd	Lake Park	MN	56554
Cormorant Township	Lisa Marschall	Assessor	15288 490th Ave	Menahga	MN	56464

Organization	Name	Title	Address	City	State	Zip Code
Crow Wing Lake Township	Jaclyn Michlin	Chair	13013 Blackberry Dr	Nevis	MN	56467
Crow Wing Lake Township	Randy Avenson	Vice Chair	13013 Blackberry Dr	Nevis	MN	56467
Crow Wing Lake Township	Larry Smith	Supervisor	13013 Blackberry Dr	Nevis	MN	56467
Crow Wing Lake Township	Brian Ford	Clerk	13013 Blackberry Dr	Nevis	MN	56467
Crow Wing Lake Township	Mark Frank	Treasurer	13013 Blackberry Dr	Nevis	MN	56467
Crow Wing Lake Township	Darin Katzenmeyer	Assessor	13013 Blackberry Dr	Nevis	MN	56467
Deerfield Township	Megan Young	Clerk	1839 Co 41 NW	Backus	MN	56435
Deerfield Township	Cleo Bach	Supervisor	1946 County 41 NW	Backus	MN	56435
Deerfield Township	Neil Dwire	Supervisor	1026 County 41 NW	Backus	MN	56435
Deerfield Township	Terry Holden	Supervisor	409 County 41 NW	Backus	MN	56435
Deerhorn Township	Jay Nord	Chairperson	1833 130th St	Wolverton	MN	56594
Deerhorn Township	Stuart Nichol	Supervisor	1924 140th St	Wolverton	MN	56594
Deerhorn Township	Scott Smith	Supervisor	1924 140th St	Wolverton	MN	56594
Deerhorn Township	Stephanie Maier	Clerk	2111 110th St	Wolverton	MN	56596
Deerhorn Township	Michael Peet	Treasurer	1650 110th St	Wolverton	MN	56597
Detroit Township	Kevin Olson	Chairperson	20549 230th Ave	Detroit Lakes	MN	56501

Organization	Name	Title	Address	City	State	Zip Code
Detroit Township	Charles Jasken	Supervisor	25420 Almquist Rd	Detroit Lakes	MN	56501
Detroit Township	John Skarie	Supervisor	25681 County Road 149	Detroit Lakes	MN	56501
Detroit Township	Lisa Skarie	Clerk	25681 Co Rd 149	Detroit Lakes	MN	56501
Detroit Township	Barbara Schmidt	Deputy-Clerk	719 Dandrew LN	Detroit Lakes	MN	56501
Detroit Township	Pam Jasken	Treasurer	25420 Almquist Rd	Detroit Lakes	MN	56501
Detroit Township	Jared Suihkonen (County)	Assessor	915 Lake Ave	Detroit Lakes	MN	56501
Dunn Township	David L. Johnson	Chairman	48242 215th Ave	Pelican Rapids	MN	56572
Dunn Township	Mary Nyquist	Vice Chair	21519 Broadwater Dr	Pelican Rapids	MN	56572
Dunn Township	Robert Dalman	Supervisor	49302 245th Ave	Pelican Rapids	MN	56572
Dunn Township	Adrian Lund	Supervisor	23122 Pelican Bass Lane	Pelican Rapids	MN	56572
Dunn Township	Duane Seifert	Supervisor	47474 US HWY 59	Pelican Rapids	MN	56572
Dunn Township	Susan Pepelnjak	Treasurer	48097 E Lake Lizzie Ct	Pelican Rapids	MN	56572
Dunn Township	Sandra Tingelstad	Clerk	20835 S Sand Lake Rd	Pelican Rapids	MN	56572
Eglon Township	Tara Anderson	Clerk	PO Box 416	Hawley	MN	56549
Eglon Township	Steve Rodke	Chairman	5419 Hwy 32 S	Hawley	MN	56549
Eglon Township	Brent Helgeson	Supervisor	26968 60th Ave S	Hawley	MN	56549

Organization	Name	Title	Address	City	State	Zip Code
Eglon Township	Mark Ekre	Supervisor	5493 274th St S	Hawley	MN	56549
Elkton Township	Mark Carr	Chairman	13308 110 Ave S	Sabin	MN	56580
Elkton Township	David Heng	Supervisor	17389 90th Ave S	Barnesville	MN	56514
Elkton Township	Scott Wright	Supervisor	9757 150th St S	Barnesville	MN	56514
Elkton Township	Laura Johnson	Clerk	14737 80th Ave S	Glyndon	MN	56547
Elmwood Township	Todd Schuler	Chairman	8314 80th Ave S	Sabin	MN	56580
Elmwood Township	Darryl Johnk	Supervisor	9793 90th St S	Sabin	MN	56580
Elmwood Township	Lori Pender	Supervisor	11663 90 Ave S	Baker	MN	56580
Elmwood Township	Judy Hansen	Clerk	PO Box 142	Sabin	MN	56580
Erie Township	Neal Sundet	Chairperson	20146 Co Hwy 29	Rochert	MN	56578
Erie Township	Kyle Vareberg	Supervisor	19529 330th Ave	Detroit Lakes	MN	56501
Erie Township	Brett Friesen	Supervisor	32129 State Hwy 34	Detroit Lakes	MN	56501
Erie Township	Karen Stenerson-Eifealdt	Clerk	30298 170th St	Detroit Lakes	MN	56501
Erie Township	Becky Renner	Treasurer	31664 State Highway 34	Detroit Lakes	MN	56501
Erie Township	Wesley Hegna	Assessor	24674 470th St	Laporte	MN	56461
Evergreen Township	Todd Holmer	Chairperson	42985 120th St	Frazee	MN	56544

Organization	Name	Title	Address	City	State	Zip Code
Evergreen Township	Brett Jepson	Supervisor	14312 460th Ave	Frazee	MN	56544
Evergreen Township	Scott Ulschmid	Supervisor	12579 Co Hwy 39	Frazee	MN	56544
Evergreen Township	Rana Holmer	Clerk	42985 120th St	Frazee	MN	56544
Evergreen Township	Betty Janke	Treasurer	12887 Co Hwy 41	Frazee	MN	56544
Evergreen Township	Luke Johnson (County)	Assessor	915 Lake Ave	Detroit Lakes	MN	56501
Fairview Township	Katie Eastman	Clerk	4508 108th St SW	Pillager	MN	56473
Fairview Township	Jenny Gunsbury	Deputy Clerk	10681 Hunters Ridge Trl SW	Nisswa	MN	56468
Fairview Township	Walt Richmond	Supervisor	10924 Richmond Rd SW	Pillager	MN	56473
Fairview Township	James Weizenegger	Supervisor	11419 Pillsbury Forest Rd SW	Nisswa	MN	56468
Fairview Township	Roger Osell	Supervisor	3560 Rockwood Rd SW	Pequot Lakes	MN	56472
Flowing Township	Richard E Menholt	Chairman	13035 Hwy 9 N	Felton	MN	56536
Flowing Township	Glen Coleman	Supervisor	12503 Hwy 9 N	Felton	MN	56536
Flowing Township	Tom Dobrzynski	Supervisor	11156 100th Ave N	Felton	MN	56536
Flowing Township	Rachell Bakken	Clerk	9939 HWY 9 N	Felton	MN	56536
Georgetown Township	John Lee	Chairman	17027 20th St N	Georgetown	MN	56546
Georgetown Township	Gary Wambach	Supervisor	15622 5th St N	Georgetown	MN	56546

Organization	Name	Title	Address	City	State	Zip Code
Georgetown Township	Mark Richards	Supervisor	1590 190th Ave NW	Georgetown	MN	56546
Georgetown Township	Linda M Hermann	Clerk	620 160 Ave N	Georgetown	MN	56546
Glyndon Township	Fred Kuehl	Chairman	8903 28th Ave S	Glyndon	MN	56547
Glyndon Township	John Winter	Supervisor	4433 100th St S	Glyndon	MN	56547
Glyndon Township	Ed Dorset	Supervisor	10050 60th Ave S	Glyndon	MN	56547
Glyndon Township	Justin Thompson	Clerk	8583 12th Ave S	Glyndon	MN	56547
Green Valley Township	Aaron Skaro	Chairperson	56469 170th St	Menahga	MN	56464
Green Valley Township	Nicholas Aho	Supervisor	16435 550th Ave	Menahga	MN	56464
Green Valley Township	Colleen Taylor	Supervisor	20449 Co Rd 125	Park Rapids	MN	56470
Green Valley Township	Sarah Maninga	Clerk	16858 550th St	Menahga	MN	56464
Green Valley Township	Dave Keranen	Treasurer	54438 175th St	Menahga	MN	56464
Green Valley Township	Lisa Marschall	Assessor	15288 490th Ave	Menahga	MN	56464
Hawley Township	Denise Graunke	Clerk	420 190th St S	Hawley	MN	56549
Hawley Township	Daren Tangen	Chairman	2994 220th St S	Hawley	MN	56549
Hawley Township	Everett Nelson	Supervisor	PO Box 923	Hawley	MN	56549
Hawley Township	Rick Weaver	Supervisor	2896 190th St S	Hawley	MN	56549

Organization	Name	Title	Address	City	State	Zip Code
Height of Land Township	Craig Hall	Chairperson	37895 SW Height of Land Dr	Rochert	MN	56578
Height of Land Township	Jona Jacobson	Supervisor	37195 170th St	Frazee	MN	56544
Height of Land Township	Perry Brown	Supervisor	37201 State Hwy 34	Detroit Lakes	MN	56501
Height of Land Township	Jackie Post	Clerk	20427 400th Ave	Frazee	MN	56544
Height of Land Township	Nancy Stenger	Treasurer	35079 State Hwy 34	Detroit Lakes	MN	56501
Height of Land Township	Luke Johnson (County)	Assessor	915 Lake Ave	Detroit Lakes	MN	56501
Hobart Township	Tim Hockett	Supervisor	49852 Black Diamond Rd	Frazee	MN	56544
Hobart Township	Larry Hoffman	Chairman	PO Box 142	Vergas	MN	56587
Hobart Township	Scott Ehlke	Supervisor	34673 County Hwy 4	Frazee	MN	56544
Hobart Township	Kathy Glawe	Treasurer	35315 County Hwy 36	Vergas	MN	56487
Hobart Township	Russ Berstler	Clerk	37893 470th St	Frazee	MN	56544
Holy Cross Township	Tim Leiseth	Chairman	12630 40th St S	Moorhead	MN	56560
Holy Cross Township	Darin Brandt	Supervisor	15060 50th St S	Moorhead	MN	56560
Holy Cross Township	Rick Brakke	Supervisor	4901 120 Ave S	Moorhead	MN	56560
Holy Cross Township	Mark T Anderson	Clerk	4495 160th Ave S	Moorhead	MN	56560
Hubbard Township	Loren Tolkkinen	Local Assessor Contact	15282 390th St	Menahga	MN	56464

Organization	Name	Title	Address	City	State	Zip Code
Hubbard Township	Kim Thompson	Treasurer	11814 County 6	Park Rapids	MN	56470
Hubbard Township	James Kujawa	Chair	1757 County 106	Park Rapids	MN	56470
Hubbard Township	Terry Kimball	Chair	12126 Broadway Rd	Park Rapids	MN	56470
Hubbard Township	Jim Simpson	Supervisor	15572 209th Ave	Park Rapids	MN	56470
Humboldt Township	Darrel Thomas	Chairman	602 13th St NE	Barnesville	MN	56514
Humboldt Township	David Grommesh	Supervisor	140 7th Ave NE	Barnesville	MN	56514
Humboldt Township	Nathan Thompson	Supervisor	21990 Hwy 34	Barnesville	MN	56514
Humboldt Township	Corey O'Leary	Clerk	16137 216th St S	Barnesville	MN	56514
Huntersville Township	Dorothy Kennelly	Chairperson	23269 380th St	Menahga	MN	56464
Huntersville Township	Judy Salonek	Clerk	23080 Old Bridge Rd	Menahga	MN	56464
Huntersville Township	Treasurer	Treasurer	22340 Duck Lake Rd	Menahga	MN	56464
Huntersville Township	Kelly Dudley	Supervisor	35441 243rd Ave	Menahga	MN	56464
Huntersville Township	Ken Salonek	Supervisor	23080 Old Bridge Rd	Menahga	MN	56464
Ideal Township	Craig Wallace	Clerk	35458 Butternut Point Road	Pequot Lakes	MN	56472
Ideal Township	David Peterson	Supervisor	35458 Butternut Point Road	Pequot Lakes	MN	56472
Ideal Township	John Bilek	Supervisor	35458 Butternut Point Road	Pequot Lakes	MN	56472

Organization	Name	Title	Address	City	State	Zip Code
Ideal Township	Ronald Ommen	Supervisor	35458 Butternut Point Road	Pequot Lakes	MN	56472
Irondale Township	Angela Fort	Clerk	19121 County Road 12	Ironton	MN	56455
Irondale Township	Philip Juracek	Supervisor	19121 County Road 12	Ironton	MN	56455
Irondale Township	Scott Saehr	Planning & Zoning Administrator	19121 County Road 12	Ironton	MN	56455
Jenkins Township	Jim Olsen	Clerk	PO Box 523	Pequot Lakes	MN	56472
Jenkins Township	Edward Walton	Supervisor	PO Box 523	Pequot Lakes	MN	56472
Jenkins Township	Steven Cox	Supervisor	PO Box 523	Pequot Lakes	MN	56472
Jenkins Township	Robert Smith	Supervisor	PO Box 523	Pequot Lakes	MN	56472
Jenkins Township	Cheryl Stuckmayer	Treasurer	PO Box 523	Pequot Lakes	MN	56472
Kragnes Township	Jeremy Clark	Chairman	293 110th Ave N	Moorhead	MN	56560
Kragnes Township	Alan Christianson	Supervisor	9473 10th St NW	Moorhead	MN	56560
Kragnes Township	Duane Brendemuhl	Supervisor	2416 120th Ave N	Moorhead	MN	56560
Kragnes Township	Jeff Richards	Clerk	12397 5th St N	Moorhead	MN	56560
Kurtz Township	James C Nelson	Chairman	4567 70th Ave S	Moorhead	MN	56560
Kurtz Township	Kent Karlstrom	Supervisor	6258 14 St S	Moorhead	MN	56560
Kurtz Township	Brian Leiseth	Supervisor	4372 110 Ave S	Moorhead	MN	56560

Organization	Name	Title	Address	City	State	Zip Code
Kurtz Township	Jill Nelson	Clerk	4567 70th Ave S	Moorhead	MN	56560
Lake Edward Township	Loni Burnard	Clerk	23977 County Road 4	Nisswa	MN	56468
Lake Edward Township	George Burnard	Supervisor	23977 County Road 4	Nisswa	MN	56468
Lake Edward Township	Ronald Metzen	Supervisor	23977 County Road 4	Nisswa	MN	56468
Lake Edward Township	Gerold Cain	Supervisor	23977 County Road 4	Nisswa	MN	56468
Lake Edward Township	Nancy Sibbert	Treasurer	23977 County Road 4	Nisswa	MN	56468
Lake Eunice Township	Jason Rosing	Chairperson	17925 Eilertson Lake Rd	Audubon	MN	56511
Lake Eunice Township	Ed Clem	Supervisor	13802 Pearl Lake Dr	Detroit Lakes	MN	56501
Lake Eunice Township	Wayne Jacobson	Supervisor	11530 Townhall Rd	Audubon	MN	56511
Lake Eunice Township	Al Bergquist	Supervisor	21074 County Hwy 22	Detroit Lakes	MN	56501
Lake Eunice Township	Gerald Johnson	Supervisor	11658 Townhall Rd	Audubon	MN	56511
Lake Eunice Township	Heather Anderson	Clerk	15320 Blackhawk Rd	Audubon	MN	56511
Lake Eunice Township	Ann Hixson	Treasurer	12368 Shorewood Beach Rd	Detroit Lakes	MN	56501
Lake Park Township	Tyler Bjerke	Chairperson	16557 County Hwy 1	Lake Park	MN	56554
Lake Park Township	Bradley Lindstrom	Supervisor	16912 County Hwy 1	Lake Park	MN	56554
Lake Park Township	Andy Kelly	Supervisor	16881 200th St	Lake Park	MN	56554

Organization	Name	Title	Address	City	State	Zip Code
Lake Park Township	Mary Lewis	Clerk	20401 County Hwy 5	Lake Park	MN	56554
Lake Park Township	Lonna Musolf	Treasurer	16694 120th Ave	Lake Park	MN	56554
Lake Park Township	Lisa Marschall	Assessor	15288 490th Ave	Menahga	MN	56464
Lake View Township	Brian Saunders	Chairperson	24766 S Melissa Dr	Detroit Lakes	MN	56501
Lake View Township	William (Billy) Jordan	Supervisor	23907 Sandy Beach Dr	Detroit Lakes	MN	56501
Lake View Township	John Okeson	Supervisor	13167 West Lake Sallie Dr	Detroit Lakes	MN	56501
Lake View Township	Dana Fagerlie	Clerk	25218 County Hwy 22	Detroit Lakes	MN	56501
Lake View Township	Jim Watland	Treasurer	14060 E Fox Lake Rd	Detroit Lakes	MN	56501
Lake View Township	Jared Suihkonen (County)	Assessor	915 Lake Ave	Detroit Lakes	MN	56501
Loon Lake Township	Tim Murphy	Clerk	1646 Cherokee Trl SW	Pequot Lakes	MN	56472
Loon Lake Township	Patricia Bohnet	Deputy Clerk	1636 64th St SW	Pequot Lakes	MN	56472
Loon Lake Township	Kurtis Moody	Supervisor	5910 17th Ave SW	Pequot Lakes	MN	56472
Loon Lake Township	Randy J. Ryan	Supervisor	PO Box 515	Pequot Lakes	MN	56472
Maple Township	Alisha Alderson	Clerk	6557 25th Ave SW	Pequot Lakes	MN	56472
Maple Township	Marian Maine	Deputy Clerk	7053 37th Ave SW	Pequot Lakes	MN	56472
Maple Township	Gerald D. Campbell	Supervisor	6497 41st St SW	Pequot Lakes	MN	56472

Organization	Name	Title	Address	City	State	Zip Code
May Township	Bianca Wyffels	Clerk	5834 112th St SW	Pillager	MN	56473
May Township	Chad Converse	Supervisor	12113 61st Ave SW	Motley	MN	56466
May Township	Jason Barg	Supervisor	5108 112th St SW	Pillager	MN	56473
May Township	Kim Lewis	Supervisor	PO Box 369	Pillager	MN	56473
McKinley Township	Stephanie Burns	Clerk	8561 16th St SW	Backus	MN	56435
McKinley Township	William L. Brown	Supervisor	1384 State 64 SW	Backus	MN	56435
McKinley Township	James Latterner	Supervisor	542 92nd Ave SW	Menahga	MN	56464
Moland Township	Justin Magnuson	Chairman	11046 57th Ave N	Glyndon	MN	56547
Moland Township	Brett Kuehl	Supervisor	8534 90th St N	Glyndon	MN	56547
Moland Township	Jeff Winters	Supervisor	3149 80th St N	Glyndon	MN	56547
Moland Township	Christian Klonowski	Clerk/Treasurer	PO Box 112	Dilworth	MN	56549
Moorhead Township	Kevin Martin	Chairman	4532 40 Ave S	Moorhead	MN	56560
Moorhead Township	Kevin Johnk	Supervisor	4049 50th St S	Moorhead	MN	56560
Moorhead Township	Carol Kurtyka	Supervisor	4860 12th Ave S	Moorhead	MN	56560
Moorhead Township	Matt Raisl	Clerk	4379 40th Ave S	Moorhead	MN	56560
Morken Township	Paul Loegering	Chairman	8438 100th Ave N	Felton	MN	56536

Organization	Name	Title	Address	City	State	Zip Code
Morken Township	Christopher Renner	Supervisor	10303 140th Ave N	Felton	MN	56536
Morken Township	Brian Dahl	Supervisor	12753 110th St N	Felton	MN	56536
Morken Township	Loren Ingebretsen	Clerk	10298 90th St N	Felton	MN	56536
Nevis Township	Loren Tolkkinen	Local Assessor Contact	15282 390th St	Menahga	MN	56464
Nevis Township	Pat Hrubes	Clerk	27564 County 33	Nevis	MN	56467
Nevis Township	Tom E Walz	Chair	21459 269th Ave	Nevis	MN	56467
Nevis Township	Mike Spry	Supervisor	22705 Deepwoods Lane	Nevis	MN	56467
Nevis Township	Karl (Trig) Trygve	Supervisor	24769 174th St	Nevis	MN	56467
Nevis Township	Kathy Edwards	Treasurer	PO Box 203	Nevis	MN	56467
Norwegian Grove Township	Jeff Holt	Chairman	14391 430th Street	Pelican Rapids	MN	56572
Norwegian Grove Township	Larry B Hovland	Supervisor	13705 423rd Street	Pelican Rapids	MN	56572
Norwegian Grove Township	Eric Nelson	Supervisor	14708 South Lake Olaf Road	Pelican Rapids	MN	56572
Norwegian Grove Township	Jane Knorr	Clerk	12790 County Highway 30	Pelican Rapids	MN	56572
Norwegian Grove Township	Mary Bongers	Treasurer	PO Box 826	Pelican Rapids	MN	56572
Oak Lawn Township	Deborah Borg	Clerk	PO Box 333	Brainerd	MN	56401
Oak Lawn Township	Lonnie Murray	Supervisor	PO Box 333	Brainerd	MN	56401

Organization	Name	Title	Address	City	State	Zip Code
Oak Lawn Township	Steve Stroschein	Supervisor	PO Box 333	Brainerd	MN	56401
Oak Lawn Township	Al Mellgren	Supervisor	PO Box 333	Brainerd	MN	56401
Oak Lawn Township	Kathryn Longhofer	Treasurer	PO Box 333	Brainerd	MN	56401
Oakport Township	Tim Brendemuhl	Chairman	8463 2 St N	Moorhead	MN	56560
Oakport Township	Kurt Skjerven	Supervisor	4840 50th St N	Moorhead	MN	56560
Oakport Township	Jerry Gee	Supervisor	23 80th Ave N	Moorhead	MN	56560
Oakport Township	Leah Skjerven	Clerk	4840 50th St N	Moorhead	MN	56560
Parke Township	Colin Melby	Chairman	7316 250 St S	Hawley	MN	56549
Parke Township	James Jennen	Supervisor	9313 300th St S	Hawley	MN	56549
Parke Township	Tim Aakre	Supervisor	26474 70th Ave S	Hawley	MN	56549
Parke Township	Nancy Bjorndahl	Clerk	24669 60th Ave S	Hawley	MN	56549
Pelican Township – Crow Wing County	Jody Wallin	Clerk	PO Box 10	Nisswa	MN	56468
Pelican Township – Crow Wing County	Giles Radtke	Supervisor	7768 Red Oak Road	Pequot Lakes	MN	56472
Pelican Township – Crow Wing County	Dave Truchan	Supervisor	7768 Red Oak Road	Pequot Lakes	MN	56472
Pelican Township – Crow Wing County	Michael McDaid	Supervisor	7768 Red Oak Road	Pequot Lakes	MN	56472
Pelican Township – Otter Tail County	Lance Haugrud	Chairman	45780 180th Avenue	Pelican Rapids	MN	56572

Organization	Name	Title	Address	City	State	Zip Code
Pelican Township – Otter Tail County	Brady Ballard	Vice Chair	21851 410th Street	Pelican Rapids	MN	56572
Pelican Township – Otter Tail County	Yancy Wifall	Supervisor	PO Box 601	Pelican Rapids	MN	56572
Pelican Township – Otter Tail County	Mitchell Egge	Vice Chair	41677 Bur Oak Hills	Pelican Rapids	MN	56572
Pelican Township – Otter Tail County	Lloyd Nelson	Clerk	PO Box 873	Pelican Rapids	MN	56572
Pelican Township – Otter Tail County	Sheila Johnson	Treasurer	PO Box 183	Pelican Rapids	MN	56572
Pine River Township	Barbara Wagner	Clerk	PO Box 767	Pine River	MN	56474
Pine River Township	Mike Nadeau	Supervisor	3067 16th St SW	Backus	MN	56435
Pine River Township	Steve Skaro	Supervisor	1915 State 371 SW	Backus	MN	56435
Pine River Township	William (Bill) Fitch	Supervisor	1396 Big Bear Lane	Backus	MN	56435
Poplar Township	Susan Peet	Clerk	7800 60th St SW	Staples	MN	56479
Poplar Township	Doug Shequen	Supervisor	7541 56th St SW	Staples	MN	56479
Poplar Township	Craig Bartels	Supervisor	8285 68th St SW	Staples	MN	56479
Poplar Township	Troy Mevissen	Supervisor	8059 56th St SW	Staples	MN	56479
Prairie View Township	Robert Hovland	Chairman	1483 320th Ave	Rothsay	MN	56579
Prairie View Township	Llyal Braton	Supervisor	1186 290th Ave	Barnesville	MN	56514
Prairie View Township	Bill Braton	Supervisor	1250 290th Ave	Barnesville	MN	56514

Organization	Name	Title	Address	City	State	Zip Code
Prairie View Township	Kathy Braton	Clerk	1250 290th Ave	Barnesville	MN	56514
Prairie View Township	Doug Duran	Chairperson	3081 120th St	Barnesville	MN	56514
Riverton Township	Jakob Pender	Chairman	5408 157th St S	Glyndon	MN	56541
Riverton Township	Lee Alm	Supervisor	17505 40th Ave S	Hawley	MN	56549
Riverton Township	Philip Swan	Supervisor	5323 157th St S	Glyndon	MN	56547
Riverton Township	Jill Toms	Clerk	PO Box 44	Glyndon	MN	56547
Runeberg Township	Philip Ylitalo	Chairperson	54759 110th St	Menahga	MN	56464
Runeberg Township	Mark Spadgenske	Supervisor	54795 State Hwy 87	Menahga	MN	56464
Runeberg Township	Kelly Etzler	Supervisor	58569 110th Street	Menahga	MN	56464
Runeberg Township	Kristine Spadgenske	Clerk	54795 State Hwy 87	Menahga	MN	56464
Runeberg Township	Ray Skaro	Treasurer	56217 State Hwy 87	Menahga	MN	56464
Runeberg Township	Lisa Marschall	Assessor	15288 490th Ave	Menahga	MN	56464
Scambler Township	Nancy Hebert	Chairperson	48990 205th Avenue	Pelican Rapids	MN	56572
Scambler Township	Robert Seifert	Supervisor	46739 County Highway 23	Pelican Rapids	MN	56572
Scambler Township	Philip Rotz	Supervisor	47337 205th Avenue	Pelican Rapids	MN	56572
Scambler Township	Peg Gilbertson	Supervisor	20750 N Sand Lake Road	Pelican Rapids	MN	56572

Organization	Name	Title	Address	City	State	Zip Code
Scambler Township	Dee Dee Stephenson	Clerk	41661 Bagley Bay Lane	Pelican Rapids	MN	56572
Scambler Township	Christine Shulstad	Treasurer	20811 470th Street	Pelican Rapids	MN	56572
Shell River Township	Meri Cartensen	Clerk	1707 370th St	Menahga	MN	56464
Shell River Township	Michelle Newhouse	Treasurer	36234 County Rd 23	Menahga	MN	56464
Shell River Township	Lynn Johnson	Supervisor	35683 County Road 23	Menahga	MN	56464
Shell River Township	Joseph Johnson	Chairperson	36582 179th Ave	Menahga	MN	56464
Shell River Township	Robert White	Supervisor	20480 394th St	Pelican Rapids	MN	56572
Silver Leaf Township	Jeremy Mitchell	Chairperson	38378 County Rd 150	Frazee	MN	56544
Silver Leaf Township	Erik Ehnert	Supervisor	15614 County Hwy 31	Frazee	MN	56544
Silver Leaf Township	Charles Mayfield	Supervisor	35519 130th St	Frazee	MN	56544
Silver Leaf Township	Nancy Bachmann	Clerk	38704 County Rd 150	Frazee	MN	56544
Silver Leaf Township	Rebecca Fett	Treasurer	35752 130th St	Frazee	MN	56544
Silver Leaf Township	Wesley Hegna	Assessor	24674 470th St	Laporte	MN	56461
Skree Township	Jeffrey Pender	Chairman	10847 200th St S	Barnesville	MN	56514
Skree Township	Randy Bjornson	Supervisor	21996 90 Ave S	Hawley	MN	56549
Skree Township	Paul Austin	Supervisor	9388 180th St S	Barnesville	MN	56514

Organization	Name	Title	Address	City	State	Zip Code
Skree Township	Dawn Shulstad	Clerk	11820 230th St	Barnesville	MN	56514
Spring Prairie Township	Ted Simmons	Mayor	3783 170th St N	Hawley	MN	56549
Spring Prairie Township	Leon Schlafman	Supervisor	17764 70th Ave N	Glyndon	MN	56547
Spring Prairie Township	Russ Ward	Supervisor	3765 150th St N	Glyndon	MN	56547
Spring Prairie Township	Ruth Osmundson	Clerk	8314 120th St N	Glyndon	MN	56547
Spring Prairie Township	Jean Ward	Treasurer	3765 150 St N	Glyndon	MN	56547
Spruce Grove Township	Arlen Huwe	Chairperson	47219 State Hwy 87	Frazee	MN	56544
Spruce Grove Township	Michael Peeters	Supervisor	48498 100th St	Menahga	MN	56464
Spruce Grove Township	Mark Skoog	Supervisor	15625 520th Ave	Menahga	MN	56464
Spruce Grove Township	Anastasia Mickelson	Clerk	14411 County Hwy 43	Frazee	MN	56544
Spruce Grove Township	Mavis Huwe	Treasurer	47219 State Hwy 87	Frazee	MN	56544
Straight River Township	Darin Katzenmeyer	Local Assessor Contact	11971 129th Ave	Menahga	MN	56464
Straight River Township	Amy Vigen	Clerk	PO Box 712	Park Rapids	MN	56470
Straight River Township	Jill Thompson	Treasurer	3261 159th Ave	Menahga	MN	56464
Straight River Township	Jonathan Carter	Supervisor	14488 119th Ave	Park Rapids	MN	56470
Straight River Township	Chad Mathison	Chair	12380 US 71	Menahga	MN	56464

Organization	Name	Title	Address	City	State	Zip Code
Straight River Township	John Hockett	Vice Chair	12797 149th Ave	Menahga	MN	56464
Sylvan Township	Jenna Ruggles	Clerk	12956 24th Ave SW	Pillager	MN	56473
Sylvan Township	Colleen Putnam	Deputy Clerk	12956 24th Ave SW	Pillager	MN	56473
Sylvan Township	Greg Booth	Supervisor	12248 Clark Dr SW	Brainerd	MN	56401
Sylvan Township	Bob Johnson	Supervisor	1844 Oakridge Rd SW	Pillager	MN	56473
Sylvan Township	Keith Card	Supervisor	13791 13th Ave SW	Pillager	MN	56473
Sylvan Township	Arlene Schmit	Supervisor	3247 Crow Wing River Dr SW	Pillager	MN	56473
Tansem Township	Chris Seifert	Chairman	14634 260th St S	Hawley	MN	56549
Tansem Township	Steve Strandlien	Supervisor	29342 180th Ave S	Pelican Rapids	MN	56572
Tansem Township	Jamie Rice	Supervisor	29705 170th Ave S	Pelican Rapids	MN	56572
Tansem Township	Lenora Arntson	Clerk	17590 250th St S	Barnesville	MN	56514
Toad Lake Township	Randy Wurst	Chairperson	42002 115th St	Frazee	MN	56544
Toad Lake Township	James Yliniemi	Supervisor	46476 200th St	Osage	MN	56570
Toad Lake Township	Peter Levijoki	Supervisor	19045 428th Ave	Frazee	MN	56544
Toad Lake Township	Linda Levijoki	Clerk	19045 428th Ave	Frazee	MN	56544
Toad Lake Township	Katie Aho	Treasurer	17676 Co Hwy 39	Frazee	MN	56544

Organization	Name	Title	Address	City	State	Zip Code
Toad Lake Township	Lisa Marschall	Assessor	15288 490th Ave	Menahga	MN	56464
Viding Township	Brad Pake	Chairman	6434 150th Ave N	Felton	MN	56536
Viding Township	Scott Tommerdahl	Supervisor	7552 150th Ave N	Felton	MN	56536
Viding Township	Keith Stevenson	Supervisor	20755 70th St N	Georgetown	MN	56546
Viding Township	Jane Kangas	Clerk	16547 80th St N	Borup	MN	56519
Walden Township	Kim Norman	Clerk	2435 48th Ave SW	Pine River	MN	56474
Walden Township	Joel Erickson	Supervisor	4531 44th St SW	Pine River	MN	56474
Walden Township	Dylan Liane	Supervisor	2550 36th Ave SW	Pine River	MN	56474
Walden Township	Michael Austad	Supervisor	2593 36th Ave SW	Pine River	MN	56474
White Oak Township	Shelly Nelson	Chairperson	21662 Minnesota 64	Akeley	MN	56433
White Oak Township	DeeAnn Hayes	Supervisor	21662 Minnesota 64	Akeley	MN	56433
White Oak Township	Michael Bates	Supervisor	21662 Minnesota 64	Akeley	MN	56433
White Oak Township	Jeff Lindstrom	Clerk	21662 Minnesota 64	Akeley	MN	56433
White Oak Township	Marlys Lehn	Treasurer	21662 Minnesota 64	Akeley	MN	56433
Wilson Township	Lainey Peterson	Clerk	2080 25th St SW	Pine River	MN	56474
Wilson Township	Marlin Torkelson	Supervisor	2193 44th St SW	Pine River	MN	56474

Organization	Name	Title	Address	City	State	Zip Code
Wilson Township	Alan Johnson	Supervisor	2626 24th Ave SW	Pine River	MN	56474
Wilson Township	Greg Witt	Supervisor	3846 16th Ave SW	Pine River	MN	56474
Wilson Township	Charles Swenson	Supervisor	1832 34th St SW	Pine River	MN	56474
Wilson Township	Mark Buchite	Supervisor	4781 12th Ave SW	Pine River	MN	56474
Wolf Lake Township	Harry Aho	Chairperson	47782 186th St	Frazee	MN	56544
Wolf Lake Township	Roger Boyce	Supervisor	52686 County Hwy 40	Menahga	MN	56464
Wolf Lake Township	Michael Chapman	Supervisor	18700 510th Ave	Osage	MN	56570
Wolf Lake Township	Lori Aho	Clerk	47782 186th St	Frazee	MN	56544
Wolf Lake Township	Mary Neal	Treasurer	50100 E Townhall Rd	Frazee	MN	56544
Wolford Township	Kimberly Marquart	Clerk	26016 State Highway 6	Crosby	MN	56441
Wolford Township	Don Nyvold	Chairman	26016 State Highway 6	Crosby	MN	56441
Wolford Township	Bernard Moormann	Supervisor	26016 State Highway 6	Crosby	MN	56441
Wolford Township	Tyler Stellmach	Supervisor	26016 State Highway 6	Crosby	MN	56441
Wolford Township	Anna Larson	Treasurer	26016 State Highway 6	Crosby	MN	56441
Unorganized Territories						
West Crow Wing	Jon Lubke	Commissioner	34013 North Oak Dr	Jenkins	MN	56472
West Crow Wing	Rosemary Franzen	Commissioner	14732 Inglewood Dr	Baxter	MN	56425

Organization	Name	Title	Address	City	State	Zip Code
West Crow Wing	Doug Houge	Commissioner	PO BOX 367	Ironton	MN	56455
Federal and State Legislators						
U.S. House of Representatives	Pete Stauber	Representative - MN 8th District	5094 Miller Trunk Hwy, Suite 900	Hermantown	MN	55811
U.S. House of Representatives	Michelle Fischbach	Representative - MN 7th District	2513 8th Street S	Moorhead	MN	56560
U.S. Senate	Amy Klobuchar	U.S. Senator	820 9th Street North, Room 105	Virgina	MN	55792
U.S. Senate	Tina Smith	U.S. Senator	60 Plato Blvd, Suite #220	St. Paul	MN	55107
Minnesota State Senate	Robert Kupec	State Senator, District 4	95 University Avenue W	St. Paul	MN	55155
Minnesota State Senate	Paul Utke	State Senator, District 5	95 University Avenue W	St. Paul	MN	55155
Minnesota State Senate	Keri Heintzeman	State Senator, District 6	95 University Avenue W	St. Paul	MN	55155
Minnesota State Senate	Jordan Rasmusson	State Senator, District 9	95 University Avenue W	St. Paul	MN	55155
Minnesota House of Representatives	Heather Keeler	Representative, District 4A	5th Floor Centennial Office Building 658 Cedar Street	St. Paul	MN	55155
Minnesota House of Representatives	Jim Joy	Representative, District 4B	2nd Floor Centennial Office Building 658 Cedar Street	St. Paul	MN	55155
Minnesota House of Representatives	Krista Knudsen	Representative, District 5A	2nd Floor Centennial Office Building 658 Cedar Street	St. Paul	MN	55155
Minnesota House of Representatives	Mike Wiener	Representative, District 5B	2nd Floor Centennial Office Building 658 Cedar Street	St. Paul	MN	55155
Minnesota House of Representatives	Ben Davis	Representative, District 6A	2nd Floor Centennial Office Building 658 Cedar Street	St. Paul	MN	55155
Minnesota House of Representatives	Josh Heintzeman	Representative, District 6B	2nd Floor Centennial Office Building 658 Cedar Street	St. Paul	MN	55155
Minnesota House of Representatives	Jeff Backer	Representative, District 9A	2nd Floor Centennial Office Building 658 Cedar Street	St. Paul	MN	55155

