

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

**Katie J. Sieben
Hwikwon Ham
Audrey C. Partridge
Joseph K. Sullivan
John A. Tuma**

**Chair
Commissioner
Commissioner
Commissioner
Commissioner**

In the Matter of the Application of Minnesota
Power, Great River Energy, and Otter Tail Power DOCKET No. ET-3,E-002/CN-25-109
Company for a Certificate of Need for the
Maple River – Cuyuna 345kV Transmission
Line Project.

**COMMENT OF
DONNA J. ANDERSEN AND CURTIS ANDERSEN, AND DONNA’S ACRES, LLC**

On February 11, 2026, the Public Utilities Commission issued a Notice of Comment Period for the above-captioned Certificate of Need transmission line application.

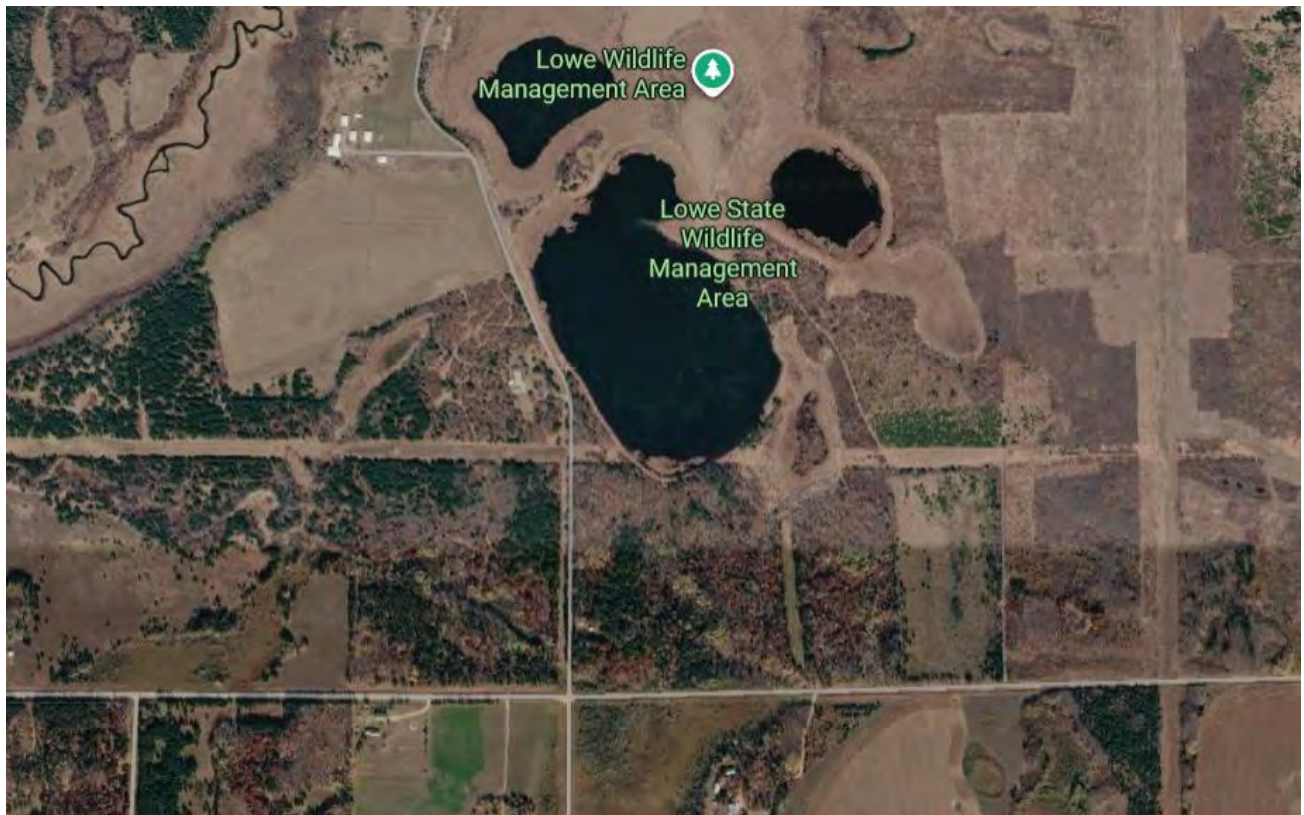
Donna J. Andersen and Curtis Andersen, and Donna’s Acres, LLC, formerly the Donna J. Andersen Trust, Donna J. Andersen, Trustee (hereinafter “Andersen”) offer the following on the Commission’s topics for comment. As participants in the Menahga transmission docket a decade ago when a transmission line was proposed in the same corridor, with their DNR certified forest and area of biological significance on their land, bounded on two sides by transmission lines, the Andersens are in a unique position to knowledgably address substantive considerations and provide evidence necessary to an informed decision on need and routing of this proposed line.

Andersen’s property is on the route proposed in a narrow pinch point surrounded on the east and south sides by roads and the north and south sides by transmission and to the east, a

pipeline:



On Google earth, it looks like this aerial photo below, with the Andersen property on the northeast corner of Hubbard County Road and the Becker County line, the southern end of Lowe State Wildlife Management Area with a transmission line as shown on that southern edge, the pipeline to the east, and their home built near the road separating Hubbard and Becker counties.



¹ Application, Appendix D, p. 15 of 20.

The Menahga project² is transmission line that was proposed and built in this corridor, through this pinchpoint encompassing the Andersen property. The Andersen property was rejected by the Commission, and it was built in the potato field to the south, across County Line Road, not yet showing on google earth. This Maple River to Cuyuna transmission project is again proposed over a corridor including the Andersen property in this pinchpoint that already has two high voltage transmission lines running east/west to the north and south of Andersens.

The application maps do not show the Andersen property well, if at all.³ The Public Outreach Materials have a different set of maps, likely the ones used at utility open houses, and are not referenced in the Application as a source for better maps. These maps also do not visibly show the Andersen property. In the Public Outreach materials, the HU-1 map has the Andersen property under the inset in lower left corner! In WA-1 it is shaded out and not very visible, and the best offered is found on BE-8, Appendix M Part 1, under a greyish shaded area surrounded by pipelines and transmission lines.⁴ These are much better maps, enlarged for a better view, but for the Andersen property, of little use. The Andersens' land is a DNR Certified Forest, reviewed every 10 years and it is in the renewal process with the DNR presently, and the DNR raised concerns in their comments in the Menahga docket, attached.⁵

A map clearly focused on the Andersen property showing the forest, the WMA, the two transmission lines at the north and south of the Andersen property, and the pipeline to the east must be entered in the record – the maps in the application have insufficient detail.

The Andersen property was rejected for routing of the Menahga project. It should be

² PUC Dockets CN-14-787 and TL-14-797.

³ Application, Appendix D, Detailed maps.

⁴ Public Outreach Maps HU-1 (p. 341 of 416), WA-1 (p. 344 of 416), and BE-8 (344 of 416) https://mrctransmissionproject.com/wp-content/uploads/2026/02/13_Appendix-M-Public-Outreach-Materials_Part1.pdf

⁵ Attachment A, Woodland Stewardship Plan; Attachment B, DNR Comment, November 2, 2015.

rejected again in favor of the existing transmission corridor on the south side of Hubbard County Road.

I. THE CERTIFICATE OF NEED APPLICATION ARGUABLY CONTAINS THE INFORMATION REQUIRED, BUT MORE INFORMATION IS NEEDED.

While the Certificate of Need does arguably contain the information required, due to the exemptions granted by the Commission, much information necessary to determine if the project is indeed needed is not provided⁶⁶. For example, the application doesn't seem to take into account the multiple other transmission lines that are operating and which are proposed, so it is hard to get a big picture view of the system and what discrete benefits this project may provide. At this time, we'll hope to get the information through Information Requests. Thankfully, this Application was not exempted from as many of the rules governing application requirements as were those in southern Minnesota!

