



May 29, 2026

Honorable Joseph C. Meyer
Court of Administrative Hearings
PO Box 64620
Saint Paul, MN 55164-0620

Sasha Bergman, *Executive Secretary*
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101

RE: IN THE MATTER OF THE APPLICATION FOR A CERTIFICATE OF NEED FOR THE POWERON MIDWEST
765 kV AND 345 kV HIGH VOLTAGE TRANSMISSION LINE PROJECT
DOCKET No. E002, ET2, ET6675/CN-25-117
CAH Docket No 28-2500-41617

Dear Judge Meyer and Ms. Bergman:

Great River Energy, Northern States Power Company, doing business as Xcel Energy, and ITC Midwest LLC (collectively, Applicants) respectfully submit the enclosed Applicants' Response to Scoping Comments, with Attachment A, to the Minnesota Public Utilities Commission regarding the above-captioned docket.

This document has been e-filed today through www.edockets.state.mn.us. A copy of this filing is also being served upon the persons on the attached Service List. If you have any questions or need additional information, please contact Dan Lesher at dlesher@greenergy.com, Jody Londo at jody.l.londo@xcelenergy.com, or Margaret Kristian at mkristian@itctransco.com.

Sincerely,

/s/ Dan Lesher

Dan Lesher
Manager, Transmission Permitting & Land Rights
Great River Energy





/s/ Jody L. Londo

Jody L. Londo
Regional Vice President, Regulatory Planning and Policy
Northern States Power Company

/s/ Margaret Kristian

Margaret Kristian
Manager-Regulatory Strategy
ITC Midwest LLC



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COURT OF ADMINISTRATIVE HEARINGS
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**In the Matter of the Application for a
Certificate of Need for the PowerOn
Midwest 765 kV and 345 kV High Voltage
Transmission Line Project**

Docket No. E002, ET2, ET6675/CN-25-117
CAH Docket No. 28-2500-41617

**APPLICANTS' RESPONSE TO
SCOPING COMMENTS**

INTRODUCTION

Great River Energy, Northern States Power Company, doing business as Xcel Energy, and ITC Midwest LLC (collectively, Applicants) submit this Response to Scoping Comments in accordance with Minn. R. 7849.1400, subp. 6, in response to comments submitted before the close of the scoping comment period. The Applicants appreciate the verbal and written comments submitted during the scoping comment period related to the PowerOn Midwest Project (Project) and are available to coordinate with Minnesota Public Utilities Commission (Commission), Energy Infrastructure Permitting (EIP) Staff, as needed, as EIP Staff prepares the Environmental Report.

COMMENTS

I. ENVIRONMENTAL REPORT.

The Applicants anticipate that the Environmental Report will include the content required by Minn. R. 7849.1500, subps. 1 and 3. Consistent with comments submitted during the scoping period, this includes an evaluation of certain system alternatives and potential human and environmental impacts of the Project.

The Applicants request that the Environmental Report reflect the description provided below of typical tangent structures proposed for the Project. This description reflects updates from the information provided regarding the typical span length for the 765 kV structures in Table 2.1-1 of the Certificate of Need Application (Application) that have resulted from further design and analysis.¹ The Application provided a typical span length of 1,100-1,300 feet, which has been updated to 1,200-1,400 feet. This updated information was also included in the Applicants’ presentation at the April 2026 public information and scoping meetings.

Table 2.1-1 765 kV and 345 kV Transmission Line Structure Characteristics ^a						
Line Type	Structure Type	Structure Material	Typical Right-of-Way Width (feet)	Typical Structure Height (feet)	Typical Foundation Diameter (feet)	Typical Span Length Between Structures (feet)
765 kV	Lattice	Galvanized Steel	250	150 - 175	5 - 7	1,200 - 1,400
345 kV Double Circuit	Tubular Monopole	Weathering Steel	150	90 - 160	6	800 – 1,200

^a Structure sizes may change based on site conditions.

II. ADDITIONAL INFORMATION REQUIRED BY THE COMMISSION’S COMPLETENESS ORDER.

In its Completeness Order, the Commission identified additional information for the Applicants to provide in this record.² Applicants address each of these items in this section below.

A. Electrical Standards for 765 kV and Wind / Solar Facilities.

The Completeness Order directs Applicants to answer the following questions:

¹ Joint Application to the Minnesota Public Utilities Commission for a Certificate of Need, p. 32 (Feb. 3, 2026) (eDocket No. [20262-227787-02](#)) (hereafter referred to as “Application”).

² Order Accepting Application, Varying Rules, Requiring Filings, and Notice of and Order for Hearing, p. 8-9 (Apr. 21, 2026) (eDocket No. [20264-230753-01](#)) (hereafter referred to as “Completeness Order”).

What are the electrical engineering limitations and safe distances that a 765 kV transmission line can be constructed from an existing wind turbine or solar facility? Are there any North American Electric Reliability Corporation (NERC) or other electrical standards that establish appropriate distances from wind turbines and solar facilities for a 765 kV transmission line?³

There are no NERC standards specifying the distance between a 765 kV transmission line and wind or solar facilities. Likewise, the Applicants have not identified any relevant transmission line-specific documentation from the American Society of Civil Engineers or the Institute of Electrical and Electronics Engineers. The National Electric Safety Code (NESC) also does not include any specific provisions regarding distances between 765 kV transmission lines and wind turbines and solar panels. However, the NESC establishes vertical and horizontal clearance requirements for existing obstacles. NESC Rule 234.C is the classification that would apply to existing wind and solar facilities. The minimum vertical clearance (assuming 2,000 foot elevation) is 23.5 feet and the minimum horizontal clearance is 23 feet. In addition to these minimum clearances, the Applicants have developed Project-specific routing criteria, as discussed further in Section II (B), below, and the Project's right-of-way is designed to meet all applicable standards (regardless of obstacle), in addition to Minnesota's state noise requirements.