Organization	Name	Title	Address	City	State	Zip Code
Minnesota House of Representatives	Tom Murphy	Representative, District 9B	2nd Floor Centennial Office Building 658 Cedar Street	St. Paul	MN	55155

Inadvertently Included on August 27, 2025 List Due to Clerical Error – To be Removed from Notice Plan List

City of Comstock	Pamela Guest	Clerk	15855 17th St S PO Box 39	Comstock	MN	56525
City of Crosby	Diane Cash	Mayor	2 Second St SW	Crosby	MN	56441
City of Crosby	Jim Traylor	Council Member	2 Second St SW	Crosby	MN	56441
City of Crosby	Paul Heglund	Council Member	2 Second St SW	Crosby	MN	56441
City of Crosby	Shawn Jarvela	Council Member	2 Second St SW	Crosby	MN	56441
City of Crosby	Vern Lewis	Council Member	2 Second St SW	Crosby	MN	56441
City of Frazee	Jared Suihkonen (County)	Assessor	915 Lake Ave	Detroit Lakes	MN	56501
City of Frazee	Stephanie Poegel	Administrator	PO Box 387	Frazee	MN	56544
City of Frazee	Mike Sharp	Mayor	PO Box 387	Frazee	MN	56544
City of Hawley	Sean Mork	Mayor	305 6th St Box 69	Hawley	MN	56549
City of Hawley	David Asleson	Council	305 6th St Box 69	Hawley	MN	56549
City of Hawley	Brad Eldred	Council	305 6th St Box 69	Hawley	MN	56549
City of Hawley	Stacey Riedberger	Council	305 6th St Box 69	Hawley	MN	56549
City of Hawley	Marc Ness	Council	305 6th St Box 69	Hawley	MN	56549

City of Lake Shore	Laura Fussy	Clerk	8583 Interlachen Road	Lake Shore	MN	56468
City of Lake Shore	Andy Stewart	Mayor	1274 Diana Dr	Lake Shore	MN	56468
City of Lake Shore	Henry Cote	Council	8098 Channel View Rd	Lake Shore	MN	56468
City of Lake Shore	Wayne Anderson	Council	8480 Nottingham RD	Lake Shore	MN	56468
City of Lake Shore	Vern Gevik	Council	8182 Co 78 Unit 106	Lake Shore	MN	56468
City of Lake Shore	Darcy Peterson	Council	8557 Interlachen Rd	Lake Shore	MN	56468
City of Menahga	Jody Bjornson	Mayor	115 2nd Street NE	Menahga	MN	56464
City of Menahga	Mike Netland	Council Member	115 2nd Street NE	Menahga	MN	56464
City of Menahga	Durwin Tomperi	Council Member	115 2nd Street NE	Menahga	MN	56464
City of Menahga	Keith Waaraniemi	Council Member	115 2nd Street NE	Menahga	MN	56464
City of Menahga	Bill Hodge	Council Member	115 2nd Street NE	Menahga	MN	56464
City of Ottertail	Amanda Thorson	Clerk	PO Box 245 - 239 Hwy 78 N.	Ottertail	MN	56571
City of Park Rapids	Pat Mikesh	Mayor	906 Trail Drive	Park Rapids	MN	56470
City of Park Rapids	Liz Stone	Council Member	210 Park Avenue North	Park Rapids	MN	56470
City of Park Rapids	Joe Christensen	Council Member	300 Mill Road	Park Rapids	MN	56470
City of Park Rapids	Tim Little	Council Member	615 Lindy Drive	Park Rapids	MN	56470
City of Park Rapids	Jeremy Engholm	Council Member	1101 Timbers Drive	Park Rapids	MN	56470

City of Pelican Rapids	Brent Frazeier	Mayor	100 SE 1st Street PO Box 255	Pelican Rapids	MN	56572
City of Pelican Rapids	Danielle Harthum	Clerk/Treasurer	PO Box 350	Pelican Rapids	MN	56572
City of Pine River	Tamara Hansen	Mayor	200 Front St N	Pine River	MN	56474
City of Staples	Ron Murray	Mayor	122 6th Street NE	Staples	MN	56479
City of Staples	Doug Case	Council Member	122 6th Street NE	Staples	MN	56479
City of Staples	Roy Miles	Council Member	122 6th Street NE	Staples	MN	56479
City of Staples	Mary Theurer	Council Member	122 6th Street NE	Staples	MN	56479
City of Staples	John Jewison	Council Member	122 6th Street NE	Staples	MN	56479
City of Staples	Mary Jo Goff	Council Member	122 6th Street NE	Staples	MN	56479
City of Staples	Blake Gerard	Council Member	122 6th Street NE	Staples	MN	56479
City of Underwood	Judy Everett	Clerk	120 Main Street S.	Underwood	MN	56586
City of Vergas	Dwight Lundgren	Mayor	PO Box 32 131 E Main St	Vergas	MN	56587
City of Vergas	Paul Pinke	Council	PO Box 32 131 E Main St	Vergas	MN	56587
City of Vergas	Dean Haarstick	Council	PO Box 32 131 E Main St	Vergas	MN	56587
City of Vergas	James Stenger	Council	PO Box 32 131 E Main St	Vergas	MN	56587
City of Vergas	Bruce Albright	Council	PO Box 32 131 E Main St	Vergas	MN	56587
Pine Lake Township	Pete Snortum	Supervisor	48584 428th St.	Perham	MN	56573

Pine Lake Township	Robert (Bob) Sieling	Chairman	41691 County Hwy 53	New York Mills	MN	56567
Pine Lake Township	Alan Starzl	Supervisor	48356 428th St	Perham	MN	56573
Pine Lake Township	Kenneth R. Guck	Treasurer	44431 Mosquito Hts Rd	Perham	MN	56573
Spring Creek Township	Vance Jirava	Chairperson	17793 County Hwy 18	Ogema	MN	56549
Spring Creek Township	Robert Haverkamp	Supervisor	17793 County Hwy 18	Ogema	MN	56549
Spring Creek Township	Kimberly Jirava	Clerk	18421 County Hwy 18	Ogema	MN	56549
Sverdrup Township	Dan Stenoien	Chairman	25710 320th Avenue	Underwood	MN	56586
Sverdrup Township	Dan Pederson	Supervisor	27192 310th Avenue	Underwood	MN	56586
Sverdrup Township	Chad Gronner	Supervisor	28257 235th Street	Underwood	MN	56586
Sverdrup Township	MarKean Martelle	Clerk	730 W Lincoln Avenue	Fergus Falls	MN	56537
Sverdrup Township	Vivki Severson	Treasurer	23247 Severson Lane	Underwood	MN	56586
Todd Township	Jim Schauer	Chairman	804 Crocus Hill Street E	Park Rapids	MN	56470
Todd Township	Keith Mikus	Supervisor	804 Crocus Hill Street E	Park Rapids	MN	56470
Todd Township	Bob Meier	Supervisor	804 Crocus Hill Street E	Park Rapids	MN	56470
Todd Township	Pat Cadreau	Clerk	804 Crocus Hill Street E	Park Rapids	MN	56470
Todd Township	Sue Zinniel	Treasurer	804 Crocus Hill Street E	Park Rapids	MN	56470
Wadena Township	Trisha Kraemer	Clerk	PO Box 222	Wadena	MN	56482

Wadena Township	Llyod Lanz	Treasurer	13349 County Rd 101	Wadena	MN	56482
Wadena Township	David Evans	Supervisor	11973 121st Ave	Wadena	MN	56482
Wadena Township	David Kraemer	Supervisor	PO Box 222	Wadena	MN	56482
Wadena Township	Mark Wohlert	Chairperson	11648 110th Street	Wadena	MN	56482

NOTICE OF PROPOSED TRANSMISSION LINE PROJECT

Re: In the Matter of the Application for a Certificate of Need for the Maple River - Cuyuna 345 kV Transmission Project

MPUC Docket No. E015,ET2,E017/CN-25-109

PLEASE TAKE NOTICE that Minnesota Power, Great River Energy, and Otter Tail Power Company (the "Applicants") are applying to the Minnesota Public Utilities Commission (also "Commission") for a Certificate of Need for the Maple River – Cuyuna 345 kV Transmission Project ("Project").

Project Description

The Project consists of construction of a new 345 kV single-circuit transmission line, on double-circuit capable structures, connecting Minnesota Power's Cuyuna Substation in Crow Wing County to Otter Tail Power Company's Maple River Substation in Cass County, North Dakota.

Project Need

The Project was studied, reviewed, and approved by the Midcontinent Independent System Operator, Inc. ("MISO") as part of its Long-Range Transmission Planning ("LRTP") Tranche 2.1 portfolio of projects included in MISO's 2024 Transmission Expansion Plan ("MTEP24"). The LRTP Tranche 2.1 portfolio is made up of 24 projects, including Project Number 20, the Maple River – Cuyuna 345 kV Transmission Project. The Project, as part of the LRTP Tranche 2.1 portfolio, is needed to support the reliability of the regional transmission system, particularly in northwestern and central Minnesota and eastern North Dakota; provide additional transmission capacity and regional transfer capability to reliably integrate new renewable generation; meet growing electrical demand, enhance resiliency during extreme weather events; and enable cost-effective regional energy transfers supporting economical grid operations.

Regulatory Review Process

Before the Applicants can construct the Project, the Minnesota Public Utilities Commission ("Commission") must determine whether the Project is needed (Certificate of Need) and if so, will determine the route along which the Project will be built (Route Permit).

The Certificate of Need process is governed by Minnesota Law, including Minnesota Statutes section 216B.243, and Minnesota Rules Chapter 7849, specifically Rules parts 7849.0010 to 7849.0400 and 7849.1000 to 7849.2100. A copy of the Certificate of Need application, once submitted, can be obtained by visiting the Commission's website at www.mn.gov/puc/ in Docket No. E015,ET2,E017/CN-25-109.

In addition to certifying the need for the Project, the Commission must also grant a Route Permit for the Project before it may be constructed. The routing of the Project is also governed by Minnesota Law, including Minnesota Statutes Chapter 216I. A copy of the Route Permit application, once submitted, can be obtained by visiting the Commission's website in Docket No. E015,ET2,E017/TL-25-110. The Applicants will be submitting an application for Route Permit with a proposed route for the new 345 kV transmission line. Other routes can be proposed to be evaluated during the Route Permit proceeding. Routes that have been shown at public meetings are preliminary and subject to change.

The Commission will not make its determinations on the Certificate of Need or Route Permit until it has completed a thorough review process that encourages public involvement and analyzes the impacts of the Project and various route alternatives. The Commission will complete an Environmental Report ("ER") for the Certificate of Need and an Environmental Impact Statement ("EIS") or an Environmental Assessment ("EA") for the Route Permit (whether an EIS or an EA will be prepared for the Route Permit process will depend on the route proposed for the Project). However, should the Commission choose to use a joint proceeding for the Certificate of Need and Route Permit, any ER requirements will be incorporated into the EIS or EA and the EIS or ER will be the sole environmental review document prepared for the Project.

The Commission will review all of the data from the public process and will decide if the Project is needed and if it is needed, which route should be approved. Selection of a final route by the Commission will be based on an evaluation of the routes guided by the actors identified in Minnesota Statues section 216I, subd. 11, and stakeholder input received during the regulatory process.

Summary of Certificate of Need Regulatory Schedule

Action	Approximate Date
Pre-application study and public meeting and stakeholder outreach	2nd and 4th Quarters 2025
Certificate of Need Application submitted to Commission	February 2026
Public Information and Scoping Meetings (public meeting and comment)	2nd Quarter 2026
ER Issued*	3rd Quarter 2026
Public Hearings (public meeting and comment period)	4th Quarter 2026
Commission Decision	1st Quarter 2027

*If the Certificate of Need and Route Permit applications are processed jointly by the Commission, an EIS or EA will be prepared as the environmental document for the Project.

Right-of-Way for the Project

Before beginning construction, the Applicants will acquire property rights for the right-of-way, typically through an easement that will be negotiated with the landowner for each parcel. The Applicants anticipate acquiring easements with a minimum right-of-way of approximately 150-feet wide for the 345 kV transmission line. Where these transmission lines parallel existing lines, less new right-of-way may be required because the new transmission line may share a portion of the existing right-of-way.

Proposed Structures for the Project

The specific type and size of structures to be used will depend on the route identified in this process along with land use/land cover, topography, water/wetlands and soil types. The current structure design is anticipated to be 120- to 180-foot high single pole weathering steel structures with arms on both sides of the structure. For this type of structure, the Applicants anticipate having five to eight structures for each mile of the line.

Additional Information and Mailing Lists

To subscribe to the Project's Certificate of Need docket and to receive email notifications when information is filed in that docket, please visit www.mn.gov/puc/ and click on "eDockets," then click on "Go to eDockets," and then click on "Sign In" in the top right corner. Then, click on "Subscriptions" and "Create a Subscription." In the "Docket #" box, type 25-109 and click "Create." These same steps can be followed to subscribe to the Project's Route Permit Docket No. E015,ET2,E017/TL-25-110.

If you would like to have your name added to the Certificate of Need proceeding mailing list (Docket No. E015,ET2,E017/CN-25-109), you may register by contacting Robin Benson at Minnesota Public Utilities Commission, 121 7th Place E., Suite 350, St. Paul, MN 55101-2147, Fax: 651-297-7073 or robin.benson@state.mn.us. Please be sure to note: 1) how you would like to receive notices (regular mail or email) and 2) your complete mailing or email address.

A separate mailing list is maintained for the Route Permit proceeding (E015,ET2,E017/TL-25-110). To be placed on the Project Route Permit mailing list, you may register by contacting the public advisor in the consumer affairs office at the Commission at consumer.puc@state.mn.us, or (651) 296-0406 or 1-800-657-3782. Please be sure to note: 1) how you would like to receive notices (regular mail or email) and 2) your complete mailing or email address.

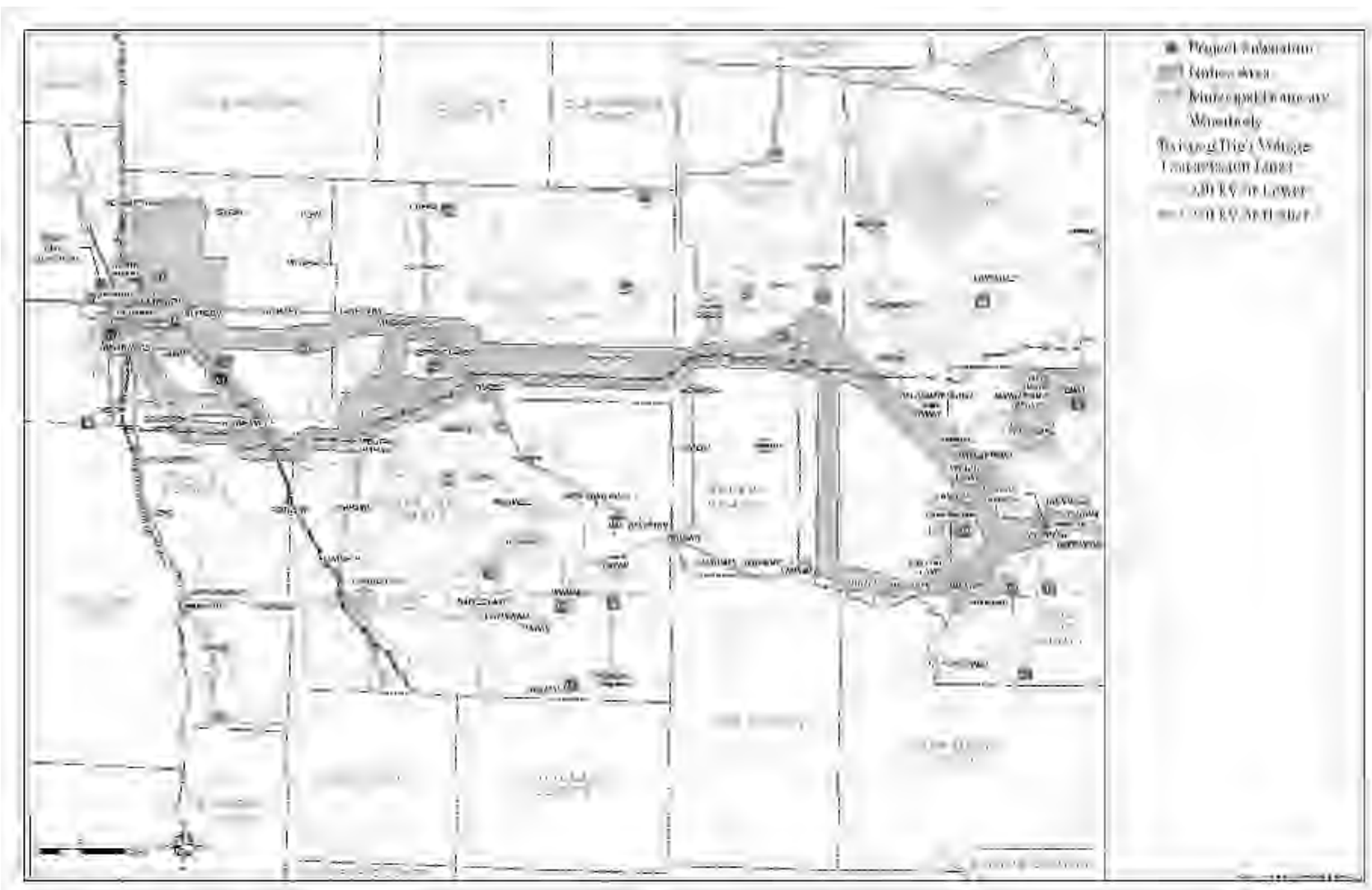
If you have any questions about the state regulatory process, you may contact the Minnesota state regulatory staff listed below:

Minnesota Public Utilities Commission
Energy Infrastructure Permitting Staff
Staff Name
121 7th Place East, Suite 350
St. Paul, Minnesota 55101
Staff Phone Number
1-800-657-3782
Staff Email
Website: www.mn.gov/puc/

Please visit the Project website at: www.mrctransmissionproject.com for more information.
Project phone and e-mail addresses:
Project Phone Number
1-888-419-5670
Project E-mail Address
connect@mrctransmissionproject.com

Transmission Planning Process in Minnesota

Minnesota Statutes § 216B.2425, subd. 2 requires that each electric transmission-owning utility in the state file a biennial transmission planning report with the Commission in the fall of each odd-numbered year. These reports provide information on the transmission planning process used by the utilities in the state of Minnesota and information about other transmission line projects. The 2023 Biennial Transmission Projects Report is available at: www.minnelectrans.com. The 2023 Biennial Transmission Projects Report was submitted on November 1, 2023. An updated planning report will be submitted by November 1, 2025.



COMMERCE DEPARTMENT

October 13, 2025

Sasha Bergman
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, Minnesota 55101-2147

RE: Supplemental Comments of the Minnesota Department of Commerce—Notice Plan Petition
Docket No. E015,ET2,E017/CN-25-109

Dear Ms. Bergman,

The comment of the Minnesota Department of Commerce (Department) recommended that Minnesota Power Great River Energy, and Otter Tail Power Company (Applicants) provide the proposed text for the newspaper notice in reply comments.[1] In reply comments Applicants provided the recommended newspaper notice text.[2] The Department reviewed the Applicants' proposed text and concludes that it contains the required information.

The Department comment also recommended that the Applicants review the map and lists of local governments to be provided notice and reconcile the differences in reply comments.[3] In reply comments the Applicants provided substantial revisions to the notice list.[4] The Department reviewed the Applicants' revised notice list and concludes that it is reasonable.

The Department considers the issues to have been resolved and the Department's full list of recommendations is as follows:

- approve the proposed notice plan as revised;
- approve the proposed rule variance regarding duplicative notice; and
- approve the proposed rule variance regarding notice timing.

Sincerely,

/s/ Dr. SYDNIE LIEB
Assistant Commissioner of Regulatory Analysis

SR/ad

[1] *In the Matter of the Application for a Certificate of Need for the Maple River to Cuyuna 345 kV Transmission Line Project,* Department, Comment, September 16, 2025, Docket No. E015,ET2,E017/CN-25-109, (eDockets), 20259-223065-01, at 4, (hereinafter "Department Comment").
[2] Minnesota Power, Great River Energy, and Otter Tail Power Company, Reply Comments, October 6, 2025, Docket No. E015,ET2,E017/CN-25-109, (eDockets), 202510-223629-01, at Attachment B, (hereinafter "Applicant Reply").
[3] Department Comment, at 3.
[4] Applicant Reply, at 3.

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Katie J. Sieben	Chair
Hwikwon Ham	Commissioner
Audrey C. Partridge	Commissioner
Joseph K. Sullivan	Commissioner
John A. Tuma	Commissioner

In the Matter of the Application for a Certificate of Need for the Maple River to Cuyuna 345 kV Transmission Line Project	SERVICE DATE: October 21, 2025 DOCKET NO. E-015,ET2,E017/CN-25-109

The above-entitled matter has been considered by the Commission and the following disposition made:

1. **Approved the proposed notice plan as revised.**

2. **Approved the proposed rule variance regarding duplicative notice.**

3. **Approved the proposed rule variance regarding notice timing.**

4. **Approved the requested exemption from Minn. R. 7849.0260 A(3) and C(6) with the provision of the proposed alternative.**

5. **Approved the requested exemption from Minn. R. 7849.0260 B(4) and (8).**

6. **Approved the requested exemption to Minnesota Rules 7849.0270 subparts 1 to 6 with the provision of the proposed alternative data.**

7. **Approved the requested exemption to Minn. R. 7849.0280, subps. (B) through (I) and approved the proposed alternative information under subp. (A).**

8. **Approved the requested exemption to Minn. R. 7849.0290 with provision of the proposed alternative data.**

9. **Approved the requested exemption to Minnesota Rules 7849.0300 and 7849.0340 with the provision of the proposed alternative data.**

This decision is issued by the Commission's consent calendar subcommittee, under a delegation of authority granted under Minn. Stat. § 216A.03, subd. 8 (a). Unless a party, a participant, or a Commissioner files an objection to this decision within ten days of receiving it, it will become the Order of the full Commission under Minn. Stat. § 216A.03, subd. 8 (b).

The Commission agrees with and adopts the recommendations of the Department of Commerce, which are attached and hereby incorporated into the Order.

BY ORDER OF THE COMMISSION

Sasha Bergman
Executive Secretary

To request this document in another format such as large print or audio, call 651.296.0406 (voice). Persons with a hearing or speech impairment may call using their preferred Telecommunications Relay Service or email consumer.puc@state.mn.us for assistance.

COMMERCE DEPARTMENT

September 16, 2025

Sasha Bergman
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. E015,ET2,E017/CN-25-109

Dear Ms. Bergman:

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

In the Matter of the Application for a Certificate of Need for the Maple River – Cuyuna 345 kV Transmission Line Project: Request for Exemptions.

The Petition was filed by Minnesota Power, Great River Energy, and Otter Tail Power Company on August 27, 2025.

The Department recommends **approval with modifications** and is available to answer any questions the Minnesota Public Utilities Commission may have.

Sincerely,

/s/ Dr. SYDNIE LIEB
Assistant Commissioner of Regulatory Analysis

SR/ad
Attachment

Before the Minnesota Public Utilities Commission

Comments of the Minnesota Department of Commerce

Docket No. E015,ET2,E017/CN-25-109

I. INTRODUCTION

Minnesota Power (MP) Great River Energy (GRE), and Otter Tail Power Company (OTP) (collectively, the Applicants) submitted a petition requesting certain exemptions to data requirements be approved by the Minnesota Public Utilities Commission (Commission).[1] The Exemption Petition was filed pursuant to Minn. R. 7849.0200, subp. 6 and is intended to tailor the data provided by the Applicants in a future certificate of need (CN) petition they intend to make.[2]

In a future filing the Applicants will be requesting a CN for the Maple River—Cuyuna 345 kV Transmission Project (Project). The proposed Project consists of a new 345 kV single-circuit transmission line, on double-circuit capable structures, connecting MP's Cuyuna Substation in Crow Wing County, Minnesota to OTP's Maple River Substation in Cass County, North Dakota. The Applicants intend to submit a Certificate of Need (CN) application pursuant to Minn. Stat. § 216B.243[3] in February 2026 and a route permit application pursuant to Minn. Stat. § 216I.05[4] in the third quarter of 2026.[5]

The proposed Project was studied, reviewed, and approved by the Midcontinent Independent System Operator, Inc. (MISO) as part of its Long-Range Transmission Planning (LRTP) Tranche 2.1 portfolio of projects included in the 2024 MISO Transmission Expansion Plan (MTEP24). The Applicants state that the proposed Project is needed to enhance grid reliability, particularly in northwestern and central Minnesota and eastern North Dakota.[6]

II. PROCEDURAL BACKGROUND

August 27, 2025	The Applicants filed the Exemption Petition, seeking approval of a data exemptions for a future CN petition for the Project.
September 2, 2025	The Commission issued a Notice of Comment Periods on the Exemption Petition.[7]

[1] *In the Matter of the Application for a Certificate of Need for the Maple River to Cuyuna 345 kV Transmission Line Project,* MP, GRE, and OTP, Exemption Petition, August 27, 2025, Docket No. E015,ET2,E017/CN-25-109, (eDockets) 20258-222473-01, (hereinafter "Exemption Petition").
[2] *See* Minn. R. 7849.0200
[3] *See* Minn. Stat. § 216B.243
[4] *See* Minn. Stat. § 216I.05
[5] Exemption Petition at 1.
[6] Exemption Petition at 4.
[7] *In the Matter of the Application for a Certificate of Need for the Maple River to Cuyuna 345 kV Transmission Line Project, Notice of Comment Period on Request for Exemption From Certain Certificate of Need Application Content Requirements,* September 2, 2025, Docket No. E015,ET2,E017/CN-25-109, (eDockets) 20259-222608-01, (Hereinafter "Notice").

According to the Notice the following topic is open for Comment: "Should the Commission grant the exemptions to the certificate of need application content requirements as requested by the Applicants' in their August 27, 2025 filing."

III. DEPARTMENT ANALYSIS

A. GOVERNING STATUTES AND RULES

The Applicants filed the Exemption Petition pursuant to Minn. R. 7849.0200, subp. 6, which states, in part:

> Before submitting an application, a person is exempted from any data requirement of parts 7849.0010 to 7849.0400 if the person (1) requests an exemption from specified rules, in writing to the commission, and (2) shows that the data requirement is unnecessary to determine the need for the proposed facility or may be satisfied by submitting another document. A request for exemption must be filed at least 45 days before submitting an application.

Based on this standard, the Commission may grant exemptions when the data requirements are shown to be unnecessary to determine need or can be satisfied by submitting alternative information. In the Petition, the Applicants request to be exempted from certain data requirements of Minn. R. 7849.0010 to 7849.0400.

B. REQUESTED EXEMPTIONS

The Exemption Petition requests exemptions from the following requirements:

- Minn. R. 7849.0260 A(3) and C(6)—Losses;[8]
- Minn. R. 7849.0260 B(4) and (8)—Transmission Lines with Different Terminals or Substations;
- Minn. R. 7849.0270, subps. 1-6—Peak Demand and Annual Consumption Forecast and System Revenue Requirements;[9]
- Minn. R. 7849.0280 subps. (B) through (I)—System Capacity;[10]
- Minn. R. 7849.0290—Conservation;[11]
- Minn. R. 7849.0300—Consequences of Delay;[12] and
- Minn. R. 7849.0340—No Facility Alternative.[13]

[8] See Minn. R. 7849.0260.
[9] See Minn. R. 7849.0270.
[10] See Minn. R. 7849.0280.
[11] See Minn. R. 7849.0290.
[12] See Minn. R. 7849.0300.
[13] See Minn. R. 7849.0340.

The Department examines each exemption request separately. The required criterion is whether the Applicants have shown that "the data requirement is unnecessary to determine the need for the proposed facility or may be satisfied by submitting another document" as discussed above. The Department notes that similar exemptions were approved recently by the Commission in proceedings for other transmission lines resulting from the MISO's LRTP process, which is also the source of the proposed Project.[14]

C. ANALYSIS OF EXEMPTION REQUESTS

C.1. Minn. R. 7849.0260 A(3) and C(6)

Minn. R. 7849.0260 A(3) requires an applicant to provide "the expected losses under projected maximum loading and under projected average loading in the length of the transmission line and at the terminals or substations." Minn. R. 7849.0260 C(6) requires an applicant to provide "its efficiency, expressed for a transmission facility as the estimated losses under projected maximum loading and under projected average loading in the length of the transmission line and at the terminals or substations."

The Applicants request an exemption from Minn. R. 7849.0260 A(3) and C(6). The Applicants propose to provide system losses information in lieu of line-specific losses, the latter of which is required by the rules.

The Department agrees with the Applicants that the requested exemptions are consistent with several prior exemption requests approved by the Commission in other Certificate of Need transmission line dockets and is more relevant to the analysis.[15] Therefore, the Department recommends that the Commission approve the requested exemption from Minn. R. 7849.0260 A(3) and C(6) with the provision of the proposed alternative data.

C.2. Minn. R. 7849.0260 B(4) and (8)

Minn. R. 7849.0260 B(4) requires the Applicants provide "a discussion of the availability of alternatives to the facility, including but not limited to: […] transmission lines with different terminals or substations." Minn. R. 7849.0260 B(8) requires the Applicants provide "a discussion of the availability of alternatives to the facility, including but not limited to: […] any reasonable combinations of the alternatives listed in subitems (1) to (7)."

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[14] For examples *see*: *In the Matter of the Application of Minnesota Power and Great River Energy for a Certificate of Need for the Northland Reliability Project 345 kV Transmission Line*, *Order Approving Requested Exemptions and Notice Plan*, June 21, 2023, Docket No. E015, ET2/CN-22-416, (eDockets) 20236-196704-01; *In the Matter of the Application for a Certificate of Need for the Big Stone South – Alexandria – Big Oaks Transmission Project*, *Order*, April 19, 2023, Docket No. E017, ET2, E002, ET10, E015/CN-22-538, (eDockets) 20234-194943-01.

[15] The Applicants cite the following examples; *In the Matter of the Application of Minnesota Power and Great River Energy for a Certificate of Need for the Northland Reliability Project 345 kV Transmission Line*, Commission, Order Approving Requested Exemptions and Notice Plan, June 21, 2023, Docket No. E015, ET2/CN-22-416, (eDockets) 20236-196704-01. *In re Application of Minnesota Power for a Certificate of Need for the Duluth Loop Reliability Project in St. Louis Cnty.*, Commission, Order Approving Notice Plan and Granting Variances and Exemptions, May 17, 2021, Docket No. E015/CN-21-140, (eDockets) 20215-174194-01.

The Applicants note that Minn. Stat. § 216B.243, subd. 3(6) states in part that "the commission must not require evaluation of alternative end points for a high-voltage transmission line qualifying as a large energy facility unless the alternative end points are (i) consistent with end points identified in a federally registered planning authority transmission plan, or (ii) otherwise agreed to for further evaluation by the applicant." In this case the Applicants have proposed end points that are consistent with MISO's and do not consent to alternative end points.

The Department agrees with the Applicants that Minnesota Statutes limit the consideration of alternative end points in this matter and, therefore, an exemption is appropriate. The Department recommends that the Commission approve the requested exemption from Minn. R. 7849.0260 B(4) and (8).

C.3. Minn. R. 7849.0270, subps. 1-6

Minn. R. 7849.0270 subps. 1-6 contains data requirements related to forecasting peak demand and annual electrical consumption. In general, the rule requires forecast data regarding an applicant's entire service area and system.

The Applicants state that the proposed Project is intended to support reliability of the transmission system in northern Minnesota.[16] To address this need, the Applicants propose to provide "forecast information from their most recent [advanced forecast reports] AFRs filed on July 1, 2025 in Docket No. E-999/PR-25-11."[17] In addition the applicants propose to provide:

- "any other forecast information used in analyzing the need for the Project"—subps 2(A) and 2(B);[18]
- "discussion of the different regional demand scenarios evaluated in the analysis used by the Applicants and MISO to justify the Project"—subps 2(C) and 2(D);[19] and
- "Minnesota Power and Otter Tail proposes to provide the general rate impact of the Maple River – Cuyuna Project on Minnesota Power's and Otter Tail's customers. Great River proposes to provide an explanation of how wholesale electricity costs are spread among users of the transmission grid and the general financial effects of the Project on Great River Energy's member cooperatives."—subp. 2(E).[20]

The Applicants' claim is that the substitute information is better tailored to the need for the proposed Project. Throughout the discussion the Applicants note numerous dockets where the Commission has approved similar exemptions.[21]

[16] Exemption Petition at 7.
[17] Exemption Petition at 7.
[18] Exemption Petition at 8.
[19] Exemption Petition at 8.
[20] Exemption Petition at 9.
[21] Exemption Petition at 7-10.

The Department agrees that the latest AFRs and the additional information specified above would be appropriate to assess need in this case. Therefore, the Department recommends that the Commission approve the requested exemption to Minnesota Rules 7849.0270 subparts 1 to 6 with the provision of the proposed alternative data.

C.4. Minn. R. 7849.0280 subps. (B) through (I)

Minnesota Rules 7849.0280 requires an applicant for a CN to provide information that describes the ability of its existing system to meet forecasted demand; in essence, load and capability information.

The Applicants request that the Commission grant an exemption from Minn. R. 7849.0280 subps. (B) through (I). The Applicants note that the Commission has previously granted exemption requests from Minn. R. 7849.0280 subps. (B) through (I) in several other transmission line CN dockets where issues of transmission adequacy, rather than generation adequacy, were at issue.[22]

The Department agrees with the Applicants that the Commission has approved exemptions to Minn. R. 7849.0280, subps. (B) through (I) in similar circumstances and for similar reasons. Therefore, the Department recommends that the Commission approve the requested exemption to Minn. R. 7849.0280, subps. (B) through (I).

C.5. Minn. R. 7849.0290

Minn. R. 7849.0290 requires various information be provided on an applicant's energy conservation and efficiency programs.

The Applicants propose to provide a summary of their Integrated Resource Plan and Conservation Improvement Plan filings.[23] In addition, the Applicants will also provide information regarding how conservation and energy efficiency was considered by MISO in its evaluation of the proposed Project.[24]

The Department agrees with the Applicants that the Commission has approved exemptions to Minn. R. 7849.0290 for this data in similar proceedings.[25] Also, the most relevant data is how MISO considered energy efficiency in determining the need for the proposed Project. This information will better inform the record as to the need for the proposed Project than the required information and will enable interested parties to pursue further information if desired.

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[22] The Applicants cite the following examples; *In re Application of Minnesota Power for a Certificate of Need for the Duluth Loop Reliability Project in St. Louis Cnty.*, *Order Approving Notice Plan and Granting Variances and Exemptions*, May 17, 2021, Docket No. E015/CN-21-140, (eDockets) 20215-174194-01; *In re Application of Great River Energy and Minnesota Power for a Certificate of Need for the Menahga Area 115 kV Transmission Line Project in Hubbard, Wadena and Becker Counties, Minnesota*, *Order Approving Exemption Request*, December 3, 2014, Docket No. E015/CN-14-787 (eDockets) 201412-105142-01; *In re Application of Great River Energy and Minnesota Power for a Certificate of Need for a 115 kV High Voltage Transmission Line in St. Louis and Carlton Counties*, *Order Approving Exemptions and Proposed Provision of Alternative Data*, November 2, 2010, Docket No. E015, ET2/CN-10-973 (eDockets) 201011-56126-01.

[23] Exemption Petition at 11.

[24] Exemption Petition at 11.

[25] Exemption Petition at 11.

The Department recommends that the Commission approved the requested exemption to Minn. R. 7849.0290 with provision of the proposed alternative data.

C.6. Minn. R. 7849.0300 and 7849.0340

Minn. R. 7849.0300 requires an applicant for a CN to provide detailed information regarding the consequences of delay at three specific, statistically-based levels of demand and energy consumption. Minn. R. 7849.0340 requires an applicant for a CN to provide detailed information regarding the no build alternative at the same three statistically-based levels of demand and energy consumption.

The Applicants state they "will discuss the consequences of delay and a no build alternative in its application, there is no need to discuss these items in terms of three levels of demand."[26] In addition, the Applicants note that the Commission has approved similar partial exemption requests from the requirements of Minn. R. 7849.0300 and 7849.0340 in other transmission line Certificate of Need dockets.[27]

The Department agrees with the Applicants that information on the consequences of delay and a no build alternative tied to three specific, statistically-based levels of demand and energy consumption is not likely to be a useful part of the analysis for the proposed Project and that a general discussion is appropriate; as noted in the Exemption Petition, similar exemptions were approved in other transmission CNs. Therefore, the Department recommends that the Commission approve the requested exemption to Minnesota Rules 7849.0300 and 7849.0340 with the provision of the proposed alternative data.

D. COMMISSION'S NOTICE

According to the Notice the following topic is open for comment: "Should the Commission grant the exemptions to the certificate of need application content requirements as requested by the Applicants' in their August 27, 2025 filing." The Department recommends the Commission approve the Exemption Petition as modified by the Department. The Department's recommendations are below.

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[26] Exemption Petition at 12.

