Minnesota Public Utilities Commission

Staff Briefing Papers

Meeting Date: July 29, 2016 .....Agenda Item **4

Company: Great River Energy

Docket No. ET2/TL-15-423
In the Matter of the Application of Great River Energy for a Route Permit under the Alternative Permitting Process for the Palisade 115 kV Project near the city of Palisade, Minnesota

Issues: Should the Commission issue findings of fact and conclusions demonstrating that the alternative permitting process has been conducted in accordance with Minn. Stat. § 216E.04 and Minn. R. 7850.2800 to 7850.3900? Should the Commission find that the environmental assessment and the record created at the public hearing adequately address the issues identified in the scoping decision? Should the Commission grant a route permit for the Palisade 115 kV Transmission Line Project? Should the Commission require specific conditions if the route permit is granted?

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Relevant Documents

Great River Energy Application ..... August 25, 2015
Department of Commerce EERA EA Scoping Decision .....December 22, 2015
Department of Commerce EERA Additional Landowner Notification .....February 19, 2016
Department of Commerce EERA Alternate Route Landowner Notification .....February 23, 2016
Department of Commerce EERA Environmental Assessment Report (7 parts) .....April 21, 2016
Minnesota DNR Comments (3 parts) .....May 16, 2016
Great River Energy Proposed Findings of Fact .....May 24, 2016
Great River Energy Comments on the Draft Route Permit .....May 26, 2016
Administrative Law Judge Summary of Public Testimony .....June 17, 2016
Department of Commerce EERA Proposed Findings of Fact .....June 30, 2016

Attached Documents

Attachment A – Staff Proposed Changes to the Draft Route Permit
Attachment B – Proposed Findings of Fact, Conclusions of Law and Recommendations
Attachment C - Proposed High Voltage Transmission Line Route Permit

Statement of the Issues

Should the Commission issue findings of fact and conclusions demonstrating that the alternative permitting process has been conducted in accordance with Minn. Stat. § 216E.04 and Minn. R. 7850.2800 to 7850.3900? Should the Commission find that the environmental assessment and the record created at the public hearing adequately address the issues identified in the scoping decision? Should the Commission grant a route permit for the Palisade 115 kV Transmission Line Project? Should the Commission require specific conditions if the route permit is granted?

Procedural History

On August 25, 2015, Great River Energy submitted an application for a route permit for the Palisade Project under the alternative permitting process.

On October 19, 2015, the Commission issued its Order Finding Application Complete, Granting Variance, and Referring Application to the Office of Administrative Hearings.

On October 27, 2015, the Commission and Department of Commerce Energy Environmental Review and Analysis staff (EERA or Department) held a Public Information and Environmental Assessment Scoping Meeting at the Waukenabo Town Hall near Palisade, Minnesota.

On December 22, 2015, EERA issued its Environmental Assessment Scoping Decision.

On April 21, 2016, the Department filed the Environmental Assessment for the project.

On May 5, 2016, Administrative Law Judge Jim Mortenson of the Office of Administrative Hearings (OAH) held a public hearing in the Waukenabo Town Hall near Palisade, Minnesota.

On May 16, 2016, the Minnesota Department of Natural Resources (DNR) submitted comments regarding the project.

On May 24, 2016, Great River Energy filed its Proposed Findings of Fact and Conclusions of Law.

On May 26, 2016, Great River Energy filed its Comments on the Draft Route Permit.

On June 17, 2016, the Office of Administrative Hearing filed its Summary of Public Testimony.

On June 30, 2016, EERA submitted its comments and recommendations.

Project Overview

Great River Energy proposed construction of approximately 13 miles of new 115 kV transmission line and a new 115 kV breaker station to be located in Aitkin County, northeast of the city of Aitkin. Great River Energy states that the project is needed to provide electrical service for the proposed Palisade Pump Station.[1] Great River Energy anticipates starting construction and energizing the line in 2018.

Great River Energy proposed that the new 115 kV transmission line run between Enbridge's proposed Palisade Pump Station, east of U.S. Highway 169 and south of 510th Lane, and a new Rice River Breaker Station, west of U.S. Highway 169 and south of 390th Street. The Project would connect to the existing Minnesota Power Cromwell to Riverton 115 kV transmission line. Great River Energy's proposed route parallels U.S. Highway 169 for the majority of the route. In its route permit application, Great River Energy proposed two route options for crossing the Mississippi River (the East Crossing Option and the West Crossing Option).

Statutes and Rules

Under Minn. Stat. § 216B.243, subd. 8(2), a certificate of need is not required for construction of a high-voltage transmission line proposed to serve the demand of a single customer at a single location.

[1] The oil pumping station is part of Enbridge, LLP's Line 3 Pipeline Replacement Project which is currently under review by the Commission. The Certificate of Need for the Line 3 Project is Commission Docket Number CN-14-916 and the Route Permit is Commission Docket Number PPL-15-137. Separately, GRE has also applied for a route permit under the alternative routing process to construct of a transmission line to serve the proposed Backus pump station as part of the Line 3 project (the Bull Moose 115 kV Project, Commission Docket #ET2/TL-15-628). Both the Palisade Project and the Bull Moose Project are identified as connected actions in the Draft Scope of the Environmental Impact Statement for the Line 3 Project.

