

Staff Briefing Papers

Meeting Date	March 19, 2026		Agenda Item *
Company	Great River Energy and Lake Region Electric Cooperative		
Docket No.	ET2/TL-25-269		
	In the Matter of the Application of Great River Energy and Lake Region Electric Cooperative for a Route Permit for the Otto Tap 115 kV Transmission Line Project in Otter Tail County, Minnesota		
Issues	<ul style="list-style-type: none">• Should the Commission grant a route permit for the proposed project?• If granted, what additional conditions or requirements should be included in the route permit?• Should the Commission approve and adopt the applicants' proposed Findings of Fact and Conclusions for the project as amended by staff?		
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The attached materials are work papers of the Commission Staff. They are intended for use by the Public Utilities Commission and are based upon information already in the record unless noted otherwise.

✓ **Relevant Documents**

	Date
GRE & LREC – Route Permit Application (13 Parts)	11/03/2025
PUC – Notice of Complete Route Permit & Information Meetings	11/18/2025
PUC – Letter – Application Completeness	11/18/2025
GRE & LREC – Supplemental Filings Completeness Determination	12/02/2025
PUC – Comments from Public Information Meeting (In-person)	12/17/2025
PUC – Comments from Public Information Meeting (Virtual)	12/17/2025
PUC – Public Comment – Otter Tail County	12/19/2025
PUC EIP – EIP Staff Recommendations and Draft Route Permit	01/07/2026
PUC – Order	01/09/2026
CAH – Order – First Prehearing Order	01/13/2026
PUC – Notice of Public Hearings and Availability of Draft Permit	01/16/2026
PUC – EQB Monitor Hearing Publication	02/18/2026
GRE – Comments on Draft Route Permit	02/18/2026
Minnesota Interagency Vegetation Management Planning Working Group – Hearing Comments	02/19/2026
DNR – Comment Letter	02/19/2026
GRE – Affidavit of Publication – Newspaper Notice of Public Hearing	02/23/2026
GRE – Reply Comments	02/25/2026
CAH – ALJ Summary Report	03/05/2026

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ATTACHMENTS

Attachment A – Summary Table of Permit Conditions Tables 1 - 3

Attachment B – Summary Table of Staff Proposed Findings

Attachment C – Staff Proposed Findings

Attachment D – Staff Proposed Permit

ISSUES

- Should the Commission grant a route permit for the proposed project?
- If granted, what additional conditions or requirements should be included in the route permit?
- Should the Commission approve and adopt the applicants' proposed Findings of Fact and Conclusions for the project as amended by staff?

PROJECT BACKGROUND

Great River Energy and Lake Region Electric Cooperative (applicants) propose to construct a new 2.9-mile 115 kV single-circuit transmission line between Great River Energy's existing Perham to Rush Lake 115 kV transmission line and the new replacement Otto Substation (project) in Otter Tail County, Minnesota. The applicants generally request a route width of 200 feet, with up to 750 feet around the substation and at the proposed crossing of U.S. Highway 10. The applicants indicate that the project will require a 100-foot right-of-way, 50 feet on either side of the alignment. Applicants propose to use wood or steel monopoles, 70 to 90 feet tall, and placed 350 to 400 feet apart. The applicants propose to begin construction in February 2028, with an in-service date of summer 2028. The project is estimated to cost approximately \$6.7 million. The applicants state that the project is necessary to improve electrical reliability in the area by upgrading the Otto Substation with a new connection to the 115 kV transmission system.

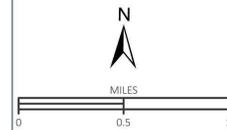
PROJECT MAP



Otto Tap 115 kV Project Route



- Transmission Line Alignment
- Otto Substation



Service Layer Credits: World Street Map; MN Dept Natural Resources, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS
World Street Map: Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS

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PUBLIC UTILITIES COMMISSION

STATUTES AND RULES

CERTIFICATE OF NEED

Minn. Stat. § 216B.243, subd. 2, provides that no large energy facility shall be sited or constructed in Minnesota without the Minnesota Public Utilities Commission (Commission) issuing a certificate of need. However, the project does not meet the definition of a large energy facility, as it excludes high-voltage transmission lines in Minnesota with a capacity of 100 kilovolts or more, with a length of more than 10 miles. This project is 2.9 miles long and therefore does not constitute a large energy facility and does not require a certificate of need.

ROUTE PERMIT

Minn. Stat. § 216I.05, subd. 2, provides that a person may not construct a high voltage transmission line without a route permit issued by the Commission. A high voltage transmission line is defined in 216.02, subd. 8 as a conduct of electricity and associated facilities that are designed and capable of operation at a nominal value of 100 kilovolts or more and greater than 1,500 feet. The proposed project is 115 kV and 2.9 miles in length and therefore requires a route permit from the Commission.

DESIGNATING ROUTES

At least 30 days before applying to the Commission, the applicant must coordinate with identified stakeholders (Minn. Stat. § 216I.05, subd. 5). Additionally, the applicant must provide a draft of the application to Commission staff for review (Minn. Stat. § 216I, subd. 6). Within 10 days of receiving the application, the Commission must determine if the application is complete (Minn. Stat. § 216I, subd. 7). Upon finding the application complete, the Commission must issue a notice (Minn. Stat. § 216I, subd. 8) and hold at least one public meeting in a location near the project (Minn. Stat. § 216I, subd. 9). Upon close of the public comment period associated with the public notice and meeting the Commission must prepare a route permit and identify the scope of the environmental review. When making a final decision on designating a route, the commission must consider the criteria listed in Minn. Stat. § 216I.05, subd. 11.

STANDARD REVIEW

Projects that involve high voltage transmission lines with a capacity between 100 and 300 kilovolts are subject to the standard review process (Minn. Stat. § 216I.07, subd. 2). Under the standard review process, the applicant must prepare and submit an environmental assessment (EA) with the application (Minn. Stat. § 216I.07, subd. 3). The Commission may require an addendum to the EA to be prepared after the public meeting if it identifies other routes or potential impacts for review.

PROCEDURAL HISTORY

On November 3, 2025, the applicants submitted an application to the Commission for a transmission line in Otter Tail County, MN.

On November 18, 2025, the Commission issued a letter on application completeness and issued a notice of a complete route permit and public information meetings. The public information and scoping meetings were scheduled for December 3 and 4, 2025. The public comment period closed on December 18, 2025.

On December 2, 2025, the applicants provided supplemental information in response to the Commission's November 18, 2025, letter, as requested.

On December 3, 2025, Commission staff held a public information and scoping meetings for the project in New York Mills, Minnesota. Commission staff held an online meeting on December 4, 2025.

On December 17, 2025, the Commission posted the transcripts from the public and virtual meeting.¹ Additionally, on December 19, 2025, the Commission filed Otter Tail County's comment.²

On January 7, 2026, Commission staff recommended³ that an EA addendum is not required, the issuance of a Draft Route Permit (DRP), including special permit conditions, and requested that an administrative law judge (ALJ) from the Court of Administrative Hearings (CAH) summarize public testimony.

On January 9, 2026, the Commission issued an Order⁴ as recommended by staff.

On January 13, 2026, the ALJ issued the First Prehearing Order⁵ for this docket. The Order established dates for a Notice of Public Hearings, Applicant Direct Testimony (if any), Public Hearings, Close of Public Comment Period, Applicant Response to Hearing Comments, and the release of the Administrative Law Judge Report (Summary of Public Testimony).

On January 16, 2026, the Commission issued a notice of public hearings and availability of the DRP.⁶ The public hearings were scheduled for February 2 and 3, 2026. The written comment period closed on February 19, 2026.

On February 2, 2026, Administrative Law Judge (ALJ) Joseph C. Meyer presided over a public hearing in New York Mills to receive public input on the route permit application. The in-person public hearing included a 30-minute open house to provide information on the project to the public. An online public hearing via Webex was held on February 3, 2026. No public comments

¹ PUC, [Comments from Virtual Public Information and Scoping Meeting for Otto Tap 115 kV Transmission Line Project](#), December 17, 2025; PUC, [Comments from New York Mills Public Information and Scoping Meeting for Otto Tap 115 kV Transmission Line Project](#), December 17, 2025.

² PUC, [Public Comment – Ottertail County](#), December 19, 2025.

³ PUC EIP, [EIP Staff Recommendations on Draft Route Permit and Need for Environmental Assessment Addendum](#), January 7, 2026.

⁴ PUC, [Order](#), January 9, 2026.

⁵ CAH, [Order – First Prehearing Order](#), January 13, 2026.

⁶ PUC, [Notice of Public Hearings and Availability of the Draft Report](#), January 16, 2026.

were offered at these hearings.⁷

On February 18, 2026, the applicants filed their comments on the DRP.

On February 19, 2026, the Minnesota Department of Natural Resources (DNR) and the Minnesota Interagency Vegetation Management Planning Working Group (VMPWG) submitted comments into the record.

On February 25, 2025, the applicants filed their response to comments received and proposed findings of fact and conclusions of law.

On March 5, 2026, the ALJ filed an Administrative Law Judge Report (Summary of Public Testimony)

ROUTE PERMIT APPLICATION

In their Route Permit Application, the applicants proposed constructing approximately 2.9 miles of 115-kV single-circuit transmission line in Otto and Pine Lake Townships. The transmission line will travel between GRE's existing 115-kV LR-PR transmission line and LREC's existing Otto Substation. A new substation will replace the existing Otto Substation to the south on LREC's property. The route primarily travels along existing roads and follows existing road rights-of-way for 97 percent of its length. The only portion of the route that does not follow existing road right-of-way is the crossing at US Highway 10, where it is within existing road right-of-way. GRE is seeking a 100-foot-wide easement for the construction and operation of the transmission line and will seek approximately 55-foot-wide easements from landowners along roadways.

Applicants indicate that the existing LREC distribution line along the route will be buried in most areas. In locations where an existing pipeline precludes burying the distribution line, the existing distribution line will be moved to a separate structure or installed as an underbuild on the project's new 115-kV structures. LREC will construct a new substation to replace the existing Otto Substation. The existing Otto Substation, located just north of the new substation, will be removed. The existing fence and substation will be removed. The new footprint will be 8,400 square feet, fenced and graveled. The voltage components will be within the fenceline.

GRE estimates the transmission line will cost approximately \$4.4 million, while LREC estimates that the Otto Substation will cost approximately \$2.3 million. Construction of the Otto Substation and transmission line will start in February 2028, with an in-service date in the summer of 2028.

DECISION ON ROUTE PERMIT AND EA ADDENDUM⁸

⁷ Shaddix & Associates, [Transcript New York Mills Public Hearing Held on 2-2-26](#) and [Transcript – Virtual Public Hearing Held on 2-3-26](#), February 25, 2026.

⁸ PUC, [Order](#), January 9, 2026.

PUC staff held public meetings for the project at the Otto Township Hall in New York Mills, Minnesota, on December 3, 2025, followed by a virtual meeting on December 4, 2025. The corresponding written public comment period was open through December 18, 2025. One landowner spoke at the public meetings, asking to be notified if any archaeological surveys related to the project are conducted on their property.⁹ Additionally, Otter Tail County submitted a comment requesting information regarding wetland impacts based on the applicants' permits from the United States Army Corps of Engineers.¹⁰ None of the comments received suggested an alternative route for the project or potential impacts for study.

PUC staff recommended that the Commission: (1) not require an addendum to the EA, (2) issue a DRP with special permit conditions, and (3) request the Commission refer the docket to CAH to conduct hearings and prepare a summary of public comments. Through the consent agenda, the Commission agreed with the staff's recommendations and issued an Order.

The special permit conditions approved by the Commission in the draft site permit include the following:

- County Wetland Permit Notification. The Permittees shall notify Otter Tail County when they obtain wetland permits from the United States Army Corps of Engineers.
- Landowner Notification of Archaeology Survey. The Permittees shall notify landowners of any archeological surveys conducted on their property to the extent the notification is permitted by law. The Permittees shall keep records of such notifications and provide them at the request of Commission staff.
- Tree Replacement Plan. The Permittee shall, in coordination with the Minnesota Department of Natural Resources and Otter Tail County, develop a tree replacement plan to replace any trees that are removed for the construction of the Project and file the plan with the Commission at least 14 days before the pre-construction meeting. Replacement trees may be planted on public lands with the permission of the public entity/owner.

PUBLIC HEARINGS AND COMMENTS RECEIVED

ADMINISTRATIVE LAW JUDGE REPORT – JUDGE JOSEPH MEYER¹¹

The Commission referred the Route Permit Application to the CAH for a summary of comments. The CAH assigned ALJ Joseph C. Meyer to the docket. The applicants and Commission staff attended the pre-hearing conference hosted by ALJ Joseph C. Meyer on January 9, 2026. Following the meeting, ALJ Joseph C. Meyer issued a prehearing order on January 13, 2026. The

⁹ PUC, [Public Comments – Comments from New York Mills Public Information and Scoping Meeting for Otto Tap 115 kV Transmission Line Project](#), December 17, 2025, p. 8 -9.

¹⁰ PUC, [Otter Tail County Comment](#), December 19, 2025.

¹¹ CAH, [Report – Summary of Public Testimony](#), March 3, 2026.

order prescribed that public hearings would occur on February 2 and 3, 2026, the associated comment period would close on February 19, 2026, and the ALJ would issue a summary of public testimony no later than March 5, 2026.

On January 16, 2026, the Commission issued a notice of public hearings and the availability of a draft permit.¹² The notice announced that the in-person hearing would be held on February 2, 2026, at the New York Mills City Hall, and that a virtual meeting would be held on February 3, 2026, via Webex.

ALJ Meyer filed a Summary of Comments on March 3, 2026, noting that applicants provided an overview of the project and Commission staff provided information about the permitting process for public members attending the virtual meeting, and summarized comments filed by the VMPWHG, DNR, and Otter Tail County (summarized below).

VEGETATION MANAGEMENT PLANNING WORKING GROUP (VMPWG)¹³

The VMPWG submitted comments on February 19, 2026, providing comments on the Vegetative Management Plan (VMP) and recommending that applicants address them in their pre-construction submittal. The VMPWG committed to working with the applicants to ensure successful site restoration and compliance with the VMP.

DNR¹⁴

On February 19, 2026, the DNR filed comments into the record stating that it had reviewed the draft permit. Their comments focused on avian impact mitigation, the timing of tree clearing, and a vegetative management plan. The DNR appreciated the inclusion of facility lighting, dust control, and wildlife-friendly erosion control as standard permit conditions.

DNR stated its support for a draft permit condition requiring the applicants to use avian flight diverters to minimize the likelihood of bird collisions associated with visibility issues with the transmission line. The DNR wishes to coordinate with the applicant on the placement of the flight diverters and on the project's construction in accordance with the Avian Power Line Interaction Committee standards to minimize the risk of electrocution.

The DNR is concerned with the timing of tree clearing and its impact on bats. As a result, the DNR is requesting a special permit condition to avoid tree removal from June 1 through August 15th. This aligns with the roosting season when pups are unable to fly.

In its comments, the DNR also supported the inclusion of a permit condition requiring the applicants to continue coordination with the VMPWG to refine its project Vegetation

¹² PUC, [Notice – Notice of Public Hearings and Availability of Draft Permit](#), January 16, 2026.

¹³ Minnesota Interagency Vegetation Management Planning Working Group, [Comments – VMPWG Hearing Comments](#), February 19, 2026.

¹⁴ Minnesota Department of Natural Resources, [Letter – DNR Comment Letter](#), February 19, 2026.

Management Plan (VMP). Specifically, the DNR requests that the applicants file the VMP and documentation of coordination efforts among the DNR, the VMPWG, and the DNR as part of their plan.

APPLICANTS¹⁵

On February 18, 2026, the applicants filed comments concerning the draft route permit issued by the Commission in its January 9, 2026, Order. They proposed revisions to Sections 2.2, 3, 5.1, 5.3.9, 5.3.16, 6.1, 6.3, 9.2, and 9.3 of the draft permit. Tables 1 -3 include a side-by-side comparison of permit modifications between the draft permit and the applicants' suggested changes, along with the staff's position on those changes.

On February 25, 2026, the applicants filed their reply comments to the DNR and the VMPWG. The applicants indicated they would work on the VMPWG for the project's VMP. The applicants did object to DNR's requested permit condition that would limit tree clearing from June 1 through August 15th. They do not believe this project warrants such a condition, as it is broader than what is typically required. Instead, they would like to comply with the U.S. Fish and Wildlife Service's tree-clearing requirements. Should the Commission decide to restrict tree clearing, the applicants suggested the following language, which they believe is consistent with other dockets:

The Permittees will coordinate with the U.S. Fish and Wildlife Service regarding the timing of tree clearing and any other conservation measures to mitigate impacts to Northern Long-Eared Bat. The Permittees shall keep records of compliance with this section and provide them upon the request of Commission staff.

The applicants also do not object to the inclusion of a permit condition related to state-listed species in the project area, as it is consistent with a condition recently imposed by the Commission:

Prior to the start of construction, the Permittees shall resubmit a Natural Heritage Review and continue to consult with the MDNR regarding implementation of avoidance measures for state-protected threatened and endangered species. The Permittees will comply with applicable Minnesota Department of Natural Resources requirements related to state-listed endangered and threatened species in accordance with Minnesota's Endangered Species Statute (Minnesota Statutes, section 84.0895) and associated Rules (Minnesota Rules, parts 6212.1800 to 6212.2300 and 6134). The Permittees shall keep records of compliance with this section and provide them upon the request of Commission

¹⁵ Great River Energy, [Reply Comments](#), February 25, 2026; Great River Energy, [Comments – Comments on Draft Route Permit](#), February 18, 2026.

staff.

STAFF DISCUSSION

Should the Commission grant a route permit for the proposed project?

Staff recommends that the permit be issued, as the applicant has met all relevant statutory and rule criteria for obtaining a route permit for the project.

If granted, what additional conditions or requirements should be included in the route permit?

Staff identified applicants' changes to permit sections 2.2, 3, 5.1, 5.3.16, and 6.1 as minor and support the Commission's adoption of them in the permit (**Attachment A - Table 1**). Staff will focus on the permit sections or conditions where there is disagreement or a substantial change is identified, as noted below and included in **Attachment A - Table 2**. **Attachment A - Table 3** includes the permit conditions staff do not recommend.

1. Wetlands and Water Resources (Permit Condition Number 5.3.9)

The applicants have requested a modification to the standard permit condition on wetlands and water resources to provide flexibility to assemble structures on site if such assembly would be less impactful than moving structures assembled elsewhere to the site. Staff generally supports the applicants' intent but recommends modifying the applicants' proposal.

Applicants stated wetland impacts related to this project are expected to be minimal, but "request this modification to route permits, more generally, to allow permittees the flexibility to appropriately minimize potential impacts."

Staff concurs that wetland impacts are anticipated to be minimal for this project, but acknowledges that, for other projects, there could be situations where it would be less impactful to assemble structures onsite. However, staff recommends replacing applicants' somewhat vague "where practicable" to more specifically address the intended mitigation, "unless assembling them on site is less impactful to wetlands."

2. Tree Replacement Plan (Permit Condition Number 6.3)

The applicants expressed their understanding that the Commission has indicated that a tree replacement plan may become a standard permit condition for transmission route permits and expressed their support for the Commission's efforts to protect and restore the natural environment. The applicants requested that the Commission consider the unique circumstances of each project when it determines whether to require a tree replacement plan and, if a plan is required, the scope of replacement plan. The applicants indicated that the anticipated 2.8 acres of tree removal within the project's right-of-way is reasonable and will not result in significant impacts. Should the Commission believe that the record supports a tree replacement plan for the proposed project, the applicants requested that replacement trees be planted on both

private and public lands.

The Commission has included a permit requirement for tree replacement plans in several recent permits, and the permit language continues to evolve.¹⁶ PUC staff have modified the condition proposed in the draft permit to include private landowners, require a compliance filing of the estimated costs for tree replacement and provide an option for permittees to fund tree replacement through DNR forestry programs or other similar public programs. The proposed condition is based on the language proposed in the Laketown 115 kV Transmission Line permit that was recently before the Commission.¹⁷

3. Tree Clearing (Permit Condition Number 6.4)

The DNR recommended that tree removal be avoided to minimize impacts to roosting bats and their pups from June 1 through August 15. The applicants argue that this language is broader than what is typically required and provide alternative language that they believe is more aligned with other dockets. The applicants' alternative language would have them coordinate with the U.S. Fish and Wildlife Service regarding tree clearing and conservation measures to mitigate impacts to bats. After reviewing both proposals, staff recommends a combination of both DNR's specific limitations on prohibited dates for tree removal with respect to the northern long-eared bats and, as the applicants suggest, a requirement that applicants continue to coordinate with both DNR and USFWS to determine if additional restrictions are necessary.

If construction will not begin until February 2028, it seems reasonable that applicants would have time to do tree clearing for this project outside the time designated by the DNR. The Commission may want to inquire if the inclusion of the DNR language will impede the project schedule before agreeing with the staff's recommendation.

4. State Listed Species (Permit Condition Number 6.5)

The applicants have proposed a new condition requiring them to update the Natural Heritage Review and to continue consultation with the DNR on avoidance measures for state-protected threatened and endangered species. Staff supports the applicants' proposed permit condition and has included it in Section 6.5 of the staff-recommended permit, with a modification to the permittee's proposed language requiring the applicants to provide records of coordination with DNR prior to construction.

5. Substation Construction (not included in staff's recommended permit)

The applicants have proposed a new condition that would allow them to begin substation construction prior to other portions of the project to maintain the project schedule. The

¹⁶ Iron Pine Solar (docket 23-414, **Section 5.8**, [permit, 7/15/26](#)), Benton Solar (Docket 23-423, **Section 5.12**, [permit 1/28/26](#)), Boswell Solar (Docket 24-425, **Section 5.13**, [permit 1/28/26](#)); Appleton to Benson transmission line (Docket 24-263, **Section 6.11** [permit 2/4/26](#)).

¹⁷ PUC, [Staff Briefing Paper for Laketown 115 kV Transmission Line](#), February 17, 2026,

applicants did not provide a rationale for including this special condition for this project, but note that it has been included in some, but not all, Commission orders. Staff does not support its inclusion, as it has been included on other permits, but questions remain.

It is not unusual for permittees to commence construction in phases to accommodate certain timing requirements, landowner preferences, and staffing availability. Staff interprets Section 9.2 of the proposed permit (Plan and Profile) as providing for staged construction. The Commission may want to ask the applicants what assurances this language provides that are not already included in permit condition 9.2, so Commission staff understands its necessity moving forward.