B. General Criteria for Routing 765 kV near Existing Wind / Solar Facilities.

The Completeness Order requires Applicants to respond to the following question:

Relating to the type of structures described in (c) below, what general criteria would be applied when running a generic 765 kV transmission line through or next to existing wind farms or solar facilities?⁴

³ Completeness Order, p. 8.

⁴ Completeness Order, p. 8.

The Applicants are aware that there are existing and proposed wind farms and solar facilities throughout the Project Area and, thus, understood that it would be important to develop criteria to apply when routing the Project near these facilities. The criteria the Applicants are applying to preliminary routing efforts for the 765 kV transmission line in the vicinity of existing wind farms or solar facilities are summarized below. The Applicants anticipate that further specific information will be evaluated as part of the forthcoming route permit proceedings.

For existing wind farms, the Applicants are using a 1.1 times turbine tip height⁵ setback from the route centerline, which can be adjusted based on site-specific conditions. This setback is being applied to minimize the risk of impact to the transmission line if an extreme weather event causes damage to a wind turbine. The Applicants plan to review routes that fall within this wind turbine buffer on a case-by-case basis. This buffer applies to individual wind turbines – not wind farm project boundaries. The Applicants are not applying a buffer to wind farm project boundaries or treating the project boundaries as avoidance areas.

For existing solar facilities, the Applicants' initial criteria is that the 765 kV transmission line conductors should not cross or span the arrays (solar panels).⁶ However, the Applicants have initially assumed that the edge of the transmission line right-of-way could abut or overlap the fenceline boundary of the solar facility.

The Applicants are engaging with developers and operators of wind farms and solar facilities in Minnesota as part of early outreach efforts and will continue to do so throughout the planning process. Likewise, the Applicants are reviewing publicly available data and engaging

⁵ “Tip height” is equal to the ‘total height’ attribute for each structure obtained from the U.S. Wind Turbine Database, Minnesota and National. Available online at: <https://gisdata.mn.gov/dataset/util-uswtdb>.

⁶ The Applicants are aware of at least two instances on other projects where a solar array is crossed by a transmission line. However, doing so poses risks for maintenance of the transmission line and operational issues for the solar array.

with developers, landowners, and local governments to understand plans for proposed future wind and solar facilities and are seeking to coordinate with developers to avoid conflicts while minimizing land use impacts.

C. Visual Simulations.

The Completeness Order requires Applicants to prepare visual simulations for the Project, as follows:

Provide several proof of concept examples of three 765 kV transmission line structures (the proposed lattice structure, tubular steel monopole under 200 feet and tubular steel H-frame – see Table 7.6-1 of the Application) moving through an area covering four sections of land (a section being approximately 640 acres in a typical township division) selected from each of the three areas identified below that will provide a fair representation of a rural mostly agricultural cross-section of the identified counties. A purpose is to show how the 765 kV transmission line routing practices the Applicants will use for each particular structure as the line moves through that landscape, and then also to provide what the viewshed would look like at distances of a quarter mile, a half mile, and a mile from the structures. The sections selected for providing these proofs of concepts routes across the landscape shall be selected from each of the following: a western portion of the area identified, the central portion of the area identified, and a portion near Rochester. Include an explanation for why each selected proof of concept is representative.

The general premise is that one would expect more structures and human impacts in the selected areas as they move from west to east, comparing the Nobles and Jackson area to the Freeborn and Mower area, and then from south to north comparing the Freeborn and Mower area to the Dodge and Olmsted area. The purpose is to identify how each of the proposed structures would comparatively mitigate impacts on agricultural and on human residences and structures across these representative landscapes.⁷

⁷ Completeness Order, p. 8-9.

The Applicants are preparing the required visual simulations, as described in the Applicants' May 20, 2026, filing.⁸ The Applicants are coordinating with EIP Staff regarding the timing of the visual simulations to ensure that they are available in time to be included in the Environmental Report.

D. Literature Related to Agricultural Practices and Transmission Structures.

The Completeness Order requires Applicants to:

Provide the best technical literature on the best ways to modify agricultural practices around the proposed lattice structure, tubular steel monopole under 200 feet and tubular steel H-frame for the 765 kV transmission line structures.⁹

The Applicants conducted a literature search using JSTOR, Google, and MS Copilot to identify peer-reviewed articles, article summaries, government guidance, utility industry publications, and agricultural extension resources. Applicants then searched directly within potentially relevant publications. Example search terms include:

- “agriculture practices transmission line right-of-way”
- “autosteer and obstacle detection agricultural machinery”
- “integrated vegetation management ROW agriculture”

Sources were screened based on relevance to agricultural practices adjacent to transmission line structures. Search results were not limited to geographical location or publication date to allow for a comprehensive review. **Attachment A** is the resulting bibliography.

Applicants note that most of the potentially relevant publications regarding lattice-specific research are from the 1970s-1980s, after which time it appears this research lessened. Additionally, Applicants included articles that describe the current technology available for obstacle avoidance

⁸ Applicants' Correspondence (May 20, 2026) (eDocket No. [20265-232041-01](#)).

⁹ Completeness Order, p. 9.

by autonomous agricultural machinery, the suitability of automated systems to detect utility poles, and the adoption of precision agricultural technologies, such as fully automated guidance systems. By providing this bibliography, Applicants are not representing the validity of these resources and note that further record development will occur in this docket and forthcoming routing proceedings regarding agricultural practices and the Project.

E. Conceptual Agricultural Impacts.

The Completeness Order requires:

For each of the proof-of-concept examples in (c), estimate the number of agricultural acres per mile that would be lost to production when best management practices are used around the three types of identified structures and a description of the methodology used to determine that.¹⁰

As an initial matter, Section 7.6.2 describes the Applicants' analysis regarding alternative structure design. The Applicants did evaluate tubular steel H-frame and tubular steel monopole structures and rejected both structures in favor of the self-supporting lattice structure due to, as applicable, cost, constructability, technical considerations, and the ability to withstand extreme weather events. The Applicants continue to conclude that neither structure is reasonable for the Project. Likewise, the Applicants are not aware of any existing 765 kV facilities in the United States constructed with monopoles, or other 765 kV facilities proposed to be constructed using monopole structures.