Under Minn. Stat. § 216E.03, subd. 1, "No person may construct a high-voltage transmission line without a route permit from the commission. A high-voltage transmission line may be constructed only along a route approved by the commission."

Minn. Stat. § 216E.01, subd. 4, defines a high-voltage transmission line (HVTL) as "…a conductor of electric energy and associated facilities designed for and capable of operation at a nominal voltage of 100 kilovolts or more and is greater than 1,500 feet in length."

The proposed project qualifies for alternative review under Minn. Stat. § 216E.03 because it is capable of operating between 100 kV and 200 kV but less than five miles in length. The procedures for route permit applications filed under the alternative process are described in Minnesota Rules, parts 7850.2800 -7850.3900.

The proposed project is subject to Minn. Stat. § 216E.02, Subd. 1, which requires that HVTLs lines be routed consistent with state policy and in a manner that "minimizes adverse human and environmental impact while insuring continuing electric power system reliability and integrity and insuring that electric energy needs are met and fulfilled in an orderly and timely fashion." The statute also grants the Commission the authority to specify the design, routing, right-of-way preparation, and facility construction it deems necessary, along with any other appropriate conditions when issuing a permit for a high-voltage transmission line.

Minn. Stat. § 216E.04, subd. 5 requires the commissioner of the Department of Commerce to prepare an environmental assessment on proposed high-voltage transmission lines. The environmental assessment must contain information on the potential human and environmental impacts of a proposed project and of alternative sites or routes considered and must address mitigation measures for identified impacts.

Environmental Assessment

On December 22, 2015, the Department filed the environmental assessment (EA) scoping decision for the project. The EA scoping decision identified potential human and environmental resource impacts to be addressed in the EA. In addition to the two route options for crossing the Mississippi River identified in the application, EERA included the "Chute Gardens Alternative Route Segment" proposed by Great River Energy, and the "Pipeline Alternative Route Segment" proposed by a member of the public at the October 27, 2015 Public Information and Scoping Meeting.

On April 21, 2016 the Department filed the environmental assessment on the proposed project. For ease of comparison, the environmental assessment categorized the Proposed Route and Route

Alternatives into nine route segments and six route alternatives. The environmental assessment contained a comprehensive description of the proposed project; a discussion of potential impacts of the project on the human and natural environment; reasonable mitigation measures that could be implemented to minimize any identified adverse impacts. The environmental assessment also identified potential permits and approvals that may be required from Federal, State, Local and other agencies.

Public Hearing and Comments

On April 22, 2016, the Commission and EERA jointly issued a Notice of Public Hearing. Administrative Law Judge James Mortenson with the Office of Administrative Hearings presided over the public hearing conducted on May 5, 2016 at the Waukenabo Town Hall in Palisade, Minnesota.

The hearing included a brief presentation to describe the proposed project; an explanation of the process to be followed; introduction of documents to be included in the record; and an opportunity for any person to present comments and to ask questions of the applicant, the Department, and Commission staff. A court reporter was present to transcribe the public hearing. Nine members of the public offered comments at the public hearing. Following the public hearing, a comment period for submission of written comments into the record was open until May 16, 2016.

Great River Energy

On May 26, 2016, Great River Energy filed its Proposed Findings of Fact and Conclusions of Law. GRE recommended that the Commission find that the applicant has satisfied the factors set forth in Minnesota Statutes Section 216E.03 and Minnesota Rules Chapter 7850 for a Route Permit for the Palisade project. GRE indicated that the Project will not be constructed unless and until the Line 3 Replacement Project receives applicable approvals from the Commission.[2]

On May 27, 2016, Great River Energy filed comments on the draft route permit. GRE requested several changes to the draft permit as described in Attachment A.

Minnesota Department of Natural Resources

In their November 10, 2015 comments, the DNR requested that a cumulative impacts analysis of the project and related projects (Enbridge Sandpiper and Line 3 Replacement Projects) be included

[2] Great River Energy's *Proposed Findings of Fact, Conclusions of Law and Recommendations*, Finding #37, at page 6, May 24, 2016.

in the environmental assessment. The DNR also identified several potential mitigation measures for inclusion in the environmental assessment.

On May 16, 2016, the DNR filed comments on the project. The DNR recommended a route permit condition requiring GRE to coordinate with the DNR regarding avian mitigation and vegetation management details once a route for the Project is selected. The DNR also recommended a permit condition requiring the use of wildlife-friendly erosion control in certain areas. The DNR also recommended the use of bird diverters and border zone/wire zone vegetation management practices.

The DNR asserted that the east option, crossing the Mississippi River adjacent to U.S. Highway 169, would have the least impact on natural resources overall because it follows existing infrastructure. The DNR indicated that the existing pipeline ROW on the northern part of the Project would involve more forest and wetland impacts than establishing the Project along U.S. Highway 169.

Administrative Law Judge Report

On June 17, 2016, Administrative Law Judge James Mortenson filed a Summary of Public Testimony. The report summarized nine oral comments received at the public hearing and five written comments received during the comment period.

EERA Comments and Recommendations

On June 30, 2016, EERA filed comments and recommendations on the route permit decision. The filing included recommended edits to several of GRE's proposed findings.

EERA staff agreed with GRE and the DNR that the proposed route with the East River Crossing Options (Route A) best satisfied the requirements of in Minnesota Statutes and Rules. In reaching its recommendation, EERA noted that this alternative minimizes aesthetic impacts, consolidates crossings of the Mississippi River, minimizes impacts to wetlands and minimizes establishment of new rights-of-ways by maximizing the paralleling of existing roadways.