[27] The Applicants cite the following examples: *In re Application of Minnesota Power for a Certificate of Need for the Duluth Loop Reliability Project in St. Louis Cnty.*, *Order Approving Notice Plan and Granting Variances and Exemptions*, May 17, 2021, Docket No. E015/CN-21-140, (eDockets) 20215-174194-01; *In re Application of Great River Energy and Minnesota Power for a Certificate of Need for the Menahga Area 115 kV Transmission Line Project in Hubbard, Wadena and Becker Counties, Minnesota*, *Order Approving Exemption Request*, December 3, 2014, Docket No. E015/CN-14-787, (eDockets) 201412-105142-01; *In re Request of Minnesota Power for a Certificate of Need for the Great Northern Transmission Line*, *Order Approving Notice Plan, Granting Variance Request, and Approving Exemption Request*, February 28, 2013, Docket No. E015/CN-12-1163, (eDockets) 20132-84248-01; *In the Matter of the Application of Northern States Power Company d/b/a Xcel Energy and Great River Energy for a Certificate of Need for the Upgrade of the Southwest Twin Cities (SWTC) Chaska Area 69 kV Transmission Line to 115 kV Capacity*, *Order Granting the Company's Exemption Request*, November 4, 2011, Docket No. E002/CN-11-826 (eDockets) 201111-68102-01.

IV. DEPARTMENT RECOMMENDATIONS

Based on analysis of the information in the record, the Department has prepared recommendations, which are provided below. The recommendations correspond to the subheadings of Section III above."

C. ANALYSIS OF EXEMPTION REQUESTS

- C.1. The Department recommends that the Commission approve the requested exemption from Minn. R. 7849.0260 A(3) and C(6) with the provision of the proposed alternative.
- C.2. The Department recommends that the Commission approve the requested exemption from Minn. R. 7849.0260 B(4) and (8).
- C.3. The Department recommends that the Commission approve the requested exemption to Minnesota Rules 7849.0270 subparts 1 to 6 with the provision of the proposed alternative data.
- C.4. The Department recommends the Commission modify the requested exemption and approve the requested exemption to Minn. R. 7849.0280, subps. (B) through (I).
- C.5. The Department recommends that the Commission approved the requested exemption to Minn. R. 7849.0290 with provision of the proposed alternative data.
- C.6. The Department recommends that the Commission approve the requested exemption to Minnesota Rules 7849.0300 and 7849.0340 with the provision of the proposed alternative data.

COMMERCE DEPARTMENT

September 16, 2025

Sasha Bergman
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. E015,ET2,E017/CN-25-109

Dear Ms. Bergman:

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

In the Matter of the Application for a Certificate of Need for the Maple River – Cuyuna 345 kV Transmission Line Project: Notice Plan Petition.

The Petition was filed by Minnesota Power, Great River Energy, and Otter Tail Power Company on August 27, 2025.

The Department recommends **clarifications be filed in reply comments** and is available to answer any questions the Minnesota Public Utilities Commission may have.

Sincerely,

/s/ Dr. SYDNIE LIEB
Assistant Commissioner of Regulatory Analysis

SR/ad
Attachment

COMMERCE DEPARTMENT

Before the Minnesota Public Utilities Commission

Comments of the Minnesota Department of Commerce

Docket No. E015,ET2,E017/CN-25-109

I. INTRODUCTION

Minnesota Power (MP) Great River Energy (GRE), and Otter Tail Power Company (OTP) (collectively, the Applicants) submitted a notice plan petition for approval by the Minnesota Public Utilities Commission (Commission).[1] The Notice Petition was filed pursuant to Minn. R. 7829.2550[2] and is intended to provide notice to all persons reasonably likely to be affected by the Maple River – Cuyuna 345 kV Transmission Project (Project). The Project consists of a new 345 kV single-circuit transmission line, on double-circuit capable structures, connecting MP's Cuyuna Substation in Crow Wing County to OTP's Maple River Substation in Cass County, North Dakota. The Applicants intend to submit a Certificate of Need (CN) application pursuant to Minn. Stat. § 216B.243[3] in February 2026 and a route permit application pursuant to Minn. Stat. § 216I.05[4] in the third quarter of 2026.

The proposed Project was studied, reviewed, and approved by the Midcontinent Independent System Operator, Inc. (MISO) as part of its Long-Range Transmission Planning (LRTP) Tranche 2.1 portfolio of projects included in the 2024 MISO Transmission Expansion Plan (MTEP24). The Applicants state that the proposed Project is needed to enhance grid reliability, particularly in northwestern and central Minnesota and eastern North Dakota.

II. PROCEDURAL BACKGROUND

August 27, 2025	The Applicants filed the Notice Petition, seeking approval of a notice plan for the Project.

III. DEPARTMENT ANALYSIS

A. GOVERNING STATUTES AND RULES

The Applicants filed the Notice Petition pursuant to Minnesota Rules 7829.2550, subp. 1 which states, in part "[t]hree months before filing a certificate of need application for a high-voltage transmission line as defined by Minnesota Statutes, section 216B.2421, the applicant shall file a proposed plan for providing notice to all persons reasonably likely to be affected by the proposed line."

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[1] *In the Matter of the Application for a Certificate of Need for the Maple River to Cuyuna 345 kV Transmission Line Project,* MP, GRE, and OTP, Notice Petition, August 27, 2025, Docket No. E015,ET2,E017/CN-25-109, (eDockets) 20258-222474-01, (hereinafter "Notice Petition").

[2] *See* Minn. R. 7829.2550.

[3] *See* Minn. Stat. § 216B.243.

[4] *See* Minn. Stat. § 216I.05.

Minn. Stat. § 216B.2421[5] includes in its definition of a Large Energy Facility (LEF) "any high-voltage transmission line with a capacity of 300 kilovolts or more and greater than one mile in length in Minnesota." Given that the proposed Project is a 345 kV transmission line substantially longer than one mile, the proposed Project falls within the definition of "large energy facility" and, therefore, requires a notice plan.

B. TYPES OF NOTICE

Minnesota Rules 7829.2550, subp. 3,[6] requires types of notice as follows:

- direct mail notice, based on county tax assessment rolls, to landowners reasonably likely to be affected by the proposed transmission line;
- direct mail notice to all mailing addresses within the area reasonably likely to be affected by the proposed transmission line;
- direct mail notice to tribal governments and to the governments of towns, statutory cities, home rule charter cities, and counties whose jurisdictions are reasonably likely to be affected by the proposed transmission line; and
- newspaper notice to members of the public in areas reasonably likely to be affected by the proposed transmission line.

The area proposed to be included in notices (Notice Area) is shown in Attachment A of the Notice Petition. The Notice Petition further states that the Notice Area:

> consists of a series of corridors that are generally three miles wide and centered on existing high voltage transmission lines. The Notice Area expands up to nearly 14 miles wide in some areas to provide routing flexibility. The Notice Area crosses portions of stretches across Becker, Cass, Clay, Crow Wing, Hubbard, Otter Tail, Wadena, and Wilkin Counties.[7]

The list of individuals and entities to be provided notice is to be complied by Applicants is as follows:

- Regarding landowner notice—Applicants have obtained tax landowner names and addresses within the Notice Area using geospatial information system ("GIS") county parcel records.[8]
- Regarding notice to mailing addresses—Applicants have obtained a list of mailing addresses in the Notice Area from Becker, Cass, Clay, Crow Wing, Hubbard, Otter Tail, Wadena, and Wilkin Counties.[9]

[5] *See* Minn. Stat. § 216B.2421.
[6] *See* Minn. R. 7829.2550.
[7] Notice Petition at 2-3.
[8] Notice Petition at 3.
[9] Notice Petition at 3.

- Regarding notice to tribal governments—Applicants will provide direct mail notice to each of the 11 federally recognized Tribal Nations in Minnesota, as well as the Minnesota Indian Affairs Counsel.[10]
- Regarding notice to local governmental jurisdictions—Applicants propose to provide direct mail notice to lead administration personnel and elected officials in local governments and to those state senators and state representatives whose districts are within the Notice Area.[11]
- Regarding newspaper notice—Applicants propose to place notice advertisements in several newspapers listed in Table 1 of the Notice Petition.[12]

After reviewing the Petition's Table 1, Figure 1 of Attachment A, Attachment B-1 and Attachment B-2, the Department notes several discrepancies:

- The cities of Sabin, Breezy Point, and Motley appear to be in or near the notice corridors on the map in Attachment A but are not listed as receiving notice.
- The city of Underwood is listed as receiving notice but is far from the corridors on the map in Attachment A and no other city nearby is getting notice.
- Sverdup Township is listed as receiving notice but is just north of Underwood and not near the notice area depicted in Attachment A.
- Pine Lake Township is listed as receiving notice but is just east of Perham and adjoining townships are not getting notice.
- Spring Creek Township is listed as receiving notice but is just west of Ogema and adjoining townships are not getting notice.
- Wadena Township is listed as receiving notice but is just south and east of city of Wadena and not near the notice area depicted in Attachment A.

The Department recommends the Applicants review the map depicted in Attachment A and lists of local governments to be provided notice as shown in Attachment B-2 and reconcile the differences in reply comments.

C. CONTENT OF NOTICE

Minnesota Rules 7829.2550, subp. 4[13] require the notices to provide the following information:

[10] Notice Petition at 3.
[11] Notice Petition at 4; see Attachment B-2 of the Notice Petition for detailed information.
[12] Notice Petition at 4.
[13] *See* Minn. R. 7829.2550.

- a map showing the end points of the line and existing transmission facilities in the area;
- a description of general right-of-way requirements for a line of the size and voltage proposed and a statement that the applicant intends to acquire property rights for the right-of-way that the proposed line will require;
- a notice that the line cannot be constructed unless the Commission certifies that it is needed;
- the Commission's mailing address, telephone number, and website;
- if the applicant is a utility subject to chapter 7848, the address of the website on which the utility applicant will post or has posted its biennial transmission projects report required under that chapter;
- a statement that the Environmental Quality Board[14] will be preparing an environmental report on each high-voltage transmission line for which certification is requested;
- a brief explanation of how to get on the mailing list for the Environmental Quality Board's proceeding; and
- a statement that requests for certification of high-voltage transmission lines are governed by Minnesota law, including specifically chapter 4410, parts 7849.0010 to 7849.0400, and 7849.1000 to 7849.2100, and Minnesota Statutes, section 216B.243.

The Department reviewed the text of the proposed landowner/resident/governmental official notice provided in Attachment A of the Notice Petition and concludes that the proposal contains the required information. The Department notes that the Applicants did not provide the text for the newspaper notice in the Notice Petition. The Department recommends the Applicants provide the proposed text for the newspaper notice in reply comments.

D. DUPLICATIVE NOTICE

Table 1 of the Notice Petition shows that the Applicants propose to publish notice in the Star Tribune, a paper of statewide circulation. This notice will be published shortly before the CN application is filed. Thus, the Applicants request that the Commission vary the requirement under Minn. R. 7829.2500,[15] subp. 5 and remove the additional requirement to publish notice of the application in a statewide paper after the CN application is filed with the Commission.

Minn. R. 7829.3200 governs such variance requests and establishes the following criteria:

1. enforcement of the rule would impose an excessive burden upon the applicant or others affected by the rule;

[14] This function has since been transferred to the Commission. See Laws of Minn. 2005, ch. 97, art. 3.
[15] *See* Minn. R. 7829.2500.

2. granting the variance would not adversely affect the public interest; and
3. granting the variance would not conflict with standards imposed by law.[16]

The Applicants conclude that the requirements for a variance are met as follows:

1. The requirement would be an excessive burden as it requires duplicate notice and associated expense without a corresponding benefit;
2. the public interest would not be adversely affected because the public will receive the pre-application newspaper notice; and
3. the Commission has previously granted such a variance and there is no conflict with any standards imposed by law.[17]

The Department agrees with the Applicants' assessment and recommends that the Commission approve the proposed rule variance regarding duplicative notice.

E. NOTICE TIMING

Minnesota Rules 7829.2550, subp. 6, requires an applicant to implement the notice plan within 30 days of its approval by the Commission.[18] In this case the Applicants request that the Commission grant a variance and direct the notices occur no more than 90 days and no less than two weeks prior to the filing of the CN application.

The Applicants conclude that the requirements for a variance are met as follows:

1. the notice requirements would burden all parties by separating notice provided to interested stakeholders from the start of the proceeding;
2. granting the variance would not adversely affect the public interest; and
3. granting a variance would not conflict with standards imposed by law.

The Applicants also note that the Commission has approved similar variance requests in past CN dockets. The Department agrees with the Applicants assessment and recommends that the Commission approve the proposed rule variance regarding notice timing.

IV. DEPARTMENT RECOMMENDATIONS

Based on analysis of the information in the record, the Department has prepared recommendations, which are provided below. The recommendations correspond to the subheadings of Section III above.

[16] *See* Minn. R. 7829.3200.
[17] Notice Petition at 5.
[18] *See* Minn. R. 7829.2500

B. TYPES OF NOTICE

- The Department recommends the Applicants review the map depicted in Attachment A and lists of local governments to be provided notice as shown in Attachment B-2 and reconcile the differences in reply comments.

C. CONTENT OF NOTICE

- The Department recommends the Applicants provide the proposed text for the newspaper notice in reply comments.

D. DUPLICATIVE NOTICE

- The Department recommends that the Commission approve the proposed rule variance regarding duplicative notice.

E. NOTICE TIMING

- The Department recommends that the Commission approve the proposed rule variance regarding notice timing.

COMMERCE DEPARTMENT

October 13, 2025

Sasha Bergman
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, Minnesota 55101-2147

RE: Supplemental Comments of the Minnesota Department of Commerce—Exemption Petition
Docket No. E015,ET2,E017/CN-25-109

Dear Ms. Bergman,

The comment of the Minnesota Department of Commerce (Department) recommended that the exemption request to the data required by Minn. R. 7849.0280 subparts (B) through (I) be granted, but did not directly analyze the request for alternative data to be provided regarding subpart (A)—a brief discussion of power planning programs.[1] In reply comments Minnesota Power, Great River Energy, and Otter Tail Power Company (Applicants) renewed the request regarding Minn. R. 7849.0280 subpart (A) to provide what they consider to be alternative data (A)—their Annual Forecast Report (AFR).[2]

The Department concludes that the AFR data proposed by the Applicants along with information that will be provided under other requirements—regarding how MISO's planning resulted in the proposed project—is reasonable data regarding Minn. R. 7849.0280, subp. A.[3] The Department considers this issue to have been resolved and the Department's recommendations remain as stated in the Department's initial comments except as follows:

- *C.4. The Department recommends the Commission ~~modify the requested exemption and~~ approve the requested exemption to Minn. R. 7849.0280, subps. (B) through (I) and approve the proposed alternative information under subp. (A).*

Sincerely,

/s/ Dr. SYDNIE LIEB
Assistant Commissioner of Regulatory Analysis

SR/ad

[1] *In the Matter of the Application for a Certificate of Need for the Maple River to Cuyuna 345 kV Transmission Line Project,* Department, Comment, September 16, 2025, Docket No. E015,ET2,E017/CN-25-109, (eDockets), 20259-223065-02 at 5, (hereinafter "Department Comment").
[2] Minnesota Power, Great River Energy, and Otter Tail Power Company, Exemption Request - Reply Comments, Docket No. E015,ET2,E017/CN-25-109, (eDockets), 202510-223630-01.
[3] Department Comment, at 4-5.

COMMERCE DEPARTMENT

October 13, 2025

Sasha Bergman
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, Minnesota 55101-2147

RE: Supplemental Comments of the Minnesota Department of Commerce—Notice Plan Petition
Docket No. E015,ET2,E017/CN-25-109

Dear Ms. Bergman,

The comment of the Minnesota Department of Commerce (Department) recommended that Minnesota Power Great River Energy, and Otter Tail Power Company (Applicants) provide the proposed text for the newspaper notice in reply comments.[1] In reply comments Applicants provided the recommended newspaper notice text.[2] The Department reviewed the Applicants' proposed text and concludes that it contains the required information.

The Department comment also recommended that the Applicants review the map and lists of local governments to be provided notice and reconcile the differences in reply comments.[3] In reply comments the Applicants provided substantial revisions to the notice list.[4] The Department reviewed the Applicants' revised notice list and concludes that it is reasonable.

The Department considers the issues to have been resolved and the Department's full list of recommendations is as follows:

- approve the proposed notice plan as revised;
- approve the proposed rule variance regarding duplicative notice; and
- approve the proposed rule variance regarding notice timing.

Sincerely,

/s/ Dr. SYDNIE LIEB
Assistant Commissioner of Regulatory Analysis

SR/ad

[1] *In the Matter of the Application for a Certificate of Need for the Maple River to Cuyuna 345 kV Transmission Line Project,* Department, Comment, September 16, 2025, Docket No. E015,ET2,E017/CN-25-109, (eDockets), 20259-223065-01, at 4, (hereinafter "Department Comment").
[2] Minnesota Power, Great River Energy, and Otter Tail Power Company, Reply Comments, October 6, 2025, Docket No. E015,ET2,E017/CN-25-109, (eDockets), 202510-223629-01, at Attachment B, (hereinafter "Applicant Reply").
[3] Department Comment, at 3.
[4] Applicant Reply, at 3.

APPENDIX B

MAPLE RIVER – CUYUNA 345 KV TRANSMISSION LINE PROJECT

EXEMPTION REQUEST

2200 IDS Center, 80 South 8th Street
Minneapolis, MN 55402-2210
Tel: 612.977.8400 | Fax: 612.977.8650
taftlaw.com

August 27, 2025

—Via Electronic Filing—

Mr. Mike Bull
Acting Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101

Re: Request for Exemptions
In the Matter of the Application for a Certificate of Need for the Maple River to Cuyuna 345 kV Transmission Line Project
Docket No. E015,ET2,E017/CN-25-109

Dear Mr. Bull:

Minnesota Power, Great River Energy, and Otter Tail Power Company respectfully submit this Request for Exemptions from Certain Certificate of Need Application Content Requirements to the Minnesota Public Utilities Commission pursuant to Minnesota Rule 7849.0200, subp. 6.

Please contact me with any questions.

Sincerely,

/s/ Kodi J. Verhalen
Kodi J. Verhalen
Taft Stettinius & Hollister LLP
On behalf of Minnesota Power, Great River Energy, and Otter Tail Power Company

cc: Service List

STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION

Katie J. Sieben	Chair
Hwikwon Ham	Commissioner
Audrey C. Partridge	Commissioner
Joseph K. Sullivan	Commissioner
John A. Tuma	Commissioner

IN THE MATTER OF THE APPLICATION FOR A CERTIFICATE OF NEED FOR THE MAPLE RIVER - CUYUNA 345 KV TRANSMISSION LINE PROJECT	Docket No. E015,ET2,E017/CN-25-109

REQUEST FOR EXEMPTION FROM CERTAIN CERTIFICATE OF NEED APPLICATION CONTENT REQUIREMENTS

I. INTRODUCTION

Minnesota Power, Great River Energy, and Otter Tail Power Company (collectively, the "Applicants") respectfully submit this request for exemption from certain requirements for a Certificate of Need Application for the Maple River – Cuyuna 345 kV Transmission Project ("Project") pursuant to Minn. R. 7849.0200, subp. 6. The Applicants intend to file separate Certificate of Need and Route Permit applications for the Project. The Certificate of Need application will be filed by February 2026 and the Route Permit application will be filed in the third quarter of 2026.

The Project involves construction of a new 345 kV single-circuit transmission line, on double-circuit capable structures, connecting Minnesota Power's Cuyuna Substation in Crow Wing County to Otter Tail Power Company's Maple River Substation near Fargo, North Dakota.

The Applicants believe that certain Certificate of Need application content requirements in Minn. R. Ch. 7849 should be modified to better address the nature of this Project. The Minnesota Public Utilities Commission ("Commission") has granted similar exemptions

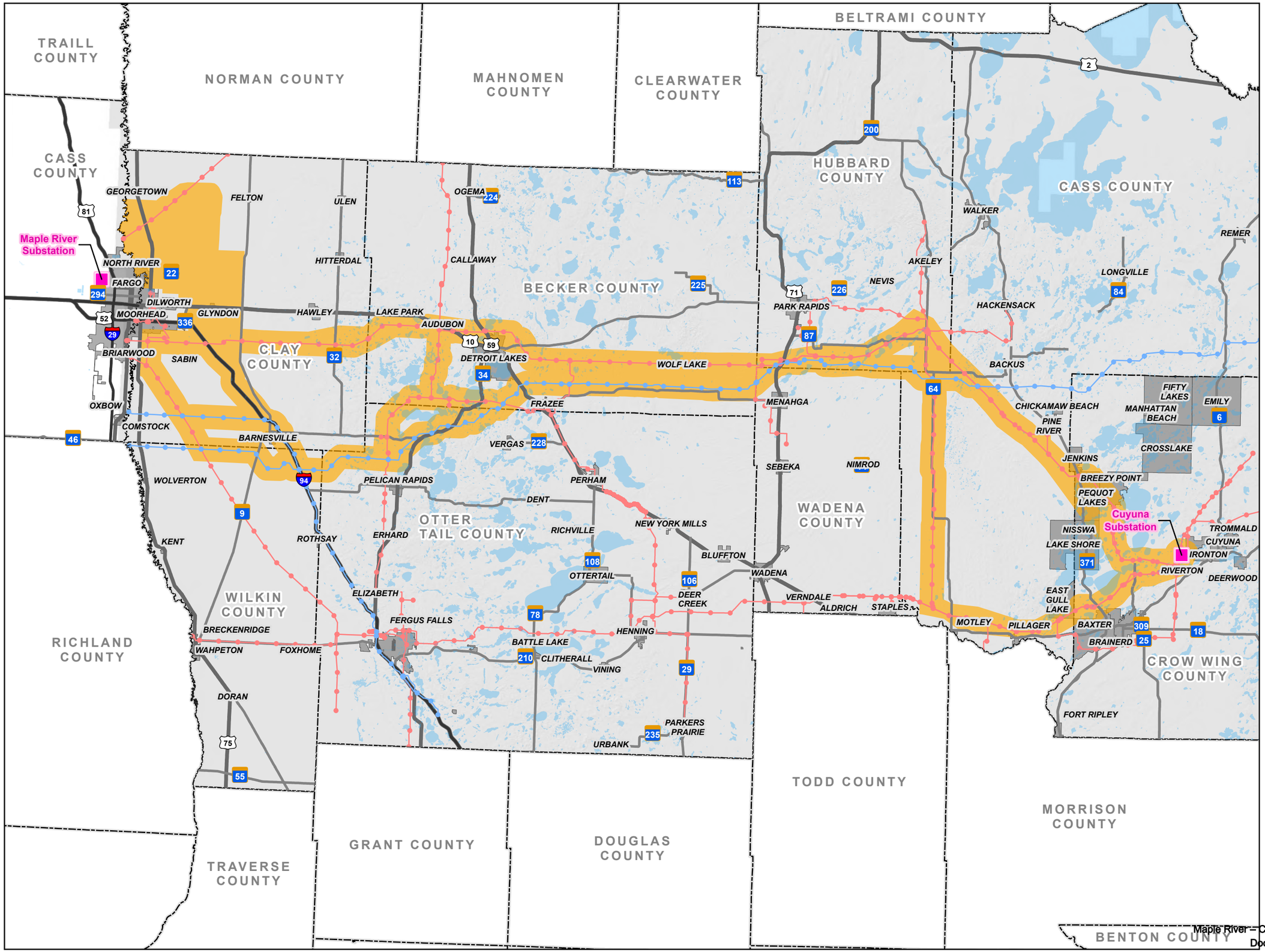
for other transmission line projects in the recent past.[1] The Applicants therefore respectfully request that the Commission grant exemptions for certain requirements as provided under Minn. R. 7849.0200, subp. 6. In lieu of some content requirements, the Applicants propose to submit alternative information that will better inform the Commission's decision regarding the need for the Project.

II. BACKGROUND

An overview of the Project, as well as other transmission facilities in the area, is provided in Figure 1, below.

[1] *See, e.g., In the Matter of the Application of Minnesota Power and Great River Energy for a Certificate of Need for the Northland Reliability Project 345 kV Transmission Line*, Docket No. E015, ET2/CN-22-416, ORDER APPROVING THE REQUESTED EXEMPTIONS AND THE NOTICE PLAN (June 21, 2023); *In re Application of Minnesota Power for a Certificate of Need for the Duluth Loop Reliability Project in St. Louis Cnty.*, Docket No. E015/CN-21-140, ORDER APPROVING NOTICE PLAN AND GRANTING VARIANCES AND EXEMPTIONS (May 17, 2021); *In re Application of Great River Energy and Minnesota Power for a Certificate of Need for the Menahga Area 115 kV Transmission Line Project in Hubbard, Wadena and Becker Counties, Minnesota*, Docket No. E015/CN-14-787, ORDER APPROVING EXEMPTION REQUEST (Dec. 3, 2014); *In re Request of Minnesota Power for a Certificate of Need for the Great Northern Transmission Line*, Docket No. E015/CN-12-1163, ORDER APPROVING NOTICE PLAN, GRANTING VARIANCE REQUEST, AND APPROVING EXEMPTION REQUEST (Feb. 28, 2013)

Figure 1. Project Overview



**Maple River-
Cuyuna Project**

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The Project was studied, reviewed, and approved by the Midcontinent Independent System Operator, Inc. ("MISO") as part of its Long-Range Transmission Planning ("LRTP") Tranche 2.1 portfolio of projects included in MISO's 2024 Transmission Expansion Plan ("MTEP24"). The LRTP Tranche 2.1 portfolio is made up of 24 projects, including project no. 20, the Maple River – Cuyuna 345 kV Transmission Project. The Project, as part of the LRTP Tranche 2.1 portfolio, is needed to support the reliability of the regional transmission system, particularly in northwestern and central Minnesota and eastern North Dakota; provide additional transmission capacity and regional transfer capability to reliably integrate new renewable generation; meet growing electrical demand, enhance resilience during extreme weather events, and enable cost-effective regional energy transfers supporting economical grid operations.

III. LEGAL STANDARD AND SUMMARY OF EXEMPTION REQUESTS

Minn. R. 7849.0220, subp. 2, part 7849.0240, and parts 7849.0260 to 7849.0340 specify the content requirements for Certificate of Need applications for large high-voltage transmission line ("LHVTL") projects. The Commission has authority to grant exemptions from the requirements of Minn. R. Ch. 7849 pursuant to Minn. R. 7849.0200, subp. 6, which provides:

> **Subp. 6 Exemptions.** Before submitting an application, a person is exempted from any data requirement of parts 7849.0010 to 7849.0400 if the person (1) requests an exemption from specified rules, in writing to the commission, and (2) shows that the data requirement is unnecessary to determine the need for the proposed facility or may be satisfied by the submitting another document. A request for exemption must be filed at least 45 days before submitting an application. The commission shall respond in writing to a request for exemption within 30 days of receipt and include the reasons for the decision. The commission shall file a statement of exemptions granted and reasons for granting them before beginning the hearing.

Based on the standard set forth in this rule, the Commission may grant exemptions when the data requirements: (1) are unnecessary to determine need in a specific case; or (2) can be satisfied by submitting documents other than those required by the rules.[2] For the Maple River – Cuyuna 345 kV Transmission Project, the Applicants request that the Commission grant exemptions from the following rules as they are either unnecessary to determine the need for the Project or can be satisfied by submitting alternative data:

[2] *In re Application for a Certificate of Need for the Appleton – Canby 115 kV Line,* Docket No. E017/CN-06-0677, ORDER GRANTING EXEMPTIONS AND APPROVING NOTICE PLAN (Aug. 1, 2006).

Minnesota Rule	Scope of Exemption
Minn. R. 7849.0260 A(3) and C(6) (Losses)	Request an exemption from providing Project-specific loss information. The Applicants propose to provide substitute data in the form of overall system losses.
Minn. R. 7849.0260 B(4) and (8) (Transmission Lines with Different Terminals or Substations)	Request an exemption from providing a discussion on the availability of alternative transmission lines with different terminals or substations. The commission must not require evaluation of alternative end points for a high-voltage transmission line qualifying as a large energy facility unless the alternative end points are (i) consistent with end points identified in a federally registered planning authority transmission plan, or (ii) otherwise agreed to for further evaluation by the applicant.[3]
Minn. R. 7849.0270 (Peak Demand and Annual Consumption Forecast; System Revenue Requirements)	Request exemption from providing forecasting and capacity information for the Applicants' system and to provide forecast information from the Applicants' most recent Annual Forecast Report ("AFR"). Request exemption from providing system revenue requirements and provide explanation of how MISO spreads wholesale electricity costs and a general estimate of rate impact of Project on Minnesota Power's and Otter Tail Power's customers. Great River Energy will provide an explanation of how MISO spreads wholesale electricity costs and a general estimate of rate impact of the Project on Minnesota customers as well as the general financial effects of the Project on Great River Energy's member cooperatives.
Minn. R. 7849.0280 (System Capacity)	Request full exemption from providing a discussion of the ability of the existing system to meet the forecasted demand for electrical energy identified in response to Minn. R. 7849.0270.
Minn. R. 7849.0290 (Conservation)	Request exemption from discussing conservation programs and their effect on the forecast information required by Minn. R. 7849.0270. The Applicants propose to provide substitute information on its conservation efforts from, as applicable, the

[3] *See* Minn. Stat. § 216B.243 Subd. 3(6).

Minnesota Rule	Scope of Exemption
	Applicants' most recent Conservation Improvement Plan and Integrated Resource Plan filings. The Applicants will also provide information regarding how conservation and energy efficiency was considered by MISO in its evaluation of the Project.
Minn. R. 7849.0300 (Consequences of Delay)	Request to be exempt from providing analysis using three confidence levels. The Applicants propose to provide substitute data regarding potential impacts caused by delay in implementing the Project.
Minn. R. 7849.0340 (No Facility Alternative)	Request to be exempt from providing analysis using three confidence levels. The Applicants propose to provide substitute data regarding potential impacts caused by no build alternatives.

Each of these requests is discussed in more detail below and summarized in **Attachment A**. This request is being made at least 45 days prior to submitting an application for a Certificate of Need as required by Minn. R. 7849.0200, subp. 6.

IV. REQUESTED EXEMPTIONS

A. Minn. R. 7849.0260 A(3) and C(6) – Proposed LHVTL and Alternatives Application (Losses)

Minn. R. 7849.0260 A(3) requires the applicant to provide the expected losses "under maximum loading and under projected average loading in the length of the transmission line and at the terminals or substations." Minn. R. 7849.0260 C(6) requires similar information (efficiency of proposed system under maximum and average loading along the length of the line). The electrical grid operates as a single, integrated system, which prevents electricity from being "directed" along a particular line or set of lines. Consequently, heat loss takes place across the entire transmission system and is not isolated to a single transmission line within the integrated regional electric grid. Therefore, losses should be calculated across the entire system rather than based on a single transmission line.

The Applicants request an exemption from Minn. R. 7849.0260 A(3) and C(6) and propose to provide system losses information in lieu of line-specific losses required by

the rules. This approach is consistent with several prior exemption requests approved by the Commission in other Certificate of Need transmission line dockets.[4]

B. Minn. R. 7849.0260 B(4) – Transmission Lines with Different Terminals or Substations

Minnesota Rule 7849.0260(B)(4) requires a discussion of "transmission lines with different terminals or substations." Likewise, section (B)(8) of that rule requires a discussion of "any reasonable combination of the alternatives" listed in, among others, section (B)(4). Minn. Stat. § 216B.243 Subd. 3(6), however, states that "the commission must not require evaluation of alternative end points for a high-voltage transmission line qualifying as a large energy facility unless the alternative end points are (i) consistent with end points identified in a federally registered planning authority transmission plan, or (ii) otherwise agreed to for further evaluation by the applicant." No alternate end points were evaluated in the MISO transmission planning process, nor have the Applicant's agreed to an evaluation of an alternative. Thus, the Applicants request an exemption consistent with Minn. Stat. § 216B.243 Subd. 3(6).

C. Minn. R. 7849.0270, subps. 1-6 – Peak Demand and Annual Consumption Forecast and System Revenue Requirements

1. Rule 7849.0270, subp. 1 – Peak Demand and Annual Consumption Data

Minn. R. 7849.0270, subp. 1 requires information concerning peak and demand and annual consumption for the Applicant's entire service area and system. The Project is intended to support reliability of the transmission system in northern Minnesota as fossil-fueled generators are retired and replaced with more intermittent and renewable generation in the region. The Applicants will provide forecast information from their most recent AFRs filed on July 1, 2025 in Docket No. E-999/PR-25-11. The Commission has previously granted similar exemption requests for other transmission projects.[5]

[4] *See, e.g., In the Matter of the Application of Minnesota Power and Great River Energy for a Certificate of Need for the Northland Reliability Project 345 kV Transmission Line*, Docket No. E015, ET2/CN-22-416, ORDER APPROVING THE REQUESTED EXEMPTIONS AND THE NOTICE PLAN (June 21, 2023); *In re Application of Minnesota Power for a Certificate of Need for the Duluth Loop Reliability Project in St. Louis, Cnty.,* Docket No. E015/CN-21-140, ORDER APPROVING NOTICE PLAN AND GRANTING VARIANCES AND EXEMPTIONS (May 17, 2021).

[5] *See, e.g., In re Application of Minnesota Power for a Certificate of Need for the HVDC Modernization Project*, Docket No. E015/CN-22-607, ORDER (Feb. 1, 2023); *In re Application of Minnesota Power for a Certificate of Need for the Duluth Loop Reliability Project in St. Louis Cnty*., Docket No. E015/CN-21-140, ORDER APPROVING NOTICE PLAN AND GRANTING VARIANCES AND EXEMPTIONS (May 17, 2021); *In re Application of Great River Energy and Minnesota Power for a Certificate of Need for the Menahga Area 115 kV Transmission Line Project in Hubbard, Wadena and Becker Counties, Minnesota*, Docket No. E015/CN-14-787, ORDER APPROVING EXEMPTION REQUEST (Dec. 3, 2014).

2. Rule 7849.0270, subps. 2(A) and 2(B) – Customer Annual Consumption Data

Minn. R. 7849.0270, subps. 2(A) and 2(B) require an applicant to estimate the number of customers and the amount of energy consumed annually by nine classes of customers (residential, commercial, industrial, farming, etc.). Energy consumption data is not relevant to establishing the need for a proposed Project. Transmission systems must be sized so that they have sufficient capacity to operate reliably during periods of peak demand. It is the demand for power during peak times that is the primary driver for the Project, not the amount of power consumed annually. Accordingly, it would be appropriate for the Commission to exempt the Applicants from providing this data and accept substitute data in the form of AFR and any other forecast information used in analyzing the need for the Project. The Commission has previously granted similar exemption requests for other transmission projects.[6]

3. Minn. R. 7849.0270, subps. 2(C) and 2(D) – System Demand and Peak Demand

Minn. R. 7849.0270, subp. 2(C) seeks an estimate of the demand for power in the system at the time of annual system peak demand. Minn. R. 7849.0270, subp. 2(D) calls for monthly system peak demand data. Evaluation of the need for the transmission capacity for the Project is based on various demand scenarios across a broad region of MISO. Rather than providing system peak demand data that provides little insight into the specific transmission needs underlying the Project, the Applicants propose to provide AFR forecast information and discussion of the different regional demand scenarios evaluated in the analysis used by the Applicants and MISO to justify the Project. The Commission has previously granted similar exemption requests for other transmission projects.[7]

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[6] *See, e.g., In the Matter of the Application of Minnesota Power and Great River Energy for a Certificate of Need for the Northland Reliability Project 345 kV Transmission Line*, Docket No. E015, ET2/CN-22-416, ORDER APPROVING THE REQUESTED EXEMPTIONS AND THE NOTICE PLAN (June 21, 2023); *In re Application of Minnesota Power for a Certificate of Need for the Duluth Loop Reliability Project in St. Louis Cnty.,* Docket No. E015/CN-21-140, ORDER APPROVING NOTICE PLAN AND GRANTING VARIANCES AND EXEMPTIONS (May 17, 2021); *In re Application of Great River Energy and Minnesota Power for a Certificate of Need for the Menahga Area 115 kV Transmission Line Project in Hubbard, Wadena and Becker Counties, Minnesota*, Docket No. E015/CN-14-787, ORDER APPROVING EXEMPTION REQUEST (Dec. 3, 2014); I*n re Application of Great River Energy and Minnesota Power for a Certificate of Need for a 115 kV High Voltage Transmission Line in St. Louis and Carlton Counties*, Docket No. E015,ET2/CN-10-973, ORDER APPROVING EXEMPTIONS AND PROPOSED PROVISION OF ALTERNATIVE DATA (Nov. 2, 2010).

[7] *In re Application of Minnesota Power for a Certificate of Need for the Duluth Loop Reliability Project in St. Louis Cnty.,* Docket No. E015/CN-21-140, ORDER APPROVING NOTICE PLAN AND GRANTING VARIANCES AND EXEMPTIONS (May 17, 2021); *In re Application of Great River Energy and Minnesota Power for a Certificate of Need for the Menahga Area 115 kV Transmission Line Project in Hubbard, Wadena and Becker Counties, Minnesota*, Docket No. E015/CN-14-787, ORDER APPROVING EXEMPTION REQUEST (Dec. 3, 2014); I*n re Application of Great River Energy and Minnesota Power for a Certificate of Need for a 115 kV High Voltage Transmission Line in St. Louis and Carlton Counties*, Docket No. E015,ET2/CN-10-973, ORDER APPROVING EXEMPTIONS AND PROPOSED PROVISION OF ALTERNATIVE DATA (Nov. 2, 2010).