6. Vegetation Clearing (not included in staff's recommended permit)

The applicants are requesting a new special permit condition that would allow them to clear vegetation before the plan and profile are submitted, subject to the conditions listed in their requested language. The applicants argue that the special condition is consistent with other route permits issued by the Commission and is necessary because vegetation clearing restrictions related to protected species may result in construction schedule constraints. This condition has been included as a special permit condition in some recent permit decisions (MN Energy Connect, Pilot Knob, Northland Reliability),¹⁸ but not others.¹⁹

Staff does not believe the record supports the applicants' proposed special condition for this project. Right-of-way clearing is part of the construction process, often well ahead of the grading and structure installation to accommodate certain timing requirements, landowner preferences, and staffing availability. While staff appreciates the applicants' concern that the vegetation clearing be done expeditiously to accommodate seasonal restrictions, staff believes this can be adequately addressed as a phased portion of construction rather than through a special condition. Given that applicants do not anticipate beginning construction until 2028, staff believes there is ample time to review vegetation clearing plans outside of seasonal restrictions. Like the construction of the substation, staff would expect to see many of the required compliance filings beyond those listed in the applicants' proposed language.

Staff also believes that the condition, as written, is inconsistent with the tree replacement plan in Section 6.3 of the proposed permit. Although the details of a tree replacement plan for this project still need to be worked out, the plan would presumably require some sort of inventory of the trees being cleared, and a plan for replacement. The language for the vegetation clearing would not include the same type of requirement if the applicants' language is adopted.

Staff has additional questions about what type of compliance review would be anticipated

¹⁸ Great River Energy, [Comments – Comments on Draft Route Permit](#), February 18, 2026.

¹⁹ PUC, [Order \(Benton Solar\)](#), January 28, 2026; PUC, [Beaver Creek Transmission Line Route Permit Order](#), September 22, 2025; PUC, [Forks Rost 161 kV Transmission Line Permit Order](#), December 18, 2025; PUC, [Staff Briefing Paper for Laketown 115 kV Transmission Line](#), February 17, 2026, PUC, [Draft Permit Mankato to Mississippi River Transmission Line Project](#), January 21, 2026

within 14 days of a filing. Staff notes that the proposed condition does not require applicants to have obtained the necessary land rights or agency permits prior to submitting the vegetation clearing request; it only requires that they plan to do so and will provide the required permits prior to commencing the clearing.

Finally, staff notes that the applicants request that, should the right-of-way or alignment vary from those identified in the permit, the permittees should demonstrate that overall impacts relative to factors in Minn. R. 7850.4100. Staff notes that that portion of the rule has been repealed, and the Commission's decision criteria is now found in Minn. Stat. § 216I.05, subd. 11.

7. Plan and Profile (Permit Condition Number 9.2, not included in staff's recommended permit)

The applicants requested language in permit section 9.2 requiring the Commission to respond within 15 days of receipt of additional or revised documentation. Commission staff are responsive to reviewing pre-construction filings, perhaps especially in instances where staff has requested modifications of filings at the pre-construction meeting. However, it is difficult to commit to a timeline when Commission staff does not know the complexity or nature of the changes that the applicant may submit.

8. Status Reports (Permit Condition Number 9.3, not included in staff's recommended permit)

The applicants have requested that they not file status reports for the project unless the construction of the transmission facility does not begin by February 28, 2028 (Decision Option X). The standard condition requires permittees to file status updates on the anticipated timing of construction every six months if construction does not start within six months of the permit issuance. Staff does not support this modification to a standard condition; the reports are helpful for public transparency and the landowners near the project. The applicants' language is not included in the staff's recommended draft route permit.

Should the Commission adopt the applicants' proposed Findings of Fact and Conclusions for the project?

Staff thoroughly reviewed the applicants' proposed findings and made corrections and additions as appropriate, reflected in PUC Staff's Proposed Findings of Fact and Conclusions of Law, **Attachment B**. With the modifications recommended by Commission staff, staff believes Attachment B accurately reflects the record; addresses all factors outlined in Minn. Stat. § 216I.05, subd. 11; and contains all findings and conclusions required to issue a permit under Minn. Stat. ch. 216I. If the Commission agrees, staff recommends that the Commission adopt these proposed findings and conclusions to the extent they are consistent with the Commission's decisions in this matter.

COMMISSION DECISION OPTIONS

Route Permit

1. Grant a route permit to Great River Energy and Lake Region Electric Cooperative for the Otto Tap Project along the applicants' proposed route. (Staff and Applicants)

Permit Conditions

2. Adopt the Draft Permit with the following modifications:

Minor Permit Changes (Table 1)

- a) Applicant recommendation for sections 2.2, 3, 5.1, 5.3.16, 6.1 included in Table 1 (Applicants and Staff)

Wetland and Water Resources (Table 2)

- b) Applicant recommendation for Section 5.3.9

Or

- c) Staff recommendation for Section 5.3.9

Tree Replacement (Table 2)

- d) Applicant recommendation for Section 6.3

Or

- e) Staff Language for Section 6.3

Tree Clearing (Table 2)

- f) DNR Language for Section 6.4

Or

- g) Applicant Language for Section 6.4

Or

- h) Staff Language for section 6.4

State Listed Species (Table 2)

- i) Applicant Language for Section 6.5

Or

- j) Staff Language for Section 6.5

Applicant Proposed Decision Options Opposed by Staff (Table 3)

- k) Applicant Language for Section 9.2 (Plan and Profile)
- l) Applicant language for Section 9.3 (Status Reports)
- m) Applicant language for Substation Construction (New Language)
- n) Applicant language for Vegetation Clearing (New Language)

Findings of Fact

3. Adopt PUC Staff's Proposed Findings of Fact and Conclusions of Law to the extent they are consistent with the Commission's decision. (Staff)

Administrative

4. Delegate authority to the Executive Secretary to modify the route permit and proposed findings, conclusions, and recommendations, to correct typographic and formatting errors and ensure consistency with the Commission's order. (Staff)

Staff Recommendation: 1, 2A, 2C, 2E, 2H, 2J, 3, 4

Attachment A

Table 1 – Accepted Minor Changes to Draft Permit

Draft Route Permit	Applicants' Recommendation	Staff Recommendation
<p><u>Conduction (2.2)</u> Conductor types may include single-circuit structures with three-phase wires and one shielded wire. The phase wires will be 477 thousand circular millimeters of aluminum-conductor steel reinforced (477 ACSR) or a conductor with similar capacity. The shield wire will be 0.555 optical ground wire.</p>	<p><u>Conduction (2.2)</u> Conductor types may include single-circuit structures with three-phase wires and one shielded wire. The phase wires will be 477 thousand circular millimeters of aluminum-conductor steel reinforced (477 ACSR) or a conductor with similar capacity. The shield wire will be 0.555 optical ground wire.</p>	<p>Applicants' Recommendation (Staff and Applicant)</p>
<p><u>Designated Route (3)</u> The route begins at Great River Energy's existing LR-PR line on the east side of U.S. Highway 10 near structure LR-PR-72. The route travels southwest across U.S. Highway 10 and then follows 410th Street westerly for approximately nine-tenths of a mile, where it will cross 470th Avenue. The Proposed Alignment then turns south and follows 470th Avenue for approximately 2 miles before crossing 390th Street where the route terminates at the Otto Substation.</p>	<p><u>Designated Route (3)</u> The route begins at Great River Energy's existing LR-PR line on the east side of U.S. Highway 10 near structure LR-PR-72. The route travels southwest across U.S. Highway 10 and then follows 410th Street westerly for approximately nine-tenths of a mile, where it will cross 470th Avenue. The Proposed Alignment Route then turns south and follows 470th Avenue for approximately 2 miles before crossing 390th Street where the route terminates at the Otto Substation.</p>	<p>Applicants' Recommendation (Staff and Applicant)</p>

<p><u>Route Permit Distribution (5.1)</u> Within 30 days of issuance of this route permit, the Permittees shall provide all affected landowners with a copy of this route permit and the complaint procedures. An affected landowner is any landowner or designee that is within or adjacent to the Designated Route. In no case shall a landowner receive this route permit and complaint procedures less than five days prior to the start of construction on their property. The Permittees shall also provide a copy of this route permit and the complaint procedures to the applicable regional development commissions, county environmental offices, and city and township clerks. The Permittees shall file with the Commission an affidavit of its route permit and complaint procedures distribution within 30 days of issuance of this route permit.</p>	<p><u>Route Permit Distribution (5.1)</u> Within 30 days of issuance of this route permit, the Permittees shall provide all affected landowners with a copy of this route permit and the complaint procedures. An affected landowner is any landowner or designee that is within or adjacent to the Designated Route. In no case shall a landowner receive this route permit and complaint procedures less than five days prior to the start of construction on their property. The Permittees shall also provide a copy of this route permit and the complaint procedures to the applicable regional development commissions, county environmental offices, and city and township clerks. The Permittees shall file with the Commission an affidavit of its route permit and complaint procedures distribution within 30 days of issuance <u>distribution</u> of this route permit.</p>	<p>Applicants' Recommendation (Staff and Applicant)</p>
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<p><u>Avian Protection (5.3.16)</u> The Permittees in cooperation with the DNR shall identify areas of the transmission line where bird flight diverters will be incorporated into the transmission line design to prevent large avian collisions attributed to visibility issues. Standard transmission design shall incorporate adequate spacing of conductors and grounding devices in accordance with Avian Power Line Interaction Committee standards to eliminate the risk of electrocution to raptors with larger wingspans that may simultaneously come in contact with a conductor and grounding devices. The Permittees shall submit documentation of its avian protection coordination with the plan and profile pursuant to Section 9.2.</p>	<p><u>Avian Protection (5.3.16)</u> The Permittees in cooperation with the DNR shall identify areas of the transmission line where bird flight diverters will be incorporated into the transmission line design to prevent large avian collisions attributed to visibility issues. Standard transmission design shall incorporate adequate spacing of conductors and grounding devices in accordance with Avian Power Line Interaction Committee standards to eliminate reduce the risk of electrocution to raptors with larger wingspans that may simultaneously come in contact with a conductor and grounding devices. The Permittees shall submit documentation of its avian protection coordination with the plan and profile pursuant to Section 9.2.</p>	<p>Applicants' Recommendation (Staff and Applicant)</p>
<p><u>County Wetland Permit Notifications (6.1)</u> The Permittees shall notify Otter Tail County when they obtain wetland permits, from the United States Army Corps of Engineers.</p>	<p><u>County Wetland Permit Notifications (6.1)</u> The Permittees shall notify Otter Tail County when they obtain wetland permits, if applicable, from the United States Army Corps of Engineers.</p>	<p>Applicants' Recommendation (Staff and Applicant)</p>

Attachment A

Table 2 - Accepted Changes to Draft Permit

Draft Route Permit	Applicants' Recommendation	Staff Recommendation
<p><u>Wetlands and Water Resources (5.3.9)</u> The Permittees shall contain soil excavated from the wetlands and riparian areas and not place it back into the wetland or riparian area. The Permittees shall access wetlands and riparian areas using the shortest route possible in order to minimize travel through wetland areas and prevent unnecessary impacts. The Permittees shall not place staging or stringing set up areas within or adjacent to wetlands or water resources, as practicable. The Permittees shall assemble structures on upland areas before they are brought to the site for installation.</p>	<p><u>Wetlands and Water Resources (5.3.9)</u> The Permittees shall contain soil excavated from the wetlands and riparian areas and not place it back into the wetland or riparian area. The Permittees shall access wetlands and riparian areas using the shortest route possible in order to minimize travel through wetland areas and prevent unnecessary impacts. The Permittees shall not place staging or stringing set up areas within or adjacent to wetlands or water resources, as practicable. The Permittees shall assemble structures on upland areas before they are brought to the site for installation, <u>where practicable.</u></p>	<p><u>Wetlands and Water Resources (5.3.9)</u> The Permittees shall contain soil excavated from the wetlands and riparian areas and not place it back into the wetland or riparian area. The Permittees shall access wetlands and riparian areas using the shortest route possible in order to minimize travel through wetland areas and prevent unnecessary impacts. The Permittees shall not place staging or stringing set up areas within or adjacent to wetlands or water resources, as practicable. The Permittees shall assemble structures on upland areas before they are brought to the site for installation <u>unless assembling them on site is less impactful to wetlands.</u></p>

<p><u>Tree Replacement Plan (6.3)</u> The Permittee shall, in coordination with the Minnesota Department of Natural Resources and Otter Tail County, develop a tree replacement plan to replace any trees that are removed for the construction of the Project and file the plan with the Commission at least 14 days before the pre-construction meeting. Replacement trees may be planted on public lands with the permission of the public entity/owner</p>	<p><u>Tree Replacement Plan (6.3)</u> The Permittee shall, in coordination with the Minnesota Department of Natural Resources and Otter Tail County, develop a tree replacement plan to replace any trees that are removed for the construction of the Project and file the plan with the Commission at least 14 days before the pre-construction meeting. Replacement trees may be planted on public <u>or private</u> lands with the permission of the public entity/owner</p>	<p><u>Tree Replacement Plan (6.3)</u> The Permittees shall, in coordination with <u>impacted landowners</u> <u>and</u> the Minnesota Department of Natural Resources DNR and Otter Tail County, develop a tree replacement plan to replace any trees that are removed for the construction of the Project <u>by planting new seedling or sapling trees.</u> and <u>The Permittees shall</u> file the plan with the Commission at least 14 days before the pre-construction meeting. <u>At least 45 days prior to the preconstruction meeting the Permittees shall make a compliance filing including an estimate of costs for the tree replacement.</u> Replacement trees may be planted on public <u>or private</u> lands with the permission of the <u>landowner or</u> public entity/owner. <u>The Tree Replacement Plan may include an alternative proposal to fund tree replacements by and through DNR Forestry Programs or other similar public programs. Plantings shall be prioritized in Otter Tail County.-</u></p>
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	<p><u>State Listed Species (6.5)</u> <u>State Listed Species Prior to the start of construction, the Permittees shall resubmit a Natural Heritage Review and continue to consult with the MDNR regarding implementation of avoidance measures for state-protected threatened and endangered species. The Permittees will comply with applicable Minnesota Department of Natural Resources requirements related to state-listed endangered and threatened species in accordance with Minnesota's Endangered Species Statute (Minnesota Statutes, section 84.0895) and associated Rules (Minnesota Rules, parts 6212.1800 to 6212.2300 and 6134). The Permittees shall keep records of compliance with this section and provide them upon the request of Commission staff.</u></p>	<p><u>State Listed Species (6.5)</u> <u>Prior to the start of construction, the Permittees shall resubmit a Natural Heritage Review and continue to consult with the DNR regarding implementation of avoidance measures for state-protected threatened and endangered species. The Permittees will comply with applicable Minnesota Department of Natural Resources requirements related to state-listed endangered and threatened species in accordance with Minnesota's Endangered Species Statute (Minnesota Statutes, section 84.0895) and associated Rules (Minnesota Rules, parts 6212.1800 to 6212.2300 and 6134). The Permittees shall file records of coordination with the DNR at least 14 days before the pre-construction meeting.</u></p>
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DNR	Applicants	Staff Recommendation
<p><u>Tree Clearing (6.4)</u> <u>Applicants to avoid tree removal from June 1 through August 15. This minimizes impacts to bats, including the federally endangered northern long-eared bat, during the maternity roosting season when pups are unable to fly.</u></p>	<p><u>Tree Clearing (6.4)</u> <u>The Permittees will coordinate with the U.S. Fish and Wildlife Service regarding the timing of tree clearing and any other conservation measures to mitigate impacts to Northern Long-Eared Bat. The Permittees shall keep records of compliance with this section and provide them upon the request of Commission staff</u></p>	<p><u>Tree Clearing (6.4)</u> <u>The Permittees shall not remove trees for the construction or operation of the project from June 1 through August 15. The Permittees shall coordinate with DNR and USFWS to determine if additional tree removal date restrictions are necessary to minimize impacts to state or federally protected species. Permittees shall file records of coordination with DNR and USFWS at least 14 days before the pre-construction meeting.</u></p>

Attachment A

Table 3 - Rejected Changes to Draft Permit

Draft Route Permit	Applicant	Staff Recommendation
<p><u>Plan and Profile (9.2)</u> If the Commission notifies the Permittees in writing within 30 days after the pre-construction meeting that it has completed its review of the documents and planned construction, and finds that the planned construction is not consistent with this route permit, the Permittees may submit additional and/or revised documentation and may not commence construction until the Commission has notified the Permittees in writing that it has determined that the planned construction is consistent with this route permit.</p>	<p><u>Plan and Profile (9.2)</u> If the Commission notifies the Permittees in writing within 30 days after the pre-construction meeting that it has completed its review of the documents and planned construction, and finds that the planned construction is not consistent with this route permit, the Permittees may submit additional and/or revised documentation and may not commence construction until the Commission has notified the Permittees in writing that it has determined that the planned construction is consistent with this route permit. <u>The Commission shall respond regarding the sufficiency of the Permittees' additional and/or revised documentation within 15 days following receipt of the additional and/or revised documentation.</u></p>	<p>Not Included</p>

<p>Status Reports (9.3) If the Permittees do not commence construction of the Transmission Facility within six months of this route permit issuance, the Permittees shall file with the Commission Pre-Construction Status Reports on the anticipated timing of construction every six months beginning with the issuance of this route permit until the pre-construction meeting. The Status Reports shall include information on the Project's Midcontinent Independent System Operator (MISO) interconnection process, if applicable.</p>	<p>Status Reports (9.3) If the Permittees do not commence construction of the Transmission Facility within six months of this route permit issuance by February 15, 2028, the Permittees shall file with the Commission Pre-Construction Status Reports on the anticipated timing of construction every six months beginning with the issuance of this route permit until the pre-construction meeting. The Status Reports shall include information on the Project's Midcontinent Independent System Operator (MISO) interconnection process, if applicable.</p>	<p>Not Included</p>
	<p><u>Substation Construction (New)</u> <u>Notwithstanding any other requirements in this Permit, Permittee may commence construction of the substations identified in Section 2.3 of this Permit, provided that Permittee complies, as applicable, with Sections 9.1 and 9.2 of this Permit with respect to the specific scope of the construction activities sought to be conducted by Permittee.</u></p>	<p>Not Included</p>

	<p><u>Vegetation Clearing (New)</u></p> <p><u>If the Permittee will clear vegetation for any portion of the Transmission Facility prior to completion of the design necessary to provide a plan and profile contemplated under Section 9.2, the Permittee shall file with the Commission at least 14 days prior to such vegetation clearing activities:</u></p> <ul style="list-style-type: none"><u>- If applicable, any vegetation management plan that is applicable to any portion of the Transmission Facility being proposed for vegetation clearing;</u><u>- A map showing the area proposed for vegetation removal and its location within the Designated Route and compared to the right-of-way identified in this route permit;</u><u>- A statement of confirmation that the Permittee has obtained, or will obtain before commencing, necessary land rights and agency permits for the proposed vegetation removal. The required permits must be provided to the Commission prior to vegetation clearing.</u><u>- The Permittee's plan for notifying landowners in the identified area(s) and for providing contact information for the Permittee's field representative; and</u><u>- If the Permittee has made any modifications to the right-of-way or alignment within the Designated Route from that identified in this route permit, the Permittee shall demonstrate that the right-of-way to be cleared of vegetation will be located so as to have comparable overall impacts relative to the factors in Minn. R. 7850.4100, as does the right-of-way and alignment identified in this route permit.</u>	<p>Not Included</p>
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Attachment B

Summary Table of Staff Proposed Findings

Staff Proposed Modifications to Applicants’ Findings

Finding	Issue	Proposed Modification	Comment
Title	Findings Author	GREAT RIVER ENERGY PUC STAFF ’S PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW	Modified to clarify the proposed findings incorporate staff recommendations.
12	Procedural History	On January 7, 2026, Commission Energy Infrastructure Permitting Staff (EIP) submitted a Scoping Summary and Recommendations, finding recommending that the Commission not require an environmental assessment (EA) addendum is not required for the Project, recommending that the Draft Route Permit prepared by EIP be issued, including special permit conditions, and requesting that an Administrative Law Judge from the Court of Administrative Hearings (CAH) conduct public hearings for the Project and prepare a summary of public testimony	Modified to reflect the record.
14	Procedural History	On January 8, 2026, the Commission issued proposed consent items for the Commission’s Uncontested Proceeding Subcommittee pursuant to Minn. R. 7829.1050	Modified to reflect the record.
15	Procedural History	On January 9, 2026, the Commission issued an order finding that an EA addendum is not required for the Project.	New finding to reflect the record.
26	Need Overview	Because the proposed HVTL is less than 10 miles in length and has a capacity of less than 300 kV , a Certificate of Need is not required for the Project.	Modified to clarify statutory requirements for a Certificate of Need.
39	Project Schedule	The Applicants anticipate starting construction of the Project in fall 2027 early 2028 and energizing the Project in the summer of 2028	Modified to incorporate applicants’ proposed construction schedule.
XIII	Public, Tribal, and Government Notifications	XIII. PUBLIC, TRIBAL , AND LOCAL GOVERNMENT PARTICIPATION NOTIFICATION	Modified heading to clarify the section addresses notifications to tribes as well as state and federal governments
46	Public, Tribal, and Government Notifications	Also in May 2025, Great River Energy sent notification letters to Tribal governments. These letters stated that Great River Energy intended to file a route permit application for the Project. Great River Energy then sent follow-up notification letters to the Tribal Historic Preservation Officers who did not respond to the May	Modified to incorporate applicants’ supplemental filing documenting coordination with Tribal Historic Preservation Officers and state and federal agencies

Finding	Issue	Proposed Modification	Comment
		<p>2025 letter in September 2025. Great River Energy also sent notification letters to individuals on the Tribal Government Contacts Service List maintained by the Commission in September 2025. <u>On December 2, 2026, Great River Energy provided documentation of follow up calls with Tribal Historic Preservation Officers and notification to state and federal agency representatives in a supplemental filing.</u></p>	
62	Noise	<p>Operational <u>Appreciable operational</u> noise impacts are not anticipated because of the new Otto Substation. Noise levels from the Otto Substation will attenuate to 50 dBA before the LREC property boundary. Noise levels will be below 30 dBA at the nearest residence, well below Noise Area Classification (NAC) 1 noise standards, and even prior to accounting for, additional environmental mitigating factors between the Substation and the residence, such as vegetation or buildings.</p>	<p>Modified to clarify that although there will be noise impacts from the new substation, the impacts will not be appreciable and will not excel noise standards.</p>
71	Socioeconomics	<p>During construction, there may be short-term positive impacts to the nearby communities, including a potential increase in local revenue may occur for businesses, such as hotels, grocery stores, gas stations and restaurants to support utility personnel and contractors. Some materials might be purchased locally, such as concrete. <u>Consistent with Minn. Stat. §216I.05, Subd. 12 (d), Section 9.5 of the Draft Site Permit requires the permittees, their contractors, and subcontractors will pay no less than prevailing wage</u> Generally, landowners will receive one-time payments for new easements</p>	<p>Modified to clarify that the permittees are required to pay no less than prevailing wage.</p>
95	Electric and Magnetic Fields (EMF)	<p>There is no state or federal standard for transmission line EF levels. The EQB, however, developed a standard of a maximum EF limit of eight kV/m at one meter (3.28 feet) above ground; the Commission has adopted this standard <u>in past permits.</u></p>	<p>Modified to clarify that the Commission has adopted the standard in past permits on a case-by-case basis.</p>
96	Electric and Magnetic Fields (EMF)	<p>There are no federal or Minnesota exposure standards for MFs <u>and past permits for HVTLs have not included an MF limit. The EQB and the Commission Environmental review documents used in EQB and Commission proceedings have recognized cited</u> Florida</p>	<p>Modified to clarify that past HVTL permits have not included a magnetic field limit, although documents used in those</p>

Finding	Issue	Proposed Modification	Comment
		(a 150-mG limit) and New York (a 200-mG limit) state standards. Both state standards are calculated at the edge of right-of-way.	proceedings have cited limits in other states.
97	Electric and Magnetic Fields (EMF)	Applicants calculated EF associated with the Project. These calculations are based on the maximum operating voltage of the Transmission Line (126.5 kV). The Applicants indicate that “because the magnitude of the voltage on a transmission line is near-constant (ideally within +/- five percent of design voltage), the magnitude of the electric field will be near-constant regardless of the power flowing on the line.” The maximum electric field is approximately 1.55 kV/m. This field strength is well below the Commission permit standard of 8.0 kV/m	Modified to clarify that there is not a Commission permit standard for maximum electric fields. These limits are included in HVTL permits on a case-by-case basis.
106	Public and Worker Safety	<u>Section 5.5.1 of the Draft Route Permit requires Applicants will Permittees to</u> meet or exceed the design, construction, and operational requirements of the NESC, North American Electric Reliability Corporation requirements, state and local codes	Modified to clarify that this is a requirement of the permit.
115	Agriculture	The Applicants are committed to working with landowners “to minimize impacts to agricultural activities,” compensating landowners “for any crop damage/loss and soil compaction that may occur during construction,” and repairing and restoring areas disturbed during construction to pre-construction condition. <u>Additionally, the Draft Route Permit includes conditions requiring the Permittees to work with landowners to minimize agricultural impacts from the Project</u>	Modified to clarify that, in addition to Applicants’ commitments, the permit contains conditions requiring the permittees to work with landowners to minimize agricultural impacts.
123	Archaeological and Historic Resources	Applicants requested feedback on the Project from the 11 federally recognized Tribes with geography within Minnesota, the 1854 Treaty Authority, MIAC, and Tribes outside of Minnesota with interest in the Project Area in its Project notification letters sent in May 2025. <u>In December 2025, Applicants placed follow-up phone calls with Tribal Historic Preservation Officers from seven federally recognized Tribes with geography within Minnesota that had not responded to previous outreach efforts.</u> To date, three <u>five</u> Tribes, along with MIAC, have responded	Modified to include additional outreach in December 2025.