Specifically, the exemptions granted by the Commission, on recommendations of Commerce, for MISO project 20, PUC Docket CN-25-109 are not warranted. Exemption by exemption:

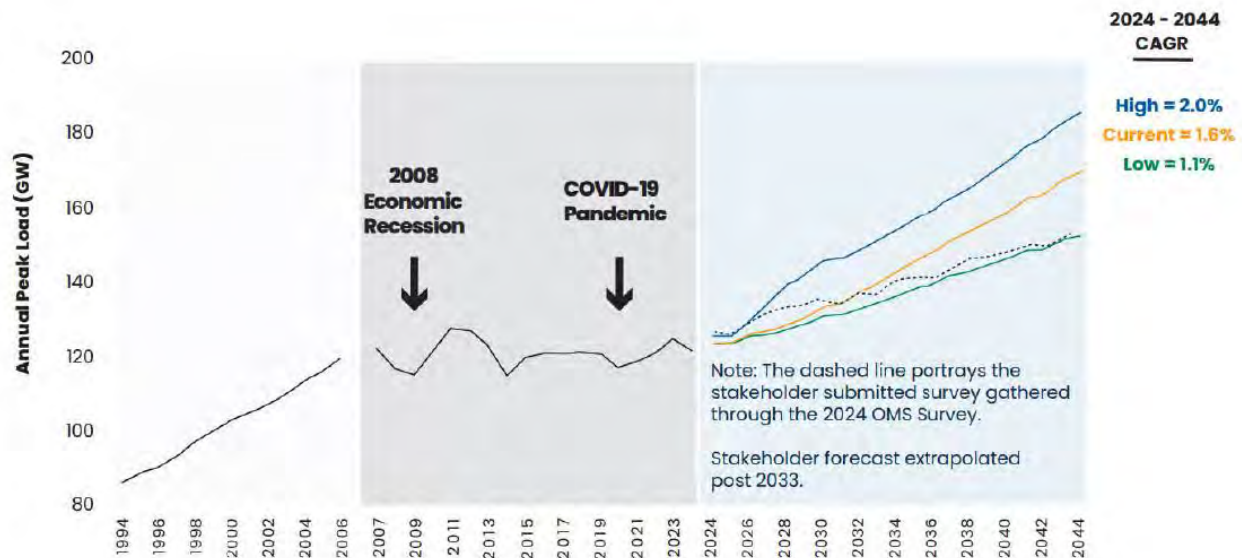
- Minn. R. 7849.0260 A(3) and C(6) were exempted. System losses are no substitute for knowing the losses expected from each specific project, because line losses are expected from long transmission lines, and are a cost that must be considered. For example, when the Commission directed Xcel to disclose the expected line loss for the "MN Energy Connection" (CN-22-131 and TL-22-132) the expected line loss was estimated at 10-12%. The cost of line loss must be considered in the project's cost/benefit analysis. Using Applicant's argument that "the requested exemptions are consistent with several prior exemption requests approved by the Commission in other CN transmission line dockets, and Commerce citing the "gen-tie lines" with the disclosed 10-12% line loss is surprising, and disingenuous given the Commission's rightful concern about line loss.
- Minn. R. 7849.0260 B(4) and (8) were fully exempted, unlike other requests for

⁶⁶ It's noteworthy that the number of exemptions are far fewer in the northern Minnesota dockets than there are for the 765kV lines for which applications have been filed. This is rather counterintuitive!

exemptions, stating that alternatives will be restricted to ones with same beginning and endpoints, unlike others where Commerce noted that “it is not recommending a wholesale exemption from Minn. R. 7849.0260 B(8), “ in “providing the data required.” Minn. R. 7849 B(8) is “any reasonable §s of the alternatives listed in subitems (1) to (7)” and see also Minn. Stat. §216B.243, Subd. 3(8). Again, this exemption is for application requirements, not exemptions from provision of the information by applicants or others for the record and consideration by the Commission.

- Minn. R. 7849.0270, Subps. 1-6. MISO’s vision of peak demand and annual consumption is contested. MISO’s demand forecasts are based on outdated 2024 information in our Trump administration world. MISO’s take on peak demand reminiscent of the extreme overstatement of the CapX demand forecast:

Figure 5.3-1: MISO Region Net Peak Load Expectations Over Time (1994 to 2044)¹³⁸



In this application, Minnesota Power, Great River Energy, and Otter Tail Power have provided their utility specific demand, although redacted. Their exemption petition stated that the project is to support reliability of the transmission system in northern Minnesota.⁷ This information is much more credible, reporting specific utility information (though at this time sight unseen) than MISO’s December 2024, Demand Forecast Whitepaper.⁸ In this application, MISO’s “futures” don’t include enough history, as they begin in 2023, and tracking for at least 20 years would be useful as it would display the essentially flat demand over the last 20 years:

⁷ Exemption Petition, p. 7.

⁸ Available at: <https://cdn.misoenergy.org/MISO%20Long-Term%20Load%20Forecast%20Whitepaper%20December%202024667166.pdf>

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



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- Minn. R. 7849.0280, Subps. (B) through (I). Commerce and the Commission rely on the “we’ve done it before, so let’s do it again” theory. That’s insufficient rationale to exempt provision of these Subparts.
- Minn. R. 7849.0290 Efficiency and energy conservation have done much to keep the peak demand down. Commerce and the Commission again rely on the “we’ve done it before, so let’s do it again” theory. Further information is needed from the applicants. Commerce and the Commission should require information from the applicants rather than exempt provision in the application and push the work onto “interested parties” to pursue. The Commission is the regulator.
- Minn. R. 7849.0300 and 7849.0340. Commerce and the Commission again rely on the “we’ve done it before, so let’s do it again” theory. That’s insufficient

⁹ Application, p. 73, Figures 22 and 23.

rationale. However, as Commerce notes, a general discussion of delay related to demand is appropriate.

The Commission too readily accepts Exemption Requests and in doing so, little by little abdicates its regulatory responsibility. In this case, the Commission has exempted Applicants from providing information required by fewer rules than in other current Applications, which is helpful. An incomplete application has the effect of shifting the burden of production onto the state agency that approved the exemptions, and on Intervenor with limited resources. As for the Applicants, through failure to provide credible and reliable information, and by making exemption requests based on their reliance on MISO rather than addressing Minnesota and project specific information, and worse, repeatedly offering the “we’ve done it before, so let’s do it again” theory, the lack of relevant information renders the application incomplete.

II. THERE ARE MANY CONTESTED ISSUES OF FACT

There are many contested issues of fact. The Commission should stay the Certificate of Need application and reviewed in a joint proceeding with the route permit applications.

The primary contested fact is fundamental – whether the line is needed. The Commission is the regulator, and the applicants have not demonstrated that the line is needed as required by Minnesota law. In short, the applicants’ need claim relies on MISO’s Tranche 2.1, with Minnesota receiving an honorable mention:

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.

Application, p. 7, 3.3.1 (emphasis added), see also 27-52.

These points, particularly the applicants’ reliance on MISO’s MTEP 24 and Tranche 2.1,

reflect the regional desire for additional regional transmission, which is distinct from Minnesota need as defined by statute. The applicants need claim is the primary contested fact.

A. The capacity of the line and electrical and regulatory limitations must be taken into account.

Part of a need determination is consideration of size, type, and timing, and potential alternatives. The capacity of this line, and the need for that capacity is an issue of fact, and is contested.

This project, a 160-180 mile long 345kV double circuit transmission line is designed to :

...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...

... 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.

Application, p. 14. The application also states a SIL rating of 825 MW and 878 MW, depending.

Application, p. 12 & 14. Specifications of 3,000 amps on a 345 kV line with double-bundled twisted pair conductors is likely far higher than the stated 825MW or 878MW. These numbers will have to be verified in the Certificate of Need proceeding.

This project connects at the Cuyuna substation, a “series compensation station” on the newly permitted and under construction “Northland Reliability Project” from the Iron Range substation southward to a web connecting Benton County/Big Oaks/Sherco substations. The change from a “series compensation station” to a substation has not been discussed. At this time, it’s not established whether the energy is flowing north to Iron Range or south to Sherco. What that means is that it was installed for voltage stability, where instability is inherent in long transmission lines. The application states that the project includes:

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.

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The impact of adding the Maple River-Cuyuna line is a contested issue of fact, where facts of this impact and the need for additional voltage support must be established in the record.

That said, if energy is planned to flow northward, there are limitations in energy flowing into the Iron Range substation from the north on the Great Northern Transmission line, and there are limits in energy flowing out of the Arrowhead substation, though the Applicants are now working to eliminate the Arrowhead substation limitation¹¹. If this energy is flowing northward from Cuyuna, where will it go? A detailed transmission map and powerflows expected to and from the Cuyuna substation should be entered into the Record.