Nonetheless, consistent with the Completeness Order, the Applicants conducted an analysis to estimate the number of agricultural acres per mile that would be lost to production when best management practices are used around three structure types: the self-supporting lattice

¹⁰ Completeness Order, p. 9.

structure (as proposed by the Applicants); tubular steel monopole under 200 feet; and tubular steel H-frame. This section also describes the Applicants' methodology.

For all structures, to allow for an apples-to-apples comparison, the calculations below assume that the structure would be placed in the center of an agricultural field.¹¹ The calculations further assume that the one-mile segment evaluated is a straight line (i.e., no dead-end structures). The Applicants note that, even with tubular H-frame or tubular monopole tangent structures, lattice structures may be required for dead-end structure locations. Further, actual impacts will be highly dependent on structure placement and alignment.

The Applicants used standard assumptions for the footprint dimensions of each structure type as outlined in **Table 1**, below. The Applicants then applied a two-foot-wide "halo" around each structure. This halo represents the area around each structure which the Applicants assume would not be farmed, as equipment operators typically leave a small area around each structure to ensure proper clearance between the structure and farm equipment operation. The Applicants' use of a two-foot-wide halo is based on observed practices at structures in agricultural settings. This increased the dimensions of each footprint as shown in **Table 1**. **Table 1** also reflects the average span distances between structures, which further equates to an average number of structures per mile, as shown in **Table 1**.

¹¹ This assumption was made to allow for comparison among the three structure types on a consistent basis, and not because the Applicants propose to primarily place structures in the center of agricultural fields.

Table 1 Agricultural Impacts Analysis by Structure Type						
Structure Type	Structure Footprint	Structure Footprint Plus Halo	Average Span Distance Between Structures	Average Number of Structures Per Mile	Acres Per Structure	Acres Per Mile
Self-supporting Lattice	40 feet x 40 feet	44 feet x 44 feet	1,300 feet ¹²	5.06	0.0444	0.2247
Tubular Steel Monopole under 200 feet	8-foot diameter	12-foot diameter	800 feet ¹³	7.60	0.0026	0.0198
Tubular Steel H-Frame	60 feet x 10 feet	64 feet x 14 feet	1,200 feet ¹⁴	5.40	0.0206	0.1112

F. Paralleling Highway Rights-of-Way and Coordination with Minnesota Department of Transportation.

The Completeness Order Requires:

The applicants shall provide a detailed description of how they propose to analyze paralleling highway rights of way in accordance with MS 216I.05, subd. 11(e). The applicants will also describe their coordination with MNDOT in accordance with MSI 161.45, the Next Gen Highway Act.¹⁵

The Applicants are engaged in ongoing and substantive coordination with the Minnesota Department of Transportation (MnDOT) related to the Project. In pre-filed Direct Testimony, the Applicants will both provide a detailed description of how they are analyzing paralleling highway rights-of-way and a description of their coordination with MnDOT. Providing this information in pre-filed Direct Testimony will allow the Applicants to provide comprehensive information that is reflective of engagement efforts occurring in Summer 2026.

¹² The average span distance for the lattice structure is 1,200 to 1,400 feet, as discussed in Section I, above.

¹³ See Application, p. 185 at Table 7.6-1.

¹⁴ This is the mid-range span length presented in Table 7.6-1.

¹⁵ Completeness Order, p. 9.

III. RESPONSE TO SCOPING COMMENTS.

Prior to the close of the scoping comment period on May 20, 2026, written comments were submitted by the Prairie Island Indian Community (PIIC), Mower County, Kalmar Township, the Midcontinent Independent System Operator Inc. (MISO), North Route Group and NO765MN, and members of the public. The Applicants respond to these written comments, as applicable, in the sections that follow.

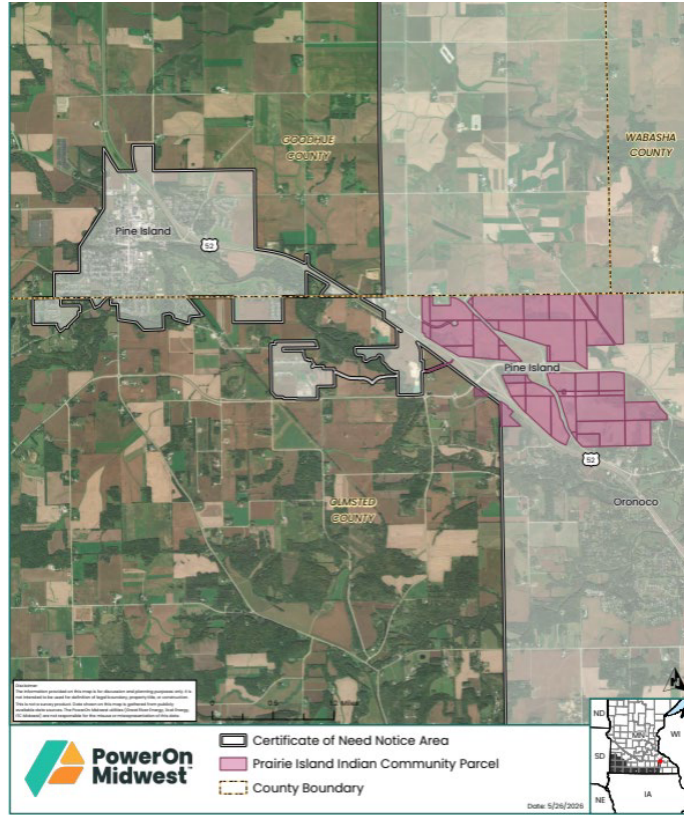
A. Prairie Island Indian Community.