Finding	Issue	Proposed Modification	Comment
150	Wildlife and Habitat	Any eagle nests discovered during survey of the Transmission Line or in the land acquisition process will be reported, as applicable, to the USFWS and Great River Energy will adhere to the guidance provided. <u>Section 3.16 of the Draft Route Permit requires applicants to cooperate with the MDNR to identify locations for bird flight diverters to be installed along the Transmission Line.</u> USFWS recommended that bird diverters be placed along the Transmission Line near Albert Lake. No additional mitigation measures are proposed.	Modified to clarify that the permit requires coordination with the DNR on placement of bird flight diverters.
XV.E.5	Vegetation	New Heading	Added new section to discuss project's impacts on vegetation and mitigation measures.
151	Vegetation	<u>Vegetation within the Proposed Right-of-Way is made up of developed open space (50 percent), cultivated cropland (29 percent), pasture (6 percent), and wetlands (6 percent).</u>	New finding to characterize the vegetation along the right-of-way.
152	Vegetation	<u>The Proposed Right-of-Way will parallel existing road right-of-way and follow distribution line right-of-way for about 97 percent of its length. Most of the Proposed Right-of-Way overlaps row crop fields; Great River Energy anticipates it will clear approximately 2.8 acres of trees within the Proposed Right-of-way. Section 5.3.10 of the Draft Route Permit require Permittees to minimize tree removal along the Route and to preserve trees and vegetation to the extent possible while ensuring sound engineering principles and engineering criteria. Section 6.3 of the Draft Route Permit requires Permittees to develop a tree replacement plan in coordination with impacted landowners, the MDNR, and Otter Tail County.</u>	New finding to discuss potential impacts on vegetation and mitigation measures.
153	Vegetation	<u>The movement of construction equipment to, from and between various works sites has the potential to introduce or spread invasive species. Sections 5.3.12 and 5.3.13 require Permittees to employ best management practices to avoid introducing or spreading invasive species or noxious weeds</u>	New finding to discuss potential for construction activities to introduce invasive species or noxious weeds and potential mitigation measures.

Finding	Issue	Proposed Modification	Comment
164	Greenhouse Gases	Minnesota Rule 4410.4300, Subpart 15, Part B, establishes a mandatory category requiring preparation of an EA <u>Environmental Assessment</u> Worksheet for stationary source facilities generating 100,000 tons of GHGs per year. Accordingly, the preliminary estimate of Project GHG emissions, when compared to statewide levels and to is below this <u>the</u> regulatory requirement threshold. for additional study for projects based on GHGs, would be negligible	Edited for clarity
180	Use of Existing Rights of Way	The Project will connect the Otto Substation to the 115 kV transmission system; because the Otto Substation is not currently connected to any HVTLs there are no HVTLs the route can follow. Approximately 2.9 miles, or 97 percent, of the Project will be collocated within existing road and utility right-of-way. Where the Project does not collocate with existing right-of-way, it is within existing road right-of-way (the U.S. Highway 10 crossing)	Modified to clarify there are no existing HVTLs the project can follow.
194	Route Permit Conditions	In comments filed on February 1918 , 2026, Great River Energy proposed limited revisions to Sections 2.2 and 3 of the Draft Route Permit to reflect Project-specific details. Great River Energy also proposed revisions to Conditions 5.1, 5.3.9 , 5.3.16, and 6.1, 6.3 , 9.2, and 9.3 . The proposed revisions are generally minor clarifications and are supported by the record. Great River Energy also requested the addition of two permit conditions — one related to vegetation clearing, and one related to substation construction. Both conditions are supported by the record and consistent with other recent permits issued by the Commission.	Modified to reflect the record.
195	Route Permit Conditions	<u>Applicants proposed modifying Condition 5.3.9 of the Draft Route Permit to allow permittees to assemble transmission structures in upland areas before transporting the structures to wetland areas where practicable. EIP staff proposed modifying applicants' request to clarify that permittees are required to assemble structures elsewhere before moving to wetlands unless assembling them on site is less impactful to wetlands.</u>	New finding to address applicants' request to construct transmission structures in wetlands in cases where transporting assembled structures to wetland areas would be more impactful (Section 5.3.9 of proposed permit) .

Finding	Issue	Proposed Modification	Comment
196	Route Permit Conditions	<u>Applicants proposed modifying Condition 6.3 of the Draft Route Permit to provide for replacement trees to be planted on private lands with the permission of the landowner. EIP staff proposed modifying the condition to incorporate the Commission’s permit language for this condition from recent dockets</u>	New finding to address special condition requiring tree replacement plan (Condition 6.3 of proposed permit).
197	Route Permit Conditions	<u>In comments filed on February 19, 2026, the Minnesota Department of Natural Resources recommended a special permit condition requiring seasonal restrictions on tree clearing to minimize impacts to bats, including the northern long-eared bat—the request did not propose specific permit language. On February 25, 2026, the Applicants proposed a permit condition for tree clearing that required permittees to coordinate with the U.S. Fish and Wildlife Service regarding the timing of tree clearing and other conservation measures to mitigate impacts to the Northern Long-Eared Bat. EIP staff proposed permit condition 6.4 that incorporated the Minnesota Department of Natural Resources recommendations on seasonal restrictions for tree clearing between June 1 and August 15 and required permittees to coordinate with both the Minnesota Department of Natural Resources and the U.S. Fish and Wildlife Services to determine if additional restrictions are necessary to minimize impacts to state or federally protected species.</u>	New finding to address new special condition limiting tree clearing requested by DNR and modified by applicants and EIP staff (Condition 6.4 of proposed permit).
198	Route Permit Condition	<u>In response to Minnesota Department of Natural Resources comments, applicants proposed a new condition requiring permittees to resubmit a Natural Heritage Review request and continue consultation with Minnesota Department of Natural Resources. EIP staff proposed modifying the applicants’ proposed condition to require permittees to file records of the coordination in proposed permit condition 6.5.</u>	New finding to address new special condition requiring applicants to update National Heritage Review (Condition 6.5 of proposed permit).
199	Route Permit Condition	<u>Applicants proposed a new permit condition allowing them to begin substation construction prior to other portions of the project. This condition has been included in some recent Commission HVTL Permit Decisions, but not others. EIP staff did</u>	New finding to address applicants’ proposed special condition to allow construction of substation prior to other

Finding	Issue	Proposed Modification	Comment
		<u>not support the new condition, noting that it is not unusual for permittees to commence construction in phases, and that staff interprets Section 9.2 of the Draft Route Permit as providing for staged construction.</u>	portions of the project (not included in proposed permit).
200	Route Permit Conditions	<u>Applicants proposed a new permit condition allowing them to begin vegetation clearing before the plan and profile are submitted. This condition has been included in some recent Commission HVTL Permit Decisions, but not others. EIP staff did not support the new condition, noting that it is not unusual for permittees to commence construction in phases, and that staff interprets Section 9.2 of the Draft Route Permit as providing for staged construction. EIP staff raised additional questions and concerns about the interaction between the proposed condition and other permit conditions and compliance review of filings within 14 days</u>	New finding to address applicants' proposed special condition to allow vegetation clearing prior to submittal of plan and profile (not included in proposed permit).
201	Route Permit Conditions	<u>Applicants proposed modifying Section 9.2 of the Draft Route Permit Plan to require the Commission to respond to permittees' additional or revised pre-construction filings within 15 days of the filing. EIP staff did not support the change, noting that the Commission staff are responsive to reviewing pre-construction filings.</u>	New finding to address applicants' proposal to modify Condition 9.2 of Draft Route Permit (not included in proposed permit).
202	Route Permit Condition	<u>Applicants proposed modifying Section 9.3 of the Draft Route Permit to delay filing periodic status reports until February 2028. The standard permit condition requires permittees to file status updates every six months from permit issuance when construction does not commence within six months of the permit issuance. EIP staff did not support this change, noting that status updates are helpful to the public and landowners when construction is delayed</u>	New finding to address applicants' proposal to modify Condition 9.3 of Draft Route Permit (not included in proposed permit).
XVIII	Environmental Assessment	COMPLETENESS OF ENVIRONMENTAL ASSESSMENT	Edited for clarity.
206	Environmental Assessment	The <u>Applicants prepared an EA process is the alternative environmental review approved for HVTLs</u> and submitted it with	Edited for clarity.

Finding	Issue	Proposed Modification	Comment
		their Route Permit Application pursuant to the Standard Review Process	
207	Environmental Assessment	The evidence in the record demonstrates that the EA is adequate. On January 7, 2026, and following the December 3 and 4, 2025, public information and scoping meetings, Commission EIP Staff submitted a Scoping Summary and Recommendations, <u>finding recommending</u> that the Commission not require an EA addendum is not required for the Project. <u>On January 9, 2026, the Commission issued an order finding that an EA addendum is not required for the Project.</u>	Under 216I, there is no legal requirement to make a finding about EA adequacy or completeness for an application processed under standard review.
208	Environmental Assessment	The record further establishes that the EA otherwise meets the criteria and contains information prescribed by Minn. Stat. §§ 216I.05, subd.4 and 216I.07, subd.3	Edited for clarity.
209	Environmental Assessment	<u>Minnesota law requires the Commission to consider the EA and the entirety of the record related to human and environmental impacts when making a final decision on a route permit application.</u>	New finding to clarify statutory requirement.
1	Conclusions	Any of the forgoing Findings of Fact more properly designated as Conclusions of Law are hereby adopted as such.	Removes duplication.
3	Conclusions	Applicants have prepared an appropriate EA of the Project for purposes of this proceeding, and which satisfies the requirements of Minn. Stat. §§ 216I.05, subd. 4, and 216I.07, subd. 3. <u>The Commission has considered the EA and the entirety of the record related to human and environmental impacts as required by Minn. Stat. § 216I.07, subd. 3(b).</u>	Edited for clarity
6	Conclusions	A public hearing was conducted near the Proposed Route. Proper notice of the public hearing was provided, as required by Minn. Stat. §§ 216I.05, subd. 98 , and 216I.07, subd. 4, and the public was given the opportunity to speak at the hearing and to submit written comments. All procedural requirements for the Route Permit were met.	Corrects statutory reference

Finding	Issue	Proposed Modification	Comment
7	Conclusions	The <u>EA and the</u> evidence in the record demonstrates that the Proposed Route <u>satisfies is consistent with</u> the Route Permit factors set forth in Minn. Stat. § 216I.05, subd. 11	Edited for clarity
8	Conclusions	There is no feasible and prudent alternative to the construction of the Project, and the Project is consistent with and reasonably required for the promotion of public health and welfare in light of the state’s concern for the protection of its air, water, land, and other natural resources as expressed in the Minnesota Environmental Rights Act <u>and the Minnesota Environmental Policy Act.</u>	Edited for clarity
10	Conclusions	The evidence in the record demonstrates that the general Route Permit conditions <u>included in the Draft Route Permit</u> are appropriate for the Project, with the revisions discussed in Section XVI, above	Edited for clarity

Attachment C

Staff Proposed Findings

STATE OF MINNESOTA
~~COURT OF ADMINISTRATIVE HEARINGS~~
~~FOR THE~~ PUBLIC UTILITIES COMMISSION

In the Matter of the Application of Great
River Energy and Lake Region Electric
Cooperative for a Route Permit for the Otto
Tap 115 kV Transmission Line Project in
Otter Tail County, Minnesota

CAH Docket No. 28-2500-41458
MPUC Docket No. ET2/TL-25-269

~~GREAT RIVER ENERGY~~ PUC STAFF'S
PROPOSED FINDINGS OF FACT AND
CONCLUSIONS OF LAW

STATE OF MINNESOTA
~~COURT OF ADMINISTRATIVE HEARINGS~~
~~FOR THE PUBLIC UTILITIES COMMISSION~~

**In the Matter of the Application of Great
River Energy and Lake Region Electric
Cooperative for a Route Permit for the Otto
Tap 115 kV Transmission Line Project in
Otter Tail County, Minnesota**

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**STATE OF MINNESOTA
PUBLIC UTILITIES COMMISSION**

In the Matter of the Application of Great River Energy and Lake Region Electric Cooperative for a Route Permit for the Otto Tap 115 kV Transmission Line Project in Otter Tail County, Minnesota

CAH Docket No. 28-2500-41458
MPUC Docket No. ET2/TL-25-269

**GREAT RIVER ENERGY PUC STAFF'S
PROPOSED FINDINGS OF FACT AND
CONCLUSIONS OF LAW**

Great River Energy and Lake Region Electric Cooperative (LREC) (together, the Applicants) have applied for a Route Permit (Application) to build a new 115 kilovolt (kV) single-circuit high voltage transmission line (HVTL) (Transmission Line) in Otto and Pine Lake Townships in Otter Tail County, Minnesota, referred to as the Otto Tap 115 kV Transmission Line Project (Project). The Project will be approximately 2.9 miles long and includes construction of a new Otto Substation (or Substation) that will replace the existing Otto Substation.

Public hearings on the Application were held on February 2, 2026 (in-person), and February 3, 2026 (remote-access). The factual record remained open until February 19, 2026, for the receipt of written public comments.

STATEMENT OF ISSUES

Have the Applicants satisfied the criteria established in Minn. Stat. Ch. 216I for a route permit for the Project?

SUMMARY

Applicants have satisfied the applicable legal requirements and, accordingly, the Minnesota Public Utilities Commission (Commission) GRANTS a route permit for the Project, subject to the conditions discussed below.

Based on the evidence in the hearing record, the Commission makes the following:

FINDINGS OF FACT

I. APPLICANTS

1. Great River Energy is a not-for-profit wholesale electric power cooperative based in Maple Grove, Minnesota. Great River Energy provides electricity and related services to approximately 1.7 million people through its 27 member-owner cooperatives and customers. Through its member-owners, including LREC, Great River Energy serves two-thirds of Minnesota and parts of Wisconsin.¹

¹ eDocket ID No. 202511-224627-02 at 1.1 (Application).

2. LREC is the distribution cooperative serving the area in which the Project will be located. It is one of Great River Energy's transmission customers, and it will be the owner of the proposed new Otto Substation. LREC is based in Pelican Rapids, Minnesota and provides electric service to a 3,200-square-mile service area which includes portions of seven Minnesota counties: Becker, Clay, Douglas, Grant, Todd, Wadena, and Wilkin.²

II. PROCEDURAL HISTORY

3. On November 3, 2025, the Applicants submitted the Application.³ Applicants stated that they intended to use the Standard Review Process pursuant to Minn. Stat. § 216I.07.⁴

4. On November 18, 2025, the Commission accepted the Application as sufficiently complete to proceed with the public information meeting in accordance with Minn. Stat. § 216I.05.⁵

5. On November 18, 2025, the Commission filed a Notice of Complete Route Permit Application and Public Information Meetings.⁶ The Notice set virtual and in-person public information and scoping meetings on the Project for December 3 and 4, 2025, respectively.⁷

6. The Notice of Complete Route Permit Application and Public Information Meetings was also published in the Perham Focus on November 18, 2025, the New York Mills Dispatch on November 19, 2025, and the Minnesota Environmental Quality Board (EQB) bulletin November 25, 2025.⁸

7. On November 18, 2025, the Commission filed a Sample HVTL [Route](#) Permit for the Project.⁹

8. On December 2, 2025, and pursuant to the Commission's request for supplemental information in the Commission's November 18, 2025, Application Completeness Determination, Applicants submitted a supplemental filing.¹⁰

9. On December 3, 2025, the Commission held a remote public information and scoping meeting via Webex.¹¹ No members of the public provided comments at this meeting.

² Application at 1.1.

³ Application and eDocket ID No. 202511-224627-01 (Application Letter).

⁴ Application Letter at 1.

⁵ eDocket ID No. 202511-225019-01 at 2 (Application Completeness Determination).

⁶ eDocket ID No. 202511-225028-01 at 1 (Notice of Completeness and Public Meetings).

⁷ Notice of Completeness and Public Meetings at 1-2.

⁸ eDocket ID Nos. 202512-225990-01 (New York Mills Dispatch Notice) and 202512-225469-01 at 3-4 (EQB Notice).

⁹ eDocket ID No. 202511-225134-01 (Sample Permit).

¹⁰ eDocket ID No. 202512-225448-01 (Supplemental Completeness Filing).

¹¹ eDocket ID No. 202512-225980-01 (Virtual Scoping Hearing Transcript).

10. On December 4, 2025, the Commission held an in-person public information and scoping meeting.¹² One member of the public submitted an oral comment at the hearing.¹³ The written public comment period remained open through December 18, 2025.

11. On December 17, 2025, Otter Tail County provided written comments on the Project.¹⁴

12. On January 7, 2026, Commission Energy Infrastructure Permitting Staff (EIP) submitted a Scoping Summary and Recommendations, ~~finding—recommending~~ that the Commission not require an environmental assessment (EA) ~~addendum is not required~~ for the Project, recommending that the Draft Route Permit prepared by EIP be issued, including special permit conditions, and requesting that an Administrative Law Judge from the Court of Administrative Hearings (CAH) conduct public hearings for the Project and prepare a summary of public testimony.¹⁵

13. On January 7, 2026, Administrative Law Judge Meyer issued an Order for Prehearing Conference, setting the conference date for January 9, 2026.¹⁶

14. On January 8, 2026, the Commission issued proposed consent items for the Commissions Uncontested Proceeding Subcommittee pursuant to Minn. R. 7829.1050.¹⁷

15. On January 9, 2026, the Commission issued an order finding that an EA addendum is not required for the Project.¹⁸

~~15.16.~~ On January 13, 2026, Administrative Law Judge Meyer issued a First Prehearing Order establishing a schedule for the proceedings.¹⁹

~~16.17.~~ On January 16, 2026, the Commission issued a Notice of Public Hearings and Availability of Draft Permit.²⁰

~~17.18.~~ The Commission held public hearings on the Project on February 2, 2026 (in-person) and February 3, 2026 (virtual). No members of the public commented at either hearing. The public comment period was open until February 19, 2026.²¹

~~18.19.~~ On February 18, 2026, Great River Energy filed comments regarding the Draft Route Permit.²²

¹² eDocket ID No. 202512-225980-02 (In-Person Scoping Hearing Transcript).

¹³ In-Person Scoping Hearing Transcript at 8:25-10:4.

¹⁴ eDocket No. 202512-226032-01 (Otter Tail December 17, 2025 Comment).

¹⁵ eDocket ID No. 20261-226587-01 (EIP Summary and Recommendations).

¹⁶ eDocket ID No. 20261-226581-01 (Order for Prehearing Conference).

¹⁷ eDocket ID No. 20261-226615-01 (Proposed Consent Items).

¹⁸ eDocket ID No. 20261-226681-01 (January 9, 2026, Order).

¹⁹ eDocket ID No. 20261-226806-01 (First Prehearing Order).

²⁰ eDocket ID No. 20261-227007-01 (Notice Public Hearings and Permit Availability).

²¹ Notice Public Hearings and Permit Availability at 3.

²² eDocket ID No. 20262-228277-01 (Great River Energy Comment).

~~19.20.~~ On February 19, 2026, comments were filed by the Minnesota Department of Natural Resources (MDNR) and the Minnesota Interagency Vegetation Management Planning Working Group (VMPWG).²³

~~20.21.~~ On February 25, 2026, Great River Energy submitted its Response to Hearing Comments and Proposed Findings of Fact and Conclusions of Law.

III. DESCRIPTION OF THE PROJECT

~~21.22.~~ The Project consists of a new 2.9-mile 115 kV single-circuit HVTL in Otto and Pine Lake Townships in Otter Tail County, Minnesota. The Project also includes construction of a replacement Substation for the existing Otto Substation.²⁴

~~22.23.~~ The Project includes a tap line from Great River Energy's 115 kV Perham to Rush Lake (LR-PR) transmission line to LREC's Otto Substation Parcel where the new Otto Substation will be constructed to receive 115 kV service. The Project will enable LREC to continue to provide reliable service by upgrading the Otto Substation with a connection to the 115 kV transmission system. The Transmission Line will be constructed and owned by Great River Energy; the Otto Substation will be constructed and owned by LREC.²⁵

~~23.24.~~ The existing Otto Substation footprint is approximately 0.1 acre. LREC intends to locate the new Otto Substation 115 kV infrastructure directly south of the existing substation – to the south of 390th Street and west of 470th Avenue. The new footprint will be approximately 60 feet by 140 feet (8,400 square feet or approximately 0.02 acre).²⁶

IV. NEED OVERVIEW

~~24.25.~~ The proposed Transmission Line is needed to improve regional electrical reliability by providing the Otto Substation with a new connection to the 115 kV transmission system.²⁷ The existing Otto Substation is aging and, due to its conditions, needs to be replaced.²⁸

~~25.26.~~ Because the proposed HVTL is less than 10 miles in length and has a capacity of less than 300 kV, a Certificate of Need is not required for the Project.²⁹

V. ROUTES EVALUATED

A. Routes Evaluated by Applicants.

1. Applicants' Proposed Route.

²³ eDocket ID Nos. 20262-228385-01 (MDNR Comment) and 20262-228389-01 (VMPWG Comment).