The Great Northern Transmission Line is limited by the Presidential Permit to 833MW.

Furthermore, the facilities described in Article 2 shall be operated in such a manner that the scheduled rate of transmission of electric energy entering the United States over the facilities operated herein shall not exceed 883MW and south-to-north transfers shall not exceed 750MW.

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The output of the Arrowhead Substation is limited by the Environmental Quality Board decision

¹⁰ Application, §2.2.3.1, Modifications, p. 15.

¹¹¹¹ See Iron Range to Arrowhead 345kV transmission line, PUC Docket CN-25-111 and CN-25-112.

¹² See Presidential Permit, online at: [Presidential Permit 155 201611-126757-03](https://www.federalregister.gov/documents/2016/11/15/2016-11-15-presidential-permit-155-201611-126757-03)

to 800 MVA:

Minnesota Power shall apply to the Minnesota Environmental Quality Board under section 116C.57 for authorization to make any changes in the Arrowhead substation that would allow Minnesota Power to increase the capability of the substation to transmit power over the transmission line beyond 800 MVA. 13

For this reason, the powerflow distribution at the Cuyuna should be established as a factor in whether this transmission line is needed. These limitations will also have to be verified in this Certificate of Need proceeding and specifics of request to amend if greater capacity is wanted for the transmission line at the Arrowhead substation and/or through the Great Northern Transmission Line's Presidential Permit at the border.

However, what is truly bizarre is the Application's statement on page 13:

The Applicants do not have access to the specific assessment MISO used to establish the High SIL Requirement.

If the applicants are designing and building this transmission line, how is that possible, how is that responsible, how is that justified, to do the engineering and design work without such basic information? This must be addressed in the Certificate of Need review to assure that this is not an example of overbuilding, of overreach, by MISO, and not "need."

B. Outdated economic modeling assumptions were used to calculate valid cost estimates which in 2026 require updating.

The cost estimate for this project is contested. This project, and all the Tranche 2.1 projects, are using outdated 2024 economic assumptions in an unprecedented time of supply limiting and cost increasing tariffs and economic uncertainty. This MISO MTEP project 20, Maple River-Cuyuna was estimated to cost \$908 million in 2024 dollars¹⁴. In the Application, the

¹³ See EQB Decision, Order Point 10, March 19, 2001, Application, Iron Range-Arrowhead, CN-25-111, Appendix J; see also §3.4.5, p. 63; §4.6.3, p. 82-83.

¹⁴ MISO MTEP2024 Full Report, p. 161, Table 2.35: Tranche 2.1 Portfolio Projects.

cost is expected to be a mid-range cost of \$1,108.40 (millions) to a high-range cost of \$1,332.80 (millions).¹⁵ That's an increase of from \$200 million to \$424 million, either way, a high percentage.

Cost increases for transmission projects can be so extreme that that at least one transmission project, so far, revealed cost increases totaling 43%, which requires a Tariff FF variance analysis.¹⁶ The conditions leading to the cost increase of an estimated 43% for that one project are not isolated because current economic conditions are global, literally, and costs have risen exponentially. Not only have costs risen, but materials and supplies may be difficult, if not impossible, to procure. In the case of this specific project, the cost estimates in the application are problematic and must be verified.

Because this project terminates at the Cuyuna substation (series compensation station) which is in the midst of the Northland Reliability Project, how are the cost increases going to effect that project and this Maple River-Cuyuna project? How will costs be apportioned?

Will this project see similar cost increases? A range of cost information is another contested area of facts at issue.

Updated cost estimates are necessary, and the project cost is a contested fact at issue.

C. MISO's cost/benefit analysis must use current numbers to determine whether a project is feasible, much less conveys a benefit.

The MISO "approval" is predicated on a cost/benefit analysis showing that the project would have economic benefits greater than the costs. When the cost rises, the ratio of benefits to cost changes. Does MISO's blessing of the benefit/cost and approval of this project remain valid?

¹⁵ Application, p. 19, Table 3.

¹⁶ See MISO Notice of Variance Analysis, PUC Docket CN-22-416, [202512-225901-01](#), filed 12/16/2025.

This benefit/cost analysis is in question for several reasons:

1. Cost of the project has increased, and ranges from \$200.40 to \$424.80 (millions).
2. It is highly probable that due to cost increases, this project will require, under MISO Tariff FF, variance analysis.
3. MISO's cost-benefit analysis was based on those 2024 cost estimates of projects, measured cost allocation zone by zone, not project by project.

What will the range of benefit/cost ratio be using 2026 cost estimates? From MTEP24:

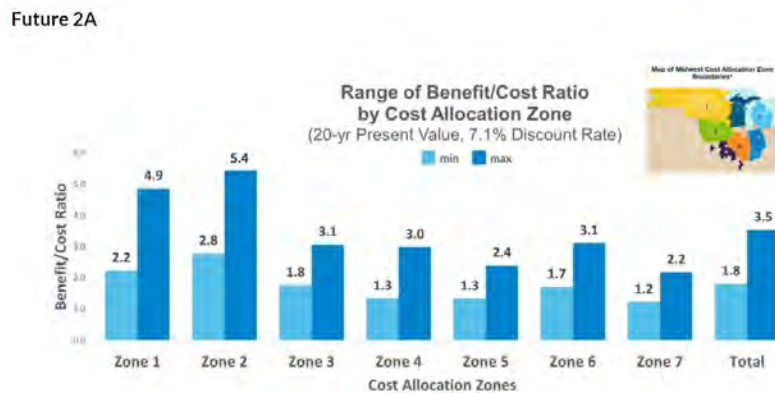


Figure 2.157: Tranche 2.1 Distribution of Benefits - Future 2A

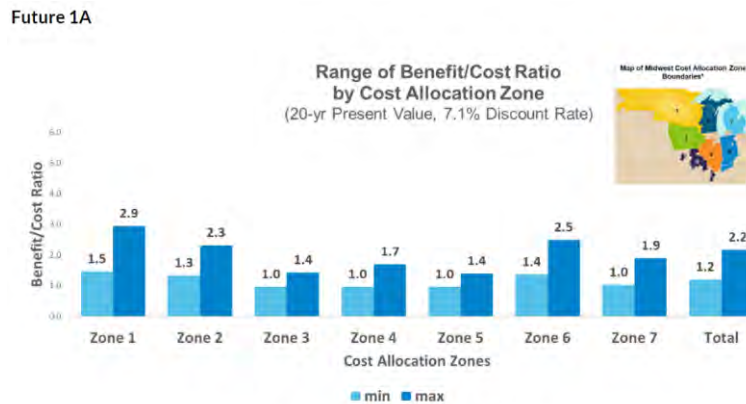


Figure 2.158: Tranche 2.1 Distribution of Benefits - Future 1A⁵

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What will these charts look like with updated cost estimates? This 2023-2024 information is used to justify inclusion in the Tranche 2.1 portfolio. Does it still hold today? That's an issue of fact, fact(s) necessary for this record.

Each transmission project before the Commission must be carefully scrutinized and cost

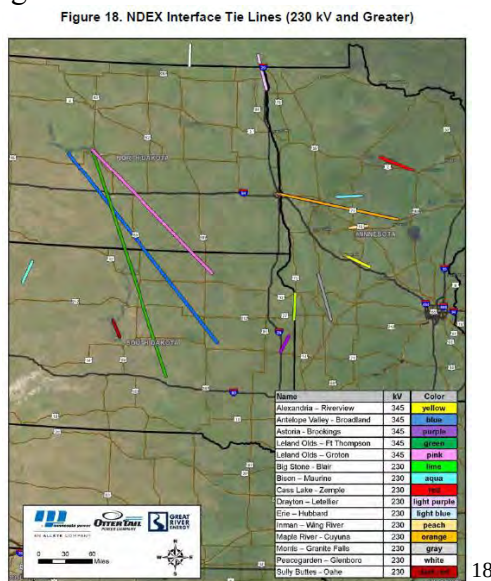
¹⁷ MTEP24, p. 163-164.

increases identified, and determine whether the MISO benefit/cost ratio is greater than 1.0! To enable this determination, the Commission should request a MISO Variance Analysis on all the Tranche 2.1 projects, and as a part of this docket, a Variance Analysis on this project. With cost of \$1,108.40 to \$1,332.80 in the application, increases of \$200 million to \$424 million from the MISO 2024 cost estimate at time of “approval,” cost is a critical part of the Certificate of Need review. The Maple River to Cuyuna project is no exception. Does the project make economic sense in 2026? The Applicants must demonstrate that the economics work in this economic climate, and we are dependent on MISO for this information.