EERA staff had no comments on GRE's proposed modifications to the draft route permit and supported GRE's proposed special permit conditions. EERA recommended including one additional permit condition requiring consultation with the DNR regarding Vegetation Management programs.

Staff Discussion

Notices

It should be noted that the notices for the EA Scoping and Public Hearing specified the incorrect house number for the meeting and hearing. Staff does not believe that this is an egregious error and has not received any complaints or inquiries on the matter.[3] Additionally, the facility of the meeting and hearing is locally well-known and located in a rural area along a paved road.

Findings of Fact, Conclusions of Law and Recommendations

EERA reviewed GRE's Proposed Findings of Fact, Conclusions of Law and Recommendations and recommended several proposed modifications. GRE indicated to the Commission that EERA's changes were acceptable, but wanted to clarify the wording of Finding 52 related to the construction cost estimate. EERA indicated that the clarification to Finding #52 was helpful.[4]

Separately, staff has reviewed both versions of the Proposed Findings of Fact and Conclusions of Law and is in general agreement with the contents as modified by subsequent discussion between EERA and GRE. Staff recommends that Conclusion #8 be stricken because the record does not indicate that any public notice was issued on the question of feasible and prudent alternatives. Additionally, the question was not included in the Environmental Assessment Scoping Decision and the environmental assessment. A proposed Findings of Fact, Conclusions of Law and Recommendations including staff's changes is included for the Commission's consideration as Attachment B.

Environmental Review

Staff agrees with the EERA recommendation for selection of the applicant's proposed route with the East River Crossing Options (Route A) as identified in the enclosed final Proposed Route Permit. Regarding permit conditions, staff has reviewed the applicant's requested changes and incorporated its recommended changes to the Draft Route Permit as Attachment A. The final proposed Route Permit incorporates these changes.

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[3] Minnesota Rule 7850.2100, Subpart 6 states: "The failure of the applicant to give the requisite notice does not invalidate any ongoing permit proceedings provided the applicant has made a bona fide attempt to comply, although the commission may extend the time for the public to participate if the failure has interfered with the public's right to be informed about the project."

[4] Email Correspondence between S. Steinhauer (EERA) and C. Schmidt (GRE), June 30 – July 1, 2016.

Staff notes that a filing in the Bull Moose 115 kV Project Docket has raised questions related to whether the Commission can approve the Bull Moose Project (which is identified as a connected action in relation to the Line 3 Project) unless and until the Environmental Impact Statement for the Line 3 Project is complete and deemed adequate.[5] The filing also expressed concerns that proceeding with the project would create the perception of bias to the public and that the Commission intends not to do anything other than approve the proposed Line 3 Project.

Staff reiterates that the issue of connected actions has not been brought before the Commission in this docket. It should also be noted that the Environmental Assessment for this project considers the Cumulative Potential Effects of GRE's Palisade project, with the Line 3 and Sandpiper Pipeline Projects.[6] However, that analysis is based on the environmental impact information currently available for the Line 3 and Sandpiper projects, which may be augmented by the EISs being developed for those projects. In light of this, the Commission should consider whether it is prudent to delay the route permit decision for this docket until after the consideration of any additional information that may be contained in the Line 3 and Sandpiper EISs on the cumulative potential impacts of the Palisade project with those projects.

In addition, as noted above, the exemption of this project from the certificate of need requirements is predicated upon the Palisad3e project primarily serving the demand of a single customer at the Line 3 pump station. Staff notes that the applicant has acknowledged that the project will not be built if the Line 3 Project is not approved to be located in the area. Because of this, the Commission should consider whether to defer its route permit determination until the route of the Line 3 Project is approved.

In the event the Commission is inclined to issue a route permit for the project at this time, staff believes that, at a minimum, the route permit should incorporate a condition requiring that physical construction may begin only after the Commission grants a certificate of need and issues a route permit for the Line 3 Project.

Summary

Commission staff has reviewed the record including Great River Energy's route permit application, the environmental assessment, Proposed Findings of Fact, Conclusions of Law and Recommendations, public comments, agency comments and the Summary of Public Testimony from the administrative law judge. Staff concludes that the environmental assessment addresses

[5] See Minnesota Center for Environmental Advocacy *Letter*, E-dockets Filings # **20166-122590-01**, June 24, 2016.
[6] *Palisade 115 kV Project Environmental Assessment*, Section 5.9- Cumulative Effects, pages 82-93, E-dockets Filing # **20164-120389-01**.

the issues identified in the scoping decision and that the record developed satisfies the requisite criteria in Minnesota Law to approve the route permit.

Staff notes, however, that a Commission decision to delay taking a final action on the route permit until the EIS for Line 3 is complete and the Commission has granted a certificate of need and route permit for that project would likely allay concerns related to whether the Commission has a complete environmental review of the Palisade and Line 3 projects as connected actions, and whether granting the route permit pre-judges the outcome of the Line 3 project proceedings. The Commission should consider whether having a permit condition requiring approvals of the Line 3 Projects prior to the construction of the Palisade project would also substantially allay those concerns.

If the Commission wishes to delay its decision on the matter at this time, it should not adopt the Proposed Findings of Fact, Conclusions of Law and Recommendations or final Proposed Route Permit at this time, or otherwise modify the document accordingly.