²⁴ Application at 1.

²⁵ Application at 1.

²⁶ Application at Figure 1 & 3.2.1.

²⁷ Application at 1.6.

²⁸ Application at 1.6.

²⁹ Minn. Stat. § subd. 2(2)–(3); 216B.2421; Minn. Stat. § 216B.243, subd. 2; Application at 2.1.

26-27. The Applicants' Proposed Route begins at the junction of Highway 10 and 410th Street. It then runs parallel to 410th Street for approximately 4,500 feet. It then turns south, following parallel to 470th Avenue for approximately two miles at which point it reaches the connection point with the Otto Substation.³⁰

2. Other Routes Considered and Rejected by Applicants.

27-28. Minn. Stat. § 216I.05, subd. 3(b)(14), requires an applicant to identify any alternative routes that were considered and rejected for the Project.

28-29. Applicants evaluated an alternative that would tap the LR-PR 115 kV line near U.S. Highway 10 and 470th Avenue (around structure LR-PR-34), add a new three-way switch south of the BNSF railroad right-of-way, cross U.S. 10, and then run south along 470th Avenue about 2.7 miles to the Otto Substation, crossing 410th Street and 390th Street. The primary concern with the rejected route was the tight spacing north of U.S. 10 between the switch, the BNSF rail line, and the highway; this co-location constraint is not present at the Proposed Route's tap location near 410th Street.³¹

29-30. The alternative was ultimately rejected in favor of the Proposed Route. Great River Energy did not consider any other existing rights-of-way as alternatives because the Proposed Alignment is collocated with existing rights-of-way for 2.9 miles, or 97 percent, of its length. Other rights-of-way are farther from the Project and would have resulted in longer alignments.³²

30-31. Applicants also concluded that the rejected alignment posed human and environmental impacts comparable to the Proposed Route. Unlike the rejected alternative, the Proposed Alignment also avoided coming within 100 feet of a residence.³³

VI. TRANSMISSION LINE STRUCTURE TYPES AND SPANS

31-32. Great River Energy will construct the Project primarily with direct-embedded single-pole wood or steel structures, 70 to 90 feet above ground and placed 350 to 400 feet apart.³⁴

32-33. The footprint of the existing Otto Substation is approximately 0.1 acres. The new Otto Substation footprint will be approximately 0.92 acres (8,400 square feet). Distribution level components within the Substation will include a 115/12.47 kV transformer, 8-foot by 8-foot electrical equipment enclosure, switch gear, and bus work. The "high-side" 115 kV structure (the last structure before the conductors interconnect to Substation equipment) will be located within the Substation footprint.³⁵

VII. TRANSMISSION LINE CONDUCTORS

³⁰ Application at Figure 1.

³¹ Application at 4.2.

³² Application at 4.1.

³³ Application at 4.3.

³⁴ Application at 3.1.5.

³⁵ Application at 3.2.1.

[33:34.](#) The single circuit structures will have three phase wires and one shield wire. It is anticipated that the phase wires will be 477 thousand circular millimeter aluminum-conductor steel reinforced (477 ACSR) or a conductor with similar capacity.³⁶

[34:35.](#) The shield wire will be 0.555 optical ground wire.³⁷

VIII. TRANSMISSION LINE ROUTE WIDTHS

[35:36.](#) Applicants generally request a 200-foot-wide Proposed Route centered on existing road centerlines; Great River Energy is also requesting varied widths for two portions of the Proposed Route to account for existing infrastructure, mitigate potential engineering challenges, and facilitate potential realignments to connect to the Otto Substation:

- Approximately 750 feet by 260 feet where the Proposed Route crosses U.S. Highway 10 at 410th Street; and
- Approximately 300 feet by 300 feet to encompass transmission line alignment options into the new Otto Substation that includes the entire 1-acre parcel.³⁸

IX. TRANSMISSION LINE RIGHT-OF-WAY

[36:37.](#) Great River Energy will require a new 100-foot-wide right-of-way (50 feet on each side of the Transmission Line) for construction and maintenance of the Project. Great River Energy's easement can overlap with road and other rights-of-way through permits or other agreements, which can reduce the amount of easement areas acquired from landowners. Where a transmission line of this size parallels roads, structures are typically installed two to seven feet outside of road right-of-way, resulting in approximately 55 feet of right-of-way being needed from landowners outside of road right-of-way. Great River Energy representatives will work directly with individual landowners to acquire the necessary easements and other land rights for the construction, operation, and maintenance of the Project once the final route and alignment are determined.³⁹

[37:38.](#) LREC owns the land on which the new Otto Substation will be located.⁴⁰

X. PROJECT SCHEDULE

[38:39.](#) The Applicants anticipate starting construction of the Project in ~~fall 2027~~[early 2028](#)⁴¹ and energizing the Project in the summer of 2028.⁴²

³⁶ Application at 5.1.2.

³⁷ Application at 5.1.2.

³⁸ Application at 3.1.1.

³⁹ Application at 5.1.3.

⁴⁰ Application at 5.1.6.

⁴¹ [Great River Energy Comments, February 18, 2026, at 6](#)

⁴² Application at 3.4.

XI. PROJECT COSTS

~~39.40.~~ Applicants estimate that the Project as proposed will cost approximately \$6,700,000. Of that cost, the Transmission Line will cost approximately \$4,400,000; the new Otto Substation will cost approximately \$2,300,000, which includes costs to decommission and remove the existing substation components. Costs may vary depending upon, among other things, the cost of material and labor.⁴³

~~40.41.~~ All capital costs for the Transmission Line infrastructure will be borne by Great River Energy. Costs related to the new Otto Substation will primarily be borne by LREC.⁴⁴

XII. PERMITTEES

~~41.42.~~ The Permittees for the Project are Great River Energy and LREC.⁴⁵

XIII. PUBLIC, TRIBAL, AND ~~LOCAL~~ PARTICIPATION/NOTIFICATION GOVERNMENT

~~42.43.~~ Prior to submission of the Application, Great River Energy initiated, and has continued, individual outreach with all fourteen of the potentially affected landowners since December 2024.⁴⁶

~~43.44.~~ Minn. Stat. § 216I.05 requires applicants to provide notice to each local unit of government within the Route, Minnesota Tribal governments, and state technical resource agencies.

~~44.45.~~ In May 2025, Great River Energy sent initial notification letters to federal, state, and local agencies regarding the Project. These letters stated that Great River Energy intended to file a route permit application for the Project. Great River Energy also sent notification letters to additional agencies on the Agency Representatives Service List maintained by the Commission in September 2025.⁴⁷

~~45.46.~~ Also in May 2025, Great River Energy sent notification letters to Tribal governments. These letters stated that Great River Energy intended to file a route permit application for the Project. Great River Energy then sent follow-up notification letters to the Tribal Historic Preservation Officers who did not respond to the May 2025 letter in September 2025. Great River Energy also sent notification letters to individuals on the Tribal Government Contacts Service List maintained by the Commission in September 2025.⁴⁸ [On December 2, 2026, Great](#)

⁴³ Application at 3.3.

⁴⁴ Application at 3.3.

⁴⁵ eDocket ID No. 202511-224627-01 (Application Filing Letter); and Application at 1.0.

⁴⁶ Application at 1.8.1.

⁴⁷ Application at 1.8.2.

⁴⁸ Application at 1.8.2, Appendix D.

[River Energy provided documentation of follow up calls with Tribal Historic Preservation Officers and notification to state and federal agency representatives in a supplemental filing.](#)⁴⁹

XIV. FACTORS FOR A ROUTE PERMIT

~~46.47.~~ The Minnesota Energy Infrastructure Permitting Act (~~MEIPA~~) provides that no person may construct a HVTL without a route permit from the Commission.⁵⁰ Under the statute, an HVTL includes a transmission line that is 100 kV or more and is greater than 1,500 feet in length.⁵¹ The proposed 115 kV Transmission Line is an HVTL greater than 1,500 feet in length and, therefore, a route permit is required from the Commission prior to construction.⁵²

~~47.48.~~ ~~MEIPA—The Minnesota Energy Permitting Act~~ requires that route permit determinations must:

- (1) be guided by the state's goals to conserve resources; (2) minimize environmental impacts, and minimize human settlement and other land use conflicts; (3) consider impacts to environmental justice areas, as defined in section 216B.1691, subdivision 1, paragraph (e), including cumulative impacts, as defined in section 116.065, to environmental justice areas; and (4) ensure the state's energy security through efficient, cost-effective energy supply and infrastructure.⁵³

~~48.49.~~ The Commissions determinations of whether to issue a permit under the ~~MEIPA~~ [Minnesota Energy Permitting Act](#) must include at minimum:

- (1) evaluating research and investigations relating to: (i) large energy infrastructure facilities' effects on land, water, and air resources; and (ii) the effects water and air discharges and electric and magnetic fields resulting from large energy infrastructure facilities have on public health and welfare, vegetation, animals, materials, and aesthetic values, including baseline studies, predictive modeling, and evaluating new or improved methods to minimize adverse impacts of water and air discharges and other matters pertaining to large energy infrastructure facilities' effects on the water and air environment;
- (2) conducting environmental evaluation of sites and routes that are proposed for future development and expansion, and the relationship of proposed sites and routes for future development

⁴⁹ [Applicants' supplemental filing, eDocket ID: 202512-225448-01, December 2, 2025](#)

⁵⁰ Minn. Stat. § 216I.05, subd. ~~3~~2.

⁵¹ Minn. Stat. § 216I.02, subd. 8.

⁵² Application at 2.2; [Minn. Stat. §§ 216I.05, subd. 2, 216I.02, subd. 8.](#)

⁵³ Minn. Stat. § 216I.05, subd. 11(a).

and expansion to Minnesota's land, water, air, and human resources;

(3) evaluating the effects of measures designed to minimize adverse environmental effects;

(4) evaluating the potential for beneficial uses of waste energy from proposed large electric power generating plants;

(5) analyzing the direct and indirect economic impact of proposed sites and routes, including but not limited to productive agricultural land lost or impaired;

(6) evaluating adverse direct and indirect environmental effects that are unavoidable should the proposed site and route be accepted;

(7) evaluating alternatives to the applicant's proposed site or route, if applicable;

(8) when appropriate, evaluating potential routes that would use or parallel existing railroad and highway rights-of-way;

(9) evaluating governmental survey lines and other natural division lines of agricultural land to minimize interference with agricultural operations;

(10) evaluating the future needs for large energy infrastructure facilities in the same general area as any proposed site or route;

(11) evaluating irreversible and irretrievable commitments of resources if the proposed site or route is approved;

(12) when appropriate, considering the potential impacts raised by other state and federal agencies and local entities;

(13) evaluating the benefits of the proposed facility with respect to (i) the protection and enhancement of environmental quality, and (ii) the reliability of state and regional energy supplies;

(14) evaluating the proposed facility's impact on socioeconomic factors; and

(15) evaluating the proposed facility's employment and economic impacts in the facility site's vicinity and throughout Minnesota, including the quantity, quality, and compensation level of construction and permanent jobs. The commission must consider a facility's local employment and economic impacts, and may

reject or place conditions on a site or route permit based on the local employment and economic impacts.⁵⁴

49-50. In addition, Minn. Stat. § 216I.05, subd. 11(e), provides that the Commission must make “a specific finding that the commission considered locating a route for a high-voltage transmission line on an existing high-voltage transmission route and using parallel existing highway right-of-way. To the extent an existing high-voltage transmission route or parallel existing right-of-way is not used for the route, the commission must state the reasons.”⁵⁵

50-51. There is sufficient evidence in this record to assess the Project using the criteria and factors set forth above.

XV. APPLICATION OF ROUTING FACTORS TO THE PROPOSED ROUTE

A. Effects on Human Settlement.

51-52. Minnesota law requires consideration of the effects the facility's construction and operation has on human settlement, including but not limited to public health and safety, displacement, noise, aesthetics, socioeconomic impacts, environmental justice impacts, cultural values, recreation, and public services.⁵⁶

1. Displacement.

52-53. No residences or businesses will be displaced by the Project on the Proposed Route.⁵⁷

53-54. There are no residences, outbuildings, or structures associated with businesses within 100 feet of the Project. The structure nearest to the Transmission Line is a residence located 149 feet from the Proposed Alignment. The closest residence to the center of the new Otto Substation is approximately 700 feet to the northeast across 470th Avenue.⁵⁸

54-55. The Project routing and Substation location avoid displacement of residences, buildings, and businesses; therefore, no mitigation is proposed.⁵⁹

2. Noise.

55-56. The Minnesota Pollution Control Agency (MPCA) has established standards for the regulation of noise levels. The most restrictive MPCA noise limits are 60–65 A-weighted decibels (dBA) during the daytime and 50–55 dBA during the nighttime.⁶⁰

⁵⁴ Minn. Stat. § 216I.05, subd. 11(b).

⁵⁵ Minn. Stat. § 216I.05, subd. 11(e).

⁵⁶ Minn. Stat. § 216I.05, subd. 4(a)(2).

⁵⁷ Application at 6.4.3.

⁵⁸ Application at 6.4.3.

⁵⁹ Application at 6.4.3.

⁶⁰ Minn. R. 7030.0040.

~~56.57.~~ The primary noise receptors within the vicinity of the Project are residences and farmsteads.⁶¹

~~57.58.~~ Construction noise is expected to occur during daytime hours as the result of heavy equipment operation and increased vehicle traffic. Occasionally, construction noise may occur outside these hours or on a weekend if Great River Energy or LREC must work around customer schedules, line outages, or if the schedule has been significantly impacted due to delays or other factors.⁶²

~~58.59.~~ Construction activities will be performed with standard heavy equipment such as backhoes, cranes, boom trucks, and assorted small vehicles.⁶³

~~59.60.~~ Noise associated with construction of the Project will be short term (ceasing upon completion of construction) and minimal.⁶⁴

~~60.61.~~ During operation, transmission lines can generate a small amount of sound energy from the corona effect—a small electrical discharge caused by the localized electric fields (EF) near energized components and conductors that ionize the surrounding air molecules. Corona noise from a transmission line occurs under foggy, damp, or rainy weather conditions and can create a crackling sound. Audible noise from the transmission lines is highest when exposed to heavy rain, defined as one inch per hour. During these events, however, the sound of the rain is typically greater than noise created by the corona effect. As a result, people do not normally hear noise from a transmission line during heavy rain.⁶⁵

~~61.62.~~ ~~Operational~~ ~~Appreciable~~ ~~operational~~ noise impacts are not anticipated because of the new Otto Substation. Noise levels from the Otto Substation will attenuate to 50 dBA before the LREC property boundary. Noise levels will be below 30 dBA at the nearest residence, well below Noise Area Classification (NAC) 1 noise standards, and even prior to accounting for, additional environmental mitigating factors between the Substation and the residence, such as vegetation or buildings.⁶⁶

~~62.63.~~ Great River Energy will require its employees and contractors to equip heavy equipment with sound attenuation devices such as mufflers to minimize the daytime noise levels. To mitigate noise impacts, work will generally be limited to daytime hours between 7 a.m. and 9 p.m. on weekdays. Applicants will work with landowners in the event construction becomes necessary outside of these hours. Once operational, the Project is not anticipated to contribute to an exceedance of noise standards.⁶⁷

~~63.64.~~ Section 5.3.6 in the Draft Route Permit addresses noise from the Project.

⁶¹ Application at 6.4.6.1.

⁶² Application at 6.4.6.1.

⁶³ Application at 6.4.6.1.

⁶⁴ Application at 6.4.6.1.

⁶⁵ Application at 6.4.6.1.

⁶⁶ Application at 6.4.6.1.

⁶⁷ Application at 6.4.6.2.

3. Aesthetics.

[64.65.](#) The Project will introduce new built features—structures, conductors, and a Substation—on the landscape.⁶⁸

[65.66.](#) The proposed Transmission Line and Otto Substation will be visible along the Proposed Route like other distribution and transmission lines, as well as the existing Otto Substation. The Project follows existing distribution lines for its entire length along 410th Street and 470th Avenue.⁶⁹

[66.67.](#) The new Otto Substation will replace the existing Otto Substation just south of the existing location within LREC's existing property. Although the structures and Otto Substation will be new, and they will vary in size and scope as compared to what is presently on site, they will not be materially different than the existing features.⁷⁰

[67.68.](#) The presence of transmission and distribution lines are a common occurrence in rural residential areas and are compatible with rural residential aesthetics. The viewshed will remain similar to existing conditions. Although distribution lines currently exist in the viewshed, the visual contrast added by the taller transmission structures and lines might be perceived as a visual disruption for some individuals.⁷¹

[68.69.](#) The Applicants will work with landowners to identify concerns related to Project aesthetics and compensate landowners for removal of trees and vegetation based on easement agreements.⁷²

4. Socioeconomics.

[69.70.](#) Anticipated socioeconomic impacts related to the Project are expected to be positive, but minimal. Impacts will be small and occur over the long and short term.⁷³

[70.71.](#) During construction, there may be short-term positive impacts to the nearby communities, including a potential increase in local revenue may occur for businesses, such as hotels, grocery stores, gas stations and restaurants to support utility personnel and contractors. Some materials might be purchased locally, such as concrete. [The permittees, their contractors, and subcontractors will pay no less than prevailing wage as defined in Minn. Stat. § 177.42.](#) Generally, landowners will receive one-time payments for new easements.⁷⁴

⁶⁸ Application at 6.4.1.1.

⁶⁹ Application at 6.4.1.1.

⁷⁰ Application at 6.4.1.

⁷¹ Application at 6.4.1.1.

⁷² Application at 6.4.1.2.

⁷³ Application at 6.4.9.1.s.

⁷⁴ Application at 6.4.9.1.

~~71.72.~~ Long-term benefits of the Project include the ongoing reliable electrical services and the ability to serve existing and new local load growth. The benefits apply to the local community regardless of economic status, race, and personal identification.⁷⁵

5. Environmental Justice.

~~72.73.~~ Minnesota Statute § 216B.1691, subdivision 1(e) defines environmental justice area as an area that meets one or more of the following criteria: (1) 40 percent or more nonwhite populations; (2) 35 percent or more households with income ≤ 200 percent of the poverty level; (3) 40 percent or more residents with limited English proficiency; or (4) Indian country as defined by 18 U.S.C. § 1151.⁷⁶

~~73.74.~~ Census tracts that intersect with the Proposed Route were analyzed for environmental justice areas. No census tracts within the Project Area are considered environmental justice communities under the definition provided in Minn. Stat. § 216B.1691, subd. 1(e).⁷⁷

~~74.75.~~ Because there are no statutorily defined environmental justice communities impacted by the Project, no mitigation is proposed.⁷⁸

5.6. Cultural Values

~~75.76.~~ Construction of the Project is not expected to conflict with work, leisure, or cultural pursuits in the Project Area. The Project will support Otter Tail County, both now and into the future, by increasing electrical reliability. Given that existing electric transmission and distribution lines already exist in the Project Area and that the Project will use existing distribution line right-of-way and construct a new Substation immediately adjacent to an existing substation that will be removed, the Project is not expected to interfere with the sense of place in the Project Area.⁷⁹

6.7. Recreation.

~~76.77.~~ Recreational opportunities in Otter Tail County include fishing, boating, water sports, swimming, biking, hiking, hunting, cross-country skiing, and snowmobiling. There are no state, federal, or county parks, forests, refuges, or designated trails within the Local Vicinity, and the Proposed Route does not cross state or national wilderness areas or national parks. Recreation in the Local Vicinity likely occurs on private lands. The Otter Tail River State Water Trail runs about 0.5 miles west of the line; the nearest access is on Rush Lake, 2.5 miles southeast. The nearest snowmobile trail is one mile south of the Otto Substation, and Project activities would not affect off-trail riding along 410th Street and 470th Avenue.⁸⁰

⁷⁵ Application at 6.4.9.1.

⁷⁶ Application at 6.4.4.

⁷⁷ Application at 6.4.4.

⁷⁸ Application at 6.4.4.1-2.

⁷⁹ Application at 6.4.2.1.

⁸⁰ Application at 6.4.8.

77-78. The proposed Project avoids established recreational resources. Impacts to recreation are not anticipated; therefore, no mitigation is proposed.⁸¹

7.8. **Public Services and Transportation.**

78-79. Private landowners in the Project Area have their own private wells and individual septic systems. Residents access other utility services from various providers, including waste collection, natural gas/propane, television, and telephone.⁸²

79-80. Local internet is provided by Park Region, Arvig, Spectrum/Charter Communications, and Century Link. Satellite internet is available from companies such as Starlink. Local telephone service is provided by East Otter Tail Telephone Company. Mobile telephone companies also provide internet service.⁸³

80-81. Roads in the Project Area include U.S. Highway 10 and township roads. The Proposed Right-of-Way is collocated with road right-of-way for approximately 97 percent of its length. Perham Municipal Airport is 5.5 miles northwest (general aviation; 24 based aircraft; 7,169 take-offs/landings forecast 2028), and Wadena Municipal Airport is 16.5 miles southeast.⁸⁴

81-82. Several existing overhead transmission and distribution lines are in the Project Area: Great River Energy maintains the LR-PR 115 kV line paralleling the north side of U.S. Highway 10; LREC provides electrical service, with distribution lines along 410th Street and 470th Avenue; the Proposed Right-of-Way follows these easements; and the OTP169 41.6 kV distribution follows the north side of 390th Street at the Otto Substation.⁸⁵

82-83. A 24-inch natural gas pipeline operated by Viking Gas Transmission Company crosses the Proposed Right-of-Way between mileposts (MPs) 1.3 and 1.4 on 470th Avenue. BNSF operates a railway northeast of the Project. U.S. Highway 10 generally parallels this railway but deviates from the railway near the Project. LREC will not bury distribution lines near the existing natural gas line and instead will construct the distribution lines overhead in this location.⁸⁶

83-84. During construction, short-term, minimal, and intermittent impacts will occur. Operational impacts are anticipated to be negligible. The Transmission Line and new Otto Substation are not expected to alter the condition or function of existing public services or transportation networks. Potential impacts will be temporary, small, and will not affect unique resources.⁸⁷

84-85. Sections 5.3.4 and 5.3.14 of the Draft Route Permit address utilities and infrastructure.

⁸¹ Application at 6.4.8.1.

⁸² Application at 6.4.7.