In its comments, PIIC identified land owned by PIIC (Elk Run) between Oronoco and Pine Island, Minnesota and asked that the Environmental Report evaluate potential Project impacts on Elk Run.¹⁶

The Applicants have engaged with PIIC regarding the Project and appreciate PIIC's participation in the scoping process. As shown on **Figure 1** below, the large majority of PIIC lands are outside of the Project Notice Area and the small portion that is within the Project Notice Area is on the northeastern edge, along Highway 52. Therefore, impacts to Elk Run from the Project are not anticipated. However, the Applicants anticipate that the Environmental Report could include evaluation of the portion of Elk Run within the Project Notice Area.

¹⁶ PIIC Comments (May 20, 2026) (eDocket No. [20265-232074-01](#)).

Figure 1: Project Area (Notice Area) & Elk Run



More generally, the Applicants anticipate that the Environmental Report will include analysis of cultural resources. Further, the route development and route permitting processes will include more specific evaluations of cultural resources, potential impacts, and avoidance/minimization/mitigation measures. The Applicants look forward to continuing to coordinate with PIIC and other interested Tribes as Project development continues.

B. Local Governments.

Mower County submitted comments dated May 15, 2026, regarding: agricultural impacts, including cultivated crops and animal agriculture; archaeological and historical resources, including a Hutterite Community near the Pleasant Valley Substation; local zoning and land use;

surface waters and bridge/culvert crossings; road use; and right-of-way/access permits.¹⁷ The Applicants appreciate Mower County’s participation in the scoping process and anticipate that the topics raised in Mower County’s comments will generally be evaluated in the Environmental Report and/or in forthcoming routing proceedings. The Applicants have been engaged with Mower County regarding the Project and will continue to coordinate with and provide updates to Mower County as Project development proceeds.

Kalmar Township submitted a resolution dated April 20, 2026, which states support for the Applicants and MISO reviewing the “No Build Pleasant Valley to North Rochester 765 kV Option” identified in comments submitted by Mr. Dale Thomforde.¹⁸ As discussed in more detail in the sections that follow, the Project and Tranche 2.1 are the result of tens of thousands of hours of study by MISO, and MISO has stated that the system alternative referenced in the Kalmar Township resolution would not serve the purpose of the Project and is not supported by MISO.¹⁹ For similar reasons, the Applicants do not agree that alternative endpoints should be further evaluated in this proceeding. Regardless, the Applicants are committed to ongoing engagement with potentially affected local governments.

C. Organizations.

1. MISO

MISO submitted scoping comments to provide additional information related to MISO’s planning process that identified and studied the Project.²⁰ MISO explained that staff spend an estimated 40,000 hours performing the LRTP Tranche 2.1 study, the result of which is a portfolio

¹⁷ Mower County Comments (May 18, 2026) (eDocket No. [20265-231906-01](#)).

¹⁸ Kalmar Township Comments (May 23, 2026) (eDocket No. [20264-230822-01](#)).

¹⁹ MISO Comments, p. 3-4 (May 20, 2026) (eDocket No. [20265-232019-01](#)).

²⁰ MISO Comments (May 20, 2026) (eDocket No. [20265-232019-01](#)).

of transmission projects “whose end points were selected to support a system of facilities that work together to provide a resilient and economical solution for MISO’s footprint.”²¹ MISO specifically addressed the system alternatives proposed by member of the public Dale Thomforde (addressed in Section D(3) below) and stated that the alternatives would “defeat the purpose that is served by the Project.”²²

2. *North Route Group & No765MN*

North Route Group and No765MN (together, NRG/No) submitted “Scoping and Other” comments.²³ The comments primarily relate to the substance of this proceeding, which will be further developed in the forthcoming contested case, and to alternatives evaluated in the Environmental Report, the scope of which is largely dictated by statute and rule. Accordingly, the Applicants’ response here is generally limited to correcting certain statements in the NRG/No comments.²⁴

First, NRG/No takes issue with the wording of the Commission’s Notice of Application Completeness and Public Information and Environmental Report Scoping Meetings—primarily with the Notice’s use of the phrase, “stated need.”²⁵ This is not a substantive critique. The Notice appropriately explains to the public the topics which are open for comment. At this stage of the

²¹ MISO Comments, p. 3 (May 20, 2026) (eDocket No. [20265-232019-01](#)).

²² MISO Comments, p. 4 (May 20, 2026) (eDocket No. [20265-232019-01](#)).

²³ NRG/No Comments (May 20, 2026) (eDocket No. [20265-232073-01](#)). Comments were also submitted by a member of the public, Cheryl Orcutt, also as on behalf of North Route Group. *See* Cheryl Orcutt and North Route Group Comments (May 20, 2026) (eDocket No. [20265-232015-01](#)). The Applicants request that the North Route Group clarify who is authorized to speak on its behalf.

²⁴ NRG/No also continues to assert that this Project should be consolidated with Docket CN-25-121. The Commission already declined NRG/No’s prior request to consolidate those dockets, and NRG/No did not submit a timely petition for reconsideration of that order. *See* Completeness Order, p. 7. As discussed in Section D(4) below, the Applicants continue to believe that not consolidating is in the public interest.

²⁵ NRG/No Comments, p. 2-6 (May 20, 2026) (eDocket No. [20265-232073-01](#)).

process, as NRG/No notes, need has not been established, and the Notice’s phrasing is appropriate and consistent with Minn. R. 7849.1200, subp. 6, which cautions that an alternative “that does not meet the underlying need for or purpose of the project or that is not likely to have any significant environmental benefit” may be excluded from the Environmental Report.²⁶ The rule also requires that a person proposing an alternative “shall identify the alternative . . . to be included, provide an explanation of why the alternative . . . should be included, and submit all supporting information the person wants the commissioner to consider.” To the extent that NRG/No is asserting that the Commission can or should disregard this rule, the Applicants disagree with that assertion because the rule is applicable and plain on its face.