Commission Decision Alternatives

A. Findings of Fact

1. Issue findings of fact and conclusions demonstrating that the alternative permitting process has been conducted in accordance with Minn. Stat. § 216E.04 and Minn. R. 7850.2800 to 7850.3900.

2. Modify and issue findings of fact and conclusions to indicate that the Commission decision will not be effective until decisions are made in the Line 3 dockets.

3. Decline to issue findings of fact and conclusions at this time and direct staff to bring the matter before the Commission once approval decisions are made in the Line 3 dockets.

4. Take some other action deemed appropriate.

B. Environmental Assessment

1. Find that the environmental assessment and the record created at the public hearing adequately address the issues identified in the scoping decision.

2. Determine that the environmental assessment and the record created at the public hearing do not adequately address the issues identified in the scoping decision and direct that any deficiencies are corrected.

3. Decline to reach a decision as to whether the environmental assessment and the record created at the public hearing do not adequately address the issues identified in the scoping decision and direct staff to bring the matter before the Commission once approval decisions are made in the Line 3 dockets.

4. Take some other action deemed appropriate.

C. Transmission Line Route Permit

1. Grant a route permit to Great River Energy for the Palisade High Voltage Transmission Line Project identifying a specific route and permit conditions for the Project incorporating staff's recommended modifications.

2. Decline to grant a route permit to Great River Energy for the Palisade High Voltage Transmission Line Project until after approval decisions are made in the Line 3 dockets.

3. Take some other action deemed appropriate.

D. Specific Route Permit Conditions

1. Delay approval of the route permit and direct staff to ask the Commission to consider issuance only after a certificate of need is granted and a route permit issued for the Line 3 Project.

2. Determine that physical construction of the Project cannot begin until after the Commission grants a certificate of need and issues a route permit for the Line 3 Project (incorporated in the Proposed Route Permit as Section 6.1).

3. Take some other action deemed appropriate.

Staff Recommendation: Either: A.1, A.2, B.1, C.1 and D.2, or: A.3, B.3, C.2, and D.1.

Staff Proposed Changes to the Palisade HVTL Draft Route Permit

Attachment A

Permit Reference	Sponsor	Proposed Language	Incorporated by Staff	Reason for Accepting or Rejecting Change
Section 1.1	Staff	Pursuant to Minn. Stat. § 216E.10, this route permit shall be the sole **route** approval required to be obtained by the Permittee for construction of the transmission facilities and this permit shall supersede and preempt all zoning, building, or land use rules, regulations, or ordinances promulgated by regional, county, local and special purpose government.	Yes	The change results in language that more closely aligns with the relevant statute.
Section 5.2	GRE	**Section 5.2.** The Permittee shall notify landowners or their designee at least 14 days in advance but not greater than 60 days in advance of ~~entering the property~~ conducting construction activities on the property related to the Project.	Yes	Proposed change avoids ambiguity and clarifies that landowner notification is required before construction activities commence.
Section 5.3	Staff	The Permittee shall follow those specific construction practices and material specifications described in Great River Energy's Application **and representations** to the Commission for a route permit for the Palisade 115 kV Project dated August 25, 2015, unless this permit establishes a different requirement in which case this permit shall prevail.	Yes	The modifications provides more specificity in relation to the Commission's functions.
Section 5.3.1	Staff	The Permittee 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 commencing construction. The Permittee shall provide the field representative's contact information to affected landowners, residents, local government units and other interested persons **at least 14 days** prior to construction. The Permittee may change the field representative at any time upon notice to the Commission, affected landowners, residents, local government units and other interested persons	Yes	The modification provides additional specificity.

Section 5.3.8	GRE	The Permittee shall use wildlife-friendly erosion control near water crossings, Minnesota Biological Survey Sites of Biodiversity Significance, and areas with rare species susceptible to entanglement in erosion control mesh.	Yes	Staff agrees with the addition to Section 5.3.8 to ensure proper erosion control.
Section 5.3.15	GRE	**Section 5.3.15.** ~~The Permittee shall evaluate mitigate measures in areas of the project where the chance of avian collision or electrocution is higher. Areas shall be identified by the Permittee in cooperation with the Minnesota Department of Natural Resources 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 to eliminate the risk of electrocution to raptors with larger wingspans that may simultaneously come in contact with a conductor and grounding devices.~~ The Permittee's standard transmission design shall **incorporate power line design included as Chapter 6 of the Avian Power Line Interaction Committee 2006 State of the Art Report** ~~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 Permittee will consult with the Minnesota Department of Natural Resources (DNR) regarding type and placement of bird diverters.	Yes, as modified by staff	Applicant proposed this change to avoid ambiguity and promote consistency. Staff notes that APLIC is not a standards organization but supports clarifying this section and has modified the proposal to incorporate a specific reference for the design.
Section 5.3.19	GRE	**Section 5.3.19.** The Permittee shall fairly restore or compensate landowners for damage to crops, fences, private roads and lanes.	Not necessary	Restoration is addressed in Section 5.3.16. Restoration as a form of compensation if acceptable to the landowner.
Section 6.1	Staff	**6.1 Commencement of Construction** **Physical construction at the project site may not begin until a certificate of need is granted and a route permit approved for the Line 3 Project (Commission Dockets Numbers CN-14-916 and PPL-15-137).**	Yes	The proposed change is appropriate to ensure that the project will be used and useful.
Section 6.2	GRE	**6.2. Northern Long-Eared Bat**	Yes	Staff agrees with the proposed change to ensure