4. Minn. R. 7849.0270, subp. 2(E) – System Revenue Requirements

Minn. R. 7849.0270, subp. 2(E) requires an estimate of the "annual revenue requirement per kilowatt-hour for the system in current dollars." Minnesota Power and Otter Tail proposes to provide the general rate impact of the Maple River – Cuyuna Project on Minnesota Power's and Otter Tail's customers. Great River proposes to provide an explanation of how wholesale electricity costs are spread among users of the transmission grid and the general financial effects of the Project on Great River Energy's member cooperatives. The Commission has previously granted similar exemption requests for other transmission projects.[8]

5. Minn. R. 7849.0270, subp. 2(F) – Weekday Load Factor

Minn. R. 7849.0270, subp. 2(F) requires an applicant's average system weekday load factor for each month. The Applicants request an exemption from this requirement because load factor is not a relevant consideration when evaluating the need for a transmission facility. Load factor is a measure of how demand varies over time and is relevant to the need determination for new generation. Moreover, transmission capacity must be designed to meet peak demand and other system power flow circumstances. This is done to ensure there is sufficient transmission capacity to meet lower levels of instantaneous demand. Thus, the Applicants respectfully request an exemption from this requirement which the Commission has granted in the past for other transmission projects.[9]

6. Minn. R. 7849.0270, subps. 3-6 – Forecast Methodology, Data Base, Assumptions, and Coordination of Forecasts

Minn. R. 7849.0270, subps. 3-6 require the applicant to detail the forecast methodology employed, identify the database used for the forecast, detail the assumptions made in

[8] *See, e.g., In the Matter of the Application of Minnesota Power and Great River Energy for a Certificate of Need for the Northland Reliability Project 345 kV Transmission Line*, Docket No. E015, ET2/CN-22-416, ORDER APPROVING THE REQUESTED EXEMPTIONS AND THE NOTICE PLAN (June 21, 2023); *In re Application of Minnesota Power for a Certificate of Need for the Duluth Loop Reliability Project in St. Louis Cnty.,* Docket No. E015/CN-21-140, ORDER APPROVING NOTICE PLAN AND GRANTING VARIANCES AND EXEMPTIONS (May 17, 2021); *In re Application of Great River Energy and Minnesota Power for a Certificate of Need for the Menahga Area 115 kV Transmission Line Project in Hubbard, Wadena and Becker Counties, Minnesota,* Docket No. E015/CN-14-787, ORDER APPROVING EXEMPTION REQUEST (Dec. 3, 2014); I*n re Application of Great River Energy and Minnesota Power for a Certificate of Need for a 115 kV High Voltage Transmission Line in St. Louis and Carlton Counties*, Docket No. E015,ET2/CN-10-973, ORDER APPROVING EXEMPTION AND PROPOSED PROVISION OF ALTERNATIVE DATA (Nov. 2, 2010).

[9] *In re Application of Minnesota Power for a Certificate of Need for the Duluth Loop Reliability Project in St. Louis Cnty.,* Docket No. E015/CN-21-140, ORDER APPROVING NOTICE PLAN AND GRANTING VARIANCES AND EXEMPTIONS (May 17, 2021); *In re request of Minnesota Power for a Certificate of Need for the Great Northern Transmission Line,* Docket No. E-015/CN-12-1163, ORDER APPROVING NOTICE PLAN, GRANTING VARIANCE REQUEST, AND APPROVING EXEMPTION REQUEST (Feb. 28, 2013); *In the Matter of the Application of Great River Energy and Minnesota Power for a Certificate of Need for a 115 kV High Voltage Transmission Line in St. Louis and Carlton Counties,* Docket No. ET2,E-015/CN-10-973, ORDER APPROVING EXEMPTION REQUESTS (Nov. 2, 2010).

preparing the forecasts provided under subpart 2 of the same rule, and a description of load forecasts coordination efforts with other systems. As stated above, the need for transmission facilities is not prompted by energy consumption, but rather, by demand during peak times. Thus, instead of providing energy consumption forecasts, The Applicants believe that forecast information and discussion of the different regional demand scenarios evaluated in the analysis used by the Applicants and MISO to justify the Project will better enable the Commission to evaluate the need for this Project. The Applicants will provide their most recent AFRs. The AFRs discuss forecast methodology, databases, forecasts assumptions, and coordination of forecasts with other systems. The Applicants respectfully request an exemption from this requirement which the Commission has granted in the past for transmission projects.[10]

In sum, the Applicants request an exemption from the data requirements of Minn. R. 7849.0270, subps. 1-6 and will provide relevant AFR forecast information and any other forecast information used in analyzing the need for the Project. This substitute information is better tailored to the need for the Maple River – Cuyuna 345 kV Transmission Project and will assist the Commission in evaluating the Project.

D. Minn. R. 7849.0280 – System Capacity

Minn. R. 7849.0280 pertains to system capacity and generation data. The general purpose of this section is to provide a discussion of the ability of the existing system to meet the forecasted demand for electrical energy in response to Minn. R. 7849.0270. Subparts (B) through (I) pertain to an examination of generation adequacy and do not address transmission planning considerations. The Applicants therefore request that the Commission grant an exemption from Minn. R. 7849.0280, subps. (B) through (I) and an exemption with alternative data from the Applicants' AFRs provided for Minn. R. 7849.0280, subp. (A). The Commission has previously granted exemption requests from Minn. R. 7849.0280 in several other transmission line Certificate of Need dockets where issues of transmission adequacy, rather than generation adequacy, were at issue.[11]

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[10] *See, e.g., In the Matter of the Application of Minnesota Power and Great River Energy for a Certificate of Need for the Northland Reliability Project 345 kV Transmission Line*, Docket No. E015, ET2/CN-22-416, ORDER APPROVING THE REQUESTED EXEMPTIONS AND THE NOTICE PLAN (June 21, 2023); *In re Application of Minnesota Power for a Certificate of Need for the Duluth Loop Reliability Project in St. Louis Cnty.,* Docket No. E015/CN-21-140, ORDER APPROVING NOTICE PLAN AND GRANTING VARIANCES AND EXEMPTIONS (May 17, 2021); *In re Application of Great River Energy and Minnesota Power for a Certificate of Need for the Menahga Area 115 kV Transmission Line Project in Hubbard, Wadena and Becker Counties, Minnesota,* Docket No. E015/CN-14-787, ORDER APPROVING EXEMPTION REQUEST (Dec. 3, 2014).

[11] *See, e.g., In the Matter of the Application of Minnesota Power and Great River Energy for a Certificate of Need for the Northland Reliability Project 345 kV Transmission Line*, Docket No. E015, ET2/CN-22-416, ORDER APPROVING THE REQUESTED EXEMPTIONS AND THE NOTICE PLAN (June 21, 2023); *In re Application of Minnesota Power for a Certificate of Need for the Duluth Loop Reliability Project in St. Louis Cnty.,* Docket No. E015/CN-21-140, ORDER APPROVING NOTICE PLAN AND GRANTING VARIANCES AND EXEMPTIONS (May 17, 2021); In re Application of Great River Energy and Minnesota Power for a Certificate of Need for the Menahga Area 115 kV Transmission Line Project in Hubbard, Wadena and Becker Counties, Minnesota, Docket No. E015/CN-14-787, ORDER APPROVING EXEMPTION REQUEST (Dec. 3, 2014); *In re Application of*

E. Minn. R. 7849.0290 – Conservation

The Applicants request an exemption for Minn. R. 7849.0290, which relates to conservation programs the applicant has in place and their effect on the forecast information called for in Minn. R. 7849.0270. This rule is intended to ensure that regulated load serving utilities fully consider conservation as well as generation when planning for future needs of their customers.[12] The Applicants' conservation and efficiency information is examined in detail in the resource planning process. All of the information requested by Minn. R. 7849.0290 is contained, as applicable, in Integrated Resource Plan and Conservation Improvement Plan ("CIP") filings[13] filed by Minnesota Power,[14] Great River Energy,[15] and Otter Tail Power.[16] Instead of replicating that information in this application, The Applicants proposed to present a summary of these filings. This will allow interested parties to pursue their investigation into this issue further through those materials if they wish. The Applicants will also provide information regarding how conservation and energy efficiency was considered by MISO in its evaluation of the Project. This request is consistent with prior exemptions the Commission has granted in other dockets.[17]

F. Minn. R. 7849.0300 – Consequences of Delay and Minn. R. 7849.0340 – No Facility Alternative

Minn. R. 7849.0300 requires detailed information regarding the consequences of delay on three specific statistically-based levels of demand and energy consumption. Similarly,

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Great River Energy and Minnesota Power for a Certificate of Need for a 115 kV High Voltage Transmission Line in St. Louis and Carlton Counties, Docket No. E015,ET2/CN-10-973, ORDER APPROVING EXEMPTIONS AND PROPOSED PROVISION OF ALTERNATIVE DATA (Nov. 2, 2010).

[12] *In re Application of Rapids Power LLC for a Certificate of Need for its Grand Rapids Cogeneration Project,* Docket No. IP-4/CN-01-1306, ORDER GRANTING EXEMPTIONS FROM FILING REQUIREMENTS at 6 (Oct. 9, 2001).

[13] The information provided to satisfy this requirement will be taken from each applicant utility's most-recently filed energy conservation and optimization ("ECO") plan or CIP in its most recent CIP docket on file with the Commission.

[14] *In the Matter of Minnesota Power's 2025-2039 Integrated Resource Plan*, Docket No. E015/RP-25-127, INITIAL FILING (March 3, 2025); *Minnesota Power's 2024–2026 Triennial Energy Conservation and Optimization Program Filing*, Docket No. E015/CIP-23-93, INITIAL FILING (June 30, 2023).

[15] *In the Matter of Great River Energy's 2023-2037 Integrated Resource Plan*, Docket No. ET2/RP-22-75, INITIAL FILING, including Appendix D thereto (2020 CIP Approval Letter and 2022 CIP Plan) (March, 31, 2023); *see also Electric Conservation Improvement Program (CIP) 2020 Results and 2022 Plans* Docket No. E,G999/CIP-21-24, DOC APPROVAL OF 2022 PLANS (June 23, 2022).

[16] *In the Matter of Otter Tail Power Company's Submittal of its 2022–2036 Integrated Resource Plan*, Docket No. E017/RP-21-339, INITIAL FILING (September 1, 2021); *In the Matter of Otter Tail Power Company's 2024-2026 Energy Conservation and Optimization Triennial Program*, Docket No. E017/CIP-23-94 INITIAL FILING (June 30, 2023).

[17] *See, e.g., In the Matter of the Application of Minnesota Power and Great River Energy for a Certificate of Need for the Northland Reliability Project 345 kV Transmission Line*, Docket No. E015, ET2/CN-22-416, ORDER APPROVING THE REQUESTED EXEMPTIONS AND THE NOTICE PLAN (June 21, 2023); *In re Application of Minnesota Power for a Certificate of Need for the Duluth Loop Reliability Project in St. Louis Cnty.,* Docket No. E015/CN-21-140, ORDER APPROVING NOTICE PLAN AND GRANTING VARIANCES AND EXEMPTIONS (May 17, 2021); *In re Application of Great River Energy and Minnesota Power for a Certificate of Need for the Menagha Area 115 kV Transmission Line Project in Hubbard, Wadena and Becker Counties, Minnesota,* Docket No. E015/CN-15-787, ORDER APPROVING EXEMPTION REQUEST (Dec. 3, 2014).

Minn. R. 7849.0340 requires a discussion of the impact on existing generation and transmission facilities at the three levels of demand specified in Minn. R. 7849.0300 for the no-build alternatives. While the Applicants will discuss the consequences of delay and a no build alternative in its application, there is no need to discuss these items in terms of three levels of demand. Rather, as noted above, for evaluating the need for the Project, the relevant inquiry is whether the system can meet peak demand and other system power flow circumstances. The Commission has approved similar partial exemption requests from the requirements of Minn. R. 7849.0300 and 7849.0340 in other transmission line Certificate of Need dockets.[18]

[18] *See, e.g.*, *In re Application of Minnesota Power for a Certificate of Need for the Duluth Loop Reliability Project in St. Louis Cnty.*, Docket No. E015/CN-21-140, ORDER APPROVING NOTICE PLAN AND GRANTING VARIANCES AND EXEMPTIONS (May 17, 2021); *In re Application of Great River Energy and Minnesota Power for a Certificate of Need for the Menahga Area 115 kV Transmission Line Project in Hubbard, Wadena and Becker Counties, Minnesota*, Docket No. E015/CN-14-787, ORDER APPROVING EXEMPTION REQUEST (Dec. 3, 2014); *In re Request of Minnesota Power for a Certificate of Need for the Great Northern Transmission Line*, Docket No. E015/CN-12-1163, ORDER APPROVING NOTICE PLAN, GRANTING VARIANCE REQUESTION AND APPROVING EXEMPTION REQUEST (Feb. 28, 2013); *In the Matter of the Application of Northern States Power Company d/b/a Xcel Energy and Great River Energy for a Certificate of Need for the Upgrade of the Southwest Twin Cities (SWTC) Chaska Area 69 kV Transmission Line to 115 kV Capacity Docket No. E002/CN-11-826,* ORDER GRANTING THE COMPANY'S EXEMPTION REQUEST (Nov. 4, 2011).

V. CONCLUSION

The Applicants respectfully request that the Commission grant the requested exemptions to allow the Applicants to provide information that is relevant and appropriate to determining the need for the Maple River – Cuyuna 345 kV Transmission Project without imposing unnecessary filing burdens.

August 27, 2025

Respectfully submitted,

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ATTACHMENT A

Maple River – Cuyuna 345 kV Transmission Project

Certificate of Need Application

Completeness Checklist

ATTACHMENT A

Authority	Required Information	Location in Application
Minn. R. 7829.2500, subp. 2	Brief summary of filing on separate page sufficient to apprise potentially interested parties of its nature and general content	
Minn. R. 7849.0200, subp. 2	Title Page and Table of Contents	
Minn. R. 7849.0200, subp. 4	Cover Letter	
Minn. R. 7849.0220, subp. 3	Joint Ownership and Multiparty use	N/A
Minn. R. 7849.0240	Need summary and additional considerations	
Subp. 1	Summary of the major factors that justify the need for the proposed facility	
Subp. 2	Relationship of the proposed facility to the following socioeconomic considerations:	–
A.	Socially beneficial uses of the output of the facility	
B.	Promotional activities that may have given rise to the demand for the facility	
C.	Effects of the facility in inducing future development	
Minn. R. 7849.0260	Proposed LHVTL and Alternatives	–
A.	A description of the type and general location of the proposed line, including:	–
(1)	Design voltage	
(2)	Number, sizes and types of conductors	

Authority	Required Information	Location in Application
(3)	Expected losses under projected maximum loading and under projected average loading in the length of the line and at terminals or substations	EXEMPT provided alternative data is supplied
	ALTERNATIVE DATA – Estimated overall system losses	
(4)	Approximate length of the proposed line	
(5)	Approximate locations of DC terminals or AC substations on a map	
(6)	List of likely affected counties	
B.	Discussion of the available alternatives including:	
(1)	New generation	
(2)	Upgrading existing transmission lines	
(3)	Transmission lines with different voltages or conductor arrays	
(4)	Transmission lines with different terminals or substations	EXEMPT per Minnesota Statute
(5)	Double circuiting of existing transmission lines	
(6)	If facility for DC (AC) transmission, an AC (DC) transmission line	
(7)	If proposed facility is for overhead (underground) transmission, an underground (overhead) transmission line	
(8)	Any reasonable combination of alternatives (1) – (7)	EXEMPT as to different terminals or substations per Minnesota Statute
C.	For the facility and each for alternative in B, a discussion of:	–

ATTACHMENT A

Authority	Required Information	Location in Application
(1)	Total cost in current dollars	
(2)	Service life	
(3)	Estimated average annual availability	
(4)	Estimated annual O&M costs in current dollars	
(5)	Estimate of its effect on rates system wide in Minnesota	
(6)	Efficiency expressed for a transmission facility as the estimated losses under projected maximum loading and under projected average loading in the length of the transmission line and at the terminals or substations	EXEMPT provided alternative data is supplied
(7)	Major assumptions made in subitems (1) – (6)	
D.	A map (of appropriate scale) showing the applicant's system or load center to be served by the proposed LHVTL	
E.	Such other information about the proposed facility and each alternative as may be relevant to determination of need.	

ATTACHMENT A

Authority	Required Information	Location in Application
Minn. R. 7849.0270	Content of Forecast	–
Minn. R. 7849.0270, subp. 1	Peak demand and annual consumption data within the applicant's service area and system.	EXEMPT provided alternative data is supplied
	ALTERNATIVE DATA – Applicants' most recent Annual Electric Utility Forecast Report and any forecast information used in analyzing the need for the Project.	
Minn. R. 7849.0270, subp. 2	Minnesota forecast data; forecast demand data by customer class, peak period, and month; estimated system annual revenue per kilowatt hour; estimated average weekday system load factor by month.	EXEMPT except as noted below and provided alternative data is supplied
	ALTERNATIVE DATA – Applicants' most recent Annual Electric Utility Forecast Report and any forecast information used in analyzing the need for the Project.	
	Subp. 2(E) – Alternative explanation of how MISO spreads wholesale electricity costs and general financial impact on Minnesota customers.	
Minn. R. 7849.0270, subp. 3	Detail of the forecast methodology used in subp. 2	EXEMPT provided alternative data is supplied
Minn. R. 7849.2070, subp. 4	Discussion of database used in current forecasting.	EXEMPT provided alternative data is supplied
Minn. R. 7849.0270, subp. 5	Discussion of each essential assumption made in forecast preparation and sensitivity to variations in assumptions.	EXEMPT provided alternative data is supplied
Minn. R. 7849.0270, subp. 6	Coordination of forecasts.	EXEMPT provided alternative data is supplied

Authority	Required Information	Location in Application
	ALTERNATIVE DATA FOR SUBPS. 3-6 – Applicants' most recent Annual Electric Utility Forecast Report and any forecast information used in analyzing the need for the Project.	
Minn. R. 7849.0280	System Capacity	–
	Description of ability of existing system to meet demand forecast including:	–
A.	Power planning programs	EXEMPT provided alternative data is supplied
B.	Seasonal firm purchases and sales	EXEMPT
C.	Seasonal participation purchases and sales	EXEMPT
D.	Load and generation capacity data request in subitems 1-13 for summer and winter seasons for each forecast year, including anticipated purchases, sales, and capacity retirements and additions except those that depend on a not yet issued certificate of need.	EXEMPT
E.	Summer and winter season load generation and capacity in years subsequent to application contingent on proposed facility	EXEMPT
F.	Summer and winter season load generation and capacity including all projected purchases, sales and generation in years subsequent to application	EXEMPT
G.	List of proposed additions and retirements in generating capacity for each forecast year subsequent to application	EXEMPT

Authority	Required Information	Location in Application
H.	Graph of monthly adjusted net demand and capability with difference between capability and maintenance outages plotted	EXEMPT
I.	Appropriateness and method of determining system reserve margins	EXEMPT
Minn. R. 7849.0290	Conservation Programs	–
A.	Persons responsible for energy conservation and efficiency programs	EXEMPT provided alternative data is supplied
B.	List of energy conservation and efficiency goals and objectives	EXEMPT provided alternative data is supplied
C.	Description of programs considered, implemented and rejected	EXEMPT provided alternative data is supplied
D.	Description of major accomplishments in conservation and efficiency	EXEMPT provided alternative data is supplied
E.	Description of future plans with respect to conservation and efficiency	EXEMPT provided alternative data is supplied
F.	Quantification of the manner by which these programs impact the forecast	EXEMPT provided alternative data is supplied
	ALTERNATIVE DATA FOR A-F – Applicants will provide a summary of each utility's most recent Integrated Resource Plan and Conservation Improvement Program filings. The Applicants will also provide information regarding how conservation and energy efficiency was considered by MISO in its evaluation of the Project.	

Authority	Required Information	Location in Application
Minn. R. 7849.0300	Consequence of Delay	EXEMPT from three levels of demand
Minn. R. 7849.0310	Required Environmental Information	
Minn. R. 7849.0330	Transmission Facilities	–
	Data for each alternative that would require LHVTL construction including:	–
A.	For overhead transmission lines	–
(1)	Schematics showing dimensions of support structures	
(2)	Discussion of electric fields	
(3)	Discussion of ozone and nitrogen oxide emissions	
(4)	Discussion of radio and television interference	
(5)	Discussion of audible noise	
B.	For underground transmission facilities:	N/A
(1)	Types and dimensions of cable systems	N/A
(2)	Types and qualities of cable system materials	N/A
(3)	Heat released in kW per foot of cable	N/A
C.	Estimated right-of-way required for the facility	
D.	Description of construction practices	
E.	Description of O&M practices	

Authority	Required Information	Location in Application
F.	Estimated workforce required for construction and O&M	
G.	Description of region between endpoints in likely area for routes emphasizing a three mile radius of endpoints including:	–
(1)	Hydrological features	
(2)	Vegetation and wildfire	
(3)	Physiographic regions	
(4)	Land use types	
Minn. R. 7849.0340	No-Facility Alternative	EXEMPT from three levels of demand

COMMERCE DEPARTMENT

September 16, 2025

Sasha Bergman
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. E015,ET2,E017/CN-25-109

Dear Ms. Bergman:

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

In the Matter of the Application for a Certificate of Need for the Maple River – Cuyuna 345 kV Transmission Line Project: Request for Exemptions.

The Petition was filed by Minnesota Power, Great River Energy, and Otter Tail Power Company on August 27, 2025.

The Department recommends **approval with modifications** and is available to answer any questions the Minnesota Public Utilities Commission may have.

Sincerely,

/s/ Dr. SYDNIE LIEB
Assistant Commissioner of Regulatory Analysis

SR/ad
Attachment

COMMERCE DEPARTMENT

Before the Minnesota Public Utilities Commission

Comments of the Minnesota Department of Commerce

Docket No. E015,ET2,E017/CN-25-109

I. INTRODUCTION

Minnesota Power (MP) Great River Energy (GRE), and Otter Tail Power Company (OTP) (collectively, the Applicants) submitted a petition requesting certain exemptions to data requirements be approved by the Minnesota Public Utilities Commission (Commission).[1] The Exemption Petition was filed pursuant to Minn. R. 7849.0200, subp. 6 and is intended to tailor the data provided by the Applicants in a future certificate of need (CN) petition they intend to make.[2]

In a future filing the Applicants will be requesting a CN for the Maple River—Cuyuna 345 kV Transmission Project (Project). The proposed Project consists of a new 345 kV single-circuit transmission line, on double-circuit capable structures, connecting MP's Cuyuna Substation in Crow Wing County, Minnesota to OTP's Maple River Substation in Cass County, North Dakota. The Applicants intend to submit a Certificate of Need (CN) application pursuant to Minn. Stat. § 216B.243[3] in February 2026 and a route permit application pursuant to Minn. Stat. § 216I.05[4] in the third quarter of 2026.[5]

The proposed Project was studied, reviewed, and approved by the Midcontinent Independent System Operator, Inc. (MISO) as part of its Long-Range Transmission Planning (LRTP) Tranche 2.1 portfolio of projects included in the 2024 MISO Transmission Expansion Plan (MTEP24). The Applicants state that the proposed Project is needed to enhance grid reliability, particularly in northwestern and central Minnesota and eastern North Dakota.[6]

II. PROCEDURAL BACKGROUND

August 27, 2025	The Applicants filed the Exemption Petition, seeking approval of a data exemptions for a future CN petition for the Project.
September 2, 2025	The Commission issued a Notice of Comment Periods on the Exemption Petition.[7]

[1] *In the Matter of the Application for a Certificate of Need for the Maple River to Cuyuna 345 kV Transmission Line Project,* MP, GRE, and OTP, Exemption Petition, August 27, 2025, Docket No. E015,ET2,E017/CN-25-109, (eDockets) 20258-222473-01, (hereinafter "Exemption Petition").
[2] *See* Minn. R. 7849.0200
[3] *See* Minn. Stat. § 216B.243
[4] *See* Minn. Stat. § 216I.05
[5] Exemption Petition at 1.
[6] Exemption Petition at 4.
[7] *In the Matter of the Application for a Certificate of Need for the Maple River to Cuyuna 345 kV Transmission Line Project, Notice of Comment Period on Request for Exemption From Certain Certificate of Need Application Content Requirements,* September 2, 2025, Docket No. E015,ET2,E017/CN-25-109, (eDockets) 20259-222608-01, (Hereinafter "Notice").

According to the Notice the following topic is open for Comment: "Should the Commission grant the exemptions to the certificate of need application content requirements as requested by the Applicants' in their August 27, 2025 filing."

III. DEPARTMENT ANALYSIS

A. GOVERNING STATUTES AND RULES

The Applicants filed the Exemption Petition pursuant to Minn. R. 7849.0200, subp. 6, which states, in part:

> Before submitting an application, a person is exempted from any data requirement of parts 7849.0010 to 7849.0400 if the person (1) requests an exemption from specified rules, in writing to the commission, and (2) shows that the data requirement is unnecessary to determine the need for the proposed facility or may be satisfied by submitting another document. A request for exemption must be filed at least 45 days before submitting an application.

Based on this standard, the Commission may grant exemptions when the data requirements are shown to be unnecessary to determine need or can be satisfied by submitting alternative information. In the Petition, the Applicants request to be exempted from certain data requirements of Minn. R. 7849.0010 to 7849.0400.

B. REQUESTED EXEMPTIONS

The Exemption Petition requests exemptions from the following requirements:

- Minn. R. 7849.0260 A(3) and C(6)—Losses;[8]
- Minn. R. 7849.0260 B(4) and (8)—Transmission Lines with Different Terminals or Substations;
- Minn. R. 7849.0270, subps. 1-6—Peak Demand and Annual Consumption Forecast and System Revenue Requirements;[9]
- Minn. R. 7849.0280 subps. (B) through (I)—System Capacity;[10]
- Minn. R. 7849.0290—Conservation;[11]
- Minn. R. 7849.0300—Consequences of Delay;[12] and
- Minn. R. 7849.0340—No Facility Alternative.[13]

[8] See Minn. R. 7849.0260.
[9] See Minn. R. 7849.0270.
[10] See Minn. R. 7849.0280.
[11] See Minn. R. 7849.0290.
[12] See Minn. R. 7849.0300.
[13] See Minn. R. 7849.0340.

The Department examines each exemption request separately. The required criterion is whether the Applicants have shown that "the data requirement is unnecessary to determine the need for the proposed facility or may be satisfied by submitting another document" as discussed above. The Department notes that similar exemptions were approved recently by the Commission in proceedings for other transmission lines resulting from the MISO's LRTP process, which is also the source of the proposed Project.[14]

C. ANALYSIS OF EXEMPTION REQUESTS

C.1. Minn. R. 7849.0260 A(3) and C(6)

Minn. R. 7849.0260 A(3) requires an applicant to provide "the expected losses under projected maximum loading and under projected average loading in the length of the transmission line and at the terminals or substations." Minn. R. 7849.0260 C(6) requires an applicant to provide "its efficiency, expressed for a transmission facility as the estimated losses under projected maximum loading and under projected average loading in the length of the transmission line and at the terminals or substations."

The Applicants request an exemption from Minn. R. 7849.0260 A(3) and C(6). The Applicants propose to provide system losses information in lieu of line-specific losses, the latter of which is required by the rules.

The Department agrees with the Applicants that the requested exemptions are consistent with several prior exemption requests approved by the Commission in other Certificate of Need transmission line dockets and is more relevant to the analysis.[15] Therefore, the Department recommends that the Commission approve the requested exemption from Minn. R. 7849.0260 A(3) and C(6) with the provision of the proposed alternative data.

C.2. Minn. R. 7849.0260 B(4) and (8)

Minn. R. 7849.0260 B(4) requires the Applicants provide "a discussion of the availability of alternatives to the facility, including but not limited to: […] transmission lines with different terminals or substations." Minn. R. 7849.0260 B(8) requires the Applicants provide "a discussion of the availability of alternatives to the facility, including but not limited to: […] any reasonable combinations of the alternatives listed in subitems (1) to (7)."

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[14] For examples *see*: *In the Matter of the Application of Minnesota Power and Great River Energy for a Certificate of Need for the Northland Reliability Project 345 kV Transmission Line*, *Order Approving Requested Exemptions and Notice Plan*, June 21, 2023, Docket No. E015, ET2/CN-22-416, (eDockets) 20236-196704-01; *In the Matter of the Application for a Certificate of Need for the Big Stone South – Alexandria – Big Oaks Transmission Project*, *Order*, April 19, 2023, Docket No. E017, ET2, E002, ET10, E015/CN-22-538, (eDockets) 20234-194943-01.

[15] The Applicants cite the following examples; *In the Matter of the Application of Minnesota Power and Great River Energy for a Certificate of Need for the Northland Reliability Project 345 kV Transmission Line*, Commission, Order Approving Requested Exemptions and Notice Plan, June 21, 2023, Docket No. E015, ET2/CN-22-416, (eDockets) 20236-196704-01. *In re Application of Minnesota Power for a Certificate of Need for the Duluth Loop Reliability Project in St. Louis Cnty.*, Commission, Order Approving Notice Plan and Granting Variances and Exemptions, May 17, 2021, Docket No. E015/CN-21-140, (eDockets) 20215-174194-01.

The Applicants note that Minn. Stat. § 216B.243, subd. 3(6) states in part that "the commission must not require evaluation of alternative end points for a high-voltage transmission line qualifying as a large energy facility unless the alternative end points are (i) consistent with end points identified in a federally registered planning authority transmission plan, or (ii) otherwise agreed to for further evaluation by the applicant." In this case the Applicants have proposed end points that are consistent with MISO's and do not consent to alternative end points.

The Department agrees with the Applicants that Minnesota Statutes limit the consideration of alternative end points in this matter and, therefore, an exemption is appropriate. The Department recommends that the Commission approve the requested exemption from Minn. R. 7849.0260 B(4) and (8).

C.3. Minn. R. 7849.0270, subps. 1-6

Minn. R. 7849.0270 subps. 1-6 contains data requirements related to forecasting peak demand and annual electrical consumption. In general, the rule requires forecast data regarding an applicant's entire service area and system.

The Applicants state that the proposed Project is intended to support reliability of the transmission system in northern Minnesota.[16] To address this need, the Applicants propose to provide "forecast information from their most recent [advanced forecast reports] AFRs filed on July 1, 2025 in Docket No. E-999/PR-25-11."[17] In addition the applicants propose to provide:

- "any other forecast information used in analyzing the need for the Project"—subps 2(A) and 2(B);[18]
- "discussion of the different regional demand scenarios evaluated in the analysis used by the Applicants and MISO to justify the Project"—subps 2(C) and 2(D);[19] and
- "Minnesota Power and Otter Tail proposes to provide the general rate impact of the Maple River – Cuyuna Project on Minnesota Power's and Otter Tail's customers. Great River proposes to provide an explanation of how wholesale electricity costs are spread among users of the transmission grid and the general financial effects of the Project on Great River Energy's member cooperatives."—subp. 2(E).[20]

The Applicants' claim is that the substitute information is better tailored to the need for the proposed Project. Throughout the discussion the Applicants note numerous dockets where the Commission has approved similar exemptions.[21]

[16] Exemption Petition at 7.
[17] Exemption Petition at 7.
[18] Exemption Petition at 8.
[19] Exemption Petition at 8.
[20] Exemption Petition at 9.
[21] Exemption Petition at 7-10.

The Department agrees that the latest AFRs and the additional information specified above would be appropriate to assess need in this case. Therefore, the Department recommends that the Commission approve the requested exemption to Minnesota Rules 7849.0270 subparts 1 to 6 with the provision of the proposed alternative data.

C.4. Minn. R. 7849.0280 subps. (B) through (I)

Minnesota Rules 7849.0280 requires an applicant for a CN to provide information that describes the ability of its existing system to meet forecasted demand; in essence, load and capability information.

The Applicants request that the Commission grant an exemption from Minn. R. 7849.0280 subps. (B) through (I). The Applicants note that the Commission has previously granted exemption requests from Minn. R. 7849.0280 subps. (B) through (I) in several other transmission line CN dockets where issues of transmission adequacy, rather than generation adequacy, were at issue.[22]

The Department agrees with the Applicants that the Commission has approved exemptions to Minn. R. 7849.0280, subps. (B) through (I) in similar circumstances and for similar reasons. Therefore, the Department recommends that the Commission approve the requested exemption to Minn. R. 7849.0280, subps. (B) through (I).

C.5. Minn. R. 7849.0290

Minn. R. 7849.0290 requires various information be provided on an applicant's energy conservation and efficiency programs.

The Applicants propose to provide a summary of their Integrated Resource Plan and Conservation Improvement Plan filings.[23] In addition, the Applicants will also provide information regarding how conservation and energy efficiency was considered by MISO in its evaluation of the proposed Project.[24]

The Department agrees with the Applicants that the Commission has approved exemptions to Minn. R. 7849.0290 for this data in similar proceedings.[25] Also, the most relevant data is how MISO considered energy efficiency in determining the need for the proposed Project. This information will better inform the record as to the need for the proposed Project than the required information and will enable interested parties to pursue further information if desired.

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[22] The Applicants cite the following examples; *In re Application of Minnesota Power for a Certificate of Need for the Duluth Loop Reliability Project in St. Louis Cnty.*, *Order Approving Notice Plan and Granting Variances and Exemptions*, May 17, 2021, Docket No. E015/CN-21-140, (eDockets) 20215-174194-01; *In re Application of Great River Energy and Minnesota Power for a Certificate of Need for the Menahga Area 115 kV Transmission Line Project in Hubbard, Wadena and Becker Counties, Minnesota*, *Order Approving Exemption Request*, December 3, 2014, Docket No. E015/CN-14-787 (eDockets) 201412-105142-01; *In re Application of Great River Energy and Minnesota Power for a Certificate of Need for a 115 kV High Voltage Transmission Line in St. Louis and Carlton Counties*, *Order Approving Exemptions and Proposed Provision of Alternative Data*, November 2, 2010, Docket No. E015, ET2/CN-10-973 (eDockets) 201011-56126-01.

[23] Exemption Petition at 11.

[24] Exemption Petition at 11.

[25] Exemption Petition at 11.

The Department recommends that the Commission approved the requested exemption to Minn. R. 7849.0290 with provision of the proposed alternative data.

C.6. Minn. R. 7849.0300 and 7849.0340

Minn. R. 7849.0300 requires an applicant for a CN to provide detailed information regarding the consequences of delay at three specific, statistically-based levels of demand and energy consumption. Minn. R. 7849.0340 requires an applicant for a CN to provide detailed information regarding the no build alternative at the same three statistically-based levels of demand and energy consumption.

The Applicants state they "will discuss the consequences of delay and a no build alternative in its application, there is no need to discuss these items in terms of three levels of demand."[26] In addition, the Applicants note that the Commission has approved similar partial exemption requests from the requirements of Minn. R. 7849.0300 and 7849.0340 in other transmission line Certificate of Need dockets.[27]

The Department agrees with the Applicants that information on the consequences of delay and a no build alternative tied to three specific, statistically-based levels of demand and energy consumption is not likely to be a useful part of the analysis for the proposed Project and that a general discussion is appropriate; as noted in the Exemption Petition, similar exemptions were approved in other transmission CNs. Therefore, the Department recommends that the Commission approve the requested exemption to Minnesota Rules 7849.0300 and 7849.0340 with the provision of the proposed alternative data.

D. COMMISSION'S NOTICE

According to the Notice the following topic is open for comment: "Should the Commission grant the exemptions to the certificate of need application content requirements as requested by the Applicants' in their August 27, 2025 filing." The Department recommends the Commission approve the Exemption Petition as modified by the Department. The Department's recommendations are below.

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[26] Exemption Petition at 12.

[27] The Applicants cite the following examples: *In re Application of Minnesota Power for a Certificate of Need for the Duluth Loop Reliability Project in St. Louis Cnty.*, *Order Approving Notice Plan and Granting Variances and Exemptions*, May 17, 2021, Docket No. E015/CN-21-140, (eDockets) 20215-174194-01; *In re Application of Great River Energy and Minnesota Power for a Certificate of Need for the Menahga Area 115 kV Transmission Line Project in Hubbard, Wadena and Becker Counties, Minnesota*, *Order Approving Exemption Request*, December 3, 2014, Docket No. E015/CN-14-787, (eDockets) 201412-105142-01; *In re Request of Minnesota Power for a Certificate of Need for the Great Northern Transmission Line*, *Order Approving Notice Plan, Granting Variance Request, and Approving Exemption Request*, February 28, 2013, Docket No. E015/CN-12-1163, (eDockets) 20132-84248-01; *In the Matter of the Application of Northern States Power Company d/b/a Xcel Energy and Great River Energy for a Certificate of Need for the Upgrade of the Southwest Twin Cities (SWTC) Chaska Area 69 kV Transmission Line to 115 kV Capacity*, *Order Granting the Company's Exemption Request*, November 4, 2011, Docket No. E002/CN-11-826 (eDockets) 201111-68102-01.

IV. DEPARTMENT RECOMMENDATIONS

Based on analysis of the information in the record, the Department has prepared recommendations, which are provided below. The recommendations correspond to the subheadings of Section III above."