NRG/No then discuss various system alternatives, including different voltages, different endpoints, and different technologies.²⁷ The Applicants generally agree that system alternatives are to be evaluated in the Environmental Report, except that the Applicants do not agree that alternative endpoints should be evaluated further in the Environmental Report. Minnesota statute is clear on this point:

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.²⁸

²⁶ Elsewhere, NRG/No asserts that system alternatives should not be rejected “out of hand before there has been an opportunity for build the record in the substantive case for system alternatives.” NRG/No Comments, p. 6 (May 20, 2026) (eDocket No. [20265-232073-01](#)). That argument ignores the promulgated rule, cited above, which explicitly authorizes the exclusion of certain alternatives from further consideration. Regardless, the Applicants agree with NRG/No’s more general conclusion that “[f]or a system alternative to be considered in the environmental review in a Certificate of Need case, the bar is not so high as required in the ultimate Certificate of Need record.”

²⁷ NRG/No Comments, p. 6-16 (May 20, 2026) (eDocket No. [20265-232073-01](#)).

²⁸ Minn. Stat. § 216B.243, subd. 3(6).

Because the endpoints for the Project were the result of MISO’s extensive planning process, including broad stakeholder participation, the Applicants do not agree that further evaluation of end points is appropriate or warranted. In its evaluation of the Tranche 2.1 portfolio, MISO evaluated multiple configurations and endpoints and determined that the proposed endpoints are the best configuration to serve the identified needs. In addition, any modification to the Project’s endpoints could have broader implications for the Tranche 2.1 portfolio as whole, as well as for other planned transmission projects that rely on the endpoints established through the MISO planning process.²⁹

Further, NRG/No criticizes a map included in the Application, asserting that it is incomplete.³⁰ For the most part, however, the “missing” lines identified by NRG/No are lines that have not yet been built or energized and/or were not represented in the publicly available dataset that was used to produce the map. Further, the Application includes a direct citation to the source material for the map at issue.³¹

Finally, the NRG/No comments discuss a host of potential human and environmental impacts.³² The Applicants anticipate that these issues will generally be discussed in the Environmental Report and note that more location-specific evaluation of resources and impacts will occur as part of the route permit environmental review process.³³

²⁹ *E.g.*, Application, p. 172-73.

³⁰ NRG/No Comments, p. 9-11 (May 20, 2026) (eDocket No. [20265-232073-01](#)).

³¹ Application, p. 52.

³² NRG/No Comments, p. 16-20 (May 20, 2026) (eDocket No. [20265-232073-01](#)).

³³ NRG/No states that “[p]roperty lines and field lines are NOT corridors.” NRG/No Comments, p. 19 (May 20, 2026) (eDocket No. [20265-232073-01](#)). This assertion is imprecise, as Minn. Stat. § 216I.05, subd. 11(b)(9) directs the Commission to evaluate “governmental survey lines and other natural division lines of agricultural land to minimize interference with agricultural operations.”

D. Members of the Public.

1. Human and Environmental Impacts

Commenters requested that the Environmental Report consider the human and environmental impacts of the Project and comments most frequently referred to agricultural practices,³⁴ electric and magnetic fields,³⁵ other land use issues,³⁶ and wildlife/natural resources.³⁷ The Applicants agree that these topics are appropriate for analysis in the Environmental Report.³⁸

³⁴ Patrick Garry Comments (Apr. 28, 2026) (eDocket No. [20264-231299-01](#)); David and Angela Ruhter Comments (May 1, 2026) (eDocket No. [20265-231482-01](#)); Kent Scholl Comments (May 17, 2026) (eDocket No. [20265-231919-01](#)); David Hagen Comments (May 19, 2026) (eDocket No. [20265-232010-01](#)); Timothy Jaykel Comments (May 19, 2026) (eDocket No. [20265-232180-01](#)); W. Ben Johnson, MD Comments (May 20, 2026) (eDocket No. [20265-232059-01](#)); Dave Huper Comments (May 20, 2026) (eDocket No. [20265-232093-06](#)); Shari Lenz Comments (May 20, 2026) (eDocket No. [20265-232093-04](#)); Caitlyn Kor Comments (May 20, 2026) (eDocket No. [20265-232093-03](#)); Jay Kachelski Comments (May 20, 2026) (eDocket No. [20265-232093-01](#)).

³⁵ Diane and Harley Krause Comments (Apr. 30, 2026) (eDocket No. [20264-231247-01](#)); Justin Wulf Comments (May 11, 2026) (eDocket No. [20265-231648-01](#)); Kent Scholl Comments (May 17, 2026) (eDocket No. [20265-231919-01](#)); Aubree Derksen Comments (May 17, 2026) (eDocket No. [20265-231916-01](#)); W. Ben Johnson, MD Comments (May 20, 2026) (eDocket No. [20265-232059-01](#)); Shari Lenz Comments (May 20, 2026) (eDocket No. [20265-232093-04](#)); Caitlyn Kor Comments (May 20, 2026) (eDocket No. [20265-232093-03](#)).

³⁶ Dean Summer Comments (May 5, 2026) (eDocket No. [20265-231505-01](#)); Trevor Scrobeck Comments (May 17, 2026) (eDocket No. [20265-231930-01](#)); Aubree Derksen Comments (May 17, 2026) (eDocket No. [20265-231916-01](#)); Aubree Derksen Comments (May 18, 2026) (eDocket No. [20265-231992-01](#)); Suzanne Tomek Comments (May 19, 2026) (eDocket No. [20265-231969-01](#)); Christian Reimche Comments (May 20, 2026) (eDocket No. [20265-232093-08](#)); Caitlyn Kor Comments (May 20, 2026) (eDocket No. [20265-232093-03](#)).

³⁷ David and Angela Ruhter Comments (May 1, 2026) (eDocket No. [20265-231482-01](#)); Aubree Derksen Comments (May 17, 2026) (eDocket No. [20265-231916-01](#)); David Hagen Comments (May 19, 2026) (eDocket No. [20265-232010-01](#)); Bonnie Matter Comments (May 18, 2026) (eDocket No. [20265-231991-01](#)); Cheryl Orcutt Comments (May 20, 2026) (eDocket No. [20265-232015-01](#)); Christian Reimche Comments (May 20, 2026) (eDocket No. [20265-232093-08](#)); Devon Ballinger Comments (May 20, 2026) (eDocket No. [20265-232093-02](#)).