D. Transmission lines exist, have been proposed, permitted, and are under construction in the geographical and electrical vicinity of this project, calling the “need” for this project into question.

Applicants claim that the line is needed, as above. For example, the application claims a need for higher NDEX transfer capacity/North Dakota exports, and there’s much in the application about an “energy transition” for renewables. These premises are contested.

The northwestern beginning of the lines, here in pink, blue and green to the left, are in the area of North Dakota coal generation:



¹⁸ Application, p. 55, see also p. 63.

In this docket, a material fact at issue is whether coal plants have retired, particularly in North Dakota with this line beginning at Maple River. If North Dakota coal plants have closed, much transmission capacity has become available on the transmission serving the coal plants. If not, where “energy transition” to renewables is a main justification for this project, that it is needed for the renewable transition, falls flat – if the coal plants are still operating, there’s no renewable transition justification for this project because the coal plants are still operating. The application does not, and we must, identify the coal plants in that area of North Dakota are operating, the number of megawatts, and which coal plants have been retired and the number of megawatts. What transmission lines are handling this coal generation? These are issues of fact, material issues central to “need” for this project.

The Square Butte transmission line is now dedicated to North Dakota wind, and it is missing from maps in this application. The coal plants now using CapX 2020 and other transmission lines are also missing from application maps. If we draw North Dakota coal plants on the map, and Minnesota Power’s “Square Butte” DC “it’s for wind” transmission line from that same area of North Dakota from beginning points of transmission to the Arrowhead substation:



¹⁹ See wiki on Square Butte: [https://en.wikipedia.org/wiki/Square_Butte_\(transmission_line\)](https://en.wikipedia.org/wiki/Square_Butte_(transmission_line))

What is the need for a new line from Maple River to Cuyuna, in addition to MP's Square Butte line, for North Dakota export, with this for the "renewable transition?" What is the source of energy to utilize this line, and what is the type of generation? These are missing facts and contested issues of fact.

Newly permitted transmission in the geographic and electrical area calls the need for this project into question, and the high voltage lines, as defined by Minnesota statute, have not been accurately represented. Existing alternatives to this project must be considered, particularly where this is connected to a Cuyuna substation, a link between the Iron Range/Arrowhead and Benton County/Sherco. This is why the map required by Minn. R. 7849.0260 D is so important and why details matter – the map should include all AC and DC transmission lines over 100kV in the 5 state region. Powerflows showing current and expected travels of energy would be helpful as well. We cannot consider the impacts of existing, new, and proposed transmission without a detailed map showing generation, transmission, and yes, powerflows.

E. Applicants claim that ratepayers will be responsible for only a small portion of the cost of this project is disingenuous.

The cost of this transmission project to Minnesota is claimed to be comparably low, which is technically correct for this individual project. However, the matter of cost to Minnesota ratepayers is more complicated than just looking at this project. Cost is contested regarding this specific project and this project as a part of the Tranche 2.1 portfolio.

Cost is apportioned among the utilities in MISO that will benefit from the project – the greater the benefit, the higher the cost to that area. Two things are demonstrated in this equation. First, if Minnesota utilities, hence Minnesota ratepayers, will pay only a small share of the cost of this project, that means there is not much benefit to Minnesota, comparably. Second, costs for ALL of the Tranche 2.1 projects are apportioned among ALL the utilities, which means that

Minnesota utilities will be allocated costs from ALL the projects and this cost of ALL the Tranche 2.1 projects that will be put on MISO member utilities, therefore ratepayers. The entire cost of Tranche 2.1 transmission to Minnesota, must be identified, and, as above, a cost benefit analysis using up to date cost estimates to determine whether it is worthwhile to Minnesota. The Commission is the regulator, and these costs will accrue – we had best account for this cost as a part of this docket, as the dockets in other states will not otherwise be addressed and we will not know the full impact of MISO Tranche 2.1/.

III. SYSTEM ALTERNATIVES MUST BE EQUITABLY EVALUATED

This Certificate of Need docket is the procedural step where system alternatives are to be evaluated, and the only option for this consideration. In the Route docket, only route alternatives will be considered. Alternatives that should be considered include, but are not limited to, building the 345kV structures with an underbuild on the existing corridor south of County Line Road; Alternative Transmission Solutions such as batteries; uprating old existing transmission with high capacity conductors; evaluation of available capacity due to retirement of fossil generation freeing up capacity on existing transmission; directed siting of new generation where there is transmission rather than running transmission hither and yon to connect generation, etc. So much has changed and new technologies and planning that is not transmission focused could demonstrate that this line is not needed.

A. An underbuild of the line on the 345kV structures in the potato field is a reasonable system alternative.

On Appendix D, page 16 of 20, there's a poor depiction of infrastructure at the Andersen parcel on Hubbard County Road, in the most southwest corner of Hubbard County, at the northeast corner of the intersection of Hubbard County, Wadena and Becker Counties.



A logical system alternative would be to underbuild the existing line south of County Line Road in the potato field on the 345kV line.

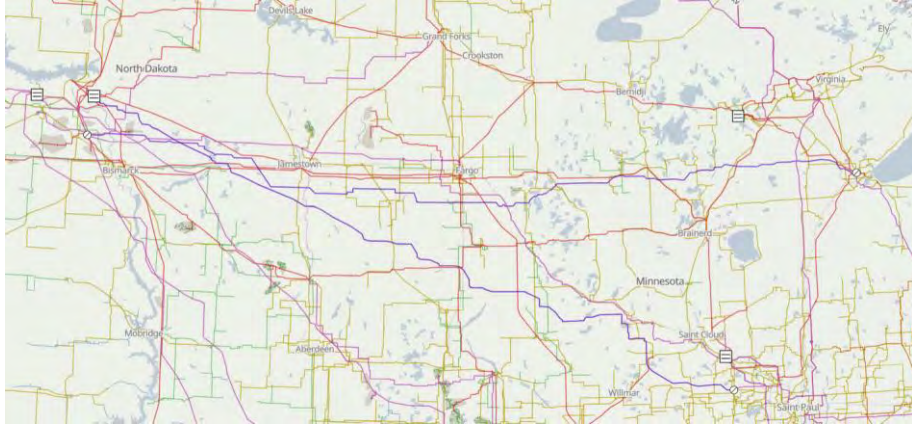
Systemwide, however, since the Menahga transmission line was permitted and built, other large transmission lines have been permitted and built that strengthen the grid of northern Minnesota and increase exports.

- Minnesota Power’s “it’s for wind” dedicated DC line from Center, ND to Arrowhead substation (coal generated energy formerly on DC line shifts to existing transmission (CapX 2020).
- Tranche 1 Northland Reliability Project CN-22-416 and TL-22-415, as above from Iron Range to Cuyuna Series Compensation substation to Benton Co./Big Oaks/Sherco
- Tranche 1 Alexandria-Big Oaks CN-22-538 and TL-23-159
- Tranche 2 Bison to Alexandria Second Circuit 345 kV Transmission Line Project CN-25-116 begins in roughly the same area as Maple River, and heads southeast to Alexandria. This 2nd circuit project doubles the capacity of the CapX 2020 line. It utilizes existing infrastructure and right-of-way/easements and thus has nominal additional impacts.²⁰

The transmission system, without recent additions looks like this²¹, much missing that would have an impact on need, and why we need an accurate map with existing, permitted, planned, and under construction lines on a map – a number of lines in this area are already up and operating stretching from North Dakota eastward:

²⁰ PUC Docket CN-25-116

²¹ See openinframap.org



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B. Batteries are a reasonable and economic alternative to transmission and provide grid support.