C. ANALYSIS OF EXEMPTION REQUESTS

- C.1. The Department recommends that the Commission approve the requested exemption from Minn. R. 7849.0260 A(3) and C(6) with the provision of the proposed alternative.
- C.2. The Department recommends that the Commission approve the requested exemption from Minn. R. 7849.0260 B(4) and (8).
- C.3. The Department recommends that the Commission approve the requested exemption to Minnesota Rules 7849.0270 subparts 1 to 6 with the provision of the proposed alternative data.
- C.4. The Department recommends the Commission modify the requested exemption and approve the requested exemption to Minn. R. 7849.0280, subps. (B) through (I).
- C.5. The Department recommends that the Commission approved the requested exemption to Minn. R. 7849.0290 with provision of the proposed alternative data.
- C.6. The Department recommends that the Commission approve the requested exemption to Minnesota Rules 7849.0300 and 7849.0340 with the provision of the proposed alternative data.

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October 6, 2025

—Via Electronic Filing—

Sasha Bergman
Executive Secretary
Minnesota Public Utilities Commission
121 Seventh Place East, Suite 350
St. Paul, MN 55101-2147

Re: Exemption Request – Reply Comments
In the Matter of the Application for a Certificate of Need for the Maple River to Cuyuna 345 kV Transmission Line Project
Docket No. E015,ET2,E017/CN-25-109

Dear Ms. Bergman:

Minnesota Power, Great River Energy, and Otter Tail Power Company (collectively the "Applicants"), submit these Reply Comments to the Initial Comments filed by the Minnesota Department of Commerce, Division of Energy Resources ("Department") on the Applicants' Exemption Request for the Maple River – Cuyuna 345 kV Transmission Project ("Project").

Applicants requested, "that the Commission grant an exemption from Minn. R. 7849.0280, subps. (B) through (I) and an exemption with alternative data from the Applicants' [Annual Forecast Reports ("AFRs")] provided for Minn. R. 7849.0280, subp. (A)."[1] The Department recommends: "the Commission modify the requested exemption and approve the requested exemption to Minn. R. 7849.0280, subps. (B) through (I)" but did not address the Applicants' request for substitute information for 7849.0280, subp. (A).[2]

The Commission has previously approved the use of AFRs as substitute information for Minn. R. 7849.0280, Subp. (A).[3] Therefore, Applicants renew their request for substitute information for Minn. R. 7849.0280, subp. (A).

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[1] *In the Matter of the Application for a Certificate of Need for the Maple River to Cuyuna 345 kV Transmission Line Project*, Docket No. E015,ET2,E017/CN-25-109, Applicant's Exemption Request at 10 (Aug. 27, 2025) (eDocket No. 20258-222473-01).
[2] *In the Matter of the Application for a Certificate of Need for the Maple River to Cuyuna 345 kV Transmission Line Project*, Docket No. E015,ET2,E017/CN-25-109, Comments of the Minnesota Department of Commerce at 5 and 7 (Sep. 16, 2025) (eDocket No. 20259-223065-02).
[3] *In the Matter of the Application of Minnesota Power and Great River Energy for a Route Permit for the Northland Reliability Project 345 kV Transmission Line,* Docket Nos. E015,ET2/TL-22-415/CN-22-416, Order Approving Exemption Requests at 1 (June 21, 2023) (eDocket No. 20236-196704-01).

Please contact me with any questions.

Sincerely,

/s/ Kodi J. Verhalen
Kodi J. Verhalen
Taft Stettinius & Hollister LLP

On behalf of Minnesota Power, Great River Energy, and Otter Tail Power Company

cc: Service List

COMMERCE DEPARTMENT

October 13, 2025

Sasha Bergman
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, Minnesota 55101-2147

RE: Supplemental Comments of the Minnesota Department of Commerce—Exemption Petition
Docket No. E015,ET2,E017/CN-25-109

Dear Ms. Bergman,

The comment of the Minnesota Department of Commerce (Department) recommended that the exemption request to the data required by Minn. R. 7849.0280 subparts (B) through (I) be granted, but did not directly analyze the request for alternative data to be provided regarding subpart (A)—a brief discussion of power planning programs.[1] In reply comments Minnesota Power, Great River Energy, and Otter Tail Power Company (Applicants) renewed the request regarding Minn. R. 7849.0280 subpart (A) to provide what they consider to be alternative data (A)—their Annual Forecast Report (AFR).[2]

The Department concludes that the AFR data proposed by the Applicants along with information that will be provided under other requirements—regarding how MISO's planning resulted in the proposed project—is reasonable data regarding Minn. R. 7849.0280, subp. A.[3] The Department considers this issue to have been resolved and the Department's recommendations remain as stated in the Department's initial comments except as follows:

- *C.4. The Department recommends the Commission ~~modify the requested exemption and~~ approve the requested exemption to Minn. R. 7849.0280, subps. (B) through (I) and approve the proposed alternative information under subp. (A).*

Sincerely,

/s/ Dr. SYDNIE LIEB
Assistant Commissioner of Regulatory Analysis

SR/ad

[1] *In the Matter of the Application for a Certificate of Need for the Maple River to Cuyuna 345 kV Transmission Line Project,* Department, Comment, September 16, 2025, Docket No. E015,ET2,E017/CN-25-109, (eDockets), 20259-223065-02 at 5, (hereinafter "Department Comment").
[2] Minnesota Power, Great River Energy, and Otter Tail Power Company, Exemption Request - Reply Comments, Docket No. E015,ET2,E017/CN-25-109, (eDockets), 202510-223630-01.
[3] Department Comment, at 4-5.

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Katie J. Sieben	Chair
Hwikwon Ham	Commissioner
Audrey C. Partridge	Commissioner
Joseph K. Sullivan	Commissioner
John A. Tuma	Commissioner

In the Matter of the Application for a Certificate of Need for the Maple River to Cuyuna 345 kV Transmission Line Project	SERVICE DATE: October 21, 2025 DOCKET NO. E-015,ET2,E017/CN-25-109

The above-entitled matter has been considered by the Commission and the following disposition made:

1. **Approved the proposed notice plan as revised.**

2. **Approved the proposed rule variance regarding duplicative notice.**

3. **Approved the proposed rule variance regarding notice timing.**

4. **Approved the requested exemption from Minn. R. 7849.0260 A(3) and C(6) with the provision of the proposed alternative.**

5. **Approved the requested exemption from Minn. R. 7849.0260 B(4) and (8).**

6. **Approved the requested exemption to Minnesota Rules 7849.0270 subparts 1 to 6 with the provision of the proposed alternative data.**

7. **Approved the requested exemption to Minn. R. 7849.0280, subps. (B) through (I) and approved the proposed alternative information under subp. (A).**

8. **Approved the requested exemption to Minn. R. 7849.0290 with provision of the proposed alternative data.**

9. **Approved the requested exemption to Minnesota Rules 7849.0300 and 7849.0340 with the provision of the proposed alternative data.**

This decision is issued by the Commission's consent calendar subcommittee, under a delegation of authority granted under Minn. Stat. § 216A.03, subd. 8 (a). Unless a party, a participant, or a Commissioner files an objection to this decision within ten days of receiving it, it will become the Order of the full Commission under Minn. Stat. § 216A.03, subd. 8 (b).

The Commission agrees with and adopts the recommendations of the Department of Commerce, which are attached and hereby incorporated into the Order.

BY ORDER OF THE COMMISSION

Sasha Bergman
Executive Secretary

To request this document in another format such as large print or audio, call 651.296.0406 (voice). Persons with a hearing or speech impairment may call using their preferred Telecommunications Relay Service or email consumer.puc@state.mn.us for assistance.

COMMERCE DEPARTMENT

September 16, 2025

Sasha Bergman
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. E015,ET2,E017/CN-25-109

Dear Ms. Bergman:

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

In the Matter of the Application for a Certificate of Need for the Maple River – Cuyuna 345 kV Transmission Line Project: Request for Exemptions.

The Petition was filed by Minnesota Power, Great River Energy, and Otter Tail Power Company on August 27, 2025.

The Department recommends **approval with modifications** and is available to answer any questions the Minnesota Public Utilities Commission may have.

Sincerely,

/s/ Dr. SYDNIE LIEB
Assistant Commissioner of Regulatory Analysis

SR/ad
Attachment

Before the Minnesota Public Utilities Commission

Comments of the Minnesota Department of Commerce

Docket No. E015,ET2,E017/CN-25-109

I. INTRODUCTION

Minnesota Power (MP) Great River Energy (GRE), and Otter Tail Power Company (OTP) (collectively, the Applicants) submitted a petition requesting certain exemptions to data requirements be approved by the Minnesota Public Utilities Commission (Commission).[1] The Exemption Petition was filed pursuant to Minn. R. 7849.0200, subp. 6 and is intended to tailor the data provided by the Applicants in a future certificate of need (CN) petition they intend to make.[2]

In a future filing the Applicants will be requesting a CN for the Maple River—Cuyuna 345 kV Transmission Project (Project). The proposed Project consists of a new 345 kV single-circuit transmission line, on double-circuit capable structures, connecting MP's Cuyuna Substation in Crow Wing County, Minnesota to OTP's Maple River Substation in Cass County, North Dakota. The Applicants intend to submit a Certificate of Need (CN) application pursuant to Minn. Stat. § 216B.243[3] in February 2026 and a route permit application pursuant to Minn. Stat. § 216I.05[4] in the third quarter of 2026.[5]

The proposed Project was studied, reviewed, and approved by the Midcontinent Independent System Operator, Inc. (MISO) as part of its Long-Range Transmission Planning (LRTP) Tranche 2.1 portfolio of projects included in the 2024 MISO Transmission Expansion Plan (MTEP24). The Applicants state that the proposed Project is needed to enhance grid reliability, particularly in northwestern and central Minnesota and eastern North Dakota.[6]

II. PROCEDURAL BACKGROUND

August 27, 2025	The Applicants filed the Exemption Petition, seeking approval of a data exemptions for a future CN petition for the Project.
September 2, 2025	The Commission issued a Notice of Comment Periods on the Exemption Petition.[7]

[1] *In the Matter of the Application for a Certificate of Need for the Maple River to Cuyuna 345 kV Transmission Line Project,* MP, GRE, and OTP, Exemption Petition, August 27, 2025, Docket No. E015,ET2,E017/CN-25-109, (eDockets) 20258-222473-01, (hereinafter "Exemption Petition").
[2] *See* Minn. R. 7849.0200
[3] *See* Minn. Stat. § 216B.243
[4] *See* Minn. Stat. § 216I.05
[5] Exemption Petition at 1.
[6] Exemption Petition at 4.
[7] *In the Matter of the Application for a Certificate of Need for the Maple River to Cuyuna 345 kV Transmission Line Project, Notice of Comment Period on Request for Exemption From Certain Certificate of Need Application Content Requirements,* September 2, 2025, Docket No. E015,ET2,E017/CN-25-109, (eDockets) 20259-222608-01, (Hereinafter "Notice").

According to the Notice the following topic is open for Comment: "Should the Commission grant the exemptions to the certificate of need application content requirements as requested by the Applicants' in their August 27, 2025 filing."

III. DEPARTMENT ANALYSIS

A. GOVERNING STATUTES AND RULES

The Applicants filed the Exemption Petition pursuant to Minn. R. 7849.0200, subp. 6, which states, in part:

> Before submitting an application, a person is exempted from any data requirement of parts 7849.0010 to 7849.0400 if the person (1) requests an exemption from specified rules, in writing to the commission, and (2) shows that the data requirement is unnecessary to determine the need for the proposed facility or may be satisfied by submitting another document. A request for exemption must be filed at least 45 days before submitting an application.

Based on this standard, the Commission may grant exemptions when the data requirements are shown to be unnecessary to determine need or can be satisfied by submitting alternative information. In the Petition, the Applicants request to be exempted from certain data requirements of Minn. R. 7849.0010 to 7849.0400.

B. REQUESTED EXEMPTIONS

The Exemption Petition requests exemptions from the following requirements:

- Minn. R. 7849.0260 A(3) and C(6)—Losses;[8]
- Minn. R. 7849.0260 B(4) and (8)—Transmission Lines with Different Terminals or Substations;
- Minn. R. 7849.0270, subps. 1-6—Peak Demand and Annual Consumption Forecast and System Revenue Requirements;[9]
- Minn. R. 7849.0280 subps. (B) through (I)—System Capacity;[10]
- Minn. R. 7849.0290—Conservation;[11]
- Minn. R. 7849.0300—Consequences of Delay;[12] and
- Minn. R. 7849.0340—No Facility Alternative.[13]

[8] See Minn. R. 7849.0260.
[9] See Minn. R. 7849.0270.
[10] See Minn. R. 7849.0280.
[11] See Minn. R. 7849.0290.
[12] See Minn. R. 7849.0300.
[13] See Minn. R. 7849.0340.

The Department examines each exemption request separately. The required criterion is whether the Applicants have shown that "the data requirement is unnecessary to determine the need for the proposed facility or may be satisfied by submitting another document" as discussed above. The Department notes that similar exemptions were approved recently by the Commission in proceedings for other transmission lines resulting from the MISO's LRTP process, which is also the source of the proposed Project.[14]

C. ANALYSIS OF EXEMPTION REQUESTS

C.1. Minn. R. 7849.0260 A(3) and C(6)

Minn. R. 7849.0260 A(3) requires an applicant to provide "the expected losses under projected maximum loading and under projected average loading in the length of the transmission line and at the terminals or substations." Minn. R. 7849.0260 C(6) requires an applicant to provide "its efficiency, expressed for a transmission facility as the estimated losses under projected maximum loading and under projected average loading in the length of the transmission line and at the terminals or substations."

The Applicants request an exemption from Minn. R. 7849.0260 A(3) and C(6). The Applicants propose to provide system losses information in lieu of line-specific losses, the latter of which is required by the rules.

The Department agrees with the Applicants that the requested exemptions are consistent with several prior exemption requests approved by the Commission in other Certificate of Need transmission line dockets and is more relevant to the analysis.[15] Therefore, the Department recommends that the Commission approve the requested exemption from Minn. R. 7849.0260 A(3) and C(6) with the provision of the proposed alternative data.

C.2. Minn. R. 7849.0260 B(4) and (8)

Minn. R. 7849.0260 B(4) requires the Applicants provide "a discussion of the availability of alternatives to the facility, including but not limited to: […] transmission lines with different terminals or substations." Minn. R. 7849.0260 B(8) requires the Applicants provide "a discussion of the availability of alternatives to the facility, including but not limited to: […] any reasonable combinations of the alternatives listed in subitems (1) to (7)."

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[14] For examples *see*: *In the Matter of the Application of Minnesota Power and Great River Energy for a Certificate of Need for the Northland Reliability Project 345 kV Transmission Line*, *Order Approving Requested Exemptions and Notice Plan*, June 21, 2023, Docket No. E015, ET2/CN-22-416, (eDockets) 20236-196704-01; *In the Matter of the Application for a Certificate of Need for the Big Stone South – Alexandria – Big Oaks Transmission Project*, *Order*, April 19, 2023, Docket No. E017, ET2, E002, ET10, E015/CN-22-538, (eDockets) 20234-194943-01.

[15] The Applicants cite the following examples; *In the Matter of the Application of Minnesota Power and Great River Energy for a Certificate of Need for the Northland Reliability Project 345 kV Transmission Line*, Commission, Order Approving Requested Exemptions and Notice Plan, June 21, 2023, Docket No. E015, ET2/CN-22-416, (eDockets) 20236-196704-01. *In re Application of Minnesota Power for a Certificate of Need for the Duluth Loop Reliability Project in St. Louis Cnty.*, Commission, Order Approving Notice Plan and Granting Variances and Exemptions, May 17, 2021, Docket No. E015/CN-21-140, (eDockets) 20215-174194-01.

The Applicants note that Minn. Stat. § 216B.243, subd. 3(6) states in part that "the commission must not require evaluation of alternative end points for a high-voltage transmission line qualifying as a large energy facility unless the alternative end points are (i) consistent with end points identified in a federally registered planning authority transmission plan, or (ii) otherwise agreed to for further evaluation by the applicant." In this case the Applicants have proposed end points that are consistent with MISO's and do not consent to alternative end points.

The Department agrees with the Applicants that Minnesota Statutes limit the consideration of alternative end points in this matter and, therefore, an exemption is appropriate. The Department recommends that the Commission approve the requested exemption from Minn. R. 7849.0260 B(4) and (8).

C.3. Minn. R. 7849.0270, subps. 1-6

Minn. R. 7849.0270 subps. 1-6 contains data requirements related to forecasting peak demand and annual electrical consumption. In general, the rule requires forecast data regarding an applicant's entire service area and system.

The Applicants state that the proposed Project is intended to support reliability of the transmission system in northern Minnesota.[16] To address this need, the Applicants propose to provide "forecast information from their most recent [advanced forecast reports] AFRs filed on July 1, 2025 in Docket No. E-999/PR-25-11."[17] In addition the applicants propose to provide:

- "any other forecast information used in analyzing the need for the Project"—subps 2(A) and 2(B);[18]
- "discussion of the different regional demand scenarios evaluated in the analysis used by the Applicants and MISO to justify the Project"—subps 2(C) and 2(D);[19] and
- "Minnesota Power and Otter Tail proposes to provide the general rate impact of the Maple River – Cuyuna Project on Minnesota Power's and Otter Tail's customers. Great River proposes to provide an explanation of how wholesale electricity costs are spread among users of the transmission grid and the general financial effects of the Project on Great River Energy's member cooperatives."—subp. 2(E).[20]

The Applicants' claim is that the substitute information is better tailored to the need for the proposed Project. Throughout the discussion the Applicants note numerous dockets where the Commission has approved similar exemptions.[21]

[16] Exemption Petition at 7.
[17] Exemption Petition at 7.
[18] Exemption Petition at 8.
[19] Exemption Petition at 8.
[20] Exemption Petition at 9.
[21] Exemption Petition at 7-10.

The Department agrees that the latest AFRs and the additional information specified above would be appropriate to assess need in this case. Therefore, the Department recommends that the Commission approve the requested exemption to Minnesota Rules 7849.0270 subparts 1 to 6 with the provision of the proposed alternative data.

C.4. Minn. R. 7849.0280 subps. (B) through (I)

Minnesota Rules 7849.0280 requires an applicant for a CN to provide information that describes the ability of its existing system to meet forecasted demand; in essence, load and capability information.

The Applicants request that the Commission grant an exemption from Minn. R. 7849.0280 subps. (B) through (I). The Applicants note that the Commission has previously granted exemption requests from Minn. R. 7849.0280 subps. (B) through (I) in several other transmission line CN dockets where issues of transmission adequacy, rather than generation adequacy, were at issue.[22]

The Department agrees with the Applicants that the Commission has approved exemptions to Minn. R. 7849.0280, subps. (B) through (I) in similar circumstances and for similar reasons. Therefore, the Department recommends that the Commission approve the requested exemption to Minn. R. 7849.0280, subps. (B) through (I).

C.5. Minn. R. 7849.0290

Minn. R. 7849.0290 requires various information be provided on an applicant's energy conservation and efficiency programs.

The Applicants propose to provide a summary of their Integrated Resource Plan and Conservation Improvement Plan filings.[23] In addition, the Applicants will also provide information regarding how conservation and energy efficiency was considered by MISO in its evaluation of the proposed Project.[24]

The Department agrees with the Applicants that the Commission has approved exemptions to Minn. R. 7849.0290 for this data in similar proceedings.[25] Also, the most relevant data is how MISO considered energy efficiency in determining the need for the proposed Project. This information will better inform the record as to the need for the proposed Project than the required information and will enable interested parties to pursue further information if desired.

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[22] The Applicants cite the following examples; *In re Application of Minnesota Power for a Certificate of Need for the Duluth Loop Reliability Project in St. Louis Cnty.*, *Order Approving Notice Plan and Granting Variances and Exemptions*, May 17, 2021, Docket No. E015/CN-21-140, (eDockets) 20215-174194-01; *In re Application of Great River Energy and Minnesota Power for a Certificate of Need for the Menahga Area 115 kV Transmission Line Project in Hubbard, Wadena and Becker Counties, Minnesota*, *Order Approving Exemption Request*, December 3, 2014, Docket No. E015/CN-14-787 (eDockets) 201412-105142-01; *In re Application of Great River Energy and Minnesota Power for a Certificate of Need for a 115 kV High Voltage Transmission Line in St. Louis and Carlton Counties*, *Order Approving Exemptions and Proposed Provision of Alternative Data*, November 2, 2010, Docket No. E015, ET2/CN-10-973 (eDockets) 201011-56126-01.

[23] Exemption Petition at 11.

[24] Exemption Petition at 11.

[25] Exemption Petition at 11.

The Department recommends that the Commission approved the requested exemption to Minn. R. 7849.0290 with provision of the proposed alternative data.

C.6. Minn. R. 7849.0300 and 7849.0340

Minn. R. 7849.0300 requires an applicant for a CN to provide detailed information regarding the consequences of delay at three specific, statistically-based levels of demand and energy consumption. Minn. R. 7849.0340 requires an applicant for a CN to provide detailed information regarding the no build alternative at the same three statistically-based levels of demand and energy consumption.

The Applicants state they "will discuss the consequences of delay and a no build alternative in its application, there is no need to discuss these items in terms of three levels of demand."[26] In addition, the Applicants note that the Commission has approved similar partial exemption requests from the requirements of Minn. R. 7849.0300 and 7849.0340 in other transmission line Certificate of Need dockets.[27]

The Department agrees with the Applicants that information on the consequences of delay and a no build alternative tied to three specific, statistically-based levels of demand and energy consumption is not likely to be a useful part of the analysis for the proposed Project and that a general discussion is appropriate; as noted in the Exemption Petition, similar exemptions were approved in other transmission CNs. Therefore, the Department recommends that the Commission approve the requested exemption to Minnesota Rules 7849.0300 and 7849.0340 with the provision of the proposed alternative data.

D. COMMISSION'S NOTICE

According to the Notice the following topic is open for comment: "Should the Commission grant the exemptions to the certificate of need application content requirements as requested by the Applicants' in their August 27, 2025 filing." The Department recommends the Commission approve the Exemption Petition as modified by the Department. The Department's recommendations are below.

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[26] Exemption Petition at 12.

[27] The Applicants cite the following examples: *In re Application of Minnesota Power for a Certificate of Need for the Duluth Loop Reliability Project in St. Louis Cnty.*, *Order Approving Notice Plan and Granting Variances and Exemptions*, May 17, 2021, Docket No. E015/CN-21-140, (eDockets) 20215-174194-01; *In re Application of Great River Energy and Minnesota Power for a Certificate of Need for the Menahga Area 115 kV Transmission Line Project in Hubbard, Wadena and Becker Counties, Minnesota*, *Order Approving Exemption Request*, December 3, 2014, Docket No. E015/CN-14-787, (eDockets) 201412-105142-01; *In re Request of Minnesota Power for a Certificate of Need for the Great Northern Transmission Line*, *Order Approving Notice Plan, Granting Variance Request, and Approving Exemption Request*, February 28, 2013, Docket No. E015/CN-12-1163, (eDockets) 20132-84248-01; *In the Matter of the Application of Northern States Power Company d/b/a Xcel Energy and Great River Energy for a Certificate of Need for the Upgrade of the Southwest Twin Cities (SWTC) Chaska Area 69 kV Transmission Line to 115 kV Capacity*, *Order Granting the Company's Exemption Request*, November 4, 2011, Docket No. E002/CN-11-826 (eDockets) 201111-68102-01.

IV. DEPARTMENT RECOMMENDATIONS

Based on analysis of the information in the record, the Department has prepared recommendations, which are provided below. The recommendations correspond to the subheadings of Section III above."

C. ANALYSIS OF EXEMPTION REQUESTS

- C.1. The Department recommends that the Commission approve the requested exemption from Minn. R. 7849.0260 A(3) and C(6) with the provision of the proposed alternative.
- C.2. The Department recommends that the Commission approve the requested exemption from Minn. R. 7849.0260 B(4) and (8).
- C.3. The Department recommends that the Commission approve the requested exemption to Minnesota Rules 7849.0270 subparts 1 to 6 with the provision of the proposed alternative data.
- C.4. The Department recommends the Commission modify the requested exemption and approve the requested exemption to Minn. R. 7849.0280, subps. (B) through (I).
- C.5. The Department recommends that the Commission approved the requested exemption to Minn. R. 7849.0290 with provision of the proposed alternative data.
- C.6. The Department recommends that the Commission approve the requested exemption to Minnesota Rules 7849.0300 and 7849.0340 with the provision of the proposed alternative data.

COMMERCE DEPARTMENT

September 16, 2025

Sasha Bergman
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. E015,ET2,E017/CN-25-109

Dear Ms. Bergman:

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

In the Matter of the Application for a Certificate of Need for the Maple River – Cuyuna 345 kV Transmission Line Project: Notice Plan Petition.

The Petition was filed by Minnesota Power, Great River Energy, and Otter Tail Power Company on August 27, 2025.

The Department recommends **clarifications be filed in reply comments** and is available to answer any questions the Minnesota Public Utilities Commission may have.

Sincerely,

/s/ Dr. SYDNIE LIEB
Assistant Commissioner of Regulatory Analysis

SR/ad
Attachment

COMMERCE DEPARTMENT

Before the Minnesota Public Utilities Commission

Comments of the Minnesota Department of Commerce

Docket No. E015,ET2,E017/CN-25-109

I. INTRODUCTION

Minnesota Power (MP) Great River Energy (GRE), and Otter Tail Power Company (OTP) (collectively, the Applicants) submitted a notice plan petition for approval by the Minnesota Public Utilities Commission (Commission).[1] The Notice Petition was filed pursuant to Minn. R. 7829.2550[2] and is intended to provide notice to all persons reasonably likely to be affected by the Maple River – Cuyuna 345 kV Transmission Project (Project). The Project consists of a new 345 kV single-circuit transmission line, on double-circuit capable structures, connecting MP's Cuyuna Substation in Crow Wing County to OTP's Maple River Substation in Cass County, North Dakota. The Applicants intend to submit a Certificate of Need (CN) application pursuant to Minn. Stat. § 216B.243[3] in February 2026 and a route permit application pursuant to Minn. Stat. § 216I.05[4] in the third quarter of 2026.

The proposed Project was studied, reviewed, and approved by the Midcontinent Independent System Operator, Inc. (MISO) as part of its Long-Range Transmission Planning (LRTP) Tranche 2.1 portfolio of projects included in the 2024 MISO Transmission Expansion Plan (MTEP24). The Applicants state that the proposed Project is needed to enhance grid reliability, particularly in northwestern and central Minnesota and eastern North Dakota.

II. PROCEDURAL BACKGROUND

August 27, 2025	The Applicants filed the Notice Petition, seeking approval of a notice plan for the Project.

III. DEPARTMENT ANALYSIS

A. GOVERNING STATUTES AND RULES

The Applicants filed the Notice Petition pursuant to Minnesota Rules 7829.2550, subp. 1 which states, in part "[t]hree months before filing a certificate of need application for a high-voltage transmission line as defined by Minnesota Statutes, section 216B.2421, the applicant shall file a proposed plan for providing notice to all persons reasonably likely to be affected by the proposed line."

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[1] *In the Matter of the Application for a Certificate of Need for the Maple River to Cuyuna 345 kV Transmission Line Project,* MP, GRE, and OTP, Notice Petition, August 27, 2025, Docket No. E015,ET2,E017/CN-25-109, (eDockets) 20258-222474-01, (hereinafter "Notice Petition").

[2] *See* Minn. R. 7829.2550.

[3] *See* Minn. Stat. § 216B.243.

[4] *See* Minn. Stat. § 216I.05.

Minn. Stat. § 216B.2421[5] includes in its definition of a Large Energy Facility (LEF) "any high-voltage transmission line with a capacity of 300 kilovolts or more and greater than one mile in length in Minnesota." Given that the proposed Project is a 345 kV transmission line substantially longer than one mile, the proposed Project falls within the definition of "large energy facility" and, therefore, requires a notice plan.

B. TYPES OF NOTICE

Minnesota Rules 7829.2550, subp. 3,[6] requires types of notice as follows:

- direct mail notice, based on county tax assessment rolls, to landowners reasonably likely to be affected by the proposed transmission line;
- direct mail notice to all mailing addresses within the area reasonably likely to be affected by the proposed transmission line;
- direct mail notice to tribal governments and to the governments of towns, statutory cities, home rule charter cities, and counties whose jurisdictions are reasonably likely to be affected by the proposed transmission line; and
- newspaper notice to members of the public in areas reasonably likely to be affected by the proposed transmission line.

The area proposed to be included in notices (Notice Area) is shown in Attachment A of the Notice Petition. The Notice Petition further states that the Notice Area:

> consists of a series of corridors that are generally three miles wide and centered on existing high voltage transmission lines. The Notice Area expands up to nearly 14 miles wide in some areas to provide routing flexibility. The Notice Area crosses portions of stretches across Becker, Cass, Clay, Crow Wing, Hubbard, Otter Tail, Wadena, and Wilkin Counties.[7]

The list of individuals and entities to be provided notice is to be complied by Applicants is as follows:

- Regarding landowner notice—Applicants have obtained tax landowner names and addresses within the Notice Area using geospatial information system ("GIS") county parcel records.[8]
- Regarding notice to mailing addresses—Applicants have obtained a list of mailing addresses in the Notice Area from Becker, Cass, Clay, Crow Wing, Hubbard, Otter Tail, Wadena, and Wilkin Counties.[9]

[5] *See* Minn. Stat. § 216B.2421.
[6] *See* Minn. R. 7829.2550.
[7] Notice Petition at 2-3.
[8] Notice Petition at 3.
[9] Notice Petition at 3.

- Regarding notice to tribal governments—Applicants will provide direct mail notice to each of the 11 federally recognized Tribal Nations in Minnesota, as well as the Minnesota Indian Affairs Counsel.[10]
- Regarding notice to local governmental jurisdictions—Applicants propose to provide direct mail notice to lead administration personnel and elected officials in local governments and to those state senators and state representatives whose districts are within the Notice Area.[11]
- Regarding newspaper notice—Applicants propose to place notice advertisements in several newspapers listed in Table 1 of the Notice Petition.[12]

After reviewing the Petition's Table 1, Figure 1 of Attachment A, Attachment B-1 and Attachment B-2, the Department notes several discrepancies:

- The cities of Sabin, Breezy Point, and Motley appear to be in or near the notice corridors on the map in Attachment A but are not listed as receiving notice.
- The city of Underwood is listed as receiving notice but is far from the corridors on the map in Attachment A and no other city nearby is getting notice.
- Sverdup Township is listed as receiving notice but is just north of Underwood and not near the notice area depicted in Attachment A.
- Pine Lake Township is listed as receiving notice but is just east of Perham and adjoining townships are not getting notice.
- Spring Creek Township is listed as receiving notice but is just west of Ogema and adjoining townships are not getting notice.
- Wadena Township is listed as receiving notice but is just south and east of city of Wadena and not near the notice area depicted in Attachment A.

The Department recommends the Applicants review the map depicted in Attachment A and lists of local governments to be provided notice as shown in Attachment B-2 and reconcile the differences in reply comments.

C. CONTENT OF NOTICE

Minnesota Rules 7829.2550, subp. 4[13] require the notices to provide the following information:

[10] Notice Petition at 3.
[11] Notice Petition at 4; see Attachment B-2 of the Notice Petition for detailed information.
[12] Notice Petition at 4.
[13] *See* Minn. R. 7829.2550.

- a map showing the end points of the line and existing transmission facilities in the area;
- a description of general right-of-way requirements for a line of the size and voltage proposed and a statement that the applicant intends to acquire property rights for the right-of-way that the proposed line will require;
- a notice that the line cannot be constructed unless the Commission certifies that it is needed;
- the Commission's mailing address, telephone number, and website;
- if the applicant is a utility subject to chapter 7848, the address of the website on which the utility applicant will post or has posted its biennial transmission projects report required under that chapter;
- a statement that the Environmental Quality Board[14] will be preparing an environmental report on each high-voltage transmission line for which certification is requested;
- a brief explanation of how to get on the mailing list for the Environmental Quality Board's proceeding; and
- a statement that requests for certification of high-voltage transmission lines are governed by Minnesota law, including specifically chapter 4410, parts 7849.0010 to 7849.0400, and 7849.1000 to 7849.2100, and Minnesota Statutes, section 216B.243.

The Department reviewed the text of the proposed landowner/resident/governmental official notice provided in Attachment A of the Notice Petition and concludes that the proposal contains the required information. The Department notes that the Applicants did not provide the text for the newspaper notice in the Notice Petition. The Department recommends the Applicants provide the proposed text for the newspaper notice in reply comments.

D. DUPLICATIVE NOTICE

Table 1 of the Notice Petition shows that the Applicants propose to publish notice in the Star Tribune, a paper of statewide circulation. This notice will be published shortly before the CN application is filed. Thus, the Applicants request that the Commission vary the requirement under Minn. R. 7829.2500,[15] subp. 5 and remove the additional requirement to publish notice of the application in a statewide paper after the CN application is filed with the Commission.

Minn. R. 7829.3200 governs such variance requests and establishes the following criteria:

1. enforcement of the rule would impose an excessive burden upon the applicant or others affected by the rule;

[14] This function has since been transferred to the Commission. See Laws of Minn. 2005, ch. 97, art. 3.
[15] *See* Minn. R. 7829.2500.

2. granting the variance would not adversely affect the public interest; and
3. granting the variance would not conflict with standards imposed by law.[16]

The Applicants conclude that the requirements for a variance are met as follows:

1. The requirement would be an excessive burden as it requires duplicate notice and associated expense without a corresponding benefit;
2. the public interest would not be adversely affected because the public will receive the pre-application newspaper notice; and
3. the Commission has previously granted such a variance and there is no conflict with any standards imposed by law.[17]

The Department agrees with the Applicants' assessment and recommends that the Commission approve the proposed rule variance regarding duplicative notice.

E. NOTICE TIMING

Minnesota Rules 7829.2550, subp. 6, requires an applicant to implement the notice plan within 30 days of its approval by the Commission.[18] In this case the Applicants request that the Commission grant a variance and direct the notices occur no more than 90 days and no less than two weeks prior to the filing of the CN application.

The Applicants conclude that the requirements for a variance are met as follows:

1. the notice requirements would burden all parties by separating notice provided to interested stakeholders from the start of the proceeding;
2. granting the variance would not adversely affect the public interest; and
3. granting a variance would not conflict with standards imposed by law.

The Applicants also note that the Commission has approved similar variance requests in past CN dockets. The Department agrees with the Applicants assessment and recommends that the Commission approve the proposed rule variance regarding notice timing.

IV. DEPARTMENT RECOMMENDATIONS

Based on analysis of the information in the record, the Department has prepared recommendations, which are provided below. The recommendations correspond to the subheadings of Section III above.

[16] *See* Minn. R. 7829.3200.
[17] Notice Petition at 5.
[18] *See* Minn. R. 7829.2500

B. TYPES OF NOTICE

- The Department recommends the Applicants review the map depicted in Attachment A and lists of local governments to be provided notice as shown in Attachment B-2 and reconcile the differences in reply comments.

C. CONTENT OF NOTICE

- The Department recommends the Applicants provide the proposed text for the newspaper notice in reply comments.

D. DUPLICATIVE NOTICE

- The Department recommends that the Commission approve the proposed rule variance regarding duplicative notice.

E. NOTICE TIMING

- The Department recommends that the Commission approve the proposed rule variance regarding notice timing.

COMMERCE DEPARTMENT

October 13, 2025

Sasha Bergman
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, Minnesota 55101-2147

RE: Supplemental Comments of the Minnesota Department of Commerce—Exemption Petition
Docket No. E015,ET2,E017/CN-25-109

Dear Ms. Bergman,

The comment of the Minnesota Department of Commerce (Department) recommended that the exemption request to the data required by Minn. R. 7849.0280 subparts (B) through (I) be granted, but did not directly analyze the request for alternative data to be provided regarding subpart (A)—a brief discussion of power planning programs.[1] In reply comments Minnesota Power, Great River Energy, and Otter Tail Power Company (Applicants) renewed the request regarding Minn. R. 7849.0280 subpart (A) to provide what they consider to be alternative data (A)—their Annual Forecast Report (AFR).[2]

The Department concludes that the AFR data proposed by the Applicants along with information that will be provided under other requirements—regarding how MISO's planning resulted in the proposed project—is reasonable data regarding Minn. R. 7849.0280, subp. A.[3] The Department considers this issue to have been resolved and the Department's recommendations remain as stated in the Department's initial comments except as follows:

- *C.4. The Department recommends the Commission ~~modify the requested exemption and~~ approve the requested exemption to Minn. R. 7849.0280, subps. (B) through (I) and approve the proposed alternative information under subp. (A).*

Sincerely,

/s/ Dr. SYDNIE LIEB
Assistant Commissioner of Regulatory Analysis

SR/ad

[1] *In the Matter of the Application for a Certificate of Need for the Maple River to Cuyuna 345 kV Transmission Line Project,* Department, Comment, September 16, 2025, Docket No. E015,ET2,E017/CN-25-109, (eDockets), 20259-223065-02 at 5, (hereinafter "Department Comment").
[2] Minnesota Power, Great River Energy, and Otter Tail Power Company, Exemption Request - Reply Comments, Docket No. E015,ET2,E017/CN-25-109, (eDockets), 202510-223630-01.
[3] Department Comment, at 4-5.