³⁸ However, the Applicants do not necessarily agree with the commenters' characterization of potential impacts, the substance of which will be developed further in this process.

2. *Project Need*

Some commenters questioned the need for the Project, including where the generation that will flow on the line comes from, and where it will be used.³⁹ Relatedly, commenters questioned whether the electricity that will be transported on the Project will be used in Minnesota.⁴⁰ Similar questions were raised during the in-person scoping meetings. The Application includes detailed analysis regarding the need for the Project, including information regarding demand, power flows, and need in Minnesota.⁴¹ The Applicants appreciate commenters' engagement in the docket, look forward to further record development, and are confident that the record will continue to show that the Project is needed, benefits Minnesota and its residents, and satisfies the criteria for the issuance of a Certificate of Need under Minnesota law.

3. *Alternatives*

(1) Generally

Commenters raised various alternatives to the Project, including distributed generation, HVDC lines, undergrounding, alternative voltages, and generation in lieu of the proposed transmission.⁴² The Applicants note that each of these alternatives was discussed in detail in

³⁹ Chuck Serbus Comments (Apr. 22, 2026) (eDocket No. [20264-230822-02](#)); David and Angela Ruhter Comments (May 1, 2026) (eDocket No. [20265-231482-01](#)); Justin Wulf Comments (May 11, 2026) (eDocket No. [20265-231648-01](#)); Greg Goetzman Comments (May 19, 2026) (eDocket No. [20265-231993-01](#)); David Derksen Comments (May 18, 2026) (eDocket No. [20265-231990-01](#)); Stephen and Kia Hackman Comments (May 18, 2026) (eDocket No. [20265-231967-01](#)); Cheryl Orcutt Comments (May 20, 2026) (eDocket No. [20265-232015-01](#)); Dave Huper Comments (May 20, 2026) (eDocket No. [20265-232093-06](#)).

⁴⁰ David and Angela Ruhter Comments (May 1, 2026) (eDocket No. [20265-231482-01](#)); Kent Scholl Comments (May 17, 2026) (eDocket No. [20265-231919-01](#)); Shari Lenz Comments (May 20, 2026) (eDocket No. [20265-232093-04](#)).

⁴¹ See Application, p. 8-17, 77-101, 118-128.

⁴² Dale Thomforde Comments (Apr. 30, 2026) (eDocket No. [20264-231247-02](#)); Justin Wulf Comments (May 11, 2026) (eDocket No. [20265-231648-01](#)); Dennis Schroeder Comments (May 13, 2026) (eDocket No. [20265-231819-01](#)); Kent Scholl Comments (May 17, 2026) (eDocket No. [20265-231919-01](#)); Suzanne Tomek Comments (May 19, 2026) (eDocket No. [20265-231969-01](#)); W. Ben Johnson, MD

Chapter 7 of the Application and rejected as infeasible, inferior to the Project, and/or not meeting the need for the Project. Nonetheless, consistent with Minn. R. 7849.1500, subp. 1(B) and (F), the Applicants anticipate that the Environmental Report will include these alternatives, along with an analysis of the feasibility and availability of each alternative considered.

(2) Alternative Endpoints

Some comments proposed alternative endpoints for the Project. For the reasons discussed below, and pursuant to Minn. Stat. § 216B.243, subd. 3(6), the Applicants oppose inclusion of system alternatives with alternative endpoints in the Environmental Report.⁴³

More specifically, Mr. Dale Thomforde submitted comments proposing system alternatives, which the Applicants understand as two different configurations:

1. A “no-build” of the 765 kV line between the North Rochester and Pleasant Valley Substations and a change in the end point of the North Rochester to Columbia 765kV line (part of the Gopher to Badger Link project –Docket No. CN-25-121) to Pleasant Valley to Columbia (“No-Build North Rochester to Pleasant Valley 765 kV”);⁴⁴ or
2. A change in the endpoint of the North Rochester to Columbia 765kV line (part of the Gopher to Badger Link project) to Pleasant Valley to Columbia. This alternative would maintain a “radial” 765 kV connection between North Rochester and Pleasant Valley (“Radial North Rochester to Pleasant Valley 765 kV”).⁴⁵

Comments (May 20, 2026) (eDocket No. [20265-232059-01](#)); Cheryl Orcutt Comments (May 20, 2026) (eDocket No. [20265-232015-01](#)); Chris Wheatley Comments (May 20, 2026) (eDocket No. [20265-232093-05](#)); Devon Ballinger Comments (May 20, 2026) (eDocket No. [20265-232093-02](#)); Dean Regnier Comments (May 19, 2026) (eDocket No. [20265-232185-01](#)).

⁴³ Minn. Stat. § 216B.243, subd. (3)(6) (“[T]he 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.”).

⁴⁴ Dale Thomforde Comments (Apr. 30, 2026) (eDocket No. [20264-231247-02](#)).

⁴⁵ Dale Thomforde Comments (Apr. 30, 2026) (eDocket No. [20264-231247-02](#)).

The Applicants appreciate Mr. Thomforde’s participation and thorough summary but do not support evaluation of Mr. Thomforde’s system alternatives in the Environmental Report. Each Project component is needed and necessary because the LRTP Tranche 2.1 projects work together to address system needs. LRTP24 (Lakefield to Pleasant Valley to North Rochester 765 kV), is the primary “artery” for the Studied Projects⁴⁶ connecting Minnesota’s high voltage hubs to both generation sources and load sinks as described in the Application.⁴⁷ The North Rochester 765 kV termination is thus intentional and essential. The North Rochester Substation has been a key component in each of MISO’s regional transmission plans going back to 2011. To date, there have been three regional portfolios that included projects connecting to the North Rochester Substation.⁴⁸ The North Rochester Substation is a hub connecting Rochester, the Twin Cities, Mankato, and Western Wisconsin and is an “on and off ramp” for power to flow to and from destinations to and well beyond Rochester on the high voltage and lower voltage systems.