⁸³ Application at 6.4.7.

⁸⁴ Application at 6.4.7.

⁸⁵ Application at 6.4.7.

⁸⁶ Application at 6.4.7.

⁸⁷ Application at 6.4.7.1.

8.9. Land Use and Zoning.

85-86. The Project is not expected to alter current and future land use. Short-term agricultural impacts might occur during construction, which will be mitigated through restoration and compensatory payments.⁸⁸

86-87. The new Transmission Line structures will be along the outside edge of where existing agricultural fields are seeded and are not expected to interfere with existing or future agricultural practices.⁸⁹

87-88. The new Otto Substation will be located on land already owned by LREC.⁹⁰

88-89. The Project is not located in a Shoreland District (Otter Tail County, 2025a) and Otter Tail County does not have a county-wide zoning ordinance; therefore, the Project will not impact current zoning.⁹¹

B. Effects on Public Health and Safety.

89-90. Minnesota's HVTL routing factors require consideration of the Project's potential effect on health and safety.⁹²

90-91. Impacts to human health and safety are assessed by looking at four main issues: interference, electric and magnetic fields, emergency services, and public worker safety.⁹³

1. Electronic Interference.

91-92. The likelihood of radio and television interference from the Project is minimal because the likelihood of significant corona formation on the Project is minimal. Great River Energy is unaware of any complaints related to radio or television interference resulting from the operation of any of its existing 115 kV facilities and does not expect radio and television interference to be an issue along the Proposed Route.⁹⁴

92-93. Section 5.4.3 of the Draft Route Permit addresses electronic interference.

2. Electric and Magnetic Fields (EMF).

93-94. As it pertains to the Project, the term "EMF" refers to the extremely low frequency (ELF) decoupled EF and magnetic fields (MF) that are present around any electrical device or conductor.⁹⁵

⁸⁸ Application at 6.4.5.1.

⁸⁹ Application at 6.4.5.1.

⁹⁰ Application at 6.4.5.1.

⁹¹ Application at 6.4.5.1.

⁹² Minn. Stat. § 216I.05, subds. [11\(b\)\(1\)-\(2\)](#), 4(a)(2).

⁹³ Application at 6.5- 6.5.4.

⁹⁴ Application at 6.5.1.

⁹⁵ Application at 6.5.2.

~~94.95.~~ There is no state or federal standard for transmission line EF levels. The EQB, however, developed a standard of a maximum EF limit of eight kV/m at one meter (3.28 feet) above ground; the Commission has adopted this standard [in past permits](#).⁹⁶

~~95.96.~~ There are no federal or Minnesota exposure standards for MFs [and past permits for HVTLs have not included an MF limit. The EQB and the Commission Environmental Review documents used in EQB and Commission proceedings](#) have ~~recognized~~ [cited](#) Florida (a 150-mG limit) and New York (a 200-mG limit) state standards. Both state standards are calculated at the edge of right-of-way.⁹⁷

~~96.97.~~ Applicants calculated EF associated with the Project. These calculations are based on the maximum operating voltage of the Transmission Line (126.5 kV). The Applicants indicate that “because the magnitude of the voltage on a transmission line is near-constant (ideally within +/- five percent of design voltage), the magnitude of the electric field will be near-constant regardless of the power flowing on the line.” The maximum electric field is approximately 1.55 kV/m. This field strength is well below ~~the Commission permit standard of~~ 8.0 kV/m.⁹⁸

~~97.98.~~ The Project will comply with local and state codes, the National Electrical Safety Code (NESC), and Great River Energy/LREC standards for clearances, materials, and right-of-way widths. The Otto Substation will have protective breakers and relays to de-energize the line when needed, and will be secured with locked, barbed-wire fencing and hazard signage listing the owner and contact number. Applicants will meet safety requirements during construction and operation; guard structures will be used when stringing across roads or railroads to minimize traffic delays and protect the public. Great River Energy will also work with landowners on induced current and stray voltage concerns, coordinating with the customer’s service provider for technical review or on-site investigation.⁹⁹

~~98.99.~~ Because electric and magnetic fields are not expected to be an issue along the Proposed Route, no additional EMF-specific mitigation is proposed.¹⁰⁰

3. Emergency Services.

~~99.100.~~ Emergency services near the Project are provided by the Otter Tail County Sheriff’s Office, Perham Police Department, and New York Mills Police Department for law enforcement; the Perham and New York Mills Fire Departments for fire protection; and Perham Area Emergency Medical Services (EMS) for ambulance service. The New York Mills Fire Department has four trained EMTs. The nearest emergency room is Sanford Perham Health Clinic, with an additional ER at Astera Health in Wadena. Nearby Detroit Lakes (Becker County) also

⁹⁶ Application at 6.5.2; [see, e.g., Section 5.4.2 of the Route Permit attached to eDockets Document ID 20246-207396-03, Docket No. IP-6981/TL-20-867, Order Granting Certificate of Need, Issuing Site Permit, and Issuing Route Permit.](#)

⁹⁷ Application at 6.5.2.

⁹⁸ Application at 6.5.2 – 6.5.2.1, and Table 20.

⁹⁹ Application at 6.5.2 – 6.5.2.2.

¹⁰⁰ Application at 6.5.2 – 6.5.2.2.

offers care at Essentia Health St. Mary's-Detroit Lakes Hospital and Sanford Health Detroit Lakes Clinic. Detroit Lakes lies approximately 20 miles north on U.S. Highway 10.¹⁰¹

~~100.101.~~ Construction could affect emergency services by requiring responses to incidents or temporarily hindering access. Great River Energy will prioritize emergency response over construction and ensure responders can access work areas. U.S. Highway 10 will be briefly closed during conductor stringing; the closure and detour will be coordinated with local road authorities and emergency responders. With these measures, construction is not expected to adversely affect emergency services.¹⁰²

~~101.102.~~ Because the Applicants anticipate that impacts to emergency services will be negligible, no mitigation is proposed.¹⁰³

4. Public and Worker Safety.

~~102.103.~~ Potential worker hazards present at a transmission line or substation construction site are similar to those at most large construction sites. Generally, safety concerns include electrocution, falls, confined spaces, fires and explosions, sprains, strains, fractures, and environmental stress. Transportation-related accidents are also a significant risk for all industries.¹⁰⁴

~~103.104.~~ Potential impacts are anticipated to be short and long term, of a small size, and can be mitigated. Overall, impacts are expected to be minimal.¹⁰⁵

~~104.105.~~ The new Otto Substation will be fenced, gated, and locked.¹⁰⁶

~~105.106.~~ [Section 5.5.1 of the Draft Route Permit requires Applicants will Permittees](#) to meet or exceed the design, construction, and operational requirements of the NESC, North American Electric Reliability Corporation requirements, state and local codes¹⁰⁷

~~106.107.~~ The Applicants or their contractor will provide or require necessary safety equipment, including fall arrest equipment, and provide daily "tailgate" safety trainings. All work must comply with Occupational Safety and Health Administration requirements. Downed transmission lines are deenergized either automatically by breakers or manually by switches and other safety equipment in substations.¹⁰⁸

C. Effects on Land-Based Economies.

¹⁰¹ Application at 6.5.3.

¹⁰² Application at 6.5.3.1.

¹⁰³ Application at 6.5.3.2.

¹⁰⁴ Application at 6.5.4.

¹⁰⁵ Application at 6.5.4.1.

¹⁰⁶ Application at 6.5.4.1.

¹⁰⁷ Application at 6.5.4.2.

¹⁰⁸ Application at 6.5.4.2.

~~107.108.~~ Minnesota’s HVTL routing factors require consideration of the Project’s impacts to land-based economies—specifically, agriculture, forestry, tourism, and mining.¹⁰⁹

1. Agriculture.

~~108.109.~~ Otter Tail County has 2,497 individual farms with an average farm size of 309 acres ~~and~~ covering approximately 770,922 acres (about 61 percent) of the county. Approximately \$551 million was generated from crop and livestock sales in 2022.¹¹⁰

~~109.110.~~ The Proposed Route consists of about 22 acres of cultivated cropland and five acres of pasture/hay lands.¹¹¹

~~110.111.~~ Potential impacts to agriculture are anticipated to be short term and minimal. There will be no impacts to prime farmland. The Proposed Right-of-Way is consistent for use as pasture, hay, or other crop cultivation. The new Otto Substation is on private land owned by LREC that is not in agricultural production; therefore, no impacts to agricultural production from the Substation are anticipated.¹¹²

~~111.112.~~ If drain tile is present in the disturbance area it could be damaged when augering holes for structures; however, irrigated fields, like the ones present along the Proposed Route, typically do not have drain tiles.¹¹³

~~112.113.~~ Agricultural land could be taken out of production during construction of the Transmission Line; however, farming would resume after restoration is complete. Only structure locations would be precluded from future farming activities.¹¹⁴

~~113.114.~~ The Proposed Alignment will cross along the outer edges of 800 feet of center-pivot irrigated fields. Center-pivot irrigation is generally compatible with transmission lines on its outer edges. In some situations where an end gun sprayer is in use, the sprayer may need to be adjusted to prevent spraying directly onto the Transmission Line. Great River Energy coordinates with landowners regarding any modifications required on the irrigation system.¹¹⁵

~~114.115.~~ The Applicants are committed to working with landowners “to minimize impacts to agricultural activities,” compensating landowners “for any crop damage/loss and soil compaction that may occur during construction,” and repairing and restoring areas disturbed during construction to pre-construction condition.¹¹⁶ [Additionally, the Draft Route Permit includes conditions requiring the Permittees to work with landowners to minimize agricultural impacts from the Project.](#)

¹⁰⁹ Minn. Stat. § 216I.05, subds [11\(b\)\(5\)](#),. 4(a)(3).

¹¹⁰ Application at 6.6.1.

¹¹¹ Application at 6.6.1.

¹¹² Application at 6.6.1.1.

¹¹³ Application at 6.6.1.1.

¹¹⁴ Application at 6.6.1.1.

¹¹⁵ Application at 6.6.1.1.

¹¹⁶ Application at 6.6.1.1.

2. Forestry.

~~115.116.~~ Some forested areas exist in association with the wetland complex that is bisected by 470th Avenue, but none of the areas crossed by the Proposed Route are currently in commercial forestry operation.¹¹⁷

~~116.117.~~ The Project will not result in any impact on commercial forestry operations; therefore, no mitigation is proposed.¹¹⁸

3. Mining.

~~117.118.~~ There are no mapped MDNR identified gravel pits within the Proposed Route. The Applicants confirmed this through desktop aerial imagery analysis. Additionally, there are no MDNR active mineral leases within the Proposed Route. Mining operations are not present in the Proposed Route; therefore, impacts will not occur. No mitigation is proposed.¹¹⁹

4. Tourism.

~~118.119.~~ Tourism associated with outdoor recreational opportunities is most associated with publicly accessible lands and waters.¹²⁰

~~119.120.~~ There are no public lands or regional or community events in the Local Vicinity. As such, potential impacts are not expected to occur. No mitigation is proposed.¹²¹

D. Effects on Archaeological and Historic Resources.

~~120.121.~~ Minnesota law requires ~~consideration of applicants to submit information about~~ the effects of the Project on historic and archaeological resources.¹²²

~~121.122.~~ The Applicants retained a consultant, Merjent, Inc. (Merjent) to evaluate the potential presence of cultural resources in and near the Project Area. Merjent conducted a cultural resource literature review of a 1-mile-wide buffer centered on the Proposed Alignment and Otto Substation referred to in this section as the Study Area. This literature review and Merjent's evaluation of the possible effects of the proposed Project on historic properties in the Study Area was provided to the Minnesota State Historic Preservation Office (SHPO) in a letter dated June 24, 2025.¹²³

~~122.123.~~ Applicants requested feedback on the Project from the 11 federally recognized Tribes with geography within Minnesota, the 1854 Treaty Authority, MIAC, and Tribes outside of Minnesota with interest in the Project Area in its Project notification letters sent

¹¹⁷ Application at 6.6.2, 6.6.2.1.

¹¹⁸ Application at 6.6.2.2.

¹¹⁹ Application at 6.6.3.

¹²⁰ Application at 6.6.4.

¹²¹ Application at 6.6.4.

¹²² Minn. Stat. § 216I.05, subd. 4(a)(4).

¹²³ Application at 6.7.

in May 2025. [In December 2025, Applicants placed follow-up phone calls with Tribal Historic Preservation Officers from seven federally recognized Tribes with geography within Minnesota that had not responded to previous outreach efforts.](#) To date, ~~three~~-five Tribes, along with MIAC, have responded.¹²⁴

~~123.124.~~ Three archaeological sites, six historic structures, and three potential historic cemeteries were identified within the Study Area. One archaeological site intersects the Project, but it has been destroyed due to road construction. Two historic cemeteries potentially overlap the Project according to historic documents. One historic structure intersects the Project, but it has already been determined Not Eligible for listing on the National Register of Historic Places.¹²⁵

~~124.125.~~ Given that the Project is proposed within an already disturbed right-of-way, there is a low potential for intact archaeological sites. The existing Otto Substation has had ground disturbance associated with the installation of the Substation, the gravel lot, and the fence surrounding the Substation. Ground disturbing work for the new Otto Substation will occur in the same area, immediately south of the existing substation.¹²⁶

~~125.126.~~ Finally, the precise location of a cemetery (the Cole Cemetery) identified by Merjent was not located during review of historic aerials, historic atlases, and topographic maps. As a result, there is potential for the new Otto Substation to overlap with the Cole Cemetery as both are located within T135N, R38W, Section 7.¹²⁷

~~126.127.~~ SHPO confirmed Merjent's recommendation for a field survey and requested an evaluation of a precontact campsite previously noted as destroyed by the construction and widening of both U.S. Highway 10 and 410th Street. The Applicants will complete a Phase I Archaeological Survey for the Project prior to construction. As part of this work, the Applicants will perform a survey of the Cole Cemetery to confirm that there is no evidence of the Cole Cemetery within the Project Area.¹²⁸

~~127.128.~~ If any archaeological sites are identified during placement of the poles along the permitted Route, construction work will be stopped and SHPO staff consulted as to how to proceed. If human remains are encountered during construction activities, all ground disturbing activity will cease, and local law enforcement will be notified.¹²⁹

~~128.129.~~ If a resource is encountered, the Permittee shall consult with the SHPO and the State Archaeologist. Where feasible, avoidance of the resource is required. Where not feasible, mitigation must include an effort to minimize project impacts on the resource consistent with SHPO and State Archaeologist requirements. Prior to construction, the Permittee shall train workers about the need to avoid cultural properties, how to identify cultural properties, and procedures to follow if undocumented cultural properties, including gravesites, are found during

¹²⁴ Application at 6.7, Appendix D; [Applicants Supplemental Filing December 2, 2026.](#)

¹²⁵ Application at 6.7.1.

¹²⁶ Application at 6.7.1.

¹²⁷ Application at 6.7.1.

¹²⁸ Application at 6.7.2.

¹²⁹ Application at 6.7.2.

construction. If human remains are encountered during construction, the Permittee shall immediately halt construction and promptly notify local law enforcement and the State Archaeologist. The Permittee shall not resume construction at such location until authorized by local law enforcement or the State Archaeologist.¹³⁰

E. Effect on Natural Environment.

~~129.130.~~ Minnesota's HVTL routing factors require consideration of the Project's effect on the natural environment, including effects on air and water quality resources and flora and fauna.¹³¹

1. Air Quality.

~~130.131.~~ Potential impacts during construction are expected to be short term, of a small size, and not affect a unique resource. Temporary and localized air quality impacts caused by construction vehicle emissions and fugitive dust from clearing and construction are expected to occur. Exhaust emissions from diesel equipment will vary during construction but will be minimal and temporary. The magnitude of emissions is influenced heavily by weather conditions and the specific construction activity taking place.¹³²

~~131.132.~~ During construction of the Transmission Line and the new Otto Substation, temporary air emissions will occur from the operation of construction equipment, vehicular traffic, and soil disturbance. Construction activities will be performed with standard heavy equipment such as backhoes, cranes, boom trucks, and assorted small vehicles.¹³³

~~132.133.~~ During operation, power lines produce ozone and nitrous oxide through the corona effect—the ionization of air molecules surrounding the conductor. Ozone production from a conductor is proportional to temperature and sunlight and inversely proportional to humidity.¹³⁴

~~133.134.~~ Corona-induced ozone and nitrogen oxides (NOX) are typically not a concern for transmission lines with operating voltages below 161 kV, like the Project, because the EF intensity is too low to produce significant corona. Ozone and NOX concentrations associated with the Project are anticipated to be negligible, and well below all federal standards. There would be no operational emissions from the Otto Substation.¹³⁵

~~134.135.~~ The Applicants will use appropriate measures to minimize fugitive dust emissions during construction.¹³⁶

¹³⁰ Application at 6.7.2.

¹³¹ Minn. Stat. 216I.05, subd. 4(a)(5).

¹³² Application at 6.8.1.1.

¹³³ Application at 6.8.1.1.

¹³⁴ Application at 6.8.1.

¹³⁵ Application at 6.8.1.1.

¹³⁶ Application at 6.8.1.2.

~~135.136.~~ At the completion of construction activities, all construction-related air impacts would cease.¹³⁷

2. Surface Waters and Wetlands.

~~136.137.~~ No floodplains are mapped within the Proposed Route. The Proposed Route crosses two ponds associated with the wetland complex that is crossed by 470th Avenue. These unnamed ponds are approximately 0.5 acre in size. The ponds are spaced such that they can be spanned to avoid direct impacts during construction.¹³⁸

~~137.138.~~ The Project will not impact impaired waters and will not cause a water to be newly listed as impaired.¹³⁹

~~138.139.~~ Construction of the Project largely avoids wetlands, except for a 9-foot crossing at MP 0.0, a 164-foot crossing near MP 0.1, and a 152-foot crossing near MP 2.6. Based on the Proposed Alignment, Great River Energy does not anticipate pole placement within wetlands. If the final Transmission Line route design cannot enable the Project to span discrete wetland segments, permanent impacts to wetlands will occur where a structure is in the wetland (approximately 18 to 60 inches in diameter of permanent impact per structure). The Proposed Right-of-Way crosses 0.24 acres of forested wetland that could require clearing; therefore, limited conversion of wetland type could occur. These impacts are generally considered permanent.¹⁴⁰

~~139.140.~~ Wetland impact avoidance measures that will be implemented during design and construction of the Transmission Line include spacing and placing the pole structures at variable distances to span and avoid all wetlands. Soil compaction within wetlands is not expected but would be mitigated by construction during frozen conditions or installation of construction mats.¹⁴¹

~~140.141.~~ The Applicants and their contractors will employ erosion and sediment control BMPs near the wetland crossing under 470th Avenue to minimize runoff during construction and could include but are not limited to the installation of sediment barriers (silt fence, straw bales, bio-logs), filter socks, mulch, upslope diversions, and slope breakers.¹⁴²

3. Groundwater.

~~141.142.~~ The Project is within the Central Groundwater Province, which is characterized by buried sand aquifers and relatively extensive surficial sand plains, part of a thick layer of sediment deposited by glaciers overlying the bedrock.¹⁴³

¹³⁷ Application at 6.8.1.2.

¹³⁸ Application at 6.8.8, 6.8.8.1.

¹³⁹ Application at 6.8.8, 6.8.8.1.

¹⁴⁰ Application at 6.8.8.1.

¹⁴¹ Application at 6.8.8.2.

¹⁴² Application at 6.8.8.2.

¹⁴³ Application at 6.8.9.

~~142.143.~~ The County Well Index indicates that there are two wells located within the Proposed Route; one well is within the Proposed Right-of-Way. The nearest well is 8.5 feet away from the Proposed Right-of-Way. This well is a monitor well owned by the MDNR.¹⁴⁴

~~143.144.~~ It is possible that pole installation or substation site preparation will encounter groundwater. Excavations may therefore require construction dewatering. Any effects on water tables would be localized and short term and would not result in significant impacts to hydrologic resources.¹⁴⁵

~~144.145.~~ Applicants will coordinate with landowners regarding well locations and access, should it be necessary.¹⁴⁶

4. Wildlife and Habitat.

~~145.146.~~ There are no MDNR Wildlife Management Areas or Aquatic Management Areas (MDNR, 2025o) crossed by the Proposed Route. There are no MDNR-designated Lakes of Biological Significance, Wild Rice Lakes, Trout Lakes, Trout Streams, Outstanding Resource Waters or Priority Shallow Lakes within the Proposed Route. Designated important bird areas do not exist with the Proposed Route.¹⁴⁷

~~146.147.~~ Construction of the Project poses minimal risk of permanent wildlife displacement or habitat loss. Wildlife in natural areas along the Proposed Route may experience short-term, localized disturbance during construction. Displacement distances will vary by species. Affected animals are typical of agricultural settings and are not expected to experience population-level effects from construction.¹⁴⁸

~~147.148.~~ The Proposed Right-of-Way will parallel existing road right-of-way and follow distribution line right-of-way for about 97 percent of its length; therefore, there will be minimal impacts related to habitat fragmentation and habitat loss.¹⁴⁹

~~148.149.~~ Raptors, waterfowl, and other bird species might be affected by the construction and placement of the Transmission Line. Avian collisions could occur during operation of the Transmission Line.¹⁵⁰

~~150.~~ Any eagle nests discovered during survey of the Transmission Line or in the land acquisition process will be reported, as applicable, to the USFWS and Great River Energy will adhere to the guidance provided. USFWS recommended that bird diverters be placed along the Transmission Line near Albert Lake. [Section 5.3.16 of the Draft Route Permit requires applicants](#)

¹⁴⁴ Application at 6.8.9.

¹⁴⁵ Application at 6.8.9.1.

¹⁴⁶ Application at 6.8.9.2.

¹⁴⁷ Application at 6.8.10.

¹⁴⁸ Application at 6.8.10.1.

¹⁴⁹ Application at 6.8.10.1.

¹⁵⁰ Application at 6.8.10.1.

to cooperate with the MDNR to identify locations for bird flight diverters to be installed along the Transmission Line. No additional mitigation measures are proposed.¹⁵¹

5. Vegetation

151. Vegetation within the Proposed Right-of-Way is made up of developed open space (50 percent), cultivated cropland (29 percent), pasture (6 percent), and wetlands (6 percent).¹⁵²

152. The Proposed Right-of-Way will parallel existing road right-of-way and follow distribution line right-of-way for about 97 percent of its length. Most of the Proposed Right-of-Way overlaps row crop fields; Great River Energy anticipates it will clear approximately 2.8 acres of trees within the Proposed Right-of-Way. Section 5.3.10 of the Draft Route Permit require Permittees to minimize tree removal along the Route and to preserve trees and vegetation to the extent possible while ensuring sound engineering principles and engineering criteria. Section 6.3 of the Draft Route Permit requires Permittees to develop a tree replacement plan in coordination with impacted landowners, the MDNR, and Otter Tail County.¹⁵³

153. The movement of construction equipment to, from and between various works sites has the potential to introduce or spread invasive species. Sections 5.3.12 and 5.3.13 require Permittees to employ best management practices to avoid introducing or spreading invasive species or noxious weeds.¹⁵⁴

5.6. Geology and Topography.

149.154. Bedrock depth in this subregion varies from 100 to 500 feet. Depth to bedrock along the Project Route varies from approximately 330 to 380 feet.¹⁵⁵

150.155. Given the depth to bedrock along the Project Route, transmission line structures or their foundations, as well as substation foundations, will not impact subsurface geologic features.¹⁵⁶

151.156. Construction of the Project will not alter the geology and topography along the Proposed Right-of-Way; therefore, no mitigation is proposed.¹⁵⁷

6.7. Soils.

152.157. Potential impacts include soil compaction associated with construction equipment traffic and exposing soil to wind and water erosion. Ground disturbance and soil exposure would be primarily limited to the structure locations, which would typically consist of a

¹⁵¹ Application at 6.8.10.2.