The design of the Northland Reliability Project includes, at Cuyuna, not a “substation” but “Cuyuna Series Compensation Station.”²³ This addition of series compensation shows the need for voltage support due to the length of the line and line loss, requiring reactive power or series compensation, and was added to the project specifically to provide grid support, “to modify the voltage of the high-voltage transmission system:

2.1.5.2 Cuyuna 345 kV Series Compensation Station

The Project requires a new series compensation station near the midpoint of each new Iron Range – Benton 345 kV transmission line. A series compensation station inserts a capacitor bank in series with each of the phases of a high-voltage transmission line and includes an integrated, custom-designed system including many power capacitors and their associated protective bypass equipment. A series compensation station differs from a substation in that there are no transformers or other power transformational equipment to modify the voltage of the high-voltage transmission system. Minnesota Power’s new Cuyuna Series Compensation Station will include the 345 kV series capacitor banks necessary for the reliable operation and optimal performance of the Project. In the original Project concept approved by MISO in July 2022, the series compensation station was expected to be located at the existing Minnesota Power Riverton 230 kV/115 kV Substation. Upon further analysis of the site, Minnesota Power determined that there was not sufficient space for the siting of the new series compensation station at the Riverton Substation due to physical and environmental constraints.

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Batteries can also provide grid support and are now regarded by FERC as a viable alternative to transmission and series compensation for transmission. The value of battery storage

²² Id.

²³ Maple River-Cuyuna Application, §2.2.3.1 Associated Facilities.

²⁴ Northland Reliability Project Application, Iron Range-Benton County, p. 2-7, §2.1.5.2 Cuyuna 345kV Series Compensation Station.

has been growing over recent years,²⁵ and is playing a strong role in our energy transition. FERC's head Jon Wellinghoff testified²⁶ regarding batteries as a viable alternative or substitution for transmission year's back in the Wisconsin Cardinal-Hickory Creek transmission docket, urging evaluation of transmission alternatives solely or in combination to meet need, and notes the distinction between "Non-Transmission Alternatives" and "Alternative Transmission Solutions," pointing out that FERC tariffs allow return on Alternative Transmission Solutions such as batteries for storage and combinations, and that regional rate base cost recovery is available. NARUC also notes the value of storage as a transmission alternative and grid system support²⁷

C. The Certificate of Need rules put non-applicants without resources at a disadvantage in proposing alternatives.

The Commission must evaluate single and combined options of Alternative Transmission Solutions that could satisfy what need has been demonstrated by Applicants. The statute states:

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

Minn. Stat. §216B.243, Subd. 3. The statute further states, regarding alternatives:

(6) 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, except 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;

...and...

²⁵ See Renewable-Storage Hybrids in a Decarbonized Electricity Supply, <https://docs.nrel.gov/docs/fy23osti/84192.pdf>

²⁶ [Direct-DALC/WWF-Wellinghoff Replaced by Direct-DALC/WWF-Wellinghoff-r](#), PSC ID 364939, Wisconsin PSC Docket 5-CE-146, April 26, 2019. See testimony on Alternative Transmission Solutions (ATS) and Non-Transmission Solutions (NTS).

²⁷ See Energy Storage as a Transmission Asset, NARUC <https://pubs.naruc.org/pub/87107D6D-C75A-2471-5F9D-68885685F3C2>

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

Id., Subd. 3(6), (8).

However, the statute’s limitation of alternatives to those with “consistent endpoints” is difficult for Alternative Transmission Solutions which logically may not have “endpoints,” and which conflicts with combinations of energy conservation improvements. Further, the rules require substantial evidence on the record:

7849.0110 ALTERNATIVES CONSIDERATION.

The commission shall consider only those alternatives proposed before the close of the public hearing and for which there exists substantial evidence on the record with respect to each of the criteria listed in part 7849.0120.

This “substantial evidence” requirement is a difficult hurdle for those suggesting alternatives with limited resources and for whom consultants and experts are not feasible. Where alternatives seem feasible, they should be fairly evaluated by the applicants and the Commission, including in environmental review and in the substantive Certificate of Need proceeding.

IV. OTHER CONCERNS

A. Procedural problem with notice of Comment Period

The Commission should be aware that there is a consistent problem with lack of notice given to affected parties along the line when there is an open comment period. This applies to any comment period, not only this initial round.

Landowners on the applicants’ “Notice Plan” list receive a mailing of initial notice of the pending application and the utility open houses from the utilities. In all cases reviewed, there was **NO** notice from the Commission (or the utilities) of this opportunity of a Completeness comment with “Topics for Comment” that included whether there are contested issues of fact and whether the Commission should stay the Certificate of Need for a joint proceeding. In particular, the

question of a stay and a joint proceeding is one in which that landowners should have a say. The missing link seems to be that the Commission does not have, or does not request, or is not provided with, the utilities' list of landowners. It's a simple matter to rectify – the Commission should procure the list from the utilities and should not send out notice that does not include landowners. Directly affected landowners should receive notice – need this be said?

This lack of notice for comments on completeness and procedure is an issue for this docket, the “Power on Minnesota” consolidated dockets of CN-25-117, 118, 119, and 120, and also the Gopher to Badger/Maribel docket, CN-25-121. The Commission DID provide notice to the landowners for the Iron Range to Arrowhead project, CN-25-111, 112, and it would be worthwhile to determine the origin of that list.

The Commission's failure of notice could be corrected by obtaining the utility landowner list, sending the Notice of Comment Period with the same “Topics for Comment” to that list of landowners, and extending the comment period.

B. An Environmental Impact Statement is necessary for a transmission line of this voltage and length.

The scoping process will provide many issues for environmental review, including system alternatives. Together with a stay and a joint Certificate of Need proceeding would come serious environmental review in the form of an Environmental Impact Statement. In the Certificate of Need docket, system alternatives will be brought forward, alternatives which would typically have less impact than the project. With the Certificate of Need joined with the Routing Application for review, the system alternatives proposed would have a way for supporting additional information to be entered in the record and could receive the consideration necessary to be taken seriously as alternatives.

This project needs the full attention inherent in an Environmental Impact Statement.

V. THE COMMISSION SHOULD STAY THE CERTIFICATE OF NEED AND REFER THE CERTIFICATE OF NEED TO THE COURT OF ADMINISTRATIVE HEARINGS FOR JOINT CERTIFICATE OF NEED AND ROUTE CONTESTED CASE PROCEEDINGS.

The notice of comment period's Topics for Comment tacitly suggests by requesting comments, that "the Commission stay the Certificate of Need application, so that it can be reviewed in a joint proceeding with the route permit application." Good idea! Yes, this should be a joint proceeding with the routing docket with a Commission referral to the Court of Administrative Hearings.

The Commission has a statutory directive to refer this application to the Court of Administrative Hearings for a joint Certificate of Need and Rout proceeding.

Unless the commission determines that a joint hearing on siting and need under this subdivision and chapter 216I is not feasible or more efficient, or otherwise not in the public interest, a joint hearing under this subdivision and chapter 216I must be held.

Minn. Stat. §216B.243, Subd. 4. There has been no determination that a joint hearing is neither feasible nor more efficient, or otherwise not in the public interest.

For this Maple River-Cuyuna 345kV transmission project, a joint proceeding must be held, and the Certificate of Need be put on hold until the Route Permit Application is submitted. The Commission must comply with the statute and refer both applications together to the Court of Administrative Hearings, and thus, stay this Certificate of Need application until the Route application is received. During that time period waiting for the application, the Commission could provide landowners with notice of this completeness and procedure comment period and allow affected landowners to weigh in.

The Commission should follow the letter and spirit of the law and join these two dockets for thorough and less confusing substantive and environmental review.

Dated: February 24, 2026



Carol A. Overland MN Lic. 254617
Attorney at Law
Attorney for Donna J. Andersen and Curtis
Andersen, and Donna's Acres, LLC,
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(612) 227-8638
overland@legalelectric.org

Anderson Property

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August, 2007

Woodland Stewardship Plan

Date: August, 2007

Landowner: Donna Anderson
1300 E. Co. Rd. E
Vadnais Heights, MN 55110-4775

Telephone: (651) 230-0785 cell
(651) 484-0150 home

Legal Description: T139N, R35W, Sec. 31, SW ¼ of SW ¼ & SE ¼ of SW ¼
Hubbard County, Straight River Township

Total Acres: 77.8 acres

Acres qualify for Woodland Stewardship Plan: 77

This woodland stewardship plan was designed to help guide the management activities of the natural resources on your property. The plan is based on your goals in harmony with the environment. Project recommendations are for your consideration.