COMMERCE DEPARTMENT

October 13, 2025

Sasha Bergman
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, Minnesota 55101-2147

RE: Supplemental Comments of the Minnesota Department of Commerce—Notice Plan Petition
Docket No. E015,ET2,E017/CN-25-109

Dear Ms. Bergman,

The comment of the Minnesota Department of Commerce (Department) recommended that Minnesota Power Great River Energy, and Otter Tail Power Company (Applicants) provide the proposed text for the newspaper notice in reply comments.[1] In reply comments Applicants provided the recommended newspaper notice text.[2] The Department reviewed the Applicants' proposed text and concludes that it contains the required information.

The Department comment also recommended that the Applicants review the map and lists of local governments to be provided notice and reconcile the differences in reply comments.[3] In reply comments the Applicants provided substantial revisions to the notice list.[4] The Department reviewed the Applicants' revised notice list and concludes that it is reasonable.

The Department considers the issues to have been resolved and the Department's full list of recommendations is as follows:

- approve the proposed notice plan as revised;
- approve the proposed rule variance regarding duplicative notice; and
- approve the proposed rule variance regarding notice timing.

Sincerely,

/s/ Dr. SYDNIE LIEB
Assistant Commissioner of Regulatory Analysis

SR/ad

[1] *In the Matter of the Application for a Certificate of Need for the Maple River to Cuyuna 345 kV Transmission Line Project,* Department, Comment, September 16, 2025, Docket No. E015,ET2,E017/CN-25-109, (eDockets), 20259-223065-01, at 4, (hereinafter "Department Comment").
[2] Minnesota Power, Great River Energy, and Otter Tail Power Company, Reply Comments, October 6, 2025, Docket No. E015,ET2,E017/CN-25-109, (eDockets), 202510-223629-01, at Attachment B, (hereinafter "Applicant Reply").
[3] Department Comment, at 3.
[4] Applicant Reply, at 3.

APPENDIX C

MAPLE RIVER – CUYUNA 345 KV TRANSMISSION LINE PROJECT

CERTIFICATE OF NEED APPLICATION COMPLETENESS CHECKLIST

MAPLE RIVER TO CUYUNA 345 KV TRANSMISSION LINE PROJECT
CERTIFICATE OF NEED APPLICATION
COMPLETENESS CHECKLIST

Authority	Required Information	Location in Application
Minn. R. 7829.2500, Subp. 2	Brief summary of filing on separate page sufficient to apprise potentially interested parties of its nature and general content	Filing Summary
Minn. R. 7849.0200, Subp. 2	Title Page and Table of Contents	Title Page and Table of Contents
Minn. R. 7849.0200, Subp. 4	Cover Letter	Cover Letter
Minn. R. 7849.0220, Subp. 3	Joint Ownership and Multiparty use	§§ 1.2, 2.3
Minn. R. 7849.0240	Need summary and additional considerations	—
Minn. R. 7849.0240, Subp. 1	Summary of the major factors that justify the need for the proposed facility	§§ 1.3, 3.2, 3.3, 3.4
Minn. R. 7849.0240, Subp. 2	Relationship of the proposed facility to the following socioeconomic considerations:	–
A.	Socially beneficial uses of the output of the facility	§ 3.10
B.	Promotional activities that may have given rise to the demand for the facility	§ 3.8
C.	Effects of the facility in inducing future development	§ 3.9
Minn. R. 7849.0260	Proposed LHVTL and Alternatives	–
A.	A description of the type and general location of the proposed line, including:	–
(1)	Design voltage	§ 2.2.2
(2)	Number, sizes and types of conductors	§ 2.2.2
(3)	Expected losses under projected maximum loading and under projected average loading in the length of the line and at terminals or substations	EXEMPT provided alternative data is supplied
	ALTERNATIVE DATA – Estimated overall system losses	§ 3.6

Authority	Required Information	Location in Application
(4)	Approximate length of the proposed line	§§ 1.2, 2.1
(5)	Approximate locations of DC terminals or AC substations on a map	Appendix D
(6)	List of likely affected counties	§ 8.4.1
B.	Discussion of the available alternatives including:	–
(1)	New generation	§ 4.2
(2)	Upgrading existing transmission lines	§ 4.3
(3)	Transmission lines with different voltages or conductor arrays	§§ 4.4, 4.7
(4)	Transmission lines with different terminals or substations	EXEMPT per Minnesota Statute
(5)	Double circuiting of existing transmission lines	§ 4.6
(6)	If facility for DC (AC) transmission, an AC (DC) transmission line	§ 4.8
(7)	If proposed facility is for overhead (underground) transmission, an underground (overhead) transmission line	§4.9
(8)	Any reasonable combination of alternatives (1) – (7)	EXEMPT as to different terminals or substations per Minnesota Statute
C.	For the facility and each for alternative in B, a discussion of:	–
(1)	Total cost in current dollars	§§ 1.4, 2.4
(2)	Service life	§ 5.4.1
(3)	Estimated average annual availability	§ 5.4.1
(4)	Estimated annual O&M costs in current dollars	§ 2.4.2
(5)	Estimate of its effect on rates system wide in Minnesota	§ 2.4.3
(6)	Efficiency expressed for a transmission facility as the estimated losses under projected maximum loading and under projected average loading in the length of	EXEMPT provided alternative data is supplied

Authority	Required Information	Location in Application
	the transmission line and at the terminals or substations	
	ALTERNATIVE DATA – Estimated overall system losses	§ 3.6
(7)	Major assumptions made in subitems (1) – (6)	Chapters 2, 3, 5
D.	A map (of appropriate scale) showing the applicant's system or load center to be served by the proposed LHVTL	§§ 1.1, 3.3.8
E.	Such other information about the proposed facility and each alternative as may be relevant to determination of need.	Chapter 4
Minn. R. 7849.0270	Content of Forecast	–
Minn. R. 7849.0270, Subp. 1	Peak demand and annual consumption data within the applicant's service area and system.	EXEMPT provided alternative data is supplied
	ALTERNATIVE DATA – Applicants' most recent Annual Electric Utility Forecast Report and any forecast information used in analyzing the need for the Project.	Appendix H
Minn. R. 7849.0270, Subp. 2	Subps. 2 (A)-(D) Minnesota forecast data; forecast demand data by customer class, peak period, and month; estimated system annual revenue per kilowatt hour; estimated average weekday system load factor by month.	EXEMPT except as noted below and provided alternative data is supplied
	ALTERNATIVE DATA – Applicants' most recent Annual Electric Utility Forecast Report and any forecast information used in analyzing the need for the Project.	Appendix H
	Subp. 2 (E) – The Applicants' estimated annual revenue requirement per kilowatt hour for the system in current dollars	EXEMPT provided alternative data is supplied
	ALTERNATIVE DATA - Alternative explanation of how MISO spreads wholesale electricity costs and general financial impact on Minnesota customers.	§ 2.4.3
	Subp. 2 (F) - The applicant's estimated average system weekday load factor by month; in other words, for each month, the estimated average of the individual load factors for each weekday in the month.	EXEMPT

Authority	Required Information	Location in Application
Minn. R. 7849.0270, Subp. 3	Detail of the forecast methodology used in Subp. 2	EXEMPT provided alternative data is supplied
Minn. R. 7849.2070, Subp. 4	Discussion of database used in current forecasting.	EXEMPT provided alternative data is supplied
Minn. R. 7849.0270, Subp. 5	Discussion of each essential assumption made in forecast preparation and sensitivity to variations in assumptions.	EXEMPT provided alternative data is supplied
Minn. R. 7849.0270, Subp. 6	Coordination of forecasts.	EXEMPT provided alternative data is supplied
	ALTERNATIVE DATA FOR SUBPS. 3-6 – Applicants' most recent Annual Electric Utility Forecast Report and any forecast information used in analyzing the need for the Project.	Chapter 3, Appendix H
Minn. R. 7849.0280	System Capacity	–
	Description of ability of existing system to meet demand forecast including:	–
A.	Power planning programs	EXEMPT provided alternative data is supplied
	ALTERNATIVE DATA – Minnesota Power's most recent Annual Electric Utility Forecast Report	Appendix H
B.	Seasonal firm purchases and sales	EXEMPT
C.	Seasonal participation purchases and sales	EXEMPT
D.	Load and generation capacity data request in subitems 1-13 for summer and winter seasons for each forecast year, including anticipated purchases, sales, and capacity retirements and additions except those that depend on a not yet issued certificate of need.	EXEMPT
E.	Summer and winter season load generation and capacity in years subsequent to application contingent on proposed facility	EXEMPT
F.	Summer and winter season load generation and capacity including all	EXEMPT

Authority	Required Information	Location in Application
	projected purchases, sales and generation in years subsequent to application	
G.	List of proposed additions and retirements in generating capacity for each forecast year subsequent to application	EXEMPT
H.	Graph of monthly adjusted net demand and capability with difference between capability and maintenance outages plotted	EXEMPT
I.	Appropriateness and method of determining system reserve margins	EXEMPT
Minn. R. 7849.0290	Conservation Programs	–
A.	Persons responsible for energy conservation and efficiency programs	EXEMPT provided alternative data is supplied
B.	List of energy conservation and efficiency goals and objectives	EXEMPT provided alternative data is supplied
C.	Description of programs considered, implemented and rejected	EXEMPT provided alternative data is supplied
D.	Description of major accomplishments in conservation and efficiency	EXEMPT provided alternative data is supplied
E.	Description of future plans with respect to conservation and efficiency	EXEMPT provided alternative data is supplied
F.	Quantification of the manner by which these programs impact the forecast	EXEMPT provided alternative data is supplied
	ALTERNATIVE DATA FOR A-F – Applicants will provide a summary of each utility's most recent Integrated Resource Plan and Energy Conservation and Optimization Plan filings.	Appendix I
Minn. R. 7849.0300	Consequence of Delay	EXEMPT from three levels of demand
	ALTERNATIVE DATA – General discussion of the consequence of delay	§ 4.10
Minn. R. 7849.0310	Required Environmental Information	

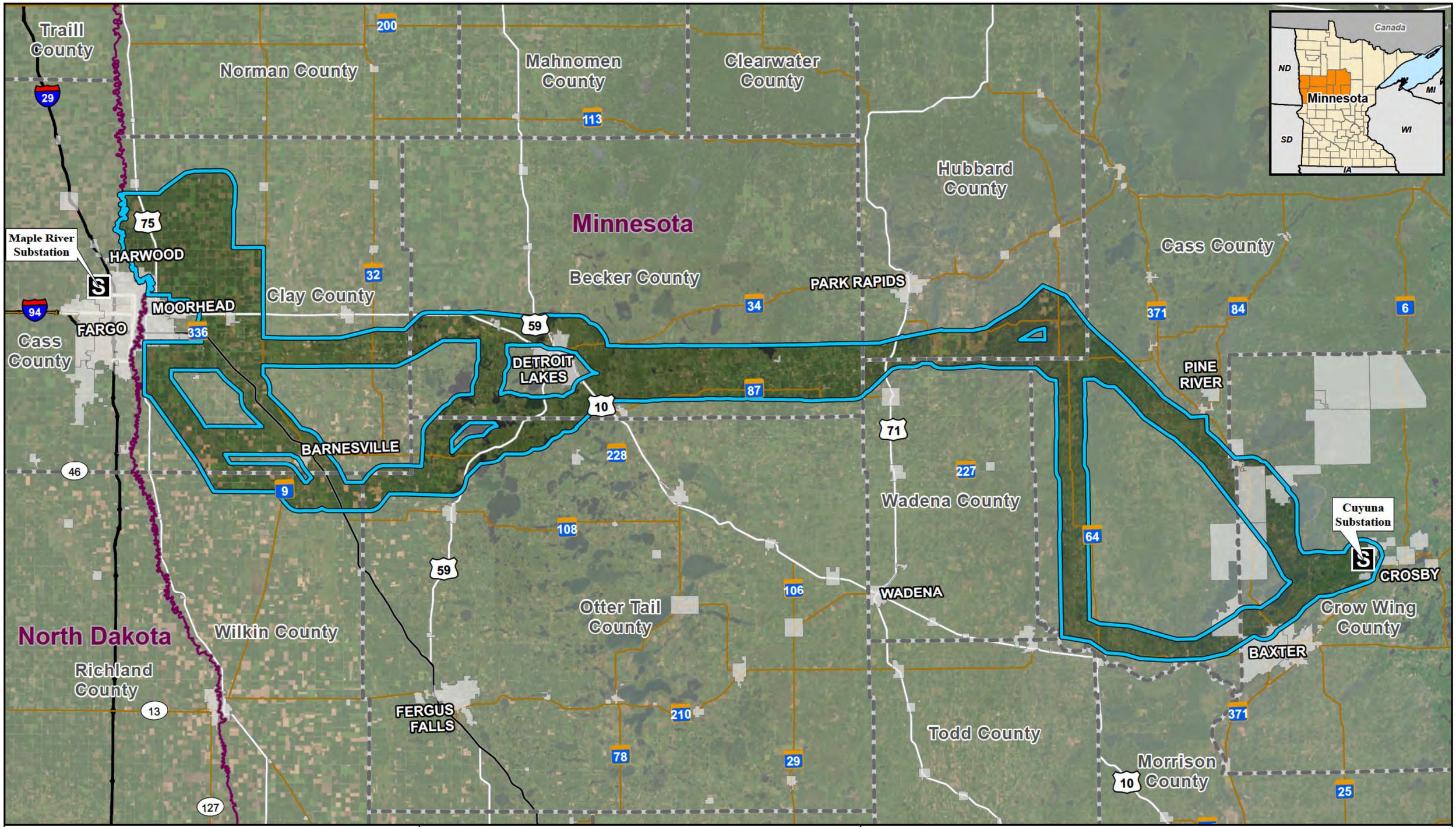
Authority	Required Information	Location in Application
Minn. R. 7849.0330	Transmission Facilities	–
	Data for each alternative that would require LHVTL construction including:	–
A.	For overhead transmission lines	–
(1)	Schematics showing dimensions of support structures	Appendix E
(2)	Discussion of electric fields	§ 5.5.1, Appendix J
(3)	Discussion of ozone and nitrogen oxide emissions	§ 5.7
(4)	Discussion of radio and television interference	§ 5.8
(5)	Discussion of audible noise	§§ 5.9, 6.5.3
B.	For underground transmission facilities:	N/A
(1)	Types and dimensions of cable systems	N/A
(2)	Types and qualities of cable system materials	N/A
(3)	Heat released in kW per foot of cable	N/A
C.	Estimated right-of-way required for the facility	§ 5.1.1
D.	Description of construction practices	§ 5.2
E.	Description of O&M practices	§ 5.4
F.	Estimated workforce required for construction and O&M	§ 5.4.3
G.	Description of region between endpoints in likely area for routes emphasizing a three mile radius of endpoints including:	–
(1)	Hydrological features	§§ 6.2, 6.8
(2)	Vegetation and wildfire	§§ 6.2, 6.9
(3)	Physiographic regions	§§ 6.2, 6.3

Authority	Required Information	Location in Application
(4)	Land use types	§§ 6.2, 6.4
Minn. R. 7849.0340	No-Facility Alternative	EXEMPT from three levels of demand
	ALTERNATIVE DATA – General discussion of the no-build alternative	§ 4.10

APPENDIX D

MAPLE RIVER – CUYUNA 345 KV TRANSMISSION LINE PROJECT

DETAILED MAPS



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OTTER TAIL POWER COMPANY

GREAT RIVER ENERGY

For Environmental Review Purposes Only

0 5 10 Miles

N W E S

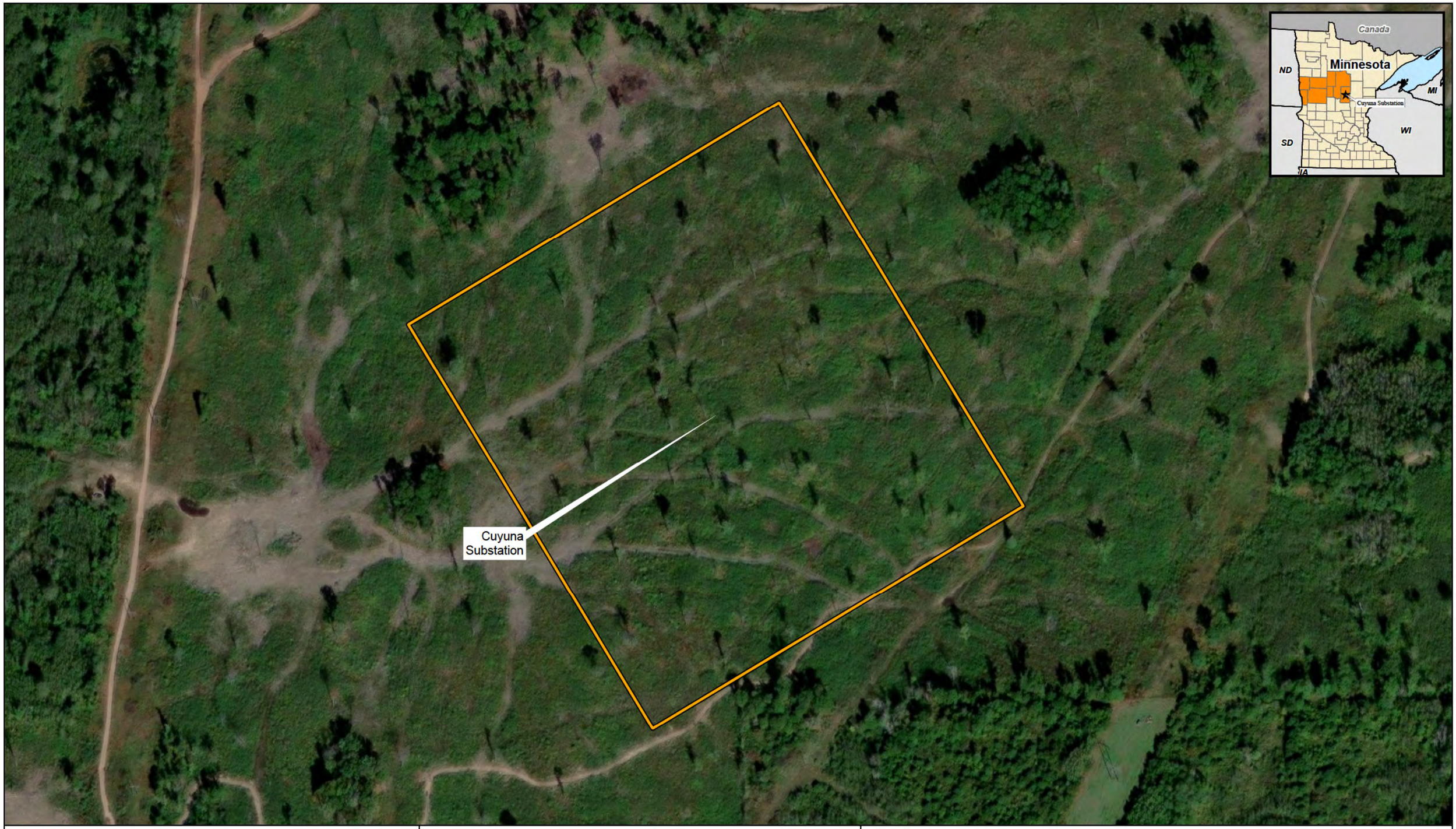
Map 1
Maple River - Cuyuna 345 kV Transmission Project
Project Study Area/Project Overview

page 1 of 9

- Project Substation
- Project Study Area
- City Boundary
- County Boundary
- State Boundary

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Date: 12/2/2025



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OTTER TAIL
POWER COMPANY

GREAT RIVER ENERGY

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0 100 200 Feet

For Environmental Review Purposes Only

Map 1

Maple River - Cuyuna 345 kV Transmission Project

Cuyuna Substation

page 2 of 9

Cuyuna Substation

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OTTER TAIL POWER COMPANY

GREAT RIVER ENERGY

For Environmental Review Purposes Only

0 100 200 Feet

N W E S

Map 1
Maple River - Cuyuna 345 kV Transmission Project
Maple River Substation

page 3 of 9

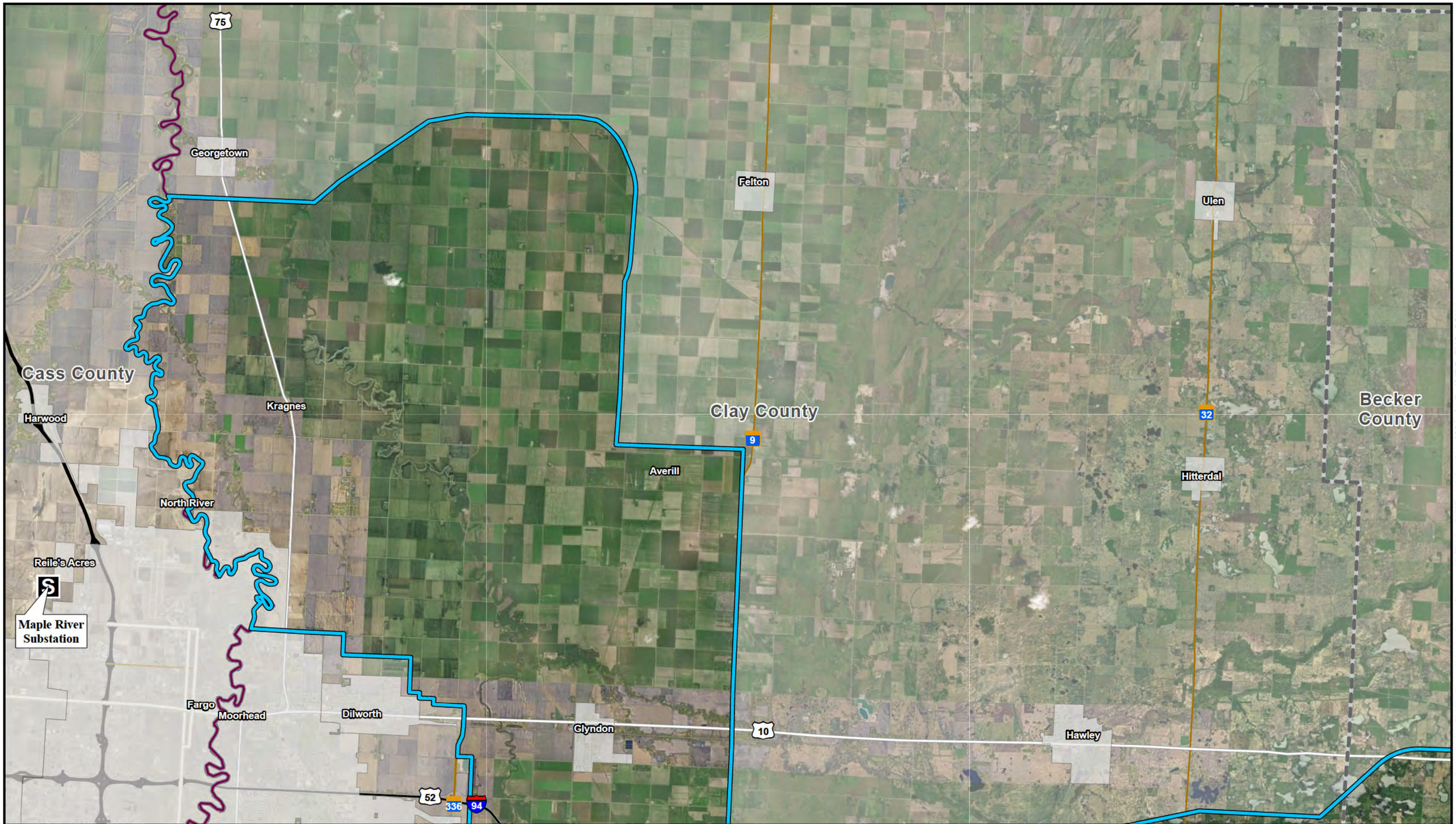
Maple River Substation

Maple River Substation Expansion *

* approximate area for expansion, subject to further engineering and design

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GREAT RIVER ENERGY

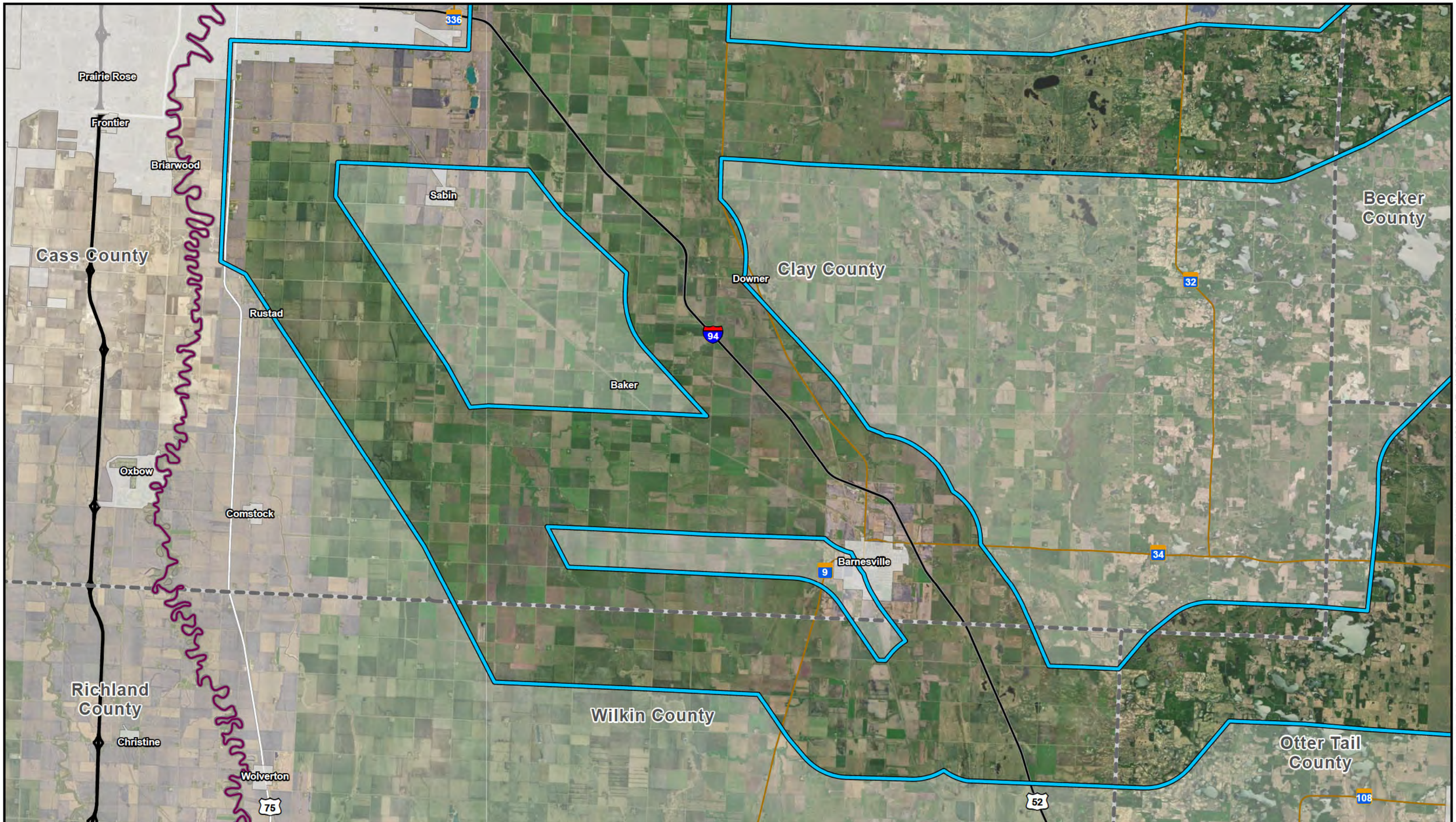
For Environmental Review Purposes Only

Map 1
Maple River - Cuyuna 345 kV Transmission Project
Project Study Area Details

page 4 of 9

- Project Substation
- Project Study Area
- City Boundary
- County Boundary
- State Boundary

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GREAT RIVER ENERGY

0 1 2 Miles

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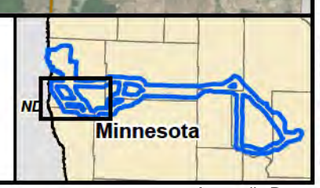
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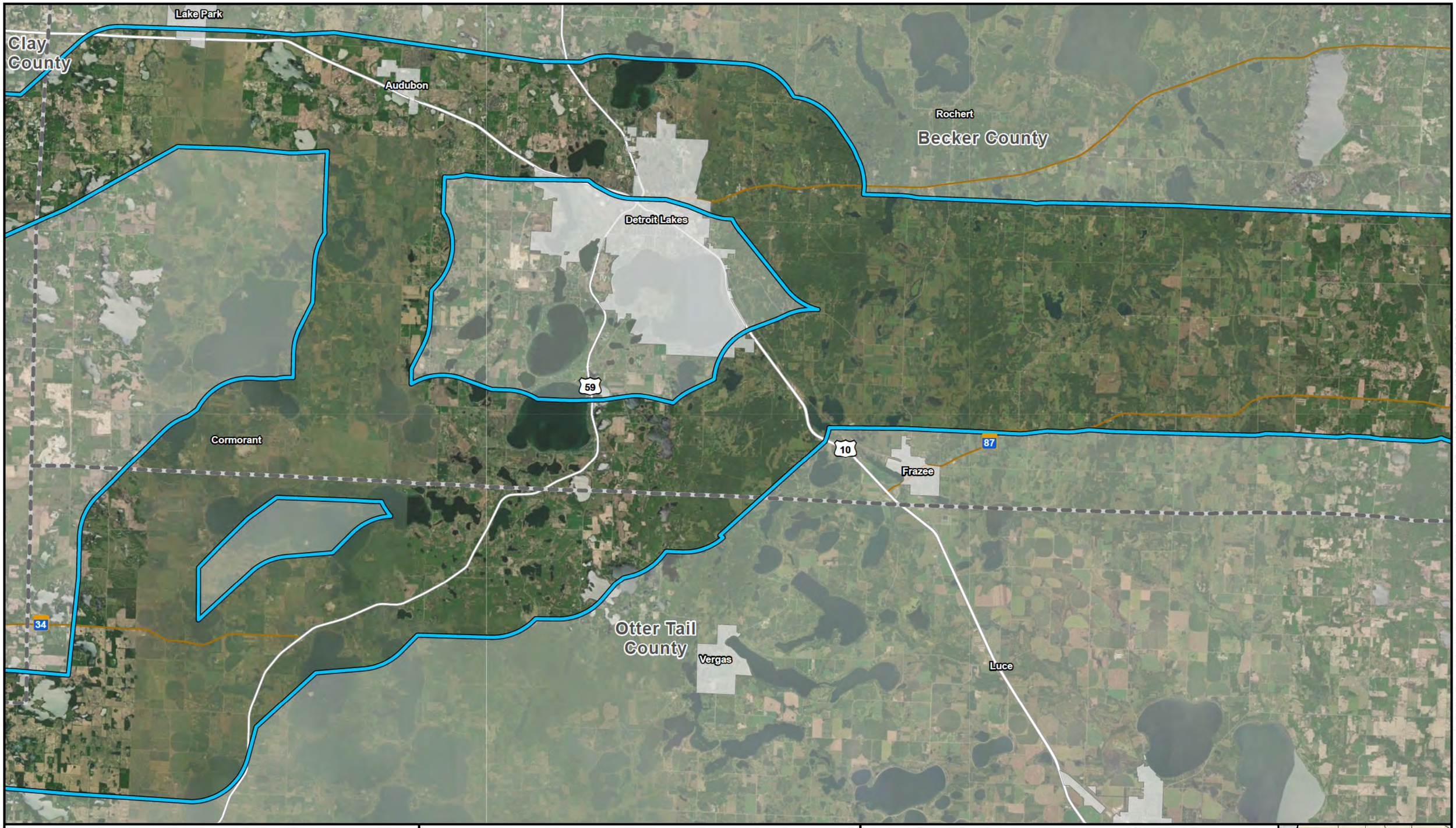
Map 1
Maple River - Cuyuna 345 kV Transmission Project
Project Study Area Details

page 5 of 9

S Project Substation
Project Study Area

City Boundary
County Boundary
State Boundary





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GREAT RIVER ENERGY

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0 1 2 Miles

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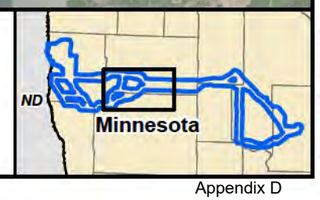
Map 1

Maple River - Cuyuna 345 kV Transmission Project

Project Study Area Details

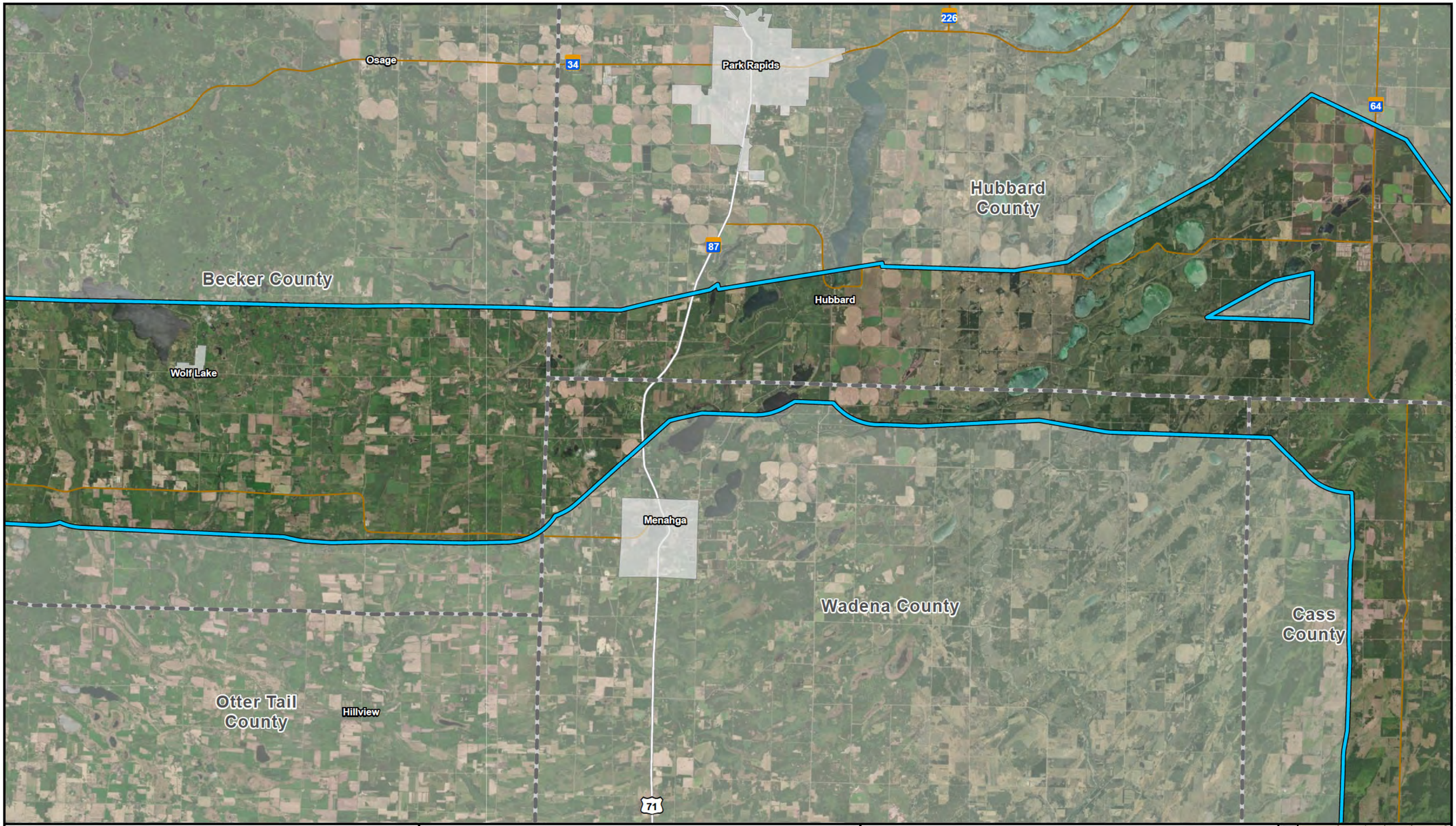
page 6 of 9

- Project Substation
- Project Study Area
- City Boundary
- County Boundary
- State Boundary



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Date: (1/22/2025)