¹⁵² [Application at 6.8.7](#)

¹⁵³ [Application at 6.8.7](#)

¹⁵⁴ [Application at 6.8.7](#)

¹⁵⁵ Application at 6.8.4.

¹⁵⁶ Application at 6.8.4.1.

¹⁵⁷ Application at 6.8.4.2.

hole 10 to 20 feet deep and 36 to 60 inches in diameter for each structure and footers for substation equipment. Long-term impacts are not expected.¹⁵⁸

~~153.~~158. Applicants will take measures to alleviate soil compaction; and exposed soil will be revegetated as soon as possible to minimize erosion.¹⁵⁹

~~154.~~159. Potential impacts to soils can be mitigated by using best management practices (BMPs) and standard construction practices. A variety of methods can be employed to minimize soil erosion, including the prompt revegetation of disturbed soils. Additionally, Section 5.3.8 of the Draft Route Permit has requirements that the permittee must follow to mitigate impacts to soil.¹⁶⁰

7.8. **Greenhouse Gas Emissions (GHG).**

~~155.~~160. Greenhouse gases (GHG) are gaseous emissions that trap heat in the atmosphere. The most common GHGs emitted from human activities include carbon dioxide, methane, and nitrous oxide.¹⁶¹

~~156.~~161. Sulfur hexafluoride (SF₆), a GHG, is used as an insulating material in substation breakers. Under normal operations and with adequate routine maintenance, the SF₆ remains contained in the breakers and is not released to the atmosphere.¹⁶²

~~157.~~162. Construction of the Transmission Line and the new Otto Substation will result in a temporary increase of GHG emissions from fuel combustion in construction equipment and associated vehicles. No new greenfield right-of-way will be cleared; therefore, no GHG emissions related to land use change were calculated and impacts from deforestation are negligible.¹⁶³

~~158.~~163. GHG emissions associated with operation of the Project include vehicle and equipment emissions related to inspections and maintenance activities. Impacts from operation of the Project will be intermittent and short term.¹⁶⁴

~~159.~~164. Minnesota Rule 4410.4300, Subpart 15, Part B, establishes a mandatory category requiring preparation of an [EA-Environmental Assessment](#) Worksheet for stationary source facilities generating 100,000 tons of GHGs per year. ~~Accordingly, the~~The preliminary estimate of Project GHG emissions, ~~when compared to statewide levels and to the~~ is below this regulatory requirement ~~for additional study for projects based on GHGs, would be negligible.~~¹⁶⁵

¹⁵⁸ Application at 6.8.6.1.

¹⁵⁹ Application at 6.8.6.2.

¹⁶⁰ Application at 6.8.6.2.

¹⁶¹ Application at 6.8.3.

¹⁶² Application at 6.8.3.

¹⁶³ Application at 6.8.3.1

¹⁶⁴ Application at 6.8.3.1

¹⁶⁵ Application at 6.8.3.1, Table 23.

~~160.165.~~ The Applicants will mitigate vehicle emissions by ensuring its construction contractor keeps equipment in good working order and limits vehicle idling. Applicants will monitor the SF6 gas levels in the Substation breakers as part of routine monitoring of Substation equipment. Should a loss of SF6 be detected, the SF6 is extracted to a separate tank to allow the breaker to be repaired. Any gas collected from decommissioned breakers is shipped offsite for recycling. No additional mitigation is proposed.¹⁶⁶

8.9. Climate Change Resilience.

~~161.166.~~ Climate resilience is the capacity of a community or environment to anticipate and manage climate impacts, minimize their damage, and recover and transform as needed after the initial shock. Potential impacts are anticipated to be long term, of a small size, and not affect a unique resource. While total precipitation is expected to increase as well as the intensity of future storms, models indicate that precipitation totals over one inch are not expected to increase significantly over current levels. Therefore, increased risks associated with flooding are not anticipated.¹⁶⁷

~~162.167.~~ Models show that more electricity will be needed to cool homes. The Project helps to maintain the resiliency of the electrical grid in Otter Tail County, helping to protect LREC customers from extreme heat events. This impact will be long term and positive.¹⁶⁸

~~163.168.~~ Climate change could result in an increased risk of flooding in the Project Area, increased temperatures, extreme weather events such as high winds, and excessive rainfall. The Project as proposed will be designed to withstand these changes and will increase reliability in the Project Area.¹⁶⁹

~~164.169.~~ Transmission lines and substations are designed with extreme weather in mind, mitigating potential effects from the chance of increased number and intensity of severe storms. Applicants do not propose additional mitigative measures specific to climate change.¹⁷⁰

9.10. Rare and Unique Natural Resources.

(1) State-Listed Species.

~~165.170.~~ Applicants submitted a formal Natural Heritage Review Request on April 15, 2025, through the MDNR. Review concluded the MDNR “[does] not believe the proposed project will negatively affect any known occurrences of rare features.”¹⁷¹

(2) Federally-Listed Species.

¹⁶⁶ Application at 6.8.3.1, Table 23.

¹⁶⁷ Application at 6.8.2.1.

¹⁶⁸ Application at 6.8.2.1.

¹⁶⁹ Application at 6.8.2.1.

¹⁷⁰ Application at 6.8.2.2.

¹⁷¹ Application at 6.8.5.

~~166.171.~~ Based on the official species list provided by the United States Fish and Wildlife Service (USFWS), one species federally listed under Endangered Species Act and three candidate species have been previously documented within the Project Vicinity. No federally designated critical habitat is present within the Project Area. Those species are the gray wolf, monarch butterfly, Suckley’s cuckoo bumble bee, and the western regal Fritillary.¹⁷²

(3) Potential Impacts.

~~167.172.~~ The Project does not cross High Conservation Value Forest, Minnesota Biological Survey (MBS) Native Plant Communities (including native prairie), MBS Sites of Biodiversity Significance, or Scientific and Natural Areas. Potential impacts to these resources are not expected to occur.¹⁷³

~~168.173.~~ MDNR also confirmed that the Project “will not negatively affect any known occurrences of rare features....”¹⁷⁴

~~169.174.~~ Gray wolves are habitat generalists. Should wolves be present along the Proposed Route they would be displaced during construction but would return once construction is complete. Therefore, impacts to the gray wolf, if they occur, are anticipated to be minimal.¹⁷⁵

~~170.175.~~ Constructing adjacent to existing distribution line right-of-way and across agricultural fields minimizes impacts to suitable habitat for the monarch butterfly and Suckley’s cuckoo bumble bee. Long-term impacts to suitable habitat are not anticipated.¹⁷⁶

~~171.176.~~ The western regal fritillary uses native prairie habitat. No native prairie habitat is present within the Proposed Route. If USFWS determines the any of these species should be listed, and protections for the species coincide with the Project, the Applicants will review Project activities for potential impacts and develop appropriate avoidance and mitigation.¹⁷⁷

~~172.177.~~ The Applicants reviewed aerial imagery and determined that suitable habitat for bald eagle activity, foraging areas, nests, and winter roost areas is present within two miles of the Project. The Applicants will comply with the requirements of the federal Bald and Golden Eagle Protection Act (BGEPA).¹⁷⁸

~~173.178.~~ The Applicants will continue to coordinate with the MDNR and USFWS to avoid and minimize impacts on sensitive species.¹⁷⁹

¹⁷² Application at 6.8.5, Appendix C.

¹⁷³ Application at 6.8.5.1.

¹⁷⁴ Application at 6.8.5.1.

¹⁷⁵ Application at 6.8.5.1.

¹⁷⁶ Application at 6.8.5.1.

¹⁷⁷ Application at 6.8.5.1.

¹⁷⁸ Application at 6.8.5.1.

¹⁷⁹ Application at 6.8.5.2.

F. Use of or Paralleling of Existing Railroad and Highway Rights-of-Way, Survey and Division Lines, and Existing High-Voltage Transmission Rights-of-Way.

~~174.179.~~ Minnesota's HVTL routing factors require consideration of the Project's use of or paralleling of existing right-of-way, survey lines, and natural division lines.¹⁸⁰

~~175.180.~~ The Project will connect the Otto Substation to the 115 kV transmission system; because the Otto Substation is not currently connected to any HVTLs there are no HVTLs the route can follow.¹⁸¹ Approximately 2.9 miles, or 97 percent, of the Project will be collocated within existing road and utility right-of-way. Where the Project does not collocate with existing right-of-way, it is within existing road right-of-way (the U.S. Highway 10 crossing).¹⁸²

G. Electrical System Reliability.

~~176.181.~~ Minnesota's HVTL routing factors require consideration of the Project's impact on electrical system reliability.¹⁸³

~~177.182.~~ The Project is designed to operate at 115 kV to serve increased electrical demand into the future and help to ensure electric reliability in Otter Tail County. An average 115 kV transmission line is expected to be available approximately 99.9 percent of the year. Great River Energy expects that this Transmission Line should not be out of service for any extended period, other than the rare times when scheduled maintenance is required or when an event, such as a tornado, thunderstorm, ice storm, or a vehicle or heavy equipment collides with a structure causes an outage.¹⁸⁴

H. Costs of Constructing, Operating, and Maintaining the Facility.

~~178.183.~~ Minnesota's HVTL routing factors require consideration of the Project's cost of construction, operation, and maintenance.¹⁸⁵

~~179.184.~~ Applicants estimate that the Project as proposed will cost approximately \$6,700,000. Of that cost, the Transmission Line will cost approximately \$4,400,000; the new Otto Substation will cost approximately \$2,300,000, which includes costs to decommission and remove the existing substation components. Costs may vary depending upon, among other things, the cost of material and labor. Applicants currently anticipate that costs may vary \pm 30 percent.¹⁸⁶

I. Adverse Human and Natural Environmental Effects that Cannot be Avoided.

¹⁸⁰ Minn. Stat. § 216I.05, ~~subd. 3(7) and~~ subd. 11(b)(8)-(9) & (15)(e).

¹⁸¹ Application at 1.6, 6.4.7, and Figure 1

¹⁸² Application at 3.1.2.

¹⁸³ Minn. Stat. § 216I.05, subd. 11(b)(13).

¹⁸⁴ Application at 3.1.11-12.

¹⁸⁵ Minn. Stat. § 216I.05, subds. 11(a), 3(b)(9).

¹⁸⁶ Application at 3.3.

~~180.185.~~ Minnesota’s HVTL routing factors require consideration of the adverse human and natural environmental effects that cannot be avoided.¹⁸⁷

~~181.186.~~ Unavoidable adverse impacts due to construction of the Project include: fugitive dust emissions on and near gravel roads; greenhouse gas emissions; incremental vegetative clearing; minimal amounts of habitat loss; noise disturbances and visual impacts; soil compaction and erosion; short-term traffic delays; temporary construction dewatering; and temporary disturbance and displacement of wildlife, including impacts to individual wildlife.¹⁸⁸

~~182.187.~~ Unavoidable adverse impacts due to the operation of the Project include: continued maintenance of tall growing woody vegetation; conversion of agricultural land at structure locations and maintained grasslands at the new Otto Substation location; increased EMF on the landscape; potential impacts from EMF are minimal and not expected to impact human health; incremental increase in the potential for avian collisions or electrocution; interference with AM radio signals; limited GHG emissions; incremental visual changes to the landscape.¹⁸⁹

J. Irreversible and Irretrievable Commitments of Resources.

~~183.188.~~ Minnesota’s HVTL routing factors require consideration of the irreversible and irretrievable commitments of resources that are necessary for the Project.¹⁹⁰

~~184.189.~~ Irreversible resource commitments associated with the Project will include the land use associated with the new Otto Substation and Transmission Line components. While the land underlying the Otto Substation could be restored to agricultural use or some other function, tall growing woody vegetation could revegetate within the Proposed Right-of-Way, and certain Project components could be reused or recycled, this is unlikely to happen in the reasonably foreseeable future.¹⁹¹

~~185.190.~~ Irretrievable resource commitments associated with the Project are related to construction activities. The use of aggregate, concrete, fuel, human labor, steel, water, wood, and other consumable resources is irretrievable. Funding could be irretrievable in part.¹⁹²

K. CUMULATIVE IMPACTS

~~186.191.~~ Cumulative effects are defined as “effect on the environment that results from the incremental effects of a project in addition to other projects in the environmentally relevant area that might reasonably be expected to affect the same environmental resources, including future projects actually planned or for which a basis of expectation has been laid,

¹⁸⁷ Minn. Stat. § 216I.05, subds. 4(a)(9), 11(b)(6).

¹⁸⁸ Application at 6.9.

¹⁸⁹ Application at 6.9.

¹⁹⁰ Minn. Stat. § 216I.05, subd. 11(b)(11).

¹⁹¹ Application at 6.10.

¹⁹² Application at 6.10.

regardless of what person undertakes the other projects or what jurisdictions have authority over the projects.”¹⁹³

~~187.192.~~ The Applicants searched for reasonably foreseeable projects in both temporal and spatial proximity to the Proposed Project. No projects were identified. The Minnesota Department of Transportation (MnDOT) is planning to resurface U.S. Highway 10 from Bluffton west to New York Mills in 2027. This Project is about eight road miles from where the Proposed Project will intersect U.S. Highway 10. Otter Tail County road work plans do not extend beyond 2025 on the county website.¹⁹⁴

XVI. ROUTE PERMIT CONDITIONS

~~188.193.~~ The Draft Route Permit filed by EIP Staff on January 7, 2026, includes standard permit conditions and three special permit conditions specific to the Project.

194. In comments filed on February ~~19~~18, 2026, Great River Energy proposed limited revisions to Sections 2.2 and 3 of the Draft Route Permit to reflect Project-specific details. Great River Energy also proposed revisions to Conditions 5.1, ~~5.3.9, 5.3.16, and 6.1, 6.3, 9.2, and 9.3.~~ The proposed revisions are generally minor clarifications and are supported by the record.¹⁹⁵ ~~Great River Energy also requested the addition of two permit conditions—one related to vegetation clearing, and one related to substation construction.¹⁹⁶ Both conditions are supported by the record and consistent with other recent permits issued by the Commission.~~

195. Applicants proposed modifying Condition 5.3.9 of the Draft Route Permit to allow permittees to assemble transmission structures in upland areas before transporting the structures to wetland areas where practicable.¹⁹⁷ EIP staff proposed modifying applicants’ request to clarify that permittees are required to assemble structures elsewhere before moving to wetlands unless assembling them on site is less impactful to wetlands.

196. Applicants proposed modifying Condition 6.3 of the Draft Route Permit to provide for replacement trees to be planted on private lands with the permission of the landowner.¹⁹⁸ EIP staff proposed modifying the condition to incorporate the Commission’s permit language for this condition from recent dockets.

197. In comments filed on February 19, 2026, the Minnesota Department of Natural Resources recommended a special permit condition requiring seasonal restrictions on tree clearing to minimize impacts to bats, including the northern long-eared bat— the request did not propose specific permit language.¹⁹⁹ On February 25, 2026, the Applicants proposed a permit condition for tree clearing that required permittees to coordinate with the U.S. Fish and Wildlife Service regarding the timing of tree clearing and other conservation measures to mitigate impacts to the

¹⁹³ Minn. R. 4410.0200, subd. 11(a).

¹⁹⁴ Minn. R. 4410.0200, subd. 11(a).

¹⁹⁵ Great River Energy Comment, February 18, 2026

¹⁹⁶ ~~Great River Energy Comment.~~

¹⁹⁷ Great River Energy Comment, February 18 2026

¹⁹⁸ Great River Energy Comment, February 18 2026

¹⁹⁹ MDNR Comment, February 18, 2026

Northern Long-Eared Bat.²⁰⁰ EIP staff proposed permit condition 6.4 that incorporated the Minnesota Department of Natural Resources recommendations on seasonal restrictions for tree clearing between June 1 and August 15 and required permittees to coordinate with both the Minnesota Department of Natural Resources and the U.S. Fish and Wildlife Services to determine if additional restrictions are necessary to minimize impacts to state or federally protected species.

198. In response to Minnesota Department of Natural Resources comments, applicants proposed a new condition requiring permittees to resubmit a Natural Heritage Review request and continue consultation with Minnesota Department of Natural Resources.²⁰¹ EIP staff proposed modifying the applicants' proposed condition to require permittees to file records of the coordination in proposed permit condition 6.5.

199. Applicants proposed a new permit condition allowing them to begin substation construction prior to other portions of the project. This condition has been included in some recent Commission HVTL Permit Decisions,²⁰² but not others. EIP staff did not support the new condition, noting that it is not unusual for permittees to commence construction in phases, and that staff interprets Section 9.2 of the Draft Route Permit as providing for staged construction.

200. Applicants proposed a new permit condition allowing them to begin vegetation clearing before the plan and profile are submitted.²⁰³ but not others. EIP staff did not support the new condition, noting that it is not unusual for permittees to commence construction in phases, and that staff interprets Section 9.2 of the Draft Route Permit as providing for staged construction. EIP staff raised additional questions and concerns about the interaction between the proposed condition and other permit conditions and compliance review of filings within 14 days.

201. Applicants proposed modifying Section 9.2 of the Draft Route Permit Plan to require the Commission to respond to permittees' additional or revised pre-construction filings within 15 days of the filing.²⁰⁴ EIP staff did not support the change, noting that the Commission staff are responsive to reviewing pre-construction filings.

202. Applicants proposed modifying Section 9.3 of the Draft Route Permit to delay filing periodic status reports until February 2028.²⁰⁵ The standard permit condition requires permittees to file status updates every six months from permit issuance when construction does not commence within six months of the permit issuance. EIP staff did not support this change, noting that status updates are helpful to the public and landowners when construction is delayed.

XVII. NOTICE

²⁰⁰ Great River Energy Comment, February 25, 2026

²⁰¹ Great River Energy Comment, February 25, 2026

²⁰² Great River Energy Comment, February 18, 2026

²⁰³ Great River Energy Comment, February 18, 2026

²⁰⁴ Great River Energy Comment, February 18, 2026

²⁰⁵ Great River Energy Comment, February 18, 2026

~~189.203.~~ Minnesota statutes and rules require an Applicant to provide certain notice to the public and local governments regarding a route permit process.²⁰⁶

~~190.204.~~ The Applicants provided notice to the public and local governments in satisfaction of Minnesota statutory and rule requirements.²⁰⁷

~~191.205.~~ EIP Staff likewise provided notices in satisfaction of Minnesota statutes and rules.²⁰⁸

XVIII. COMPLETENESS OF ENVIRONMENTAL ASSESSMENT

~~192.206.~~ The Applicants prepared an EA ~~process is the alternative environmental review approved for HVTLs~~ and submitted it with their Route Permit Application pursuant to the Standard Review Process.²⁰⁹

~~193.207.~~ ~~The evidence in the record demonstrates that the EA is adequate.~~ On January 7, 2026, and following the December 3 and 4, 2025, public information and scoping meetings, Commission EIP Staff submitted a Scoping Summary and Recommendations, finding recommending that the Commission not require an EA addendum is not required for the Project.²¹⁰ On January 9, 2026, the Commission issued an order finding that an EA addendum is not required for the Project.²¹¹

208. The record ~~further~~ establishes that the EA otherwise meets the criteria and contains information prescribed by Minn. Stat. §§ 216I.05, subd.4 and 216I.07, subd. 3.

209. Minnesota law requires the Commission to consider the EA and the entirety of the record related to human and environmental impacts when making a final decision on a route permit application.²¹²

Based on the foregoing Findings of Fact and the record in this proceeding, the Commission makes the following:

CONCLUSIONS OF LAW

~~1.~~ ~~Any of the forgoing Findings of Fact more properly designated as Conclusions of Law are hereby adopted as such.~~

~~2.1.~~ The Commission has jurisdiction to consider the Application.

²⁰⁶ Minn. Stat. § 216I.05, subd. 5.

²⁰⁷ Application at 1.8.2, 2.3.2, Appendices C-D.

²⁰⁸ Notice of Completeness and Public Meetings; of Public Hearings and Draft Route Permit.

²⁰⁹ Minn. Stat. § 216I.07, subd. 3.

²¹⁰ EIP Summary and Recommendations.

²¹¹ January 9, 2026, Order.

²¹² Minn. Stat. § 216I.07, subd. 3(b).

~~3-2.~~ The Commission determined that the Application was substantially complete and accepted the Application on November 18, 2025.²¹³

~~4-3.~~ Applicants have prepared an appropriate EA of the Project for purposes of this proceeding, and which satisfies the requirements of Minn. Stat. §§ 216I.05, subd. 4, and 216I.07, subd. 3. The Commission has considered the EA and the entirety of the record related to human and environmental impacts as required by Minn. Stat. § 216I.07, subd. 3(b).

~~5-4.~~ The Commission appropriately concluded that no addendum to the EA should be prepared.

~~6-5.~~ Applicants and the Commission gave notice as required by Minn. Stat. Ch. 216I.

~~7-6.~~ A public hearing was conducted near the Proposed Route. Proper notice of the public hearing was provided, as required by Minn. Stat. §§ 216I.05, subd. ~~98~~, and 216I.07, subd. 4, and the public was given the opportunity to speak at the hearing and to submit written comments. All procedural requirements for the Route Permit were met.

~~8-7.~~ The EA and the evidence in the record demonstrates that the Proposed Route ~~satisfies~~ is consistent with the Route Permit factors set forth in Minn. Stat. § 216I.05, subd. 11.

~~9-8.~~ There is no feasible and prudent alternative to the construction of the Project, and the Project is consistent with and reasonably required for the promotion of public health and welfare in light of the state's concern for the protection of its air, water, land, and other natural resources as expressed in the Minnesota Environmental Rights Act and the Minnesota Environmental Policy Act.

~~10-9.~~ The evidence in the record demonstrates that the Proposed Route is the best route for the Project.

~~11-10.~~ The evidence in the record demonstrates that the general Route Permit conditions included in the Draft Route Permit are appropriate for the Project, with the revisions discussed in Section XVI, above.

~~12-11.~~ Any of the foregoing Conclusions of Law which are more properly designated Findings of Fact are hereby adopted as such.

²¹³ Notice of Completeness and Public Meetings.