THE GOALS YOU IDENTIFIED FOR MANAGING THE PROPERTY ARE:

Manage land to be forested and provide recreation setting (walking trails). Okay to thin stands or harvest with small clear-cuts with reserve trees, but do not wish to clear-cut the land. Do desire habitat for wildlife, although they do not hunt. A pond touches the property on the north boundary where beaver have cut some trees. They thought about making a more open area near the pond. Revenues are not necessary from the property. They do wish to plant trees in the 20 acre field on the east side of property. A house exists on the west side of the property.

Prepared by: Steven L. Ludwig
37384 Nighthawk Road
Lake George, MN 56458
Telephone: (218) 266-3671
Email: slud@localnet.com

For More Cost-Share Information Contact:

Brad Witkin
DNR Forestry
607 W 1st St, Box 113
Park Rapids, MN 56470
218-732-3309

Russell Johnsrud
Natural Resource Conservation Service
Park Rapids, MN 56470
218-732-9723

Anderson Property

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August, 2007

Ecosystem Information

The text: "Field Guide to the Native Plant Communities of Minnesota – The Laurentian Mixed Forest Province" identifies this land is within the Pine Moraines and Outwash Plains Subsection of the Northern Minnesota Drift and Lake Plains Section.

The Native Plant Community is most likely FDC34. Under natural disturbance regimes this ecosystem is typically dominated by red pine or white pine, or a mixture of the two, with smaller amounts of paper birch, quaking aspen, red maple, jack pine, northern red oak, and bur oak.

Natural disturbances were catastrophic fire and mild surface fires. After catastrophic fire the tree regeneration would be quaking or big-toothed aspen and red pine. Jack pine, white pine, and northern red oak would also be present.

Soils

Soils information is from the Soil Survey of Hubbard County, Minnesota, as obtained from the NRCS website at www.websoilsurvey.nrcs.usda.gov. A map and soil summary legend is included in the 3 ring binder provided.

Soil map symbols include 540, 867B, 1127A, 1136, 1230, and 1444. These symbols identify the upland soils as predominately Graycalm-Menahga complex and Bootlake-Graycalm complex. These two complexes are sandy soils with some sandy loam or loamy sand.

Threatened, Rare or Sensitive Species

A check with the DNR St. Paul Office has identified there are no known locations of threatened, rare or sensitive species on this parcel of land.

Cultural Information

No cultural sites were found during the field visit on your property. The DNR Office in Grand Rapids identified no known locations of cultural sites exist in their data base. Please consult the 3 ring binder for the things to look for relating to cultural sites.

Property Lines and Survey Corners

No known property corner monuments are adjacent to your property, other than the original survey work.

Adjacent Property Owners

The adjacent property owners proceeding clockwise and starting on the north are:
State of Minnesota Wildlife Management Area

Vegetation: forested with lake, field and opening for power-line; property line is identified with signs.

Anderson Property

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August, 2007

Potlatch Corporation (East)

Vegetation: recent cut-over planted to trees.

Potlatch Corporation (South)

Vegetation: small saw-log size red pine plantation.

Wade Marjamaa etux

Vegetation: mostly willow, sedge grass swamp.

Renenberg Companies

Vegetation: cut-over with residual trees, appears forested.

Landscape Committee (MN Forest Resource Council)

Minnesota provided a setting whereby a citizen group could learn about the ecosystems in this area and make recommendations for future conditions of forests in this area.

The desired future forest condition for the entire Northern Minnesota Drift and Lake Plains Section includes: increase red, white and jack pine, cedar, tamarack, spruce and fir; create a range of species, patch sizes, and age classes that more closely resemble natural patterns and functions; the amount of forestland and timberland will not decrease...large blocks of contiguous forest land that have minimal inclusion of conflicting land uses will be created...

This area is identified as Dry Mesic Pine/Oak ecosystem in their report. The citizen landscape committee suggests increasing jack pine, red pine and white pine.

Their report is available at <http://www.frc.state.mn.us/Info/MFRCdocs>.

Anderson Property

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August, 2007

Stand Description and Potential Activities

Stand No.	Acre	Forest Type	Age	Stocking in Basal Area per Acre (more common)	Range of tree diameters (more common)	Site Index	Radial Diam. Growth Past 10 years	Volume per acre* in cords
1	0.8	Structure	NA	NA	NA	NA	NA	NA
2	51	Aspen-Pine	34 to 60+	30-160 (80-110)	1 to 14 (6-10)	QA 58 RP 58 JP 57	0.9 1.0 0.4	16
3	2	Grass Swamp	NA	NA	NA	NA	NA	NA
4	21	Field	NA	NA	NA	NA	NA	NA
5	3	Ash Swamp	67	60-80	5 to 14 (8-12)	46	0.5	12

* volumes are not suitable for timber sale purposes; used 3" top diameter.

Stand 1 0.8 acres Structure

This stand is not part of the Woodland Stewardship Plan.

Stand 2 51 acres Aspen-Pine

This stand comprises most of the forested portion of the property. Aspen is the most common species present, although some plots were dominated by jack pine, northern red oak, bur oak or red pine. Other species present include paper birch, elm, white spruce and balsam fir.

Most of the trees are relatively young at 34 years of age or slightly older. Diameter growth is good at around 2 inches each ten years.

Conks are present on some of the aspen. This indicates white trunk rot is causing some heart rot within these trees.

Under-story plants include hazel, snowberry, grass, meadow rue, cherry, service berry, blueberry, poison ivy, grey dogwood, big leaf aster, bedstraw, bracken fern, bellwort, raspberry and strawberry.

One inclusion along the north line is a non-forested opening adjacent to the small lake. This is sedge grass and some willow shrubs.

A second inclusion is shown on the map adjacent to the larger field. This one is young aspen sprouts approximately 12 years old. This is a well stocked area of 2 inch diameter trees.

Anderson Property

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August, 2007

No Treatment

If left undisturbed, this stand will continue the good diameter growth for ten years or so. Then the growth is expected to slow. Aspen is a relatively short-lived tree. Normally, aspen declines from age 60 years on.

Jack pine, paper birch and balsam fir are also relatively short-lived. These species will live longer than aspen, but usually decline in vigor and die before reaching ages of 80-90 years.

Oak on this site does not produce large saw-log quality trees. Most trees will be less than the 11 inch diameter needed for a saw-log and will have lots of limbs. Quality saw-logs are larger in diameter and have few or no limbs.

As the stand ages the aspen will decline, followed by jack pine, paper birch and balsam fir. The balsam fir will regenerate without a disturbance. Red pine and white spruce will continue to grow to older ages, some exceeding 250 years of age.

As trees in the main canopy die, the increased light will allow the hazel shrubs to become taller and denser. Some aspen, paper birch and oak will regenerate and continue to be present forming a mixed species multi-aged stand of poor stocking with a lot of under brush.

Harvest

This stand could be harvested now, however, more volume would be realized by delaying the harvest for ten or more years. Normally, the preferred rotation age for aspen stands is 40 years of age. This stand is only 34 years of age. If harvest is delayed beyond 60 years of age, some losses will occur due to normal tree mortality and the heart rot that is present.

The jack pine component will also start to die near 60 years of age and increased mortality can be expected as the stand ages. Unless the jack pine budworm returns (it was at epidemic levels 1 to 4 years ago), I do not expect large numbers of trees to die in any one year. The mortality will be a few trees here and there over a decade or more.

Harvesting the entire stand at one time would return the most revenue, but is not in line with your objectives. The stand could be divided into several smaller blocks and harvest scheduled every 10-15 years until the existing trees are regenerated.

Dividing the 51 acres into 6 separate areas ranging in size from 8 to 10 acres is likely to provide the best mix of age classes for species such as grouse and deer. This harvesting could retain the longer-lived Norway pine, but remove the shorter-lived aspen, jack pine, paper birch and balsam fir. The larger oak could also be retained to provide some acorns.

Anderson Property

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August, 2007

Two areas would be harvested at one time to provide 300 or more cords, sufficient to allow commercial harvesting. Most loggers are not willing to move equipment on site for only ten acres of harvesting.

This site is expected to become fully stocked with aspen after harvesting. The soils are generally sandy, which will allow harvesting any time during the year. This makes the harvest more desirable to loggers as a lot of sites require winter harvesting, thus summer wood is in more demand.

A second round of harvesting could be considered starting with 40 year old aspen that originates from the first harvesting. Increasing the age diversity by delaying the harvest cycles so 20 years occur between harvests would further benefit wildlife.