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GREAT RIVER ENERGY

0 1 2 Miles

N W E S

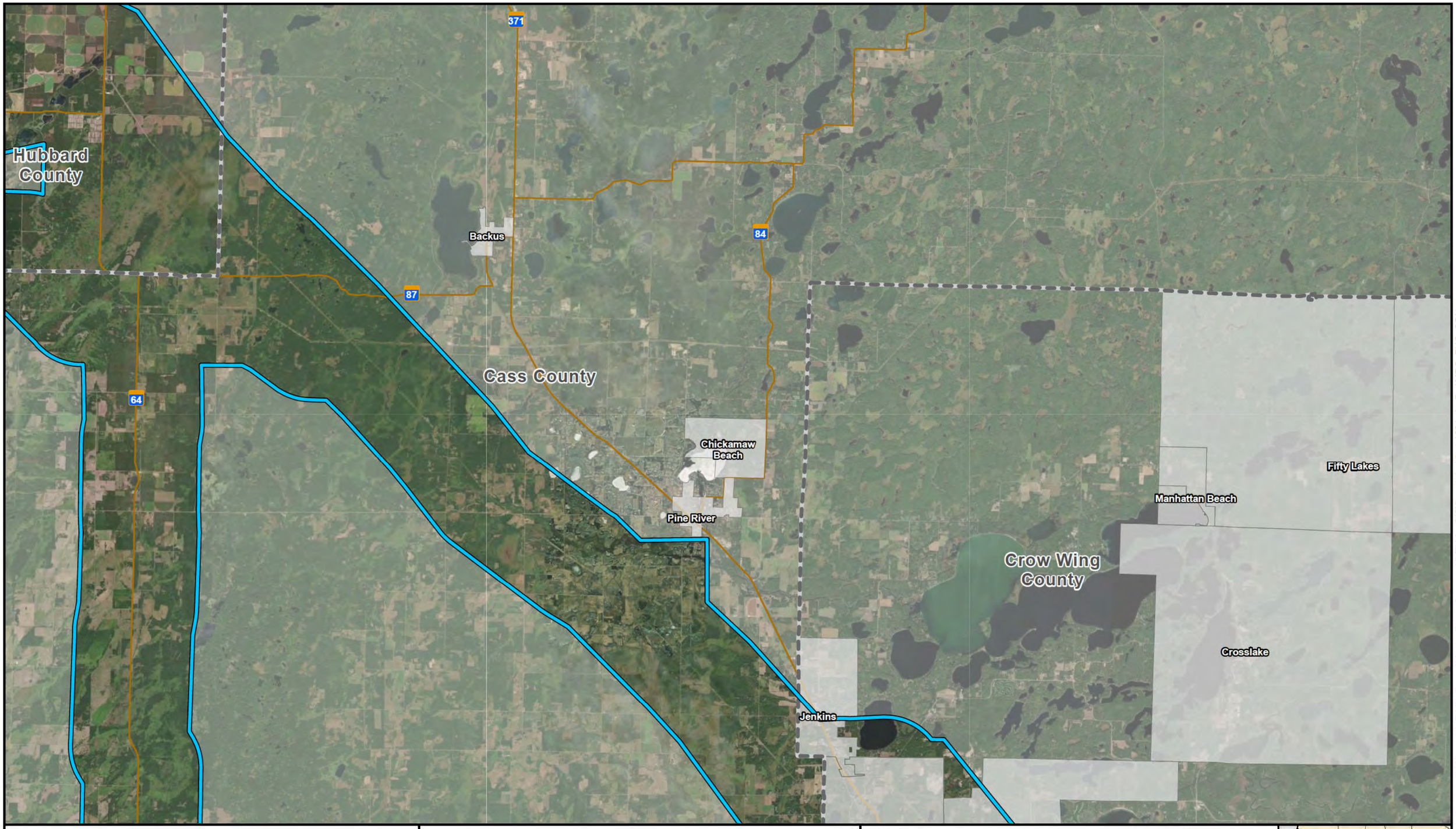
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Map 1
Maple River - Cuyuna 345 kV Transmission Project
Project Study Area Details

page 7 of 9

S Project Substation
Project Study Area
City Boundary
County Boundary
State Boundary

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Date: (1/22/2025)



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GREAT RIVER ENERGY

0 1 2 Miles

N W E S

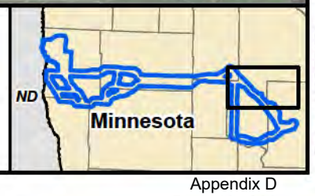
For Environmental Review Purposes Only

Map 1
Maple River - Cuyuna 345 kV Transmission Project
Project Study Area Details

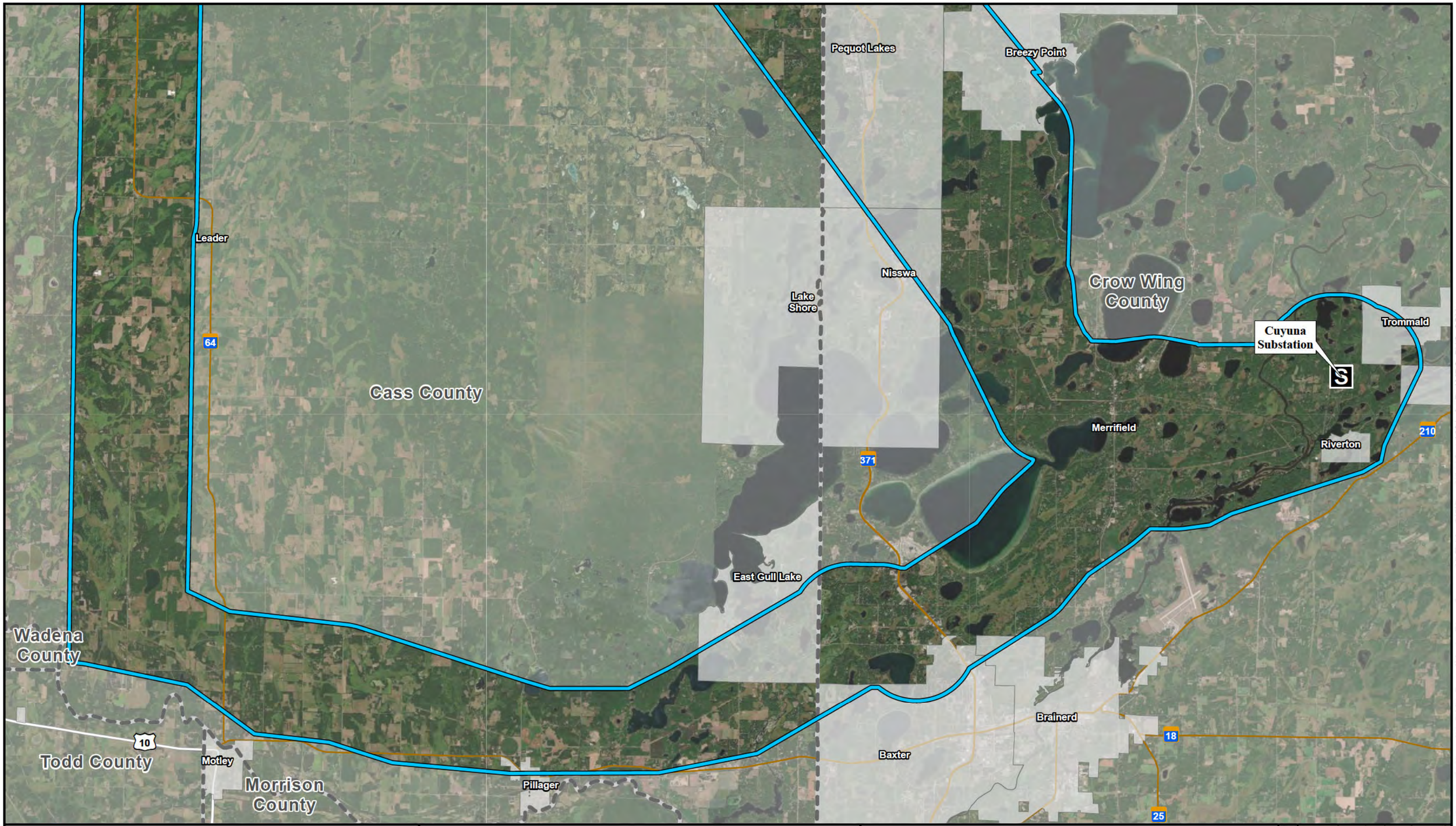
page 8 of 9

S Project Substation
Project Study Area

City Boundary
County Boundary
State Boundary



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Date: (1/22/2025)



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GREAT RIVER ENERGY

0 1 2 Miles

N W E S

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Map 1

Maple River - Cuyuna 345 kV Transmission Project

Project Study Area Details

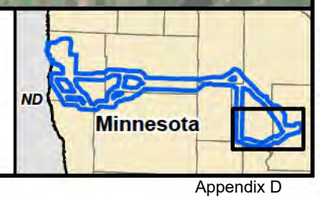
S Project Substation

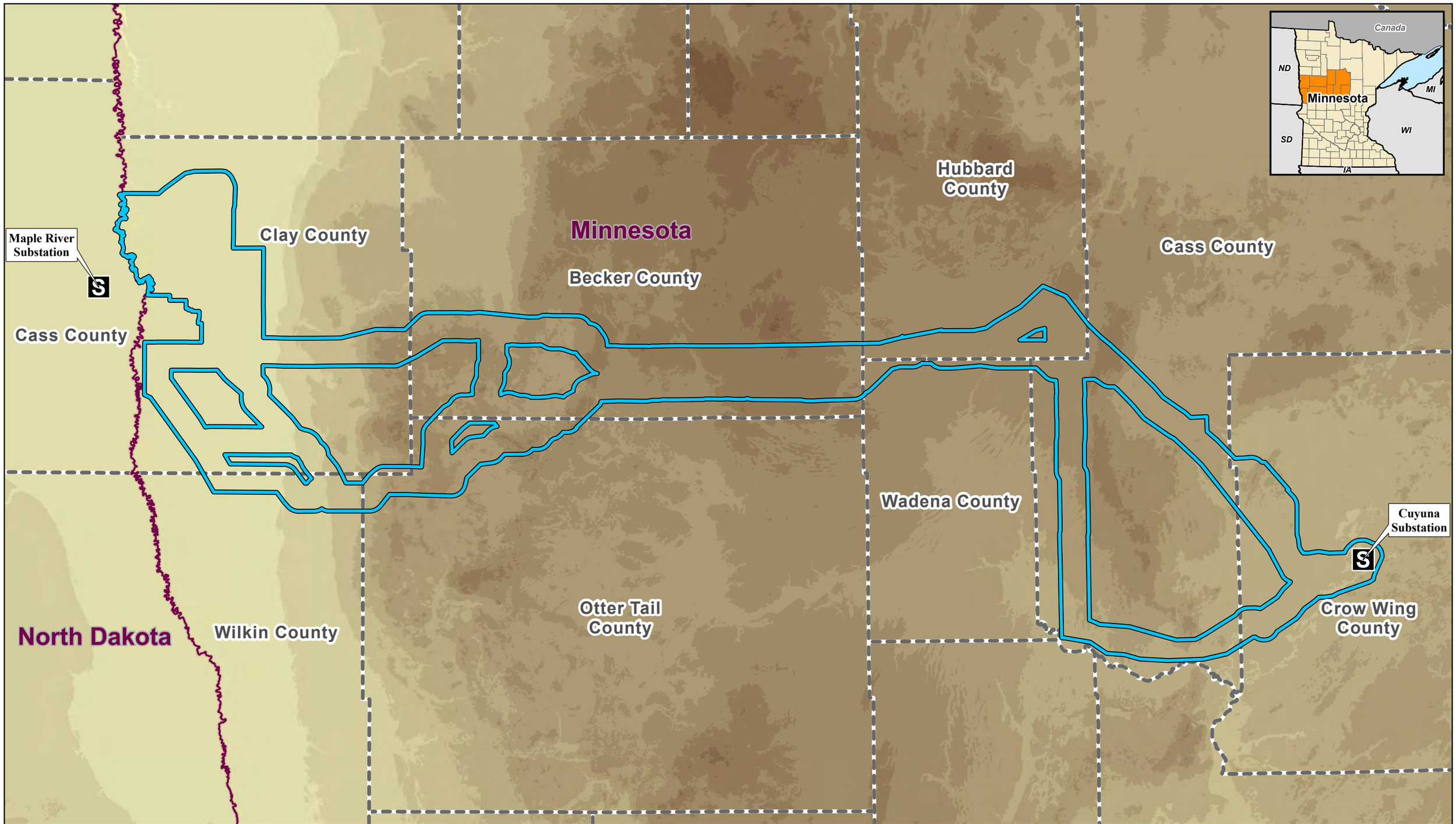
Project Study Area

City Boundary

County Boundary

State Boundary





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GREAT RIVER ENERGY

0 5 10 Miles

N W E S

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Map 2

Maple River - Cuyuna 345 kV Transmission Project

Topography in the Project Study Area

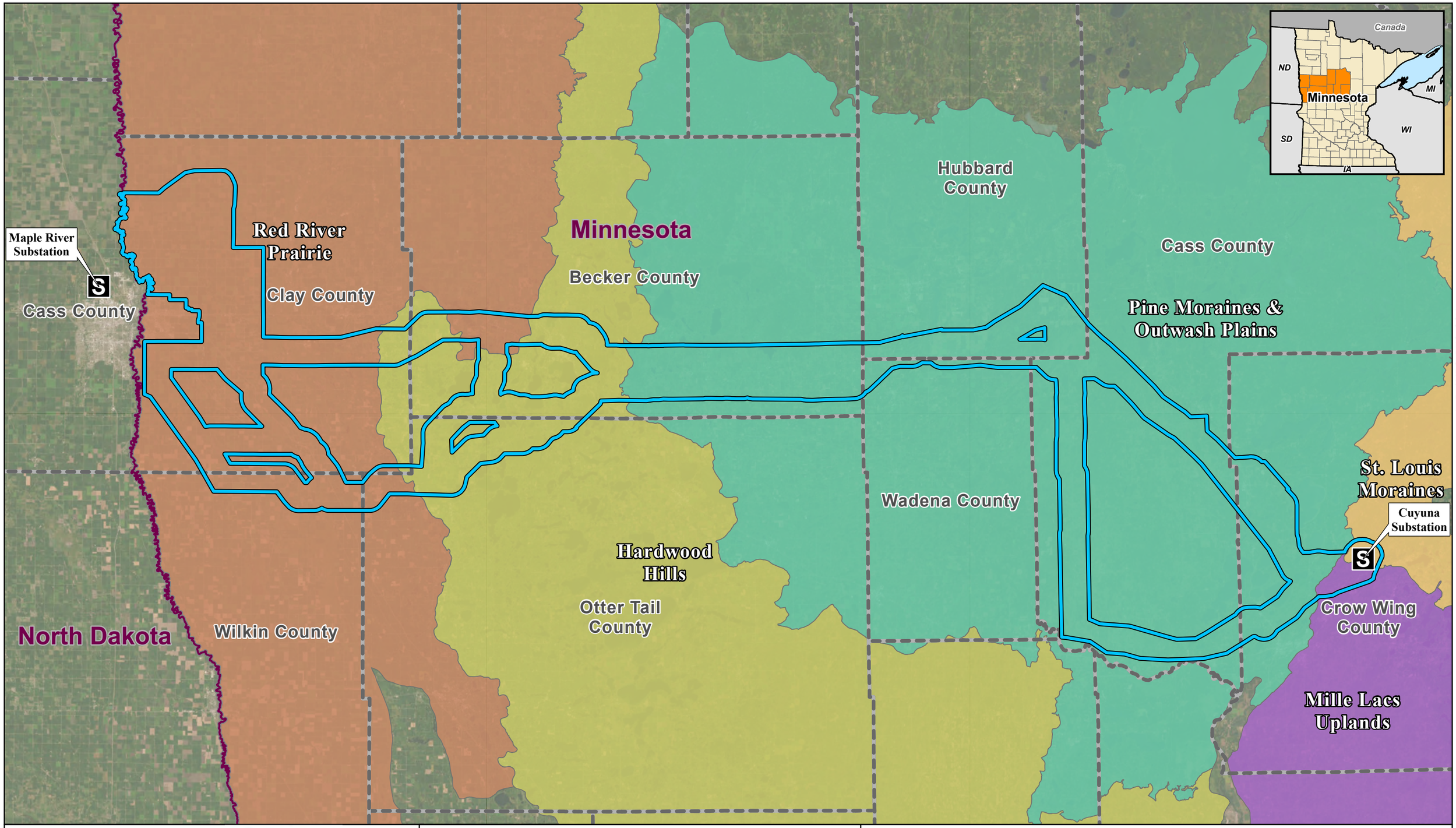
- Project Substation
- Project Study Area
- County Boundary
- State Boundary

Elevation Range (Feet)

- 590 - 863
- 863 - 985
- 985 - 1,087
- 1,087 - 1,181
- 1,181 - 1,272
- 1,272 - 1,362
- 1,362 - 1,464
- 1,464 - 1,598
- 1,598 - 1,769
- 1,769 - 2,300

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Date: (1/22/2026)



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GREAT RIVER ENERGY

0 5 10 Miles

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Map 3

Maple River - Cuyuna 345 kV Transmission Project

Ecological Classification System Subsections

- Project Substation
- Project Study Area
- County Boundary
- State Boundary

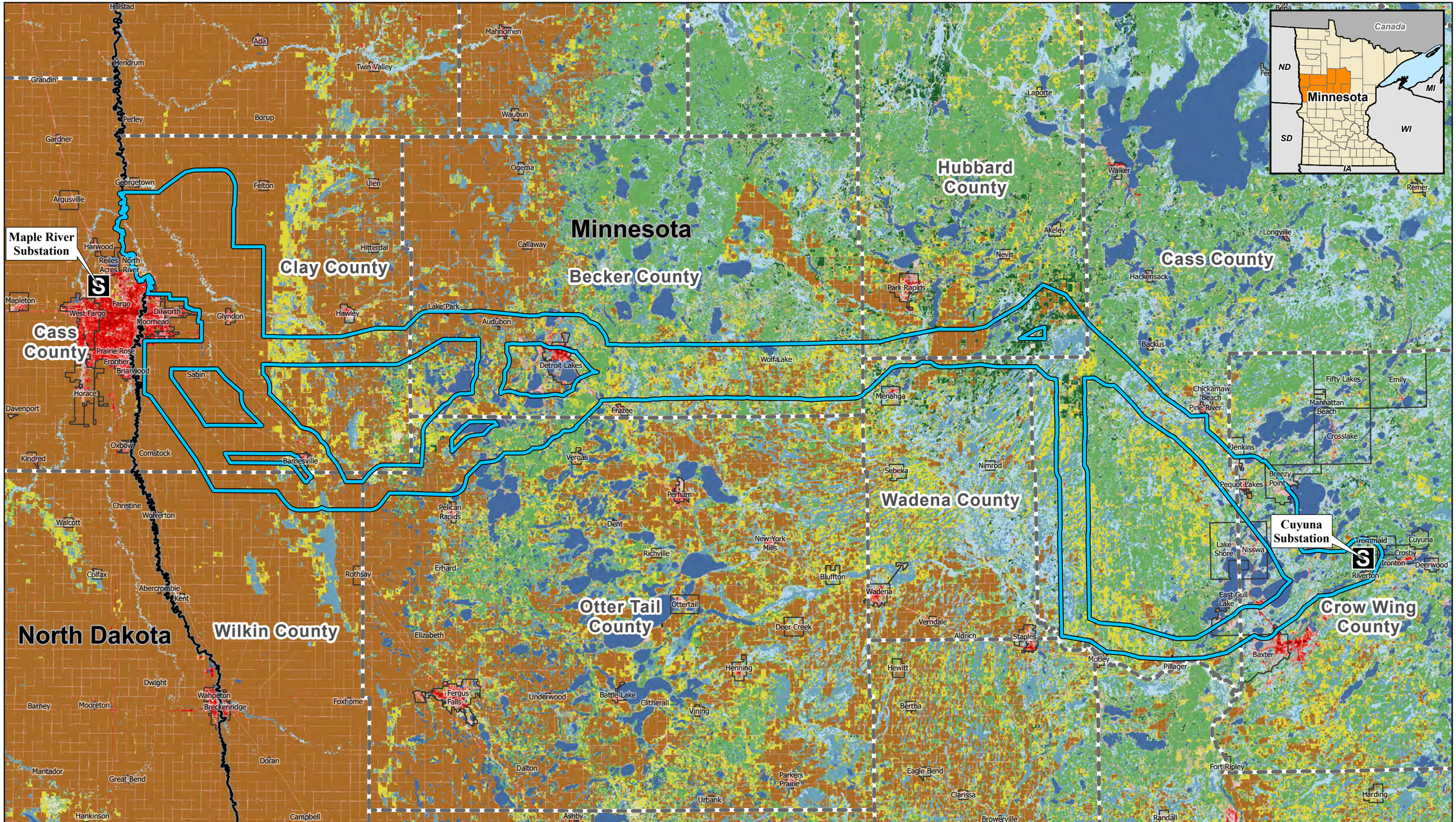
Ecological Classification System Subsections

SUBSECNAME

- Hardwood Hills
- Mille Lacs Uplands
- Pine Moraines & Outwash Plains
- Red River Prairie
- St. Louis Moraines

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Date: (1/22/2026)



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AN ALLETE COMPANY

OTTER TAIL POWER COMPANY

GREAT RIVER ENERGY

0 5 10 Miles

For Environmental Review Purposes Only

N W E S

Map 4

Maple River - Cuyuna 345 kV Transmission Project

Land Cover in the Project Study Area

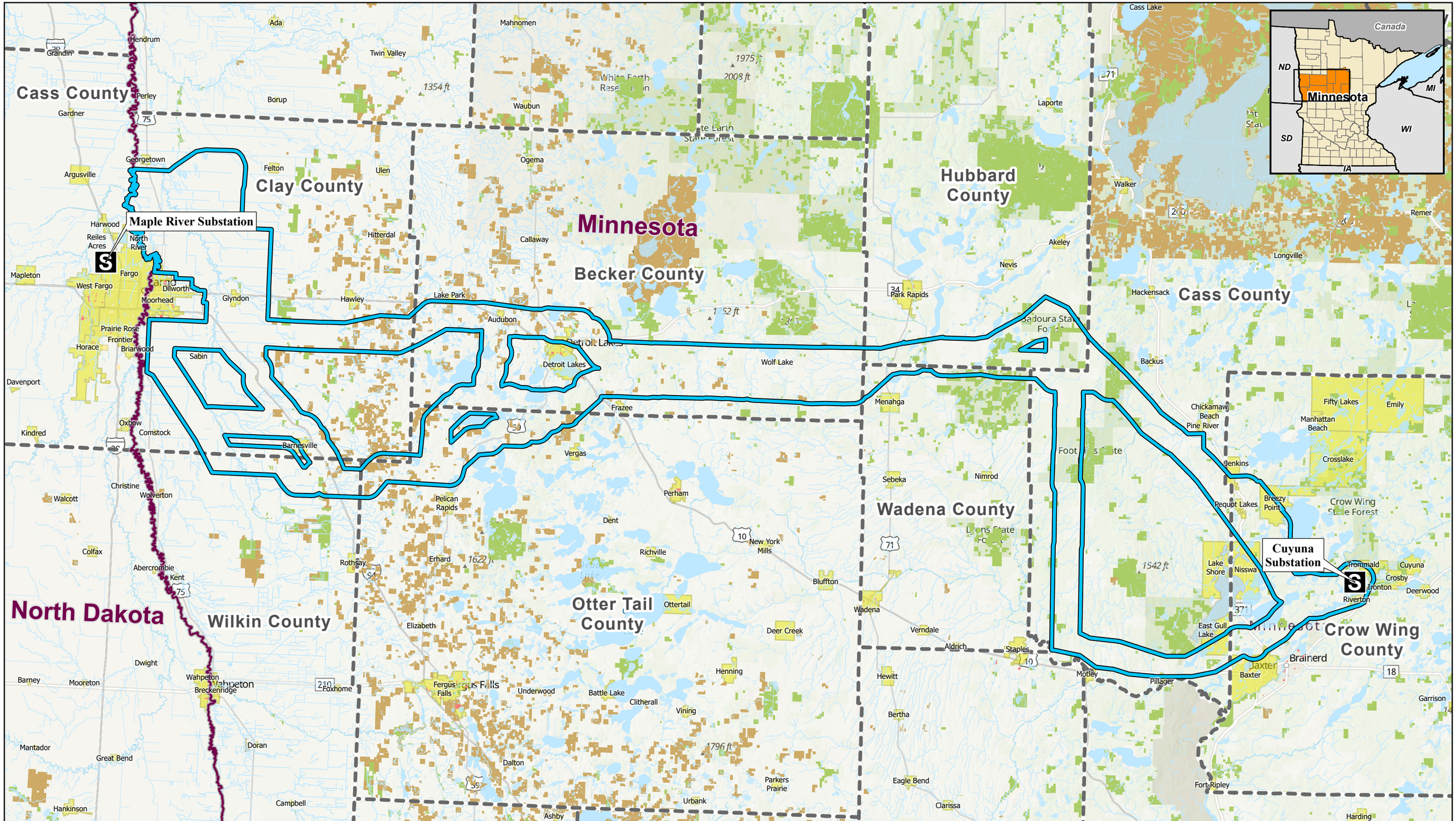
- Project Substation
- Project Study Area
- City
- County Boundary
- State Boundary

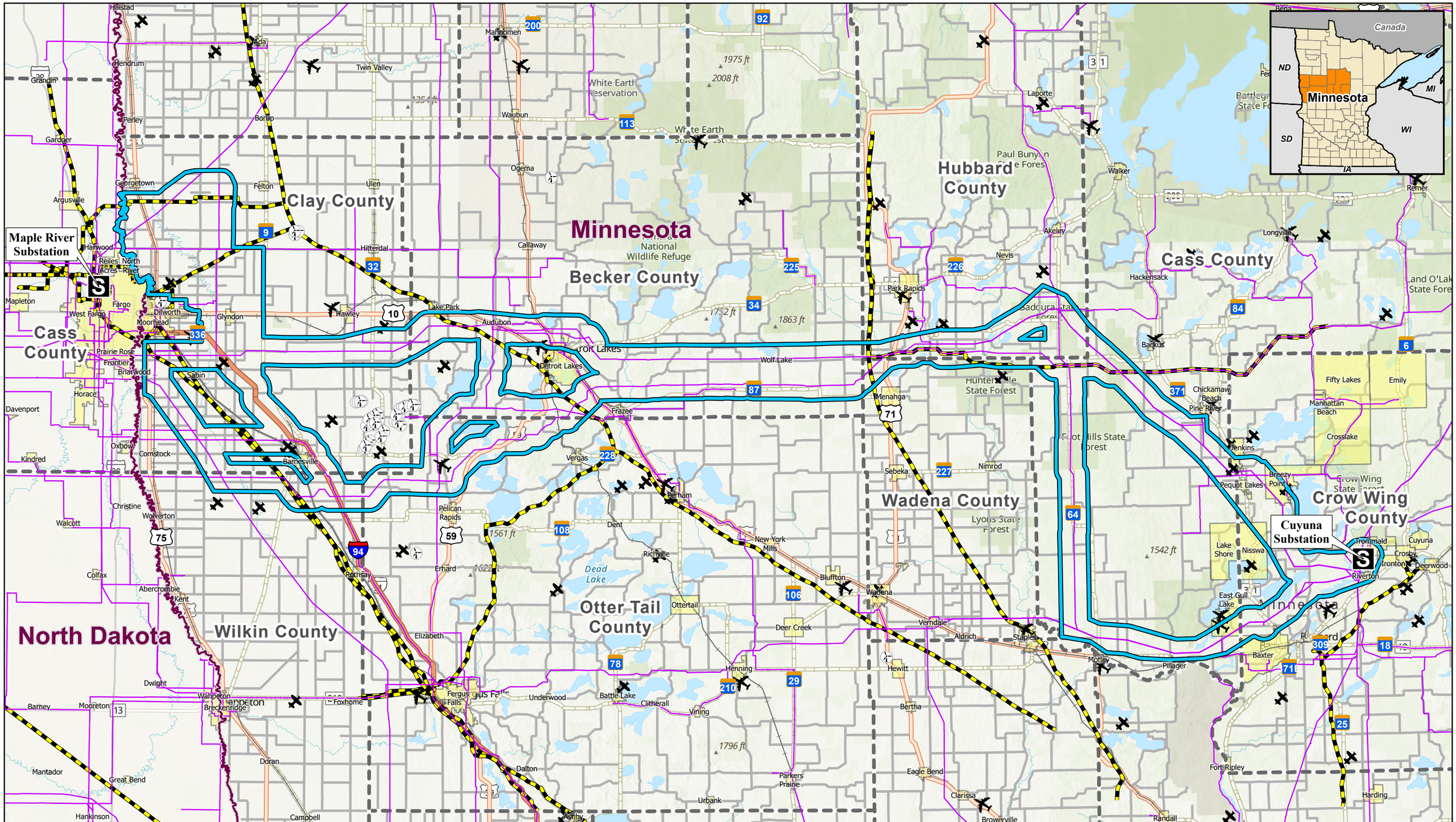
National Land Cover Dataset 2024

- Open Water
- Developed, Open Space
- Developed, Low Intensity
- Developed, Medium Intensity
- Developed, High Intensity
- Barren Land (Rock/Sand/Clay)
- Deciduous Forest
- Evergreen Forest
- Mixed Forest
- Shrub/Scrub
- Grassland/Herbaceous
- Pasture/Hay
- Cultivated Crops
- Woody Wetlands
- Emergent Herbaceous Wetlands

Source: Z:\Clients\M_PMN_PowerMaple_River_Cuyuna_HVTL\ArcGIS\Permitting\State\001_ArcProMRC_PUC_CON.aprx

Date: (1/22/2026)


Maple River Substation
Cuyuna Substation
Cass County
Clay County
Becker County
Hubbard County
Wilkin County
Otter Tail County
Wadena County
Crow Wing County
Minnesota
North Dakota
Canada
ND
SD
MI
WI
IA
Fargo
West Fargo
Moorhead
Dilworth
Detroit Lakes
Park Rapids
Wadena
Brainerd
Baxter
Pequot Lakes
Fergus Falls
Wahpeton
Breckenridge
Barnesville
Hawley
Glyndon
Lake Park
Audubon
Wolf Lake
Menahga
Nevis
Akeley
Walker
Laporte
Cass Lake
Longville
Remer
Backus
Pillager
Motley
Staples
Verndale
Aldrich
Hewitt
Bertha
Eagle Bend
Clarissa
Fort Ripley
Harding
Garrison
Riverton
Ironton
Crosby
Deerwood
Crosslake
Manhattan Beach
Fifty Lakes
Emily
Chickamaw Beach
Pine River
Jenkins
Breezy Point
Crow Wing State Forest
Nimrod
Sebeka
Perham
Dent
Richville
Bluffton
Ottertail
Deer Creek
Henning
Vining
Battle Lake
Clitherall
Underwood
Foxhome
Elizabeth
Erhard
Rothsay
New York Mills
Pelican Rapids
Frazee
Vergas
Ogema
Waubun
Callaway
Hitterdal
Ulen
Felton
Georgetown
Argusville
Harwood
Reiles Acres
North River
Mapleton
Horace
Frontier
Prairie Rose
Briarwood
Sabin
Davenport
Kindred
Oxbow
Comstock
Christine
Wolverton
Walcott
Colfax
Abercrombie
Kent
Dwight
Barney
Mooreton
Wahpeton
Breckenridge
Mantador
Great Bend
Hankinson
Doran
Dalton
Campbell
Ashby
Urbank
Parkers Prairie
Twin Valley
Borup
Gardner
Perley
Grandin
Ada
Mahnomen
Lyons State Forest
Hackensack
Akeley
Nevis
Longville
Remer
Cass Lake
Laporte
Walker
Lake Shore
Nisswa
Trommald
Cuyuna
Crosby
Ironton
Riverton
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Brainerd
Baxter
Deerwood
Riverton
Ironton
Crosby
Cuyuna
Trommald
Nisswa
Lake Shore
East Gull Lake
Wadena
Bluffton
Richville
Dent
Perham



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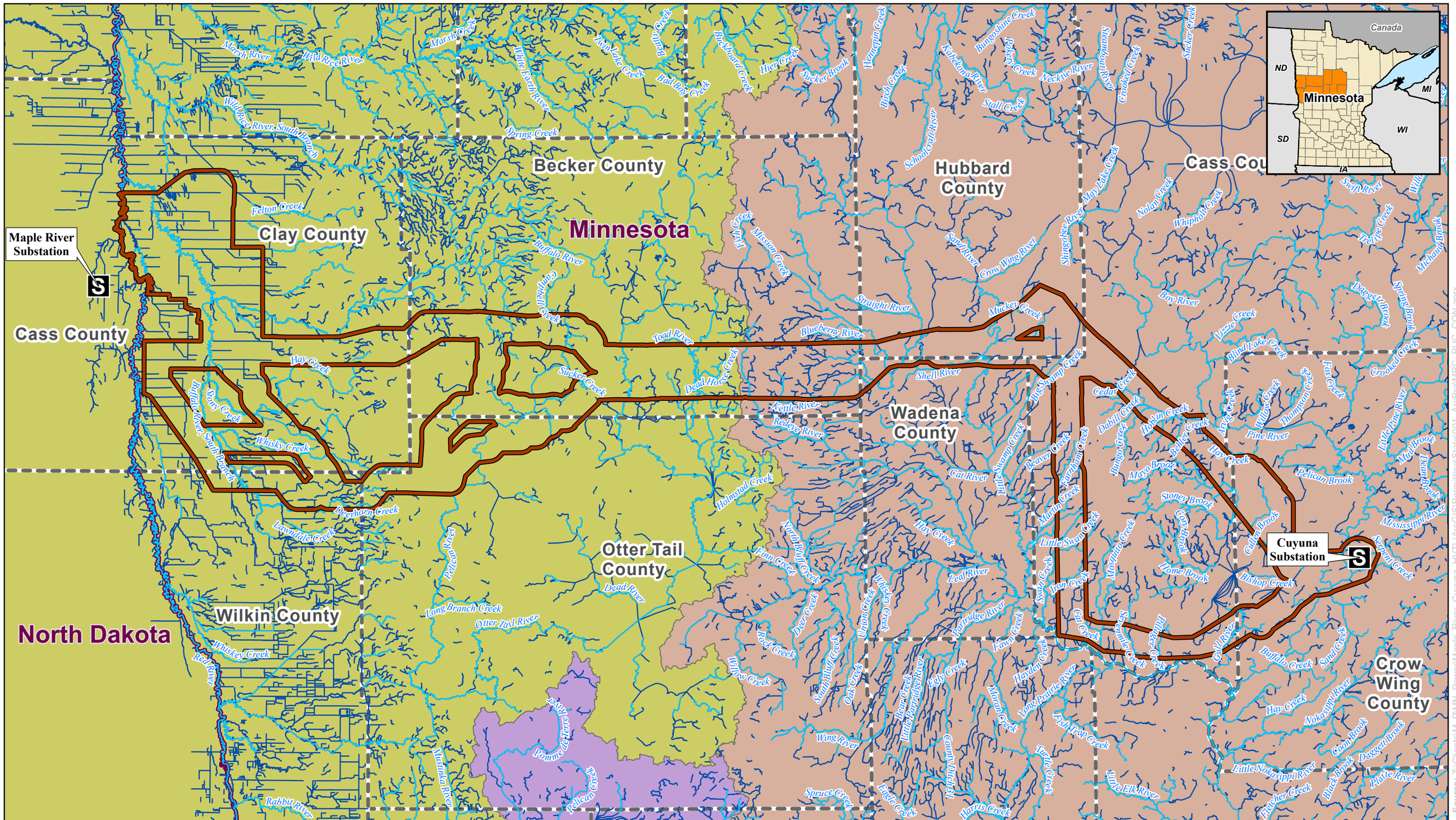
Map 6

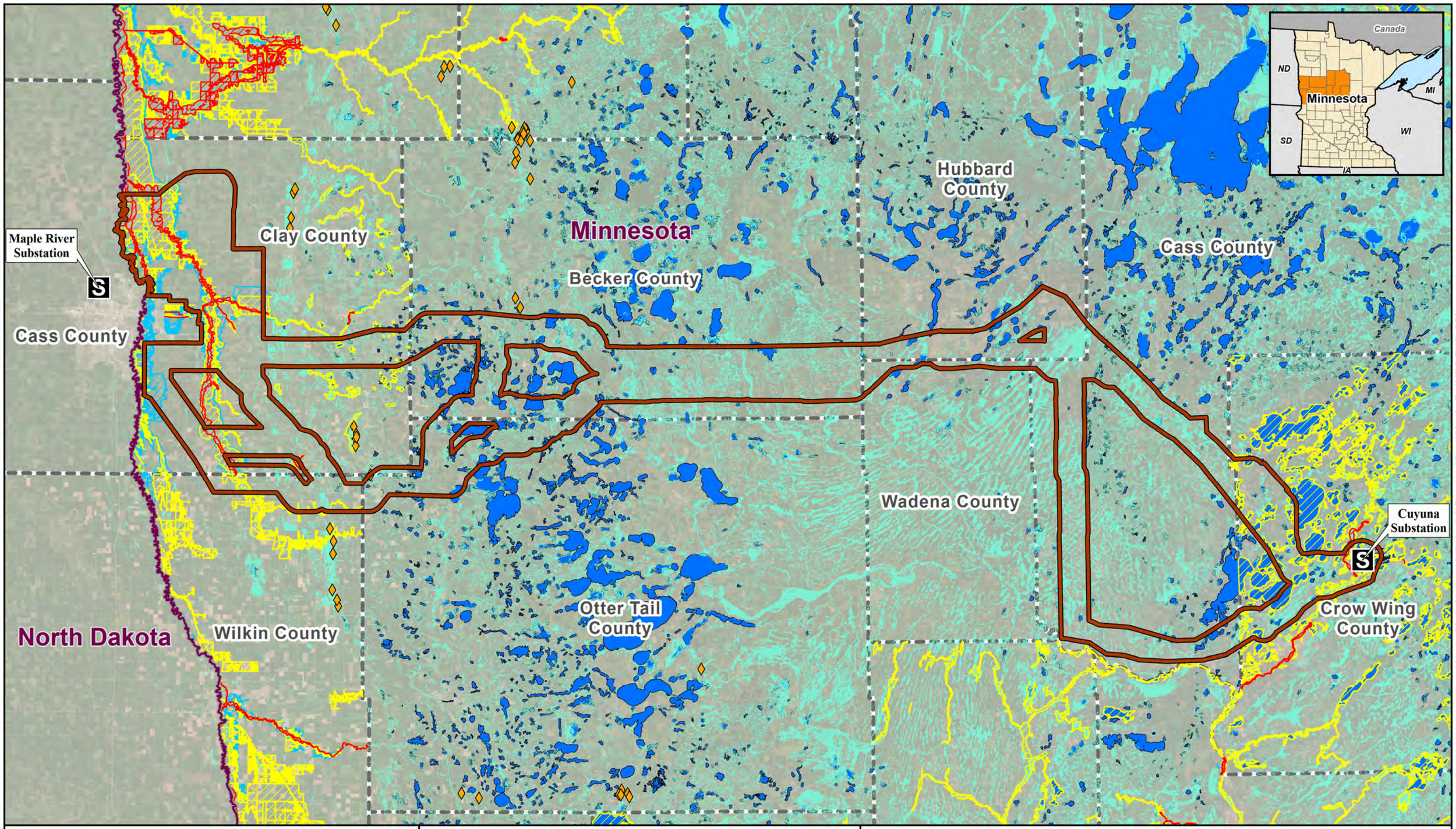
Maple River - Cuyuna 345 kV Transmission Project