Both of Mr. Thomforde’s proposed alternatives would require a change in endpoint to LRTP24. The State of Minnesota recognizes that MISO is best positioned to determine project endpoints. Specifically, Minn. Stat. § 216B.243, subd. 3(6) dictates that the Commission may not require evaluation of end points that are inconsistent with MISO’s transmission plan unless Applicants agree to further study. MISO spent approximately 40,000 staff hours and facilitated 300 meetings to identify the proposed Project configuration as the optimal to meet the system’s needs.

⁴⁶ The Studied Projects include the entirety of MISO designated LRTPs 22 through 26 from South Dakota to Wisconsin.

⁴⁷ *See, e.g.*, Application, p. 110.

⁴⁸ In Tranche 1, MISO approved the Mankato-Mississippi River Transmission Project. In the first MVP portfolio, MISO approved the Twin Cities-Rochester-La Crosse 345 kV Project.

The Applicants support MISO’s plan and do not consent to further evaluation, given the exhaustive analysis MISO undertook and the role of the Project as part of a regional portfolio of projects designed and optimized to work together as Multi-Value Projects (MVPs) eligible for regional cost sharing under the MISO Open Access Transmission, Energy and Operating Reserve Markets Tariff. Given the critical nature of the North Rochester Substation hub, MISO designed the portfolio to have two transmission lines connecting at North Rochester, so that if one of the 765 kV lines is out of service, the substation could still be served by the other. A change in endpoint not only has implications to the Project but would impact the broader MISO LRTP Tranche 2.1 portfolio. In addition, each of Mr. Thomforde's proposed alternatives would be a new project and not eligible for cost sharing unless it also qualified as an MVP.

In summary, the Applicants do not agree to the Environmental Report evaluating alternative endpoints to LRTP24 because MISO selected them after extensive evaluation, the endpoints serve critical local and regional needs, and alternative end points would not be eligible for cost-sharing absent further MISO action.⁴⁹

(3) Structure Type

Consistent with the Commission’s Completeness Order, the Applicants anticipate that the Environmental Report will include analysis regarding the self-supporting lattice structure type that is proposed for the Project, as well as a monopole structure and H-frame structure. The Applicants previously rejected the monopole structure and the H-frame structure due to engineering, cost, and environmental impact considerations, as discussed in Section 7.6.2 of the Application.

⁴⁹ For the same reasons, the Applicants do not agree that the Environmental Report should study the Iowa to Brookings to Big Stone alternative endpoints discussed in comments submitted by Rose and Lynn Hoffman. *See* Rose and Lynn Hoffman Comments (May 20, 2026) (eDocket No. [20265-232093-07](#)).

A commenter, Mr. Kent Scholl, also referred to a “delta design” for 765 kV structures being proposed by American Electric Power (AEP).⁵⁰ According to AEP’s website,⁵¹ the company is developing a project in Texas that would use both a guyed structure (meaning that it would have wires connecting the structure to the ground) and self-supporting structure, both with phases configured near the top of the structure and which are proprietary to AEP. Based on publicly available information,⁵² these structures would likely be taller than those being proposed for the Project.

Applicants do not agree that evaluation of the proprietary AEP structures in the Environmental Report would be useful. The Environmental Report need not evaluate alternatives that are not likely to have significant environmental benefits,⁵³ and here, the Applicants already rejected using any type of guyed structures for the Project because of their additional impacts on agricultural operations and concerns about reliability of those structures in areas where agricultural equipment is used due to potential collisions with the guy wires.⁵⁴ Likewise, it appears that either structure would be taller than the structures proposed for the Project, increasing the potential for Federal Aviation Administration marking/lighting requirements.

⁵⁰ Kent Scholl Comments (Apr. 30, 2026) (eDocket No. [20265-231422-01](#)).

⁵¹ <https://www.aeptransmission.com/texas/howard-solstice/> (last accessed May 28, 2026).

⁵² See <https://cdn.misoenergy.org/BECI%20Selection%20Report734487.pdf> (discussing guyed-Y structure for use in Wisconsin and noting that it would be 30-35 taller than a guyed-V structure). For comparison, Applicants’ analysis indicates that a guyed-V structure would be 150-175 feet tall in Minnesota. See Application Table 7.6-1. AEP states that the structures will be up to 220 feet in Texas. See Joint Application of AEP Texas Inc. and the City of San Antonio . . . , Texas Public Utility Comm’n Docket No. 59336, at p. 9 (Mar. 2, 2026).

⁵³ Minn. R. 7849.1200, subp. 6.

⁵⁴ Application, p. 182-185.

4. *Other Issues*

Some comments submitted by members of the public relate to topics outside the scope of this proceeding. For example, some comments discussed Project routing and route alternatives.⁵⁵ The Applicants have not yet filed route permit applications and are currently in the route development process. The Applicants will hold routing open houses in the Project area June 2-4 and 9-12, 2026 and encourage members of the public to participate.⁵⁶

Other commenters discussed their concerns related to data centers,⁵⁷ which were a common issue raised at the in-person scoping meetings. The need for the Project is independent of data centers.⁵⁸ The Applicants look forward to further developing the record regarding the need for the Project as the proceeding continues.

Some comments discussed different projects (including the Gopher to Badger Link Project) that are being reviewed by the Commission in other dockets.⁵⁹ The Applicants encourage

⁵⁵ Patrick Garry Comments (Apr. 28, 2026) (eDocket No. [20264-231299-01](#)); Dale Thomforde Comments (Apr. 30, 2026) (eDocket No. [20264-231247-02](#)); Trevor Scrobeck Comments (May 17, 2026) (eDocket No. [20265-231930-01](#)); Dean Regnier Comments (May 19, 2026) (eDocket No. [20265-232185-01](#)); Timothy Jaykel Comments (May 19, 2026) (eDocket No. [20265-232180-01](#)); Christian Reimche Comments (May 20, 2026) (eDocket No. [20265-232093-08](#)); Rose and Lynn Hoffman Comments (May 20, 2026) (eDocket No. [20265-232093-07](#)); Shari Lenz Comments (May 20, 2026) (eDocket No. [20265-232093-04](#)).