		The Permittee shall coordinate with the United Fish and Wildlife Service regarding mitigation of potential impacts to the **Northern Long-Eared Bat** ~~NLEB~~.		coordination with the USFWS on an emerging issue.
Section 6..3	GRE, EERA	**6.3.** Vegetation Management Plan The Permittee shall consult with the DNR to develop a vegetation management plan for the Project. The plan must incorporate DNR's recommendations including management of vegetation within the right-of-way to maintain low-growing plants on the border of the right-of-way (wire zone / border zone management) and maintaining natural vegetation buffers at all water crossings. The Vegetation Management Plan shall also include a right-of-way management approach, invasive species control and prevention measures, shoreland vegetation management, and herbicide used.	Yes, as modified	This requirement is necessary to address route clearing and maintenance procedures during construction and operation because of stream and river crossings, as well as forested and wetland areas.
Section 9.4	GRE	Within ~~60~~ ~~180~~ **90** days after completion of construction, the Permittee shall submit copies of all final as-built plans and specifications developed during the Project.	Yes, as modified by staff	GRE requested a 180 day timeframe. Recent permits have incorporated a 90-day time period.
Section 9.5	GRE	Within ~~60~~ ~~180~~ **90** days after completion of construction, the Permittee 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 line and each substation connected.	Yes, as modified by staff	GRE requested a 180 day timeframe. Recent permits have incorporated a 90-day time period.

Proposed text to be added is indicated in blue underlined text.

Proposed deletion of text (including proposed language) is indicated in ~~red stricken text~~.

In addition, Staff's recommended additions are included in **green bold underlined text**.

Non-substantive irregularities in numbering caused by Commission decisions may require editing by Commission staff.

STATE OF MINNESOTA
PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION OF GREAT RIVER ENERGY FOR A ROUTE PERMIT FOR A 115 kV TRANSMISSION PROJECT NEAR PALISADE, MINNESOTA IN AITKIN COUNTY	PUC Docket No. ET2/TL-15-423 OAH Docket No. 5-2500-32920 PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW

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STATE OF MINNESOTA
PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION OF GREAT RIVER ENERGY FOR A ROUTE PERMIT FOR A 115 KV TRANSMISSION PROJECT NEAR PALISADE, MINNESOTA IN AITKIN COUNTY	PUC DOCKET NO. ET2/TL-15-423 OAH DOCKET NO. 5-2500-32920 PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW

A public hearing was held before Administrative Law Judge ("ALJ") James Mortenson on May 5, 2016 at the Waukenabo Town Hall near Palisade, Minnesota.

Dan Lesher, Senior Field Representative; Carole Schmidt, Supervisor, Transmission Permitting and Compliance; Chuck Lukkarila, Project Manager; Kyle Gustofson, Engineer; and Jenny Guardia, Communications Coordinator appeared on behalf of Great River Energy, 12300 Elm Creek Boulevard, Maple Grove, MN 55369 ("Applicant"). Lisa Agrimonti, Fredrikson and Byron, P.A., also appeared on behalf of Applicant.

Suzanne Steinhauer, Environmental Review Manager, 445 Minnesota Street, Suite 1500, St. Paul, MN 55101 appeared on behalf of the Department of Commerce, Energy Environmental Review and Analysis ("EERA").

Mike Kaluzniak, Minnesota Public Utilities Commission ("Commission") Staff, 121 Seventh Place East, Suite 350, St. Paul, MN 55101 appeared on behalf of the Commission.

STATEMENT OF ISSUE

Has the Applicant satisfied the factors set forth in Minnesota Statutes Section 216E.03 and Minnesota Rules Chapter 7850 for a Route Permit for a 115 kilovolt ("kV") transmission project near Palisade, Minnesota in Aitkin County (the "Project")?

SUMMARY

The Commission concludes that the Applicant has satisfied the criteria set forth in Minnesota law for a Route Permit and therefore GRANTS the Applicant a Route Permit.

Based on information in the Application, the Environmental Assessment ("EA"), the testimony at the public hearing, written comments, and exhibits received in this proceeding, the Commission makes the following:

FINDINGS OF FACT

I. APPLICANT

1. Great River Energy is a not-for-profit generation and transmission cooperative based in Maple Grove, Minnesota. Great River Energy provides electrical energy and related services to 28 member cooperatives, including Mille Lacs Energy Cooperative, the distribution cooperative serving the area to be served by the proposed Project. Great River Energy's distribution cooperatives, in turn, supply electricity and related services to more than 650,000 residential, commercial, and industrial customers in Minnesota and Wisconsin.[1]

II. PROCEDURAL HISTORY

2. On May 4, 2015, Applicant filed with the Commission a Notice of Intent to Submit a Route Permit Application under the Alternative Permitting Process for the Project.[2]

3. On August 25, 2015, Applicant submitted an Application for a Route Permit ("Application") for the Project.[3] The Application included a Proposed Route with two variations, the East Option and the West Option, to provide for alternative crossings of the Mississippi River.[4]

4. On August 27, 2015, the Commission issued a Notice of Comment Period on Application Completeness.[5]

5. On September 3, 2015, Applicant provided notice of the Application to the General List, persons who own land on or adjacent to the proposed route, local officials, and agencies.[6]

6. On September 14, 2015, EERA filed its comments and recommendations regarding the completeness of the Application and recommended the Application be found complete.[7]

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[1] Ex. 3 at 1-1 (Application).