Attachment D

Staff Proposed Permit

STATE OF MINNESOTA PUBLIC UTILITIES COMMISSION

**ROUTE PERMIT FOR
OTTO TAP 115 KILOVOLT TRANSMISSION LINE PROJECT**

A HIGH-VOLTAGE TRANSMISSION LINE AND ASSOCIATED FACILITIES

**IN
OTTER TAIL COUNTY**

**ISSUED TO
GREAT RIVER ENERGY AND LAKE REGION ELECTRIC COOPERATIVE**

PUC DOCKET NO. ET2/TL-25-269

In accordance with the requirements of Minnesota Statutes Chapter 216I, this route permit is hereby issued to:

GREAT RIVER ENERGY AND LAKE REGION ELECTRIC COOPERATIVE

Great River Energy and Lake Region Electric Cooperative are authorized by this route permit to construct and operate a new 2.9-mile 115 kV single-circuit transmission line between Great River Energy's existing Perham to Rush Lake 115 kV transmission line and the new replacement Otto Substation in Otter Tail County, Minnesota.

The high-voltage transmission line shall be constructed within the route identified in this route permit and in compliance with the conditions specified in this route permit.

Approved and adopted this ____ day of [Month, Year]

BY ORDER OF THE COMMISSION

Sasha Bergman,
Executive Secretary

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ATTACHMENTS

Attachment 1 – Complaint Handling Procedures for Permitted Energy Facilities

Attachment 2 – Compliance Filing Procedures for Permitted Energy Facilities

Attachment 3 – Route Permit Maps

1 ROUTE PERMIT

The Minnesota Public Utilities Commission (Commission) hereby issues this route permit to Great River Energy and Lake Region Electric Cooperative (Permittees) pursuant to Minnesota Statutes Chapter 216I. This route permit authorizes the Permittees to construct and operate a new 2.9-mile 115 kV single-circuit transmission line between Great River Energy’s existing Perham to Rush Lake 115 kV transmission line and the new replacement Otto Substation in Otter Tail County, Minnesota (Otto Tap 115 kilovolt Transmission Project), henceforth known as Transmission Facility. The high-voltage transmission line shall be constructed within the route identified in this route permit and in compliance with the conditions specified in this route permit.

1.1 Pre-emption

Pursuant to Minn. Stat. § 216I.18, this route permit shall be the sole route approval required for construction of the Transmission Facility. This route permit shall supersede and preempt all zoning, building, or land use rules, regulations, or ordinances promulgated by regional, county, local and special purpose governments.

2 TRANSMISSION FACILITY DESCRIPTION

Great River Energy will construct, own, and operate the 2.9-mile 115-kV transmission line between the switch structure on the Perham to Rush Lake transmission line northeast of U.S. Highway 10 and the new Otto Substation.

Lake Region Electric Cooperative will construct, own, and operate the new Otto Substation and the portion of the 115 kV transmission line from the high-side structure to the new 115/12.47-kV stepdown transformer.

County	Township Name	Township	Range	Section
Otter Tail	Otto	135	38	29, 30, 31, 32
Otter Tail	Pine Lake	136	38	5

2.1 Structures

The structure types as described in the Permittees’ route permit application are detailed in the table below.

Line Type	Structure		Foundation	Height	Span
	Type	Material			
115-kV	Monopole with brace post	Wood, steel, or ductile iron	18 – 36 inches in diameter	60-90	300-400
	H-Frame	Wood, steel, or ductile iron	18 – 36 inches in diameter	60-90	350-800
	Three-pole	Wood, steel, or ductile iron	18 – 36 inches in diameter	60-90	350-800

2.2 Conductors

Conductor types may include single-circuit structures with three-phase wires and one shielded wire. The phase wires will be 477 thousand circular millimeters of aluminum-conductor steel reinforced (477 ACSR) or a conductor with similar capacity. The shield wire will be 0.555 optical ground wire.

2.3 Substations and Associated Facilities

The substations and associated facilities authorized by this Route Permit include:

- Construction of a new Otto Substation that will convert 115-kV to 12.47-kV, replacing the existing Otto Substation

3 DESIGNATED ROUTE

The route designated by the Commission is depicted on the route maps attached to this route permit (Designated Route). The route width approved by this permit is generally 200 feet (100 feet either side of road centerlines), with a route width of up to 750 feet by 260 feet where the route crosses U.S. Highway 10 at 410th Street and 300 feet by 300 feet at the Replacement Otto Substation. The Designated Route is described as follows:

The route begins at Great River Energy’s existing LR-PR line on the east side of U.S. Highway 10 near structure LR-PR-72. The route travels southwest across U.S. Highway 10 and then follows 410th Street westerly for approximately nine-tenths of a mile, where it will cross 470th Avenue. The Proposed [Alignment Route](#) then turns south and follows 470th Avenue for approximately 2 miles before crossing 390th Street where the route terminates at the Otto Substation.

The Designated Route includes an anticipated alignment and a right-of-way. The right-of-way is the physical land needed for the safe operation of the transmission line. The Permittees shall locate the alignment and associated right-of-way within the Designated Route unless otherwise authorized by this route permit or the Commission. The Designated Route provides the Permittees with flexibility for minor adjustments of the alignment and right-of-way to accommodate landowner requests and unforeseen conditions.

Any modifications to the Designated Route or modifications that would result in right-of-way placement outside the Designated Route shall be specifically reviewed by the Commission in accordance with Minn. Stat. § 216I.09 and Section 10 of this route permit.

4 RIGHT-OF-WAY

This route permit authorizes the Permittees to obtain a new permanent right-of-way for the transmission line up to 100 feet in width. The permanent right-of-way is typically 50 feet on both sides of the transmission line measured from its centerline or alignment.

The anticipated alignment is intended to minimize potential impacts relative to the criteria identified in Minn. Stat. § 216I.05, subd. 11. The final alignment must generally conform to the anticipated alignment identified on the route maps unless changes are requested by individual landowners and agreed to by the Permittees or for unforeseen conditions that are encountered or as otherwise provided for by this route permit.

Any right-of-way or alignment modifications within the Designated Route shall be located so as to have comparable overall impacts relative to the factors in Minn. Stat. § 216I.05, subd. 11, as does the right-of-way and alignment identified in this route permit and shall be specifically identified and documented in and approved as part of the plan and profile submitted pursuant to Section 9.2 of this route permit.

Where the transmission line parallels existing highway and other road rights-of-way, the transmission line right-of-way shall occupy and utilize the existing right-of-way to the maximum extent possible; consistent with the criteria in Minn. Stat. § 216I.05, subd. 11, and the other requirements of this route permit; and for highways under the jurisdiction of the Minnesota Department of Transportation (MnDOT), the procedures for accommodating utilities in trunk highway rights-of-way.

5 GENERAL CONDITIONS

The Permittees shall comply with the following conditions during construction and operation of the Transmission Facility over the life of this route permit.

5.1 Route Permit Distribution

Within 30 days of issuance of this route permit, the Permittees shall provide all affected landowners with a copy of this route permit and the complaint procedures. An affected landowner is any landowner or designee that is within or adjacent to the Designated Route. In no case shall a landowner receive this route permit and complaint procedures less than five days prior to the start of construction on their property. The Permittees shall also provide a copy of this route permit and the complaint procedures to the applicable regional development commissions, county environmental offices, and city and township clerks. The Permittees shall file with the Commission an affidavit of its route permit and complaint procedures distribution within 30 days of ~~issuance~~-distribution of this route permit.

5.2 Access to Property

The Permittees shall notify landowners prior to entering or conducting maintenance within their property, unless otherwise negotiated with the landowner. The Permittees shall keep records of compliance with this section and provide them upon the request of Commission staff.

5.3 Construction and Operation Practices

The Permittees shall comply with the construction practices, operation and maintenance practices, and material specifications described in the permitting record for this Transmission Facility unless this route permit establishes a different requirement in which case this route permit shall prevail.

5.3.1 Field Representative

The Permittees shall designate a field representative responsible for overseeing compliance with the conditions of this route permit during construction of the Transmission Facility. This person shall be accessible by telephone or other means during normal business hours throughout site preparation, construction, cleanup, and restoration.

The Permittees shall file with the Commission the name, address, email, phone number, and emergency phone number of the field representative at least 14 days prior to the pre-construction meeting. The Permittees shall provide the field representative's contact information to affected landowners, local government units and other interested persons at least 14 days prior to the pre-construction meeting. The Permittees may change the field representative at any time upon notice to the Commission, affected landowners, local government units and other interested persons. The Permittees shall file with the Commission

an affidavit of distribution of its field representative's contact information at least 14 days prior to the pre-construction meeting and upon changes to the field representative.

5.3.2 Employee Training

The Permittees shall train all employees, contractors, and other persons involved in the Transmission Facility construction regarding the terms and conditions of this route permit. The Permittees shall keep records of compliance with this section and provide them upon the request of Commission staff.

5.3.3 Independent Third-Party Monitoring

Prior to any construction, the Permittees shall propose a scope of work and identify an independent third-party monitor to conduct Project construction monitoring on behalf of the Commission. The scope of work shall be developed in consultation with and approved by Commission staff. This third-party monitor will report directly to and will be under the control of the Commission with costs borne by the Permittees.

The Permittees shall file with the Commission the approved scope of work and the name, address, email, and telephone number of the third party-monitor at least 14 days prior to commencing any construction or right-of-way preparation and upon any change in contact information that may occur during Project construction and restoration of the right-of-way.

The Permittees shall keep records of compliance with this section and ensure that status reports detailing the construction monitoring are filed with the Commission in accordance with the approved scope of work.

5.3.4 Public Services, Public Utilities, and Existing Easements

During Transmission Facility construction, the Permittees shall minimize any disruption to public services or public utilities. To the extent disruptions to public services or public utilities occur these shall be temporary, and the Permittees shall restore service promptly. Where any impacts to utilities have the potential to occur the Permittees shall work with both landowners and local entities to determine the most appropriate mitigation measures if not already considered as part of this route permit.

The Permittees shall coordinate with county and city road authorities to develop appropriate signage and traffic management during construction. The Permittees shall keep records of compliance with this section and provide them upon the request of Commission staff.

5.3.5 Temporary Workspace

The Permittees shall limit temporary easements to special construction access needs and additional staging or lay-down areas required outside of the authorized right-of-way. Temporary space shall be selected to limit the removal and impacts to vegetation. The Permittees shall obtain temporary easements outside of the authorized transmission line right-of-way from affected landowners through rental or lease agreements. Temporary easements are not provided for in this route permit.

The Permittees may construct temporary driveways between roadways and transmission structures to minimize impacts by using the shortest route feasible. The Permittees shall use construction mats to minimize impacts on access paths and construction areas. The Permittees shall submit the location of temporary workspaces and driveways with the plan and profile pursuant to Section 9.2.

5.3.6 Noise

The Permittees shall comply with noise standards established under Minn. R. 7030.0010 to 7030.0080. The Permittees shall limit construction and maintenance activities to daytime working hours to the extent practicable.

5.3.7 Aesthetics

The Permittees shall consider input pertaining to visual impacts from landowners or land management agencies prior to final location of structures, rights-of-way, and other areas with the potential for visual disturbance. The Permittees shall use care to preserve the natural landscape, minimize tree removal and prevent any unnecessary destruction of the natural surroundings in the vicinity of the Transmission Facility during construction and maintenance. The Permittees shall work with landowners to locate the high-voltage transmission line to minimize the loss of agricultural land, forest, and wetlands, and to avoid homes and farmsteads. The Permittees shall place structures at a distance, consistent with sound engineering principles and system reliability criteria, from intersecting roads, highways, or trail crossings.

5.3.8 Soil Erosion and Sediment Control

The Permittees shall implement those erosion prevention and sediment control practices recommended by the Minnesota Pollution Control Agency (MPCA) Construction Stormwater Program. If construction of the Transmission Facility disturbs more than one acre of land or is sited in an area designated by the MPCA as having potential for impacts to water resources, the

Permittees shall obtain a National Pollutant Discharge Elimination System/State Disposal System Construction Stormwater Permit from the MPCA that provides for development of a Stormwater Pollution Prevention Plan that describes methods to control erosion and runoff.

The Permittees shall implement reasonable measures to minimize erosion and sedimentation during construction and shall employ perimeter sediment controls, protect exposed soil by promptly planting, seeding, using erosion control blankets and turf reinforcement mats, stabilizing slopes, protecting storm drain inlets, protecting soil stockpiles, and controlling vehicle tracking. Contours shall be graded as required so that all surfaces provide for proper drainage, blend with the natural terrain, and are left in a condition that will facilitate re-vegetation and prevent erosion. All areas disturbed during construction of the Transmission Facility shall be returned to pre-construction conditions.

5.3.9 Wetlands and Water Resources

The Permittees shall develop wetland impact avoidance measures and implement them during construction of the Transmission Facility. Measures shall include spacing and placing transmission structures at variable distances to span and avoid wetlands, watercourses, and floodplains. Unavoidable wetland impacts as a result of the placement of structures shall be limited to the immediate area around the structures. To minimize impacts, the Permittees shall construct in wetland areas during frozen ground conditions where practicable and according to permit requirements by the applicable permitting authority. When construction during winter is not possible, the Permittees shall use wooden or composite mats to protect wetland vegetation.

The Permittees shall contain soil excavated from the wetlands and riparian areas and not place it back into the wetland or riparian area. The Permittees shall access wetlands and riparian areas using the shortest route possible in order to minimize travel through wetland areas and prevent unnecessary impacts. The Permittees shall not place staging or stringing set up areas within or adjacent to wetlands or water resources, as practicable. The Permittees shall assemble structures on upland areas before they are brought to the site for installation [unless assembling them on site is less impactful to wetlands.](#)

The Permittees shall restore wetland and water resource areas disturbed by construction activities to pre-construction conditions in accordance with the requirements of applicable state and federal permits or laws and landowner agreements. The Permittees shall meet the U.S. Army Corps of Engineers (USACE), Minnesota Department of Natural Resources (DNR), Minnesota Board of Water and Soil Resources, and local units of government wetland and water resource requirements.

5.3.10 Vegetation Management

The Permittees shall minimize the number of trees to be removed in selecting the right-of-way specifically preserving to the maximum extent practicable windbreaks, shelterbelts, living snow fences, and vegetation in areas such as trail and stream crossings where vegetative screening may minimize aesthetic impacts, to the extent that such actions do not violate sound engineering principles or system reliability criteria.

The Permittees shall remove tall growing species located within the transmission line right-of-way that endanger the safe and reliable operation of the transmission line. The Permittees shall leave undisturbed, to the extent possible, existing low growing species in the right-of-way or replant such species in the right-of-way to blend the difference between the right-of-way and adjacent areas, to the extent that the low growing vegetation will not pose a threat to the transmission line or impede construction.

The Permittees shall develop a vegetation management plan (VMP), in coordination with the Vegetation Management Plan Working Group (VMPWG), using best management practices established by the DNR and BWSR. The Permittees shall file the VMP and documentation of the coordination efforts between the Permittees and the DNR with the Commission as part of the plan and profile required in Section 9.2 of the Permit.

5.3.11 Application of Pesticides

The Permittees shall restrict pesticide use to those pesticides and methods of application approved by the Minnesota Department of Agriculture (MDA), DNR, and the U.S. Environmental Protection Agency (EPA). Selective foliage or basal application shall be used when practicable. All pesticides shall be applied in a safe and cautious manner so as not to damage adjacent properties including crops, orchards, tree farms, apiaries, or gardens. The Permittees shall contact the landowner at least 14 days prior to pesticide application on their property. The Permittees may not apply any pesticide if the landowner requests that there be no application of pesticides within the landowner's property. The Permittees shall provide notice of pesticide application to landowners and beekeepers operating known apiaries within three miles of the pesticide application area at least 14 days prior to such application. The Permittees shall use the MDA's Apiary Registry (<https://mn.beecheck.org/map>) to identify known apiaries for purposes of compliance with this condition. The Permittees shall keep pesticide communication and application records and provide them upon the request of Commission staff.

5.3.12 Invasive Species

The Permittees shall employ best management practices to avoid the potential introduction and spread of invasive species on lands disturbed by Transmission Facility construction activities. The Permittees shall develop an Invasive Species Prevention Plan and file it with the Commission at least 14 days prior to the pre-construction meeting. The Permittees shall comply with the most recently filed Invasive Species Prevention Plan.

5.3.13 Noxious Weeds

The Permittees shall take all reasonable precautions against the spread of noxious weeds during all phases of construction. When utilizing seed to establish temporary and permanent vegetative cover on exposed soil the Permittees shall select site appropriate seed certified to be free of noxious weeds. To the extent possible, the Permittees shall use native seed mixes. The Permittees shall keep records of compliance with this section and provide them upon the request of Commission staff.

5.3.14 Roads

The Permittees shall advise the appropriate governing bodies having jurisdiction over all state, county, city, or township roads that will be used during the construction phase of the Transmission Facility. Where practical, existing roadways shall be used for all activities associated with construction of the Transmission Facility. Oversize or overweight loads associated with the Transmission Facility shall not be hauled across public roads without required permits and approvals.

The Permittees shall construct the fewest number of site access roads required. Access roads shall not be constructed across streams and drainage ways without the required permits and approvals. Access roads shall be constructed in accordance with all necessary township, county or state road requirements and permits.

The Permittees shall promptly repair private roads or lanes damaged when moving equipment or when accessing construction workspace, unless otherwise negotiated with the affected landowner.

5.3.15 Archaeological and Historic Resources

The Permittees shall make every effort to avoid impacts to archaeological and historic resources when constructing the Transmission Facility. In the event that a resource is encountered, the Permittees shall consult with the State Historic Preservation Office and the

State Archaeologist. Where feasible, avoidance of the resource is required. Where not feasible, mitigation must include an effort to minimize Transmission Facility impacts on the resource consistent with State Historic Preservation Office and State Archaeologist requirements.

The Permittees shall develop an Unanticipated Discoveries Plan (UDP) to identify guidelines to be used in the event previously unrecorded archeological or historic properties, or human remains, are encountered during construction, or if unanticipated effects to previously identified archaeological or historic properties occur during construction. The UDP is in addition to and not in lieu of any other obligations that may exist under law or regulation relating to these matters. The Permittees shall file the UDP with the Commission at least 14 days prior to the preconstruction meeting.

The Permittees shall train workers about the need to avoid cultural properties, how to identify cultural properties, and procedures to follow if undocumented cultural properties, including gravesites, are found during construction. If human remains are encountered during construction, the Permittees shall, in accordance with Minn. Stat. Ch. 307 (Private Cemeteries Act), immediately halt construction and promptly notify local law enforcement and the State Archaeologist. The Permittees shall not resume construction at such location until authorized by local law enforcement or the State Archaeologist. The Permittees shall keep records of compliance with this section and provide them upon the request of Commission staff.

5.3.16 Avian Protection

The Permittees in cooperation with the DNR shall identify areas of the transmission line where bird flight diverters will be incorporated into the transmission line design to prevent large avian collisions attributed to visibility issues. Standard transmission design shall incorporate adequate spacing of conductors and grounding devices in accordance with Avian Power Line Interaction Committee standards to ~~eliminate~~reduce the risk of electrocution to raptors with larger wingspans that may simultaneously come in contact with a conductor and grounding devices. The Permittees shall submit documentation of its avian protection coordination with the plan and profile pursuant to Section 9.2.

5.3.17 Drainage Tiles

The Permittees shall avoid, promptly repair, or replace all drainage tiles broken or damaged during all phases of the Transmission Facility's life. The Permittees shall keep records of compliance with this section and provide them upon the request of Commission staff.

5.3.18 Restoration

The Permittees shall restore the right-of-way, temporary workspaces, access roads, abandoned right-of-way, and other public or private lands affected by construction of the Transmission Facility. Restoration within the right-of-way must be compatible with the safe operation, maintenance, and inspection of the transmission line. Within 60 days after completion of all restoration activities, the Permittees shall file with the Commission a Notice of Restoration Completion.

5.3.19 Cleanup

The Permittees shall remove and properly dispose of all construction waste and scrap from the right-of-way and all premises on which construction activities were conducted upon completion of each task. The Permittees shall remove and properly dispose of all personal litter, including bottles, cans, and paper from construction activities daily.

5.3.20 Pollution and Hazardous Wastes

The Permittees shall take all appropriate precautions to protect against pollution of the environment. The Permittees shall be responsible for compliance with all laws applicable to the generation, storage, transportation, clean up and disposal of all waste generated during construction and restoration of the Transmission Facility.

5.3.21 Damages

The Permittees shall fairly restore or compensate landowners for damage to crops, fences, private roads and lanes, landscaping, drain tile, or other damages sustained during construction. The Permittees shall keep records of compliance with this section and provide them upon the request of Commission staff.

5.3.22 Facility Lighting

The Permittees shall use shielded and downward facing lighting and LED lighting that minimizes blue hue.

5.3.23 Dust Control

The Permittees shall utilize non-chloride products for onsite dust control during construction.

5.3.24 Wildlife Friendly Erosion Control

The Permittees shall use only “bio-netting” or “natural netting” types of erosion control materials and mulch products without synthetic (plastic) fiber additives or malachite green dye.

5.4 Electrical Performance Standards

5.4.1 Grounding

The Permittees shall design, construct, and operate the transmission line in a manner so that the maximum induced steady-state short-circuit current shall be limited to five milliamperes root mean square (rms) alternating current between the ground and any non-stationary object within the right-of-way, including but not limited to large motor vehicles and agricultural equipment. All fixed metallic objects on or off the right-of-way, except electric fences that parallel or cross the right-of-way, shall be grounded to the extent necessary to limit the induced short-circuit current between ground and the object so as not to exceed one milliamperes rms under steady state conditions of the transmission line and to comply with the ground fault conditions specified in the National Electric Safety Code. The Permittees shall address and rectify any induced current problems that arise during transmission line operation.

5.4.2 Electric Field

The Permittees shall design, construct, and operate the transmission line in such a manner that the electric field measured one meter above ground level immediately below the transmission line shall not exceed 8.0 kV/m rms.

5.4.3 Interference with Communication Devices

If interference with radio or television, satellite, wireless internet, GPS-based agriculture navigation systems or other communication devices is caused by the presence or operation of the Transmission Facility, the Permittees shall take whatever action is necessary to restore or provide reception equivalent to reception levels in the immediate area just prior to the construction of the Transmission Facility. The Permittees shall keep records of compliance with this section and provide them upon the request of Commission staff.

5.5 Other Requirements

5.5.1 Safety Codes and Design Requirements

The Permittees shall design the transmission line and associated facilities to meet or exceed all relevant local and state codes, the National Electric Safety Code, and North American Electric Reliability Corporation requirements. This includes standards relating to clearances to ground, clearance to crossing utilities, clearance to buildings, strength of materials, clearances over roadways, right-of-way widths, and permit requirements.

5.5.2 Other Permits and Regulations

The Permittees shall comply with all applicable state statutes and rules. The Permittees shall obtain all required permits for the Transmission Facility and comply with the conditions of those permits unless those permits conflict with or are preempted by federal or state permits and regulations.