⁵⁶ Additional information is available at www.poweronmidwest.com/events/.

⁵⁷ Chuck Serbus Comments (Apr. 22, 2026) (eDocket No. [20264-230822-02](#)); Twenty-Five Comments (May 1, 2025) (eDocket No. [20265-231422-02](#)); Justin Wulf Comments (May 11, 2026) (eDocket No. [20265-231648-01](#)); Aubree Derksen Comments (May 15, 2026) (eDocket No. [20265-231916-01](#)); David Hagen Comments (May 19, 2026) (eDocket No. [20265-232010-01](#)); Aubree Derksen Comments (May 18, 2026) (eDocket No. [20265-231992-01](#)); Bonnie Matter Comments (May 18, 2026) (eDocket No. [20265-231991-01](#)); David Derksen Comments (May 18, 2026) (eDocket No. [20265-231990-01](#)); Shari Lenz Comments (May 20, 2026) (eDocket No. [20265-232093-04](#)).

⁵⁸ See Application, p. 86 (“Demand forecasts used in this Application do not consider data center and other industry growth potential.”); MISO Comments, p. 2-3 (May 20, 2026) (eDocket No. [20265-232019-01](#)) (“The demand forecasts relied upon to assess the need for Tranche 2.1 included some assumptions regarding load growth, but did not include data center load growth.”).

⁵⁹ Dale Thomforde Comments (Apr. 30, 2026) (eDocket No. [20264-231247-02](#)); Cree Kachelski Comments (May 12, 2026) (eDocket No. [20265-231751-01](#)); Aubree Derksen Comments (May 15, 2026)

commenters to participate in the docket(s) related to the specific project in which they are interested. Some comments also continued to assert that this docket should be consolidated with Docket 25-121 (the Certificate of Need proceeding for the Gopher to Badger Link Project). When faced previously with similar requests, the Commission declined to consolidate the two dockets and no person submitted timely petitions for reconsideration of that order.⁶⁰ The Applicants do not dispute that PowerOn Midwest and Gopher to Badger Link are both part of MISO's Tranche 2.1 and thus are supported by similar analysis related to need and benefits. However, the two projects have separate Certificate of Need applications and the Commission will fully evaluate the required statutory and rule criteria for each application in each docket. A decision in one docket does not result in a decision in the other. The Applicants continue to believe that it would not be in the public interest to consolidate the dockets for multiple reasons, including due to scheduling differences and the broad geographic scope of both projects.

CONCLUSION

The Applicants appreciate the opportunity to submit this Response to Scoping Comments and are available to coordinate with EIP Staff to provide information needed for preparation of the Environmental Report.

(eDocket No. [20265-231916-01](#)); Aubree Derksen Comments (May 18, 2026) (eDocket No. [20265-231992-01](#)); Suzanne Tomek Comments (May 19, 2026) (eDocket No. [20265-231969-01](#)); Allie Kuppenbender Comments (May 19, 2026) (eDocket No. [20265-232177-01](#)); Valerie Darger Comments (May 19, 2026) (eDocket No. [20265-232176-01](#)); Craig Orcutt Comments (May 20, 2026) (eDocket No. [20265-232066-01](#)); Cheryl Orcutt Comments (May 20, 2026) (eDocket No. [20265-232015-01](#)); Chris Wheatley Comments (May 20, 2026) (eDocket No. [20265-232093-05](#)).

⁶⁰ Completeness Order, p. 7.

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Attachment A
Literature Related to Agricultural Practices and Transmission Structures¹

1. Chen, Z., Yin, J., Farhan, S., Liu, L., Zhang, D., Zhou, M., Cheng, J. (2026) *A comprehensive review of obstacle avoidance for autonomous agricultural machinery in multi-operational environment*. *Artificial Intelligence in Agriculture*, 16(1), 139-163. Available at: <https://doi.org/10.1016/j.aiia.2025.10.001>.
2. Fortin, J.-M., & Vigneault, C. (1982). *Time and land losses with electric towers in agricultural fields*. *Canadian Agricultural Engineering*, 24(2), 103–108.
3. Gustafson, R. J., Grumstrup, P. D., Hendrickson, E. R., & Meyer, M. P. (1980). *Land lost from production under and around electrical transmission line structures*. *Transactions of the ASAE*, 23(1), 180–184.
4. McFadden, J., Njuki, E. & Griffin, T. (2023) *Precision Agriculture in the Digital Era: Recent Adoption on U.S. Farms*. U.S. Department of Agriculture, Economic Research Service. EIB-248. Available at: https://ers.usda.gov/sites/default/files/_laserfiche/publications/105894/EIB-248.pdf
5. Parsch, Reneau & Norman (1987). *Effects of overhead electric transmission lines on crop production costs*. Arkansas Agricultural Experiment Station, Bulletin 896. Available for download at: <https://digitalcollections.uark.edu/digital/collection/ArkBulletins/id/960/rec/1>
6. Parsch & Norman. (1988) *Impacts of Powerlines on Cost of Crop Production*. Available at: https://eweb.irwaonline.org/eweb/upload/web_0488_Impact_of_Powerlines.pdf.
7. Ontario Hydro (1977) *Effects of Hydro Transmission Towers on Farm Operations*. Ontario, Hydro, Toronto. (Unavailable)
8. Ross, P., English, A., Ball, D., Uperoft, B., Corke, P. (2015) *Online novelty-based visual obstacle detection for field robotics*. 2015 IEEE International Conference on Robotics and Automation (ICRA). Available for purchase at: <https://www.ieee.org/>
9. Wisconsin Public Service Commission. (2012) *Environmental Impacts of Transmission Lines*. Available at: <https://www.nrc.gov/docs/ML1209/ML12090A853.pdf>

¹ Applicants do not represent the validity or accuracy of these resources. Further record development will occur in this proceeding and in forthcoming routing proceedings, and the Applicants reserve the right to supplement, refine, respond to, or object to these resources, as applicable.