[2] Ex. 1 (Notice of Intent to Submit Route Permit Application).

[3] Ex. 3 (Application).

[4] Ex. 3 at 4-1 (Application).

[5] Notice of Comment Period on Application Completeness (Aug. 27, 2015), eDockets Document No. 20158-113561-01.

[6] Ex. 4 (Notice of Route Permit Application).

[7] Ex. 100 (EERA Comments and Recommendations to Commission on Route Permit Application Completeness).

7. On September 18, 2015, the Commission issued a Notice of Meeting on Application Completeness for October 1, 2015.[8]

8. On October 1, 2015, the Commission met and found the Application complete.[9]

9. On October 2, 2015, Applicant filed affidavits of mailing and affidavits of publication for the Notice of Application, as required under Minnesota Statutes Sections 216E.03, Subdivision 4 and 216E.04, Subdivision 4; and Minnesota Rule 7850.2100, Subpart 4.[10]

10. On October 7, 2015, the Commission and EERA issued a Notice of Public Information and EA Scoping Meeting.[11] This notice was also published in the *Aitkin Independent Age* on October 14, 2015, as required under Minnesota Statutes Sections 216E.03, Subdivision 4 and 216E.04, Subdivision 4; and Minnesota Rule 7850.2100, Subpart 2.[12]

11. On October 19, 2015, the Commission issued its Order Accepting the Application as Complete.[13]

12. On October 27, 2015, the Commission and EERA held a Public Information and EA Scoping Meeting at the Waukenabo Town Hall in Palisade, Minnesota, at 6:00 p.m.[14] At the hearing, landowners expressed concern over the Project crossing their properties, a township supervisor inquired about the Project's impact on property tax base, and the possibility of following the anticipated pipeline right-of-way ("ROW") for a portion of the Project's route was discussed. A comment period remained open until November 10, 2016.

13. On November 10, 2015, the Minnesota Department of Transportation ("MnDOT") filed a comment. [15]

14. On November 10, 2015, the Minnesota Department of Natural Resources ("DNR") filed scoping comments.[16]

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[8] Notice of Commission Meeting (Sept. 18, 2015), eDockets Document No. 20159-114106-03.

[9] Order Finding Application Complete, Granting Variance, and Referring Application to the Office of Administrative Hearings (Oct. 19, 2015), eDockets Document No. 201510-114930-01.

[10] Ex. 5 (Confirmation of Notice of Route Application).

[11] Notice of Public Information and EA Scoping Meeting (Oct. 7, 2015), eDockets Document No. 201510-114655-01.

[12] Ex. 7 (Newspaper Affidavits for Information and Scoping Meeting).

[13] Order Finding Application Complete, Granting Variance, and Referring Application to the Office of Administrative Hearings (Oct. 19, 2015), eDockets Document No. 201510-114930-01.

[14] Notice of Public Information and EA Scoping Meeting (Oct. 7, 2015), eDockets Document No. 201510-114655-01.

[15] MnDOT Comments (Nov. 10, 2015), eDockets Document No. 201511-115606-01.

[16] Ex. 101 at 2-3 (Written Comments on Scope of EA).

15. On November 10, 2015, Applicant also filed comments submitting an additional route option for inclusion in the EA. Applicant stated that the additional route option, known as the Chute Gardens Route Option, offered a third alternative for crossing the Mississippi River, and that Applicant had discussed the route option with the landowner impacted by the additional route option and would work with EERA to identify an alignment that is agreeable to the landowner.[17]

16. On November 10, 2015, the scoping comment period ended.[18]

17. On November 19, 2015, EERA issued comments and recommendations on the EA Scoping Process and Alternative Routes to the Commission.[19] EERA recommended that two alternatives (Chute Gardens Alternative Route Segment and Pipeline Alternative Route Segment) be included in the EA.

18. On November 25, 2015, Applicant filed the newspaper affidavit of publication for the October 27, 2015 Information and EA Scoping Meeting.[20]

19. On December 4, 2015, the Commission issued a Notice of Commission Meeting (December 17, 2015) noting that it would consider what action it should take in regard to route alternatives to be evaluated in the EA.[21]

20. On December 17, 2015, the Commission met to consider what action to take regarding route alternatives to be evaluated in the EA.[22] The Commission elected to take no action on the route alternatives EERA proposed to recommend to the Deputy Commissioner in its November 19, 2015, scoping summary to the Commission.[23]

21. On December 22, 2015, the Department of Commerce issued its EA Scoping Decision.[24]

22. On December 23, 2015, the Department of Commerce issued notice of its EA Scoping Decision.[25]

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[17] Ex. 6 (Scoping Comment – Additional Route Option).

[18] Notice of Public Information and EA Scoping Meeting (Oct. 7, 2015), eDockets Document No. 201510-114655-01.

[19] Ex. 103 at 5 (Comments and Recommendations to Commission on Scoping Process and Route Alternatives).

[20] Ex. 7 (Newspaper Affidavits for Information and Scoping Meeting).