Anderson Property

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August, 2007

Stand 3 2 acres Grass Swamp

This stand is an open grass swamp surrounded on the south end by dense willow shrubs. It is a semi-wet site. It could be harvested for hay in dry years. A few cattails are present in one area. A few aspen are regenerating along the edge.

No Treatment

This open area will remain open for many years. The shrubs will continue to slowly encroach on the grass area and some trees will slowly encroach on both the shrub and grass areas. I expect the area will remain open for many years.

Anderson Property

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August, 2007

Stand 4 21 acres Field

This field is two separate areas. The main field is along the east end of the property, while the smaller area is a narrow strip running north to south near the center of the property (approx. 2 acres).

These two areas have been cut for hay in the past. A few old bales are still present near the main road. The last hay cutting was 5-6 years ago.

Small jack pine trees are present in the larger field. These seedling/sapling size trees are from 2 feet tall to 12 feet tall. The shorter trees show signs of having been browsed on by deer. A few aspen, northern red oak and bur oak seedlings are also present in both areas.

No Action

This field is already starting to become stocked with trees after only 5-6 years without hay cutting. The jack pine in the larger field are well scattered throughout the area. These trees will produce some cones at ages as young as 7-8 years of age. Young jack pine will have open cones that disperse seed. Older jack pine trees usually have closed cones (serotinous) that require heat to open the cones.

In the past I have seen areas like this regenerate to jack pine with no additional treatments. Seeds are dispersed by the young jack pine and the seedlings become established creating a fully stocked stand within twenty years. I am doubtful this will happen today due to the large deer population. The shorter jack pine seedlings are showing evidence of browse damage and may not survive.

Plant Trees

Planting tree seedlings would be the sure means of establishing trees on the site in the shortest time frame. Norway pine, white pine or jack pine would be the species most likely to do well on this site.

Trees could be planted using a tree planting machine on this old field. Additional site preparation is not necessary. Some tree planting machines have a plow attachment that removes the sod for a foot or so from the planting trench, effectively removing grass competition.

Planting at densities of 800 trees per acre would adequately stock the site. Some foresters prefer slightly higher densities. This rate allows sufficient trees to begin commercial thinning at 25-30 years of age.

Seedlings will require protection from deer browsing until they reach heights taller than deer can reach (4 feet or so). This can be accomplished by placing paper bud caps over the terminal leaders of each of the seedlings every fall (September or early October). Information on bud caps is included in the 3 ring binder.

Anderson Property

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August, 2007

An alternative is to use repellent sprays, like Plantskydd. Plantskydd is a dried blood formulation that can be purchased at most nursery supply stores. It is also carried by the Soil and Water Conservation Office in Park Rapids.

Anderson Property

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August, 2007

Stand 5 3 acres Ash Swamp

This is a wetland area near the road. Ash trees are present along with elm, aspen and balsam fir. Ash, balsam fir and some aspen are regenerating. This stand is only moderately stocked and not expected to become well-stocked due to the nature of the wetland.

Alder dominates the shrub layer with lady fern, horse tail, sedge grass and moss present.

No Action

This stand is expected to exist in the future, much as it is today. Some additional trees will regenerate to replace those that die. Stocking will remain similar to the current stocking.

Harvest

This stand could be considered for harvesting when the adjacent upland is harvested. Ash will sprout from stumps and other regeneration will be present in the under-story to add to the tree stocking. Ash, aspen and balsam fir are expected to comprise the future stand after a harvest.

Shrubs may increase growth after a harvest and occupy more of the growing space until trees slowly out-compete the shrubs.

Harvesting should be restricted to frozen soil conditions to protect the soil productivity.

Anderson Property

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August, 2007

Summary of Stand Recommendations

Stand No.	Acres	Description	Treatment Recommended	Year
1	0.8	Structure	NA	2007
2	51	Aspen - Pine	No Treatment	2007
			Harvest 2 areas of 8-10 acres	2013
			Harvest 2 areas of 8-10 acres	2023
			Harvest 2 areas of 8-10 acres	2033
3	2	Grass Swamp	NA	2007
4	21	Old Field	Plant Trees	2008
			Protect from deer	2008
			Protect from deer	2009
			Protect from deer	2010
			Protect from deer	2011
			Thin	2033
			Thin	2048
5	3	Ash Swamp	No Treatment	2007

The above table identifies the treatments I suggest after inventorying the stands and considering your objectives for managing the land. Other treatments are identified in the main text and may be implemented, rather than the ones shown.

Updating your Woodland Forest Stewardship Plan ten years from now, will provide an opportunity to update the inventory information and check on the success of treatments implemented.

I have attached a potential harvest map with the year of harvest identified on the map. The harvest blocks that become age classes of trees do not have to be shaped as square blocks. More edge with fingers is more beneficial to some wildlife species.

Anderson Property

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August, 2007

Potential Harvest Map

August, 2007

North



Scale:

½ mile



Legend:



Property Lines

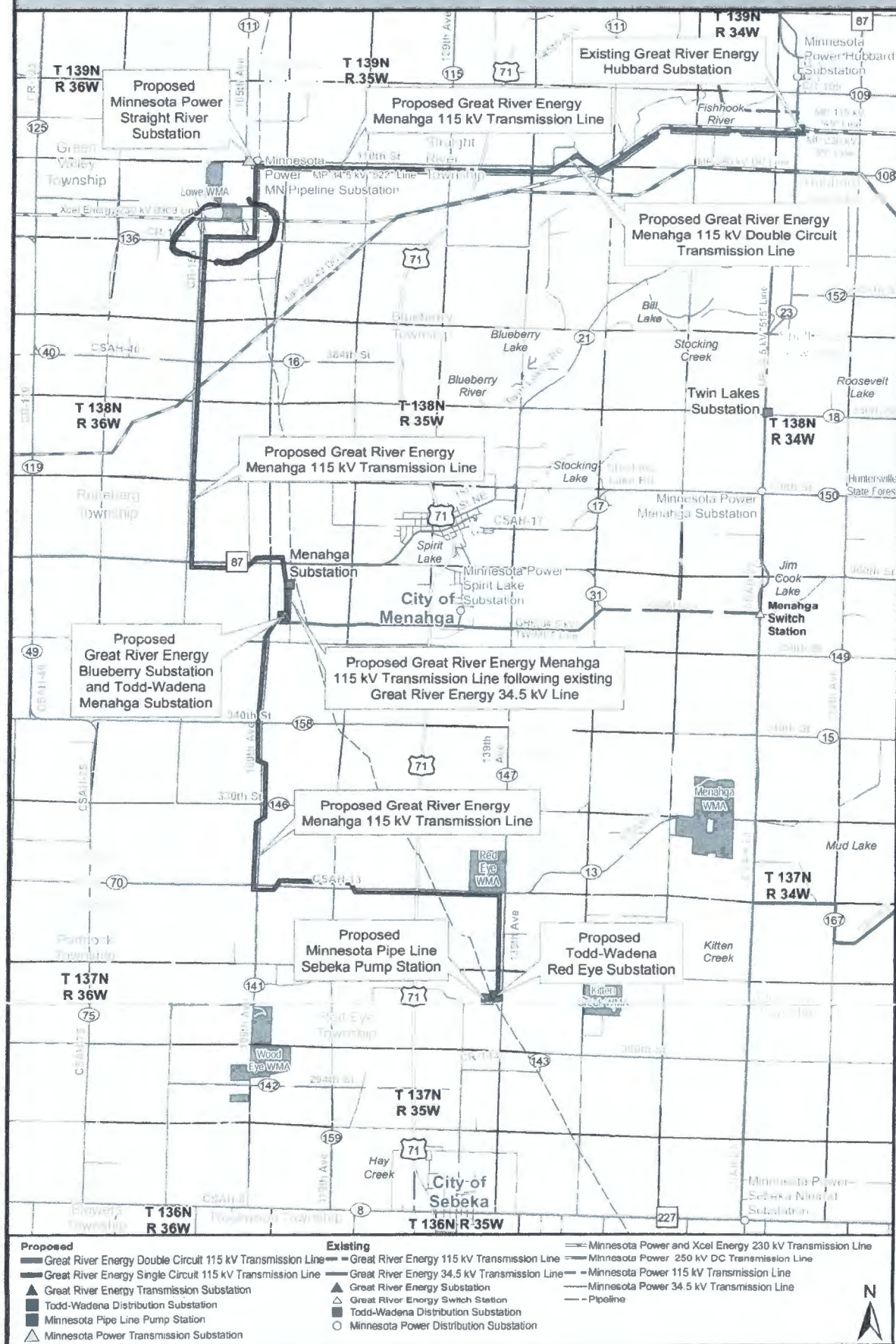


Harvest Boundaries

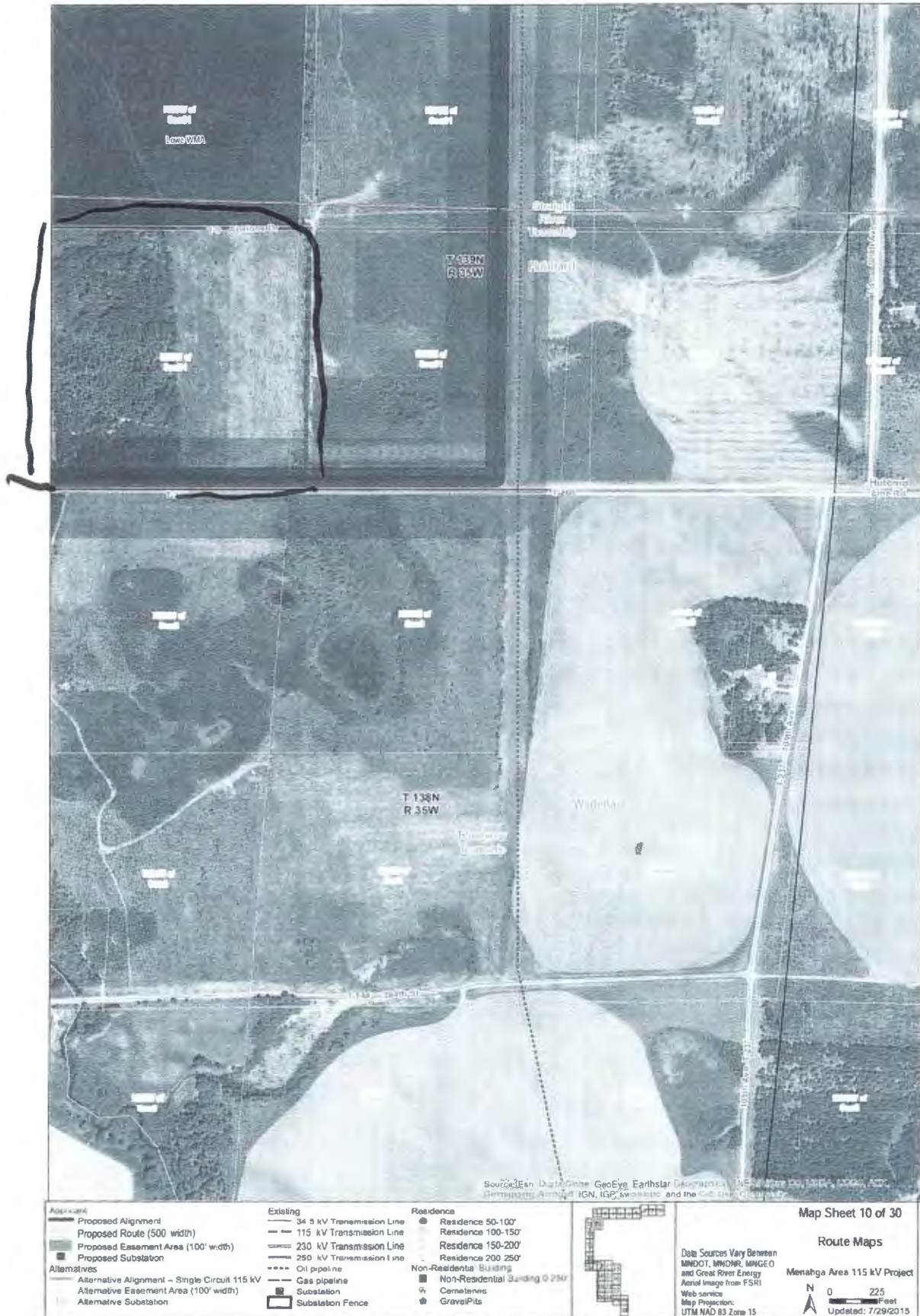
2023

Year of Harvest

Preliminary Project Study Area







Minnesota Department of Natural Resources

500 Lafayette Road • St. Paul, MN • 55155-40



November 2, 2015

Cezar Panait, Energy Facilities Planner
Public Utilities Commission
121 7th Place East, Suite 350
St. Paul MN 55101

Re: In the Matter of the Application of Great River Energy and Minnesota Power for a Certificate of Need and a Route Permit for the Menahga Area 115 kV Transmission Project in Hubbard, Wadena and Becker Counties, Minnesota

PUC Docket Number: ET-2, E-015/TL-14-797
OAH Docket Number: 5-2500-32715
DNR ERDB Number: 20150073

Dear Mr. Panait:

The Minnesota Department of Natural Resources (DNR) has reviewed the application and Environmental Assessment (EA) for the Menahga Transmission Line Project in Hubbard, Wadena, and Becker Counties.

Routing

The EA states that the Blueberry route alternative, west of the city of Menahga, utilizes less existing right-of-way and impacts more acres of trees and forested wetlands than the proposed route. The DNR generally encourages co-location to reduce fragmentation of forested habitat. Therefore, the Preferred Route, west of Menahga, would appear to result in fewer impacts to natural resources.

The Proposed Route or 119th Ave. Route Alternatives appear to have the least environmental impacts in comparison to the East of 109th Ave. Route, U.S. 71 Route, and Pipeline South Route Alternatives.

Suggested Conditions

The DNR recommends the use of bird diverters at public water crossings. The bird diverters should extend beyond the boundary of the public water for a minimum of 50 feet or as warranted when considering site specific features. The DNR also supports the United States Fish and Wildlife Service recommendation of bird diverters near the Red Eye Wildlife Management Area. In addition to document plans to mitigate for bird impacts, it is recommended that the Public Utilities Commission (PUC) permit include a condition requiring an Avian Mitigation Plan. The DNR would appreciate the opportunity to review the plan and provide comments.

Due to the forested nature of the project area, it is important to reduce habitat fragmentation resulting from right-of-way (ROW) clearing as much as possible. The DNR recommends requiring border zone/wire zone ROW management. The wire zone/border zone concept allows

for different types and heights of vegetation in the ROW. The concept differentiates between the wire zone directly under the conductors and the remaining border zone within the ROW and generally allows for different, yet compatible, vegetation types in these separate zones. Types and heights of site vegetation and topography should be discussed as part of this analysis.

Wire Zone: Area directly underneath the conductors, including potential conductor sway. Vegetation in this zone consists of low-growing forbs and grasses.

Border Zone: Area that begins at the outside edge of the wire zone and extends to the edge of the easement or other right of way. This zone may contain additional low-growing woody plants and trees.

The DNR recommends that the PUC permit include a condition that natural vegetation be maintained and spraying prohibited within a minimum of a 50' buffer on both banks at all stream crossings (Kitten, Blueberry, Shell, and Fish Hook) in order to maintain habitat and bank stability.

Plans for vegetation management, including the ROW management approach, invasive species control and prevention measures, shoreland vegetation management, and herbicide use should be discussed in a permit required Vegetation Management Plan. The plan should include special considerations for sensitive areas such as wetland areas or those areas which may require other considerations such as public waters or recreational lands. The use of wildlife-friendly erosion control is recommended for any areas that may be disturbed by construction or maintenance activities that require erosion control materials be used. The DNR would appreciate the opportunity to comment on a draft Vegetation Management Plan.

Impacts to wetlands may be reduced with pole placement and route alignment shifts. The DNR recommends that project plans describe how wetland impacts will be reduced with pole placement and alignment within the route. In addition, it is recommended that construction within wetland areas occur during winter months when the ground is frozen.

Thank you for the opportunity to provide comments regarding the Menahga Transmission Line Project. Please contact me with any questions.

Sincerely,



Jamie Schrenzel
Principal Planner
Environmental Review Unit
(651) 259-5115

cc: Administrative Law Judge James Mortenson, Office of Administrative Hearings
Ray Kirsch, Department of Commerce
Michelle Lommel, Great River Energy