Public Services and Transportation in the Project Study Area

Source: Z:\Clients\M_PMN_PowerMaple_River_Cuyuna_HVTL\ArcGIS\Permitting\State\001_ArcProMRC_PUC_CON.aprx

Date: (1/22/2026)


Maple River Substation
Cass County
Clay County
Becker County
Minnesota
Hubbard County
Wadena County
Otter Tail County
Wilkin County
North Dakota
Cuyuna Substation
Crow Wing County
Canada
ND
MI
SD
WI
IA
Minnesota
Marsh River
Wild Rice River
Marsh Creek
White Earth River
Twin Lake Creek
Bad Boy Creek
Buckboard Creek
Hien Creek
Sucker Brook
Hemenpin Creek
Birch Creek
Bungoshine Creek
Kabekona River
Rocky Creek
Stall Creek
Necktie River
Crooked Creek
Sucker Creek
Wildrice River, South Branch
Spring Creek
Felton Creek
Buffalo River
Campbell Creek
Toad River
Hay Creek
Stony Creek
Wildrice River, South Branch
Whisky Creek
Deerhorn Creek
Lawndale Creek
Pelican River
Long Branch Creek
Otter Tail River
Dead River
Whiskey Creek
Red River
Rabbit River
Mustinka River
Pelican Creek
Spruce Creek
Holmstad Creek
Dead Horse Creek
Sucker Creek
Kettle River
Redeye River
Shell River
Big Swamp Creek
Straight River
Blueberry River
Murder Creek
Birch Lake Creek
Mission Creek
Schoolcraft River
Crow Wing River
Shingobee River
May Lake Creek
Nolan Creek
Whipholt Creek
Swift River
Trapper Creek
Methand Brook
Boy River
Lizzie Creek
Blind Lake Creek
Dugger Brook
Spring Brook
Crooked Creek
Fox Creek
Thompson Creek
Willow Creek
Pine River
Little Pine River
Mud Brook
Pelican Brook
Stoney Brook
Coon Brook
Mississippi River
Cedar Creek
Dabill Creek
Hahlin Creek
Bellew Creek
Hay Creek
Bingo Creek
Mayo Brook
Jarvis Creek
Cat River
Little Swamp Creek
Beaver Creek
Turnip Creek
Martin Creek
Little Swan Creek
Mosquito Creek
Home Brook
Bishop Creek
Culver Brook
Swan Creek
Iron Creek
Leaf River
Partridge River
Four Creek
Hayden Creek
Long Prairie River
Fish Trap Creek
Moran Creek
Gull River
Buffalo Creek
Sand Creek
Hay Creek
Nokasippi River
Goon Brook
Dugger Brook
Little Nokasippi River
Black Brook
Platte River
Fletcher Creek
Little Elk River
Eagle Creek
Harris Creek
County Ditch 13
Wing River
Tamarac River
Pomme de Terre River
Pelican Creek
Mustinka River
Rabbit River
Willow Creek
Rock Creek
Deer Creek
Whiskey Creek
Union Creek
South Bluff Creek
Oak Creek
Little Partridge River
Bear Creek
Ugly Creek
Whitefish Creek
Northpine Creek
Trimm Creek
Hay Creek
Pelican River
Holmstad Creek
Spruce Creek
Eagle Creek
Harris Creek
Wing River
Tamarac River
Little Elk River
Fish Trap Creek
Moran Creek
Long Prairie River
Hayden Creek
Four Creek
Partridge River
Leaf River
Iron Creek
Swan Creek
Little Swan Creek
Martin Creek
Mosquito Creek
Home Brook
Bishop Creek
Culver Brook
Gull River
Buffalo Creek
Sand Creek
Hay Creek
Nokasippi River
Goon Brook
Dugger Brook
Little Nokasippi River
Black Brook
Platte River
Fletcher Creek
Mississippi River
Pelican Brook
Stoney Brook
Coon Brook
Mud Brook
Pine River
Little Pine River
Crooked Creek
Fox Creek
Thompson Creek
Willow Creek
Spring Brook
Dugger Brook
Methand Brook
Trapper Creek
Swift River
Boy River
Lizzie Creek
Blind Lake Creek
Shingobee River
May Lake Creek
Nolan Creek
Whipholt Creek
Crow Wing River
Spider River
Straight River
Murder Creek
Blueberry River
Shell River
Big Swamp Creek
Cedar Creek
Dabill Creek
Hahlin Creek
Bellew Creek
Hay Creek
Bingo Creek
Mayo Brook
Jarvis Creek
Cat River
Little Swamp Creek
Beaver Creek
Turnip Creek
Martin Creek
Little Swan Creek
Mosquito Creek
Home Brook
Bishop Creek
Culver Brook
Swan Creek
Iron Creek
Leaf River
Partridge River
Four Creek
Hayden Creek
Long Prairie River
Fish Trap Creek
Moran Creek



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GREAT RIVER ENERGY

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0 5 10 Miles

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Map 8

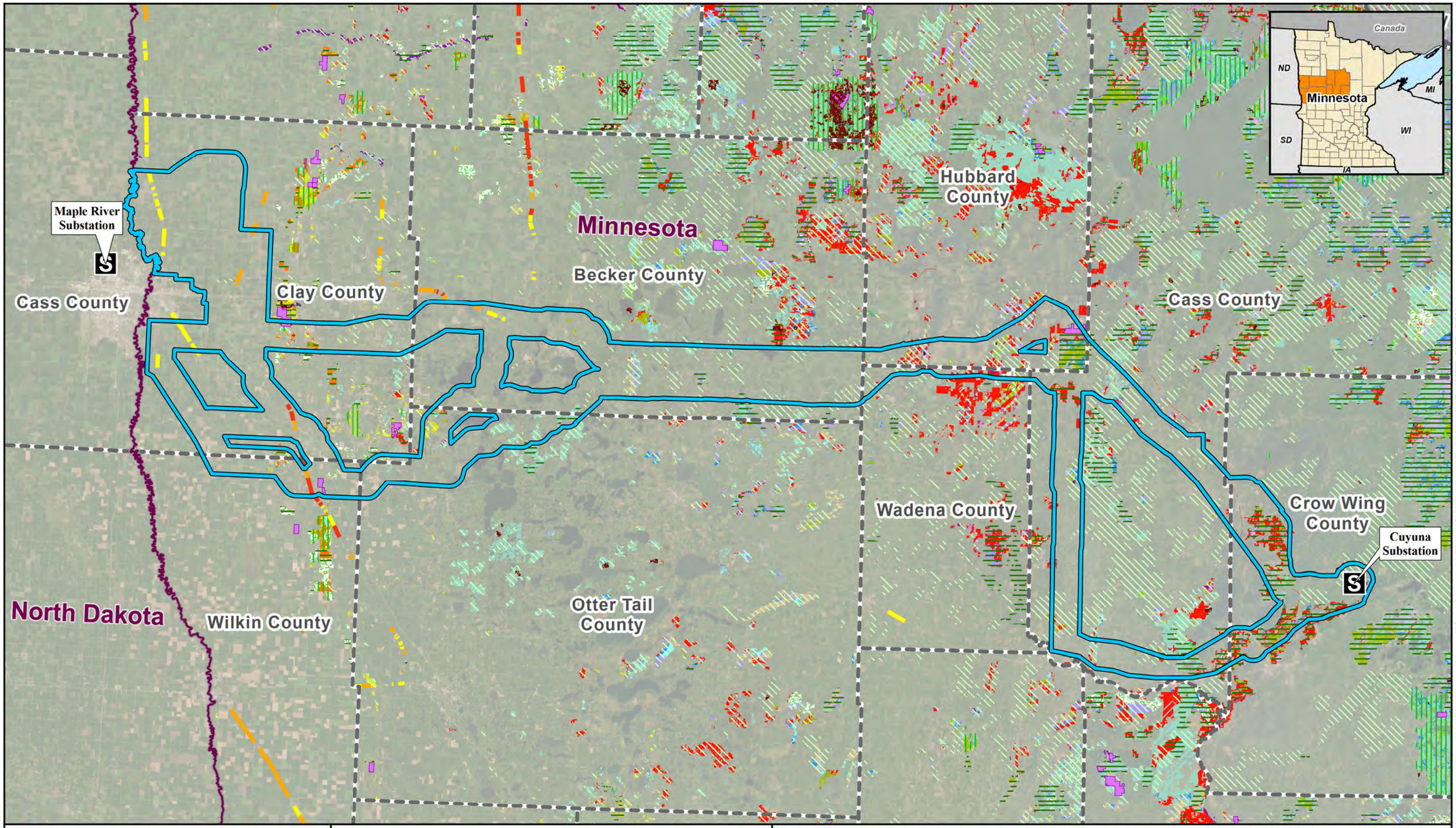
Maple River - Cuyuna 345 kV Transmission Project

Waterbodies and Wetlands in the Project Study Area

- Project Substation
- Project Study Area
- County Boundary
- State Boundary
- Calcareous Fen
- Public Waters Inventory Waterbody (MNDNR)
- National Wetland Inventory (USFWS)
- FEMA Floodway
- 100 Year Floodplain
- 500 Year Floodplain

Source: Z:\Clients\M_P\MN_PowerMaple_River_Cuyuna_HVTL\ArcGIS\Permitting\State\001_ArcPro\MRC_PUC_CON.aprx

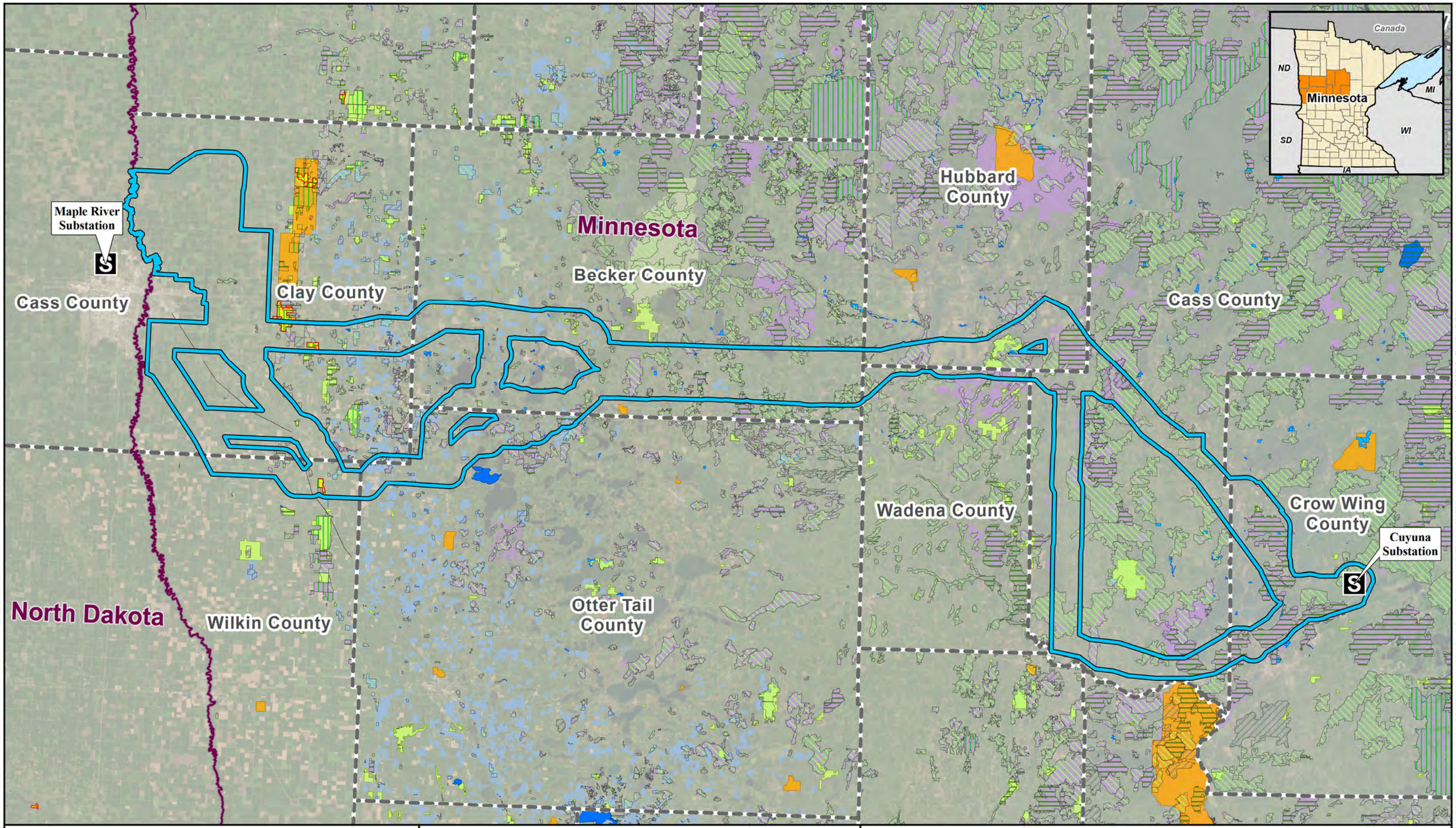
Date: 11/22/2026



Map 9

Maple River - Cuyuna 345 kV Transmission Project

Vegetation Resources in the Project Study Area



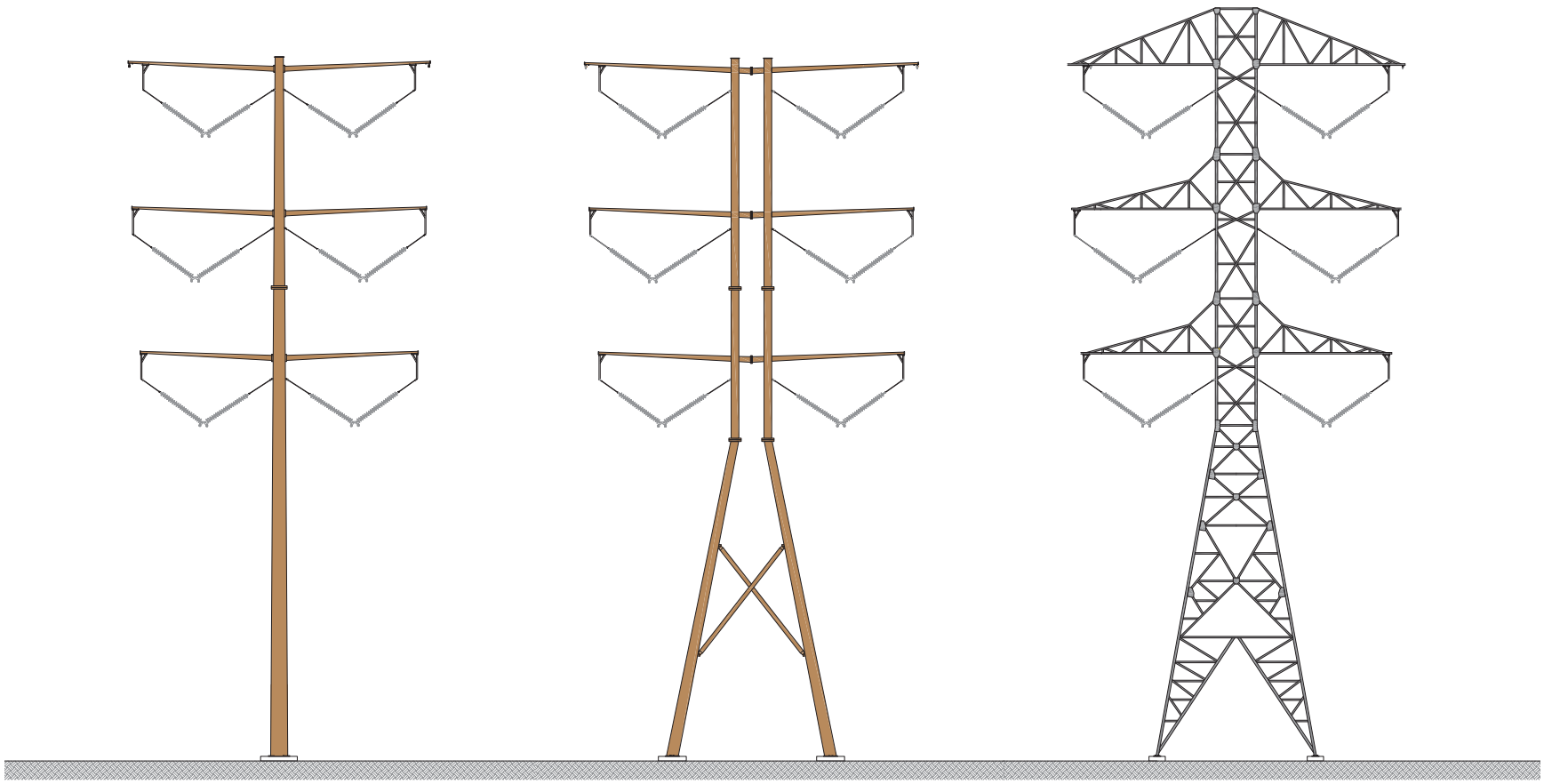
Map 10
Maple River - Cuyuna 345 kV Transmission Project
Wildlife Resources in the Project Area

APPENDIX E

MAPLE RIVER – CUYUNA 345 KV TRANSMISSION LINE PROJECT

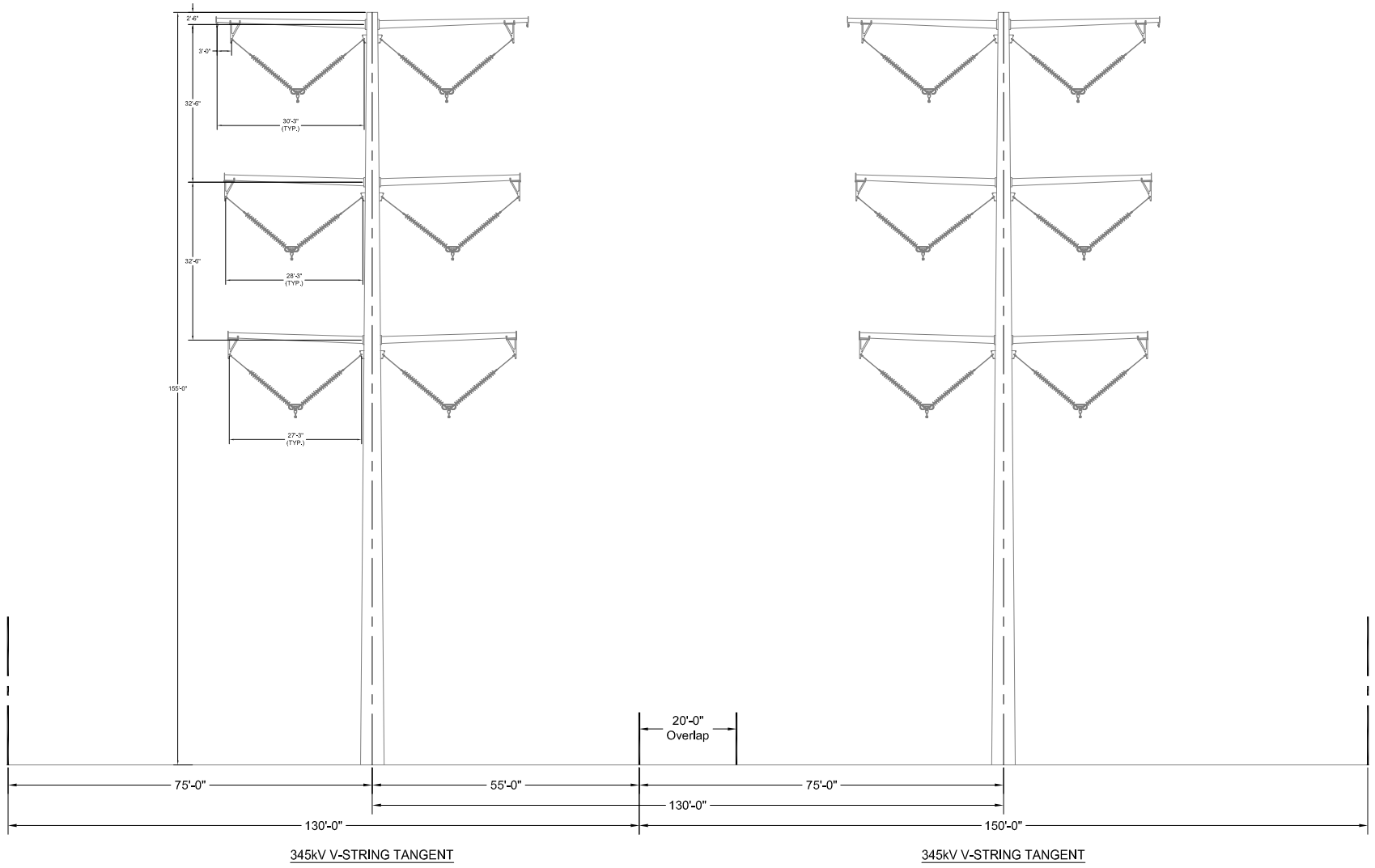
TECHNICAL DRAWINGS OF PROPOSED STRUCTURES

Potential Structure Design Concepts

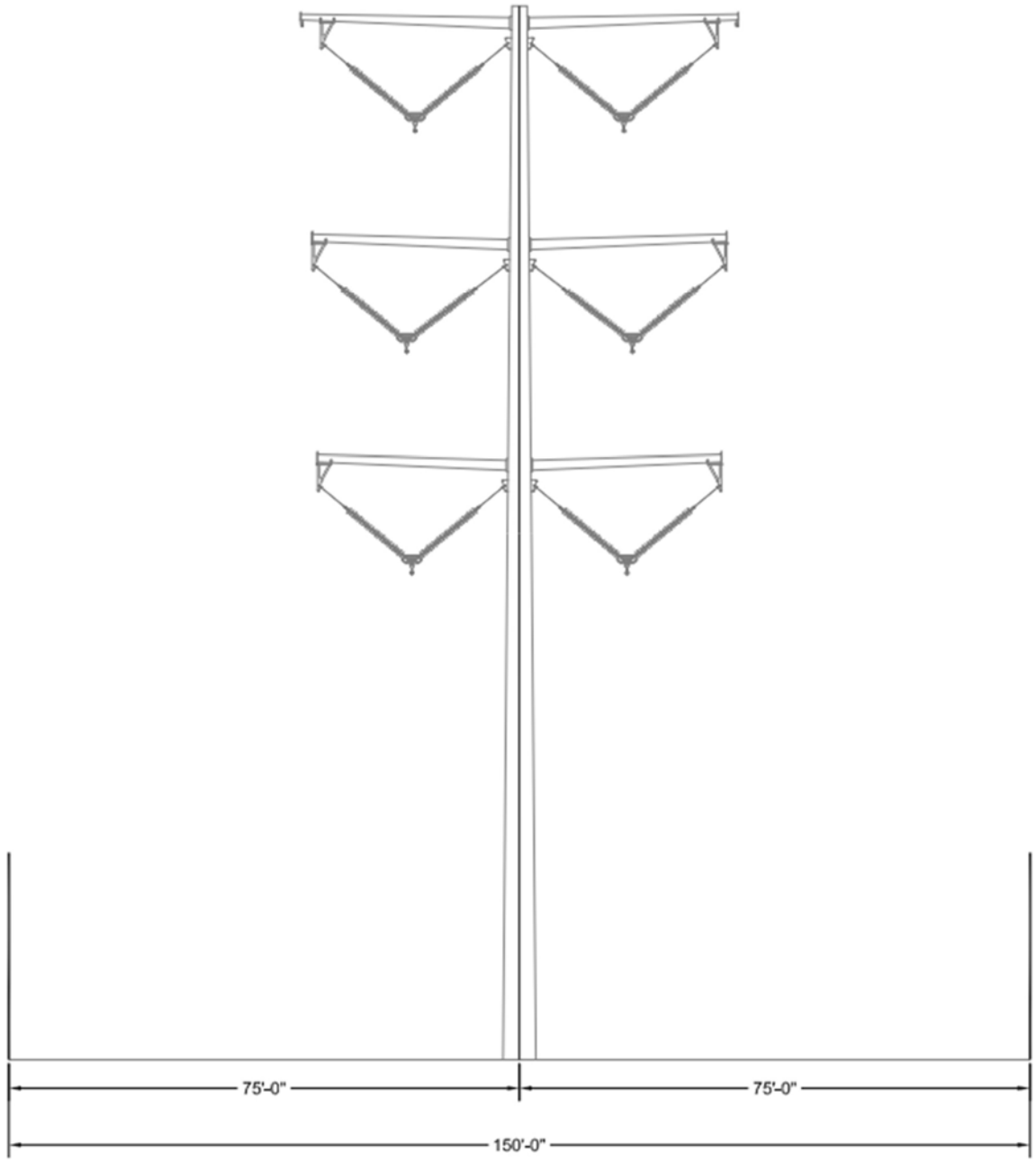


Preferred Design

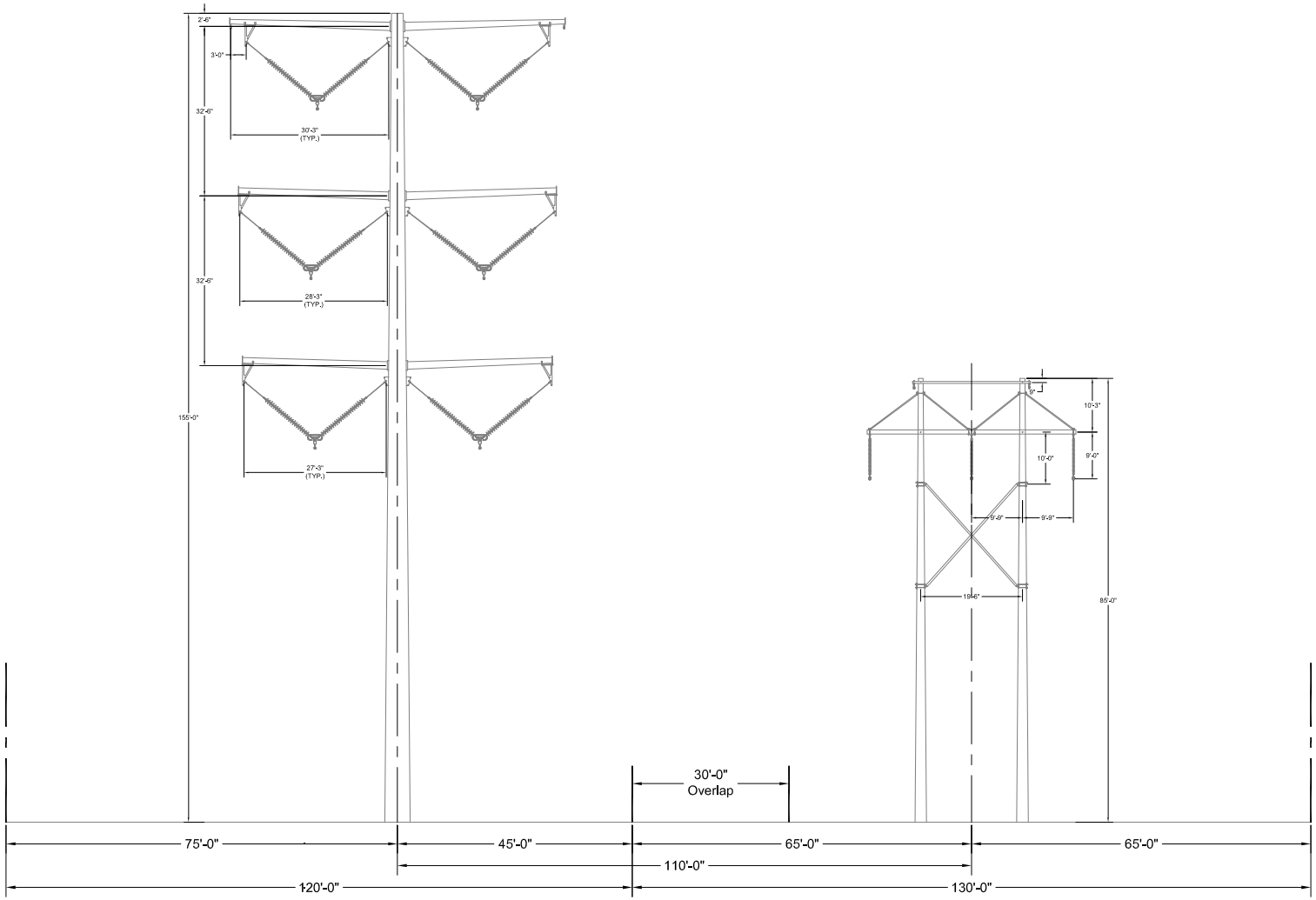
Site-Specific Alternatives



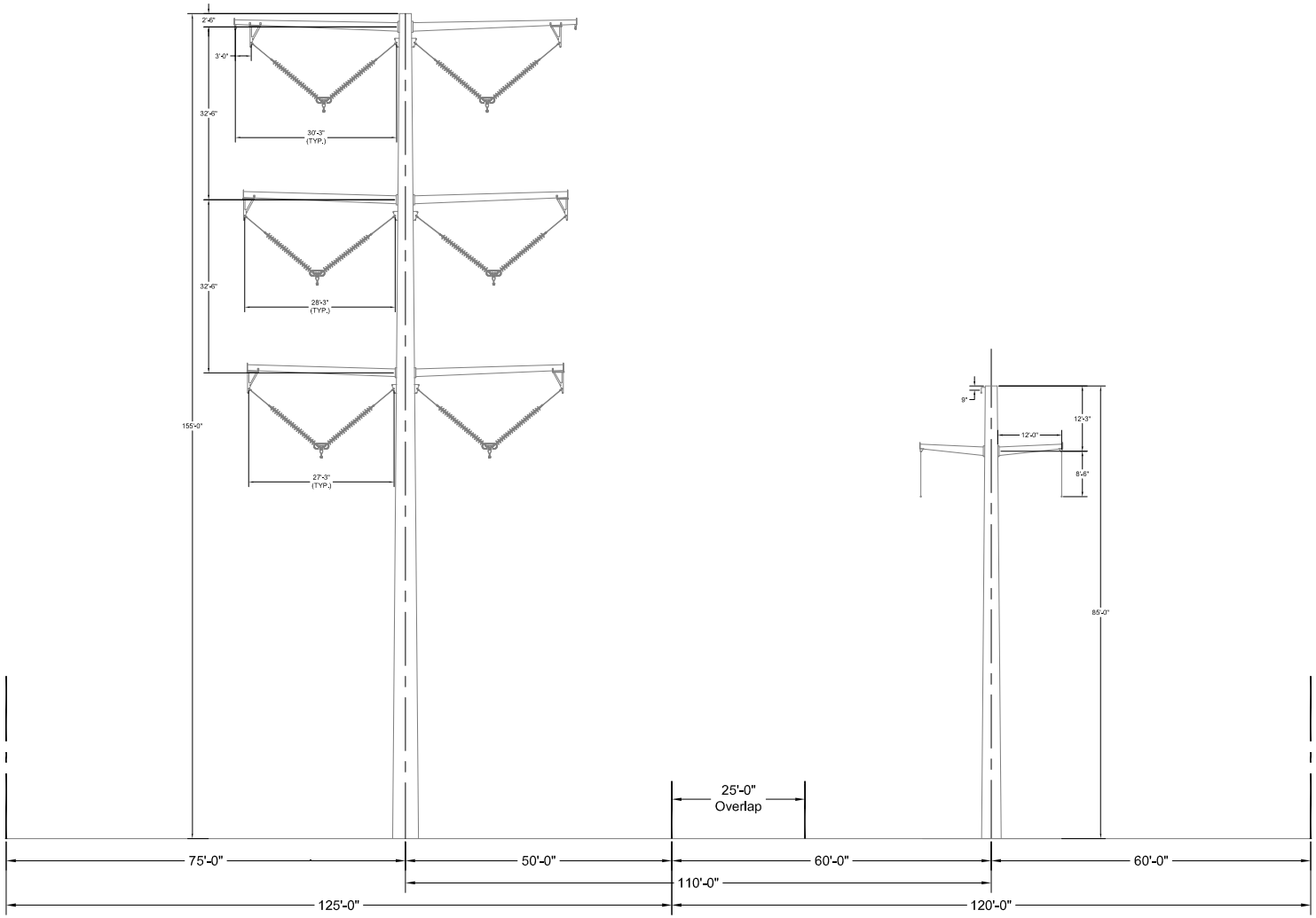
CROSS-SECTION A
345kV Parallel to 345kV



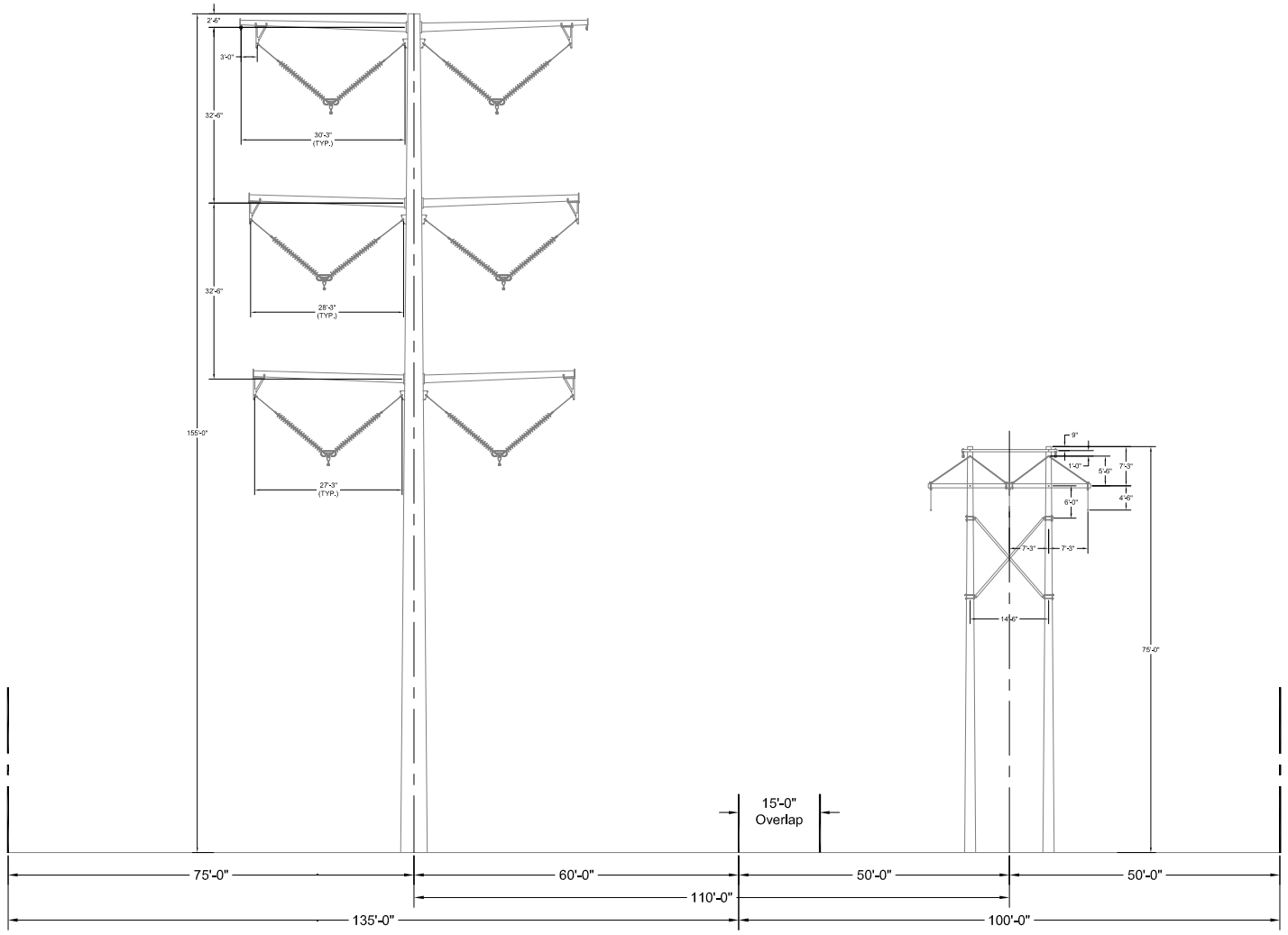
345kV V-STRING TANGENT



CROSS-SECTION B
345kV Parallel to 230kV



CROSS-SECTION C
345kV Parallel to 250kV-DC



CROSS-SECTION G
345kV Parallel to 115kV

345kV Jumpered Structure Concept