[21] Notice of Commission Meeting (Dec. 4, 2015), eDockets Document No. 201512-116183-02.

[22] Notice of Commission Meeting (Dec. 4, 2015), eDockets Document No. 201512-116183-02.

[23] Ex. 104 at 5 (EA Scoping Decision)

[24] Ex. 104 (EA Scoping Decision).

[25] Ex. 105 (Notice of EA Scoping Decision).

23. On January 14, 2016, the Commission issued a generic route permit template.[26]

24. On January 14, 2016, EERA filed its Letter to Landowners along Alternative Routes.[27] On February 19, 2016, EERA filed its New Landowner Letter.[28]

25. On February 23, 2016, EERA filed a Notification to Landowners of Additional Routes under Consideration.[29]

26. On April 19, 2016, the Commission issued a Draft Route Permit for the Project.[30]

27. On April 21, 2016, EERA issued the EA for the Project, its Notice of Availability of the EA, and filed the certificate of service for mailing of the EA to public agencies.[31]

28. On April 22, 2016, the Commission issued the Notice of Public Hearing to be held May 5, 2016, at the Waukenabo Town Hall in Palisade, Minnesota, at 6:00 p.m.[32] The Notice further provided that the Commission would accept public comments on the Project through May 16, 2016, at 4:30 p.m.

29. On May 2, 2016, EERA filed the certificate of service for mailing of the EA to public agencies.[33] On the same day, EERA filed its Notice of Availability of EA in the *EQB Monitor*.[34]

30. On May 5, 2016, the ALJ held a Public Hearing at the Waukenabo Town Hall near Palisade, Minnesota at 6:00 p.m.[35]

31. On May 6, 2016, Applicant filed the affidavit of publication of the Notice of Public Hearing, confirming that notice for the May 5, 2016 public hearing was published in the *Aitkin Independent Age* on April 27, 2016.[36]

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[26] Generic Route Permit Template (Jan. 14, 2016), eDockets Document No. 20161-117275-01.

[27] EERA Letter to Landowners Along Alternative Routes (Jan. 14, 2016), eDockets Document No. 20161-117268-01.

[28] New Landowner Letter (Feb. 19, 2016), eDockets Document No. 20162-118481-02.

[29] Ex. 106 (Letters Notifying Landowners of Additional Routes Under Consideration).

[30] Draft Route Permit (Apr. 19, 2016), eDockets Document No. 20164-120256-01.

[31] Exs. 107 (EA), 108 (Notice of Availability of EA), and Certificate of Service for Mailing of EA to Public Agencies (May 2, 2016), eDockets Document No. 20165-120915-01.

[32] Notice of Public Hearing (Apr. 22, 2016), eDockets Document No. 20164-120509-01.

[33] Ex. 109 (Distribution of EA to Agencies and Library).

[34] Ex. 110 (Notice in *EQB Monitor* of Availability of EA).

[35] Notice of Public Hearing (Apr. 22, 2016), eDockets Document No. 20164-120509-01.

[36] Affidavit of Publication for Notice of Public Meeting (May 6, 2016), eDockets Document No. 20165-121140-01.

32. On May 16, 2016, the public hearing comment period ended.[37] During the public hearing comment period, comments were received from two state agencies (DNR and Minnesota Pollution Control Agency ("MPCA"), as well as several members of the public. These comments are summarized in Section XIII below.

III. DESCRIPTION OF THE PROJECT

33. The Project includes construction of a new breaker station and approximately 13 miles of new overhead 115 kV transmission line in Aitkin County, Minnesota (the "Project") to serve the proposed Enbridge Pipeline, Limited Partnership ("Enbridge") Palisade Pump Station.[38]

34. Applicant proposed to use single-pole wood structures with horizontal post insulators for most of the transmission line. H-frame, laminated wood poles, or steel poles may be required in some locations (to cross over a river, to cross under an existing line, for angles poles, or in areas where soil conditions are poor and guying is not practical). Typical pole heights will range from 60 to 90 feet above ground and spans between poles will range from 275 to 450 feet.[39]

35. Applicant requested approval of a 400-foot route width for the transmission line (200 feet either side of the transmission line) and wider route widths in some areas where alignment options are limited due to the proximity of homes and other features. Route widths are discussed in greater detail in Section VIII.[40]

36. Applicant proposed a ROW of 100 feet in width for the Project.[41]

IV. NEED OVERVIEW

37. The Project will provide electrical service to the proposed new Enbridge Palisade distribution substation, which will in turn serve Enbridge's proposed Palisade Pump Station, which is part of Enbridge's Line 3 Pipeline Replacement Project.[42] The Project will not be constructed unless and until the Line 3 Replacement Project receives applicable approvals from the Commission.[43] The Line 3 Replacement Project is currently pending before the Commission in docket numbers CN-14-916 and PPL-15-137.

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[37] Notice of Public Hearing (Apr. 22, 2016), eDockets Document No. 20164-120509-01; Certificate of Service and Service Lists (Apr. 22, 2016), eDockets Document No. 20164-120509-02.

[38] Ex. 107, at 2 (EA).

[39] Ex. 107, at 4 (EA).

[40] Ex. 107, at 4 (EA).

[41] Ex. 107, at 4 (EA).

[42] Ex. 107, at 2 (EA).

[43] Ex. 107 at 26 (EA).