At least 14 days prior to the pre-construction meeting, the Permittees shall file with the Commission an Other Permits and Regulations Submittal that contains a detailed status of all permits, authorizations, and approvals that have been applied for specific to the Transmission Facility. The Other Permits and Regulations Submittal shall also include the permitting agency name; the name of the permit, authorization, or approval being sought; contact person and contact information for the permitting agency or authority; brief description of why the permit, authorization, or approval is needed; application submittal date; and the date the permit, authorization, or approval was issued or is anticipated to be issued.

The Permittees shall demonstrate that it has obtained all necessary permits, authorizations, and approvals by filing an affidavit stating as such and an updated Other Permits and Regulations Submittal prior to commencing construction. The Permittees shall provide a copy of any such permits, authorizations, and approvals at the request of Commission staff.

6 SPECIAL CONDITIONS

The special conditions shall take precedence over other conditions of this permit should there be a conflict.

6.1 County Wetland Permit Notification

The Permittees shall notify Otter Tail County when they obtain wetland permits, [if applicable](#), from the United States Army Corps of Engineers.

6.2 Landowner Notification of Archaeology Survey

The Permittees shall notify landowners of any archeological surveys conducted on their property to the extent the notification is permitted by law. The Permittees shall keep records of such notifications and provide them at the request of Commission staff.

6.3 Tree Replacement Plan

The Permittees shall, in coordination with impacted landowners and the Minnesota Department of Natural Resources DNR and Otter Tail County, develop a tree replacement plan to replace any trees that are removed for the construction of the Project by planting new seedling or sapling trees. ~~and~~ The Permittees shall file the plan with the Commission at least 14 days before the pre-construction meeting. At least 45 days prior to the preconstruction meeting the Permittees shall make a compliance filing including an estimate of costs for the tree replacement. Replacement trees may be planted on public or private lands with the permission of the landowner or public entity/owner. The Tree Replacement Plan may include an alternative proposal to fund tree replacements by and through DNR Forestry Programs or other similar public programs. Plantings shall be prioritized in Otter Tail County.

6.4 Tree Clearing

The Permittees shall not remove trees for the construction or operation of the project from June 1 through August 15. The Permittees shall coordinate with DNR and USFWS to determine if additional tree removal date restrictions are necessary to minimize impacts to state or federally protected species. Permittees shall file records of coordination with DNR and USFWS at least 14 days before the pre-construction meeting.

6.5 State Listed Species

Prior to the start of construction, the Permittees shall resubmit a Natural Heritage Review and continue to consult with the DNR regarding implementation of avoidance measures for state-protected threatened and endangered species. The Permittees will comply with applicable Minnesota Department of Natural Resources requirements related to state-listed endangered and threatened species in accordance with Minnesota's Endangered Species Statute (Minnesota Statutes, section 84.0895) and associated Rules (Minnesota Rules, parts 6212.1800 to 6212.2300 and 6134). The Permittees shall file records of coordination with the DNR at least 14 days before the pre-construction meeting.

7 DELAY IN CONSTRUCTION

If the Permittees have not commenced construction or improvement of the route within four years after the date of issuance of this route permit the Permittees shall file a Failure to Construct Report and the Commission shall consider suspension of this route permit in accordance with Minn. Stat. § 216I.24.

8 COMPLAINT PROCEDURES

At least 14 days prior to the pre-construction meeting, the Permittees shall file with the Commission the complaint procedures that will be used to receive and respond to complaints. The complaint procedures shall be in accordance with the requirements of Minn. R. 7829.1500 or Minn. R. 7829.1700, and as set forth in the complaint procedures attached to this route permit.

Upon request, the Permittees shall assist Commission staff with the disposition of unresolved or longstanding complaints. This assistance shall include, but is not limited to, the submittal of complaint correspondence and complaint resolution efforts.

9 COMPLIANCE REQUIREMENTS

Failure to timely and properly make compliance filings required by this route permit is a failure to comply with the conditions of this route permit. Compliance filings must be electronically filed with the Commission.

9.1 Pre-Construction Meeting

Prior to the start of construction, the Permittees shall participate in a pre-construction meeting with Commission staff to review pre-construction filing requirements, scheduling, and to coordinate monitoring of construction and site restoration activities. Within 14 days following the pre-construction meeting, the Permittees shall file with the Commission a summary of the topics reviewed and discussed and a list of attendees. The Permittees shall indicate in the filing the anticipated construction start date.

9.2 Plan and Profile

At least 14 days prior to the pre-construction meeting, the Permittees shall file with the Commission, and provide the counties where the Transmission Facility, or portion of the Transmission Facility, will be constructed with a plan and profile of the right-of-way and the specifications and drawings for right-of-way preparation, construction, structure specifications and locations, cleanup, and restoration for the Transmission Facility. The documentation shall include maps depicting the plan and profile including the right-of-way, alignment, and structures in relation to the route and alignment approved by this route permit.

The Permittees may not commence construction until the earlier of (i) 30 days after the pre-construction meeting or (ii) until the Commission staff has notified the Permittees in writing that it has completed its review of the documents and determined that the planned construction is consistent with this route permit.

If the Commission notifies the Permittees in writing within 30 days after the pre-construction meeting that it has completed its review of the documents and planned construction, and finds that the planned construction is not consistent with this route permit, the Permittees may submit additional and/or revised documentation and may not commence construction until the Commission has notified the Permittees in writing that it has determined that the planned construction is consistent with this route permit.

If the Permittees intend to make any significant changes in its plan and profile or the specifications and drawings after submission to the Commission, the Permittees shall notify the Commission and county staff at least five days before implementing the changes. No changes shall be made that would be in violation of any of the terms of this route permit.

9.3 Status Reports

The Permittees shall file with the Commission monthly Construction Status Reports beginning with the pre-construction meeting and until completion of restoration. Construction Status Reports shall describe construction activities and progress, activities undertaken in compliance with this route permit, and shall include text and photographs.

If the Permittees do not commence construction of the Transmission Facility within six months of this route permit issuance, the Permittees shall file with the Commission Pre-Construction Status Reports on the anticipated timing of construction every six months beginning with the issuance of this route permit until the pre-construction meeting. The Status Reports shall include information on the Project's Midcontinent Independent System Operator (MISO) interconnection process, if applicable.

9.4 Labor Statistic Reporting

The Permittees shall file quarterly Labor Statistic Reports with the Commission within 45 days of the end of the quarter regarding construction workers that participated in the construction of the Project. The Labor Statistic Reports shall:

- A. detail the Permittees' efforts and the site contractor's efforts to hire Minnesota workers; and
- B. provide an account of:
 - 1) the gross number of hours worked by or full-time equivalent workers who are Minnesota residents, as defined in Minn. Stat. § 290.01, subd. 7;

- 2) the gross number of hours worked by or full-time equivalent workers who are residents of other states, but maintain a permanent residence within 150 miles of the Project; and
- 3) the total gross hours worked or total full-time equivalent workers.

The Permittees shall work with their contractor(s) to determine the suitable reporting metric. The report may not include personally identifiable data.

9.5 Prevailing Wage

The Permittees, their contractors, and subcontractors shall (1) pay no less than the prevailing wage rate as defined in Minn. Stat. § 177.42; and (2) shall be subject to the requirements and enforcement provisions under Minn. Stat. §§ 177.27, 177.30, 177.32, 177.41 to 177.435, and 177.45. The Permittees shall keep records of contractor and subcontractor pay and provide them at the request of Commission staff.

9.6 In-Service Date

At least three days before the Transmission Facility is to be placed into service, the Permittees shall notify the Commission of the date on which the Transmission Facility will be placed into service and the date on which construction was completed.

9.7 As-Builts

Within 90 days after completion of construction, the Permittees shall submit to the Commission copies of all final as-built plans and specifications developed during the Transmission Facility construction.

9.8 GPS Data

Within 90 days after completion of construction, the Permittees shall submit to the Commission, in the format requested by the Commission, geo-spatial information (*e.g.*, ArcGIS compatible map files, GPS coordinates, associated database of characteristics) for all structures associated with the Transmission Facility and each substation connected.

9.9 Right of Entry

The Permittees shall allow Commission designated representatives to perform the following, upon reasonable notice, upon presentation of credentials and at all times in compliance with

the Permittees' site safety standards:

- A. To enter upon the facilities easement of the property for the purpose of obtaining information, examining records, and conducting surveys or investigations.
- B. To bring such equipment upon the facilities easement of the property as is necessary to conduct such surveys and investigations.
- C. To sample and monitor upon the facilities easement of the property.
- D. To examine and copy any documents pertaining to compliance with the conditions of this route permit.

10 ROUTE PERMIT AMENDMENT

The Commission has the authority to modify this route permit at any time. The Permittees may request an amendment of the conditions of this route permit by submitting a request to the Commission in writing describing the amendment sought and the reasons for the amendment. The Commission may amend the conditions after affording the Permittees and interested persons such process as is required under Minn. Stat. § 216I.09.

11 TRANSFER OF ROUTE PERMIT

The Permittees may request at any time that the Commission transfer this route permit to another person or entity (transferee). In their request, the Permittees must provide the Commission with:

- A. the name and description of the transferee;
- B. the reasons for the transfer;
- C. a description of the facilities affected; and
- D. the proposed effective date of the transfer.

The transferee must provide the Commission with a certification that it has read, understands and is able to comply with the plans and procedures filed for the Transmission Facility and all conditions of this route permit. The Commission may authorize transfer of the route permit after affording the Permittees, the transferee, and interested persons such process as is required under Minn. Stat. § 216I.13.

12 REVOCATION OR SUSPENSION OF ROUTE PERMIT

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The Commission may initiate action to revoke or suspend this route permit at any time. The Commission shall act in accordance with the requirements of Minn. Stat. § 216I.24, to revoke or suspend this route permit.

ATTACHMENT 1

Complaint Handling Procedures for Permitted Energy Facilities

**MINNESOTA PUBLIC UTILITIES COMMISSION
COMPLAINT HANDLING PROCEDURES FOR
PERMITTED ENERGY FACILITIES**

A. Purpose

To establish a uniform and timely method of reporting and resolving complaints received by the permittee concerning permit conditions for site or route preparation, construction, cleanup, restoration, operation, and maintenance.

B. Scope

This document describes complaint reporting procedures and frequency.

C. Applicability

The procedures shall be used for all complaints received by the permittee and all complaints received by the Minnesota Public Utilities Commission (Commission) under Minn. R. 7829.1500 or Minn. R. 7829.1700 relevant to this permit.

D. Definitions

Complaint: A verbal or written statement presented to the permittee by a person expressing dissatisfaction or concern regarding site or route preparation, cleanup or restoration, or other permit conditions. Complaints do not include requests, inquiries, questions or general comments.

Substantial Complaint: A written complaint alleging a violation of a specific permit condition that, if substantiated, could result in permit modification or suspension pursuant to the applicable regulations.

Unresolved Complaint: A complaint which, despite the good faith efforts of the permittee and a person, remains unresolved or unsatisfactorily resolved to one or both of the parties.

Person: An individual, partnership, joint venture, private or public corporation, association, firm, public service company, cooperative, political subdivision, municipal corporation, government agency, public utility district, or any other entity, public or private; however organized.

E. Complaint Documentation and Processing

1. The permittee shall designate a representative responsible for filing complaints to the Commission's eDocket system. This person's name, phone number and email address shall accompany all complaint submittals. The name and contact information for the representative shall be kept current in eDockets.
2. A person presenting the complaint should, to the extent possible, include the following information in their communications:
 - a. name, address, phone number, and email address;
 - b. initial date of the complaint;
 - c. tract, parcel number, or address of the complaint;
 - d. a summary of the complaint; and
 - e. whether the complaint relates to a permit violation, a construction practice issue, or other type of complaint.
3. The permittee shall document all complaints by maintaining a record of all applicable information concerning the complaint, including the following:
 - a. docket number and project name;
 - b. name of complainant, address, phone number and email address;
 - c. precise description of property or parcel number;
 - d. name of permittee representative receiving complaint and date of receipt;
 - e. nature of complaint and the applicable permit condition(s);
 - f. summary of activities undertaken to resolve the complaint; and
 - g. a statement on the final disposition of the complaint.

F. Reporting Requirements

The permittee shall commence complaint reporting at the beginning of project construction and continue through the term of the permit, unless otherwise required below. The permittee shall report all complaints to the Commission according to the following schedule:

Immediate Reports: All substantial complaints shall be reported to the Commission the same day received, or on the following working day for complaints received after working hours. Such reports are to be directed to the Commission's Consumer Affairs Office at 1-800-657-3782 (voice messages are acceptable) or consumer.puc@state.mn.us. For e-mail reporting, the email

subject line should read “PUC EIP Complaint” and include the appropriate project docket number.

Monthly Reports: During project construction, restoration, and operation, a summary of all complaints, including substantial complaints received or resolved during the preceding month, shall be filed by the 15th of each month to the eDockets system. The eDockets system is located at: <https://efiling.web.commerce.state.mn.us/>. If no complaints were received during the preceding month, the permittee shall file a summary indicating that no complaints were received.

If a project has submitted twelve consecutive months of complaint reports with no complaints, monthly reports can terminate by a letter to eDockets notifying the Commission of such action. If a substantial complaint is received (by the company or the Commission) following termination of the monthly complaint report, as noted above, the monthly reporting should commence for a period of six months following the most recent complaint or upon resolution of all pending complaints.

If a permittee is found to be in violation of this section, the Commission may reinstate monthly complaint reporting for the remaining permit term or enact some other commensurate requirement via notification by the Executive Secretary or some other action as decided by the Commission.

G. Complaints Received by the Commission

Complaints received directly by the Commission from aggrieved persons regarding the permit or issues related to site or route preparation, construction, cleanup, restoration, or operation and maintenance will be promptly sent to the permittee.

The permittee shall notify the Commission when the issue has been resolved. The permittee will add the complaint to the monthly reports of all complaints. If the permittee is unable to find resolution, the Commission will use the process outlined in the Unresolved Complaints Section to process the issue.

H. Commission Process for Unresolved Complaints

Complaints raising substantial and unresolved permit issues will be investigated by the Commission. Staff will notify the permittee and appropriate people if it determines that the complaint is a substantial complaint. With respect to such complaints, the permittee and

complainant shall be required to submit a written summary of the complaint and its current position on the issues to the Commission. Staff will set a deadline for comments. As necessary, the complaint will be presented to the Commission for consideration.

I. Permittee Contacts for Complaints and Complaint Reporting

Complaints may be filed by mail or email to the permittee's designated complaint representative, or to the Commission's Consumer Affairs Office at 1-800-657-3782 or consumer.puc@state.mn.us. The name and contact information for the permittee's designated complaint representative shall be kept current in the Commission's eDocket system.

ATTACHMENT 2

Compliance Filing Procedures for Permitted Energy Facilities

**MINNESOTA PUBLIC UTILITIES COMMISSION
COMPLIANCE FILING PROCEDURE FOR
PERMITTED ENERGY FACILITIES**

A. Purpose

To establish a uniform and timely method of submitting information required by Commission energy facility permits.

B. Scope and Applicability

This procedure encompasses all known compliance filings required by the permit.

C. Definitions

Compliance Filing: A filing of information to the Commission, where the information is required by a Commission site or route permit.

D. Responsibilities

1. The permittee shall file all compliance filings through the eDockets system. The eDockets system is located at: <https://efiling.web.commerce.state.mn.us/>

General instructions are provided on the eDockets website. Permittees must register on the website to file documents.

2. All filings must have a cover sheet that includes:

- a. Date
- b. Name of submitter/permittee
- c. Type of permit (site or route)
- d. Project location
- e. Project docket number
- f. Permit section under which the filing is made
- g. Short description of the filing

3. The Commission may request a paper copy or USB drive of filings that are graphic intensive (*e.g.*, maps and engineered drawings), in addition to being electronically filed. If requested, send a paper copy or USB drive to: Executive Secretary, Minnesota Public Utilities Commission, 121 7th Place East, Suite 350, St. Paul, MN 55101-2147.

PERMIT COMPLIANCE FILINGS¹

PERMITTEE: Great River Energy and Lake Region Electric Cooperative

PERMIT TYPE: HVTL Transmission Line

PROJECT LOCATION: Otter Tail County, Minnesota

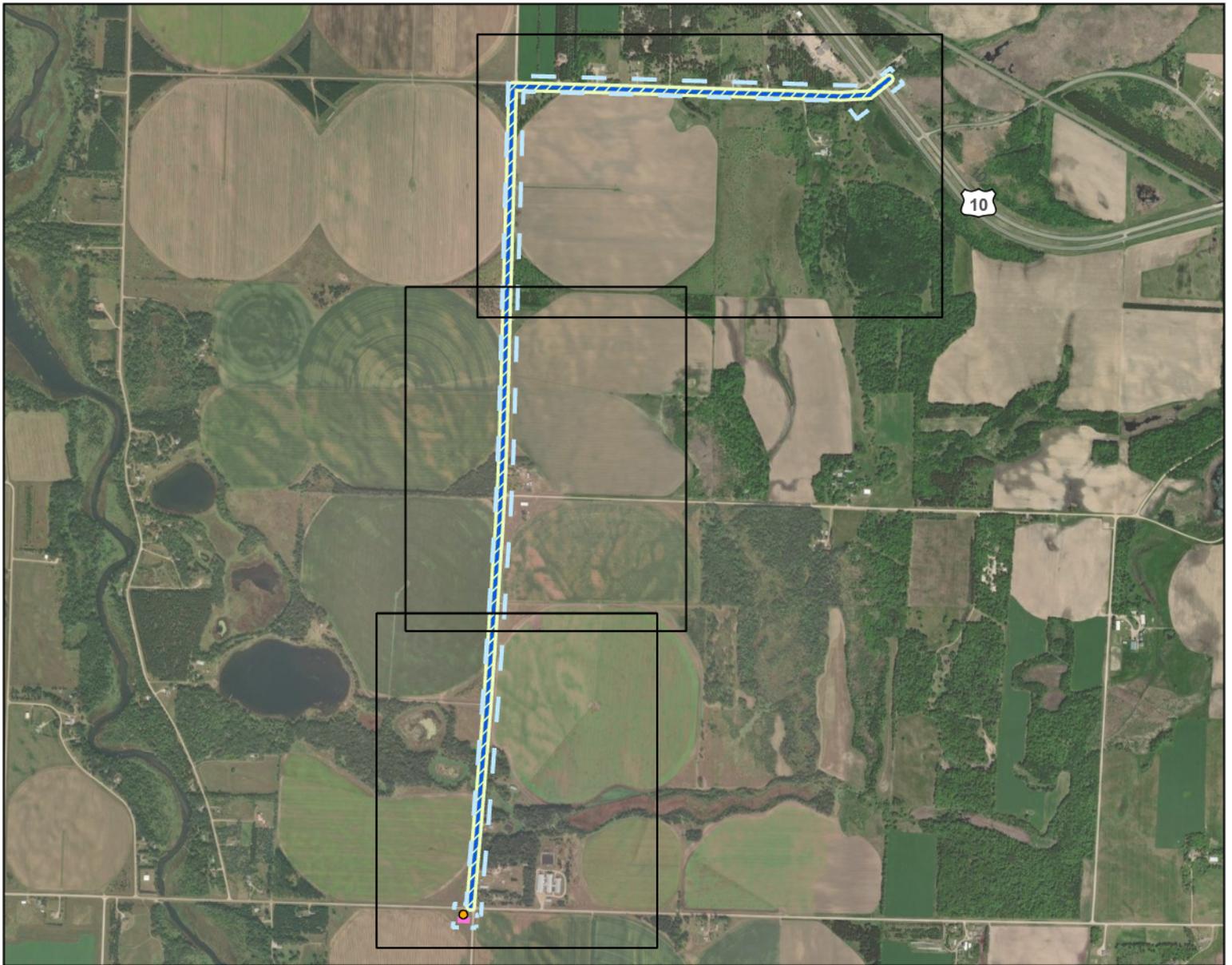
PUC DOCKET NUMBER: ET2/C-25-269

Filing Number	Permit Section	Description of Compliance Filing	Due Date
	5.1	Route Permit Distribution	Within 30 days of Permit Issuance
	5.3.1	Field Representative - Designee	14 days prior to the pre-construction meetings
	5.3.1	Field Representative – Affidavit Distribution	14 days prior to the pre-construction meeting
	5.3.3	Independent Third-Party Monitoring	14 days prior to commencing construction
	5.3.12	Invasive Species	14 days prior to the pre-construction meeting
	5.3.15	Archaeological and Historic Resources	14 days prior to the preconstruction meeting
	5.3.18	Restoration	Within 60 days of completion
	5.5.2	Other Permits and Regulations	14 days prior to the pre-construction meeting
	6.3	Tree Replacement Plan	45 days prior to the pre-construction meeting

¹ This compilation of permit compliance filings is provided for the convenience of the permittee and the Commission. It is not a substitute for the permit; the language of the permit controls.

Filing Number	Permit Section	Description of Compliance Filing	Due Date
	6.4	Tree Clearing	14 days prior to the pre-construction meeting
	6.5	State Listed Species	14 days prior to the pre-construction meeting
	7	Failure to Construct	As needed
	8	Compliant Procedures	14 days prior to the pre-construction meeting
	9.1	Pre-construction meeting	14 days following the pre-construction meeting
	9.2	Plan and Profile	14 days prior to the pre-construction meeting
	9.3	Status Reports	As needed
	9.4	Labor Statistic Reporting	Quarterly
	9.6	In-Service Date	Three days before the in-service
	9.7	As-Builts	90 days after completion
	9.8	GPS Data	90 days after completion

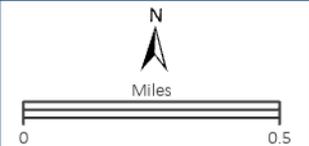
ATTACHMENT 3
Route Permit Maps



Otto Tap 115 kV Transmission Project | Cover Page



-  Route Width
-  Right of Way (ROW) 100 ft
-  Anticipated Alignment
-  Existing Otto Substation
-  New Otto Substation

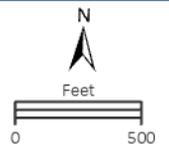




Otto Tap 115 kV Transmission Project | Page 1 of 3



-  Route Width
-  Right of Way (ROW) 100 ft
-  Anticipated Alignment
-  Existing Otto Substation
-  New Otto Substation

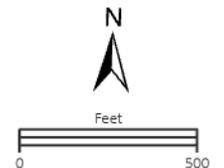




Otto Tap 115 kV Transmission Project | Page 2 of 3



-  Route Width
-  Right of Way (ROW) 100 ft
-  Anticipated Alignment
-  Existing Otto Substation
-  New Otto Substation





Otto Tap 115 kV Transmission Project | Page 3 of 3



-  Route Width
-  Right of Way (ROW) 100 ft
-  Anticipated Alignment
-  Existing Otto Substation
-  New Otto Substation