V. ROUTES EVALUATED

A. Route/Route Options Proposed by Applicant

38. Applicant evaluated the Project area and determined that identifying route options were constrained by the location of the proposed Enbridge pump station, the ability to connect to existing infrastructure, the geographical area of the proposed Project, and engineering constraints associated with getting proper clearances around existing infrastructure.[44]

39. The Application included two route options, the East Option and the West Option. The East Option would begin at the proposed Rice River Breaker Station just west of U.S. Highway 169 and south of 390th Street. From there the East Option would follow U.S. Highway 169 north for approximately 13 miles, crossing the Mississippi River adjacent to U.S. Highway 169 and terminating at the proposed pump station location on the east side of the highway and south of 510th Lane. The West Option provides an alternative to the East Option's U.S. Highway 169 Mississippi River crossing. The West Option would follow the highway from the proposed Rice River Breaker Station for approximately four miles to 430th Street where the West Option would turn west. The West Option would continue for approximately one-half mile to the termination of 430th Street. From there the West Option would follow a property line northwest across the Mississippi River to County Road 21. The West Option would follow County Road 21 for approximately 1.2 miles back to U.S. Highway 169 and then follow the highway north to the pump station.[45]

40. Using either route option, Applicant's proposed route is approximately 13 miles long and is located in Aitkin County near the town of Palisade in Spencer, Morrison, and Waukenabo townships (the "Proposed Route").[46]

41. Applicant identified and analyzed several interconnection alternatives that were rejected for various reasons.[47] The existing Minnesota Power "13 Line" is the only viable regional interconnection point to provide the source of energy for the Project, and U.S. Highway 169 provides the only existing utility or road ROW between the "13 Line" and the proposed Palisade Pump Station.[48]

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[44] *E.g.*, Ex. 3 at 5-1 to 5-4 (Application).

[45] Ex. 3, at 4-1 (Application).

[46] Ex. 3, at 1-1, 7-1 (Application). Except where otherwise specified herein, the "Proposed Route" refers to the route, including the East and West Options, included in the Application.

[47] Ex. 3, at 5-4 (Application).

[48] Ex. 3, at 5-4 (Application).

B. Route Segments Proposed Through Public Participation.

42. The Scoping Decision identified two additional alternative route segments to be evaluated in the EA:

43. The "Chute Gardens Alternative Route Segment" was proposed by Applicant. The "Chute Gardens Alternative Route Segment" would turn west from US Highway 169 in the vicinity of 445th Lane and head west for approximately one-quarter of a mile before crossing the Mississippi River. On the west side of the Mississippi, this alternative would follow the Great River Road northeast for approximately 0.75 miles before re-connecting with US Highway 169.[49]

44. The "Pipeline Alternative Route Segment" was proposed at the October 27, 2015 public meeting and would turn east from the Proposed Route and follow Aitkin County Highway 3 for approximately one-quarter mile before following Enbridge's proposed Line 3 route north for approximately three miles to the proposed Palisade Pump Station location. [50]

C. Route Descriptions

45. The Proposed Route (including the East Option and West Option), the Chute Gardens Alternative Route Segment, and the Pipeline Alternative Route Segment were evaluated in the EA.[51] For ease of comparison, the EA categorized the Proposed Route and Route Alternatives into nine route segments and six route alternatives.[52] The EA's description of these alternatives is included below for ease of reference. In addition, the EA's map depicting the Route Alternatives is attached hereto as Exhibit A. For purposes of clarity, the EA refers to the Proposed Route + East Option as "Route A," the Proposed Route + West Option as "Route B.," and the Proposed Route + "Chute Gardens Alternative Route Segment" as "Route C."

- **Route A**: Follows US Highway 169 between proposed Rice River Breaker Station, turning east along 510th Lane to the proposed Palisade Pump Station. This route is approximately 13 miles in length and combines route segments A, B, C, D, and E. Alternative alignments on either side of US Highway 169 (along route segment C) are evaluated.
- **Route B**: Follows US Highway 169 north from the proposed Rice River Breaker Station turning west on 430th Street, crossing the Mississippi River and then proceeding northeast along Great River Road/CSAH 21 to US

[49] Ex. 104, at 8 (EA Scoping Decision).

[50] Ex. 104, at 8 (EA Scoping Decision).

[51] Ex. 107, at 27-31 and Appendix E (EA).

[52] Ex. 107, at 29-30 (EA).

Highway 169, turning east along 510th Lane to the proposed Palisade Pump Station. This route is approximately 13.8 miles in length and combines route segments A, F, G, D, and E.

- **Route C**: Follows US Highway 169 north from the proposed Rice River Breaker Station, turning west along the south side of 435th Lane, then cross- country across the river to Great River Road/CSAH 21 back to US Highway 169, turning east along 510th Lane to the proposed Palisade Pump Station. This route is approximately 13.4 miles in length and combines route segments A, B, H, G, D, and E.
- **Route A/Pipeline Alternative**: Follows US Highway 169 north from the proposed Rice River Breaker Station, turning east along CSAH 3 and then north cross-country along Enbridge's proposed route to Palisade Pump Station. This route is approximately 13.1 miles in length and combines route segments A, B, C, D, and I.
- **Route B/Pipeline Alternative**: Follows US Highway 169 north from the proposed Rice River Breaker Station turning west on 430th Street, crossing the Mississippi River and then proceeding northeast along Great River Road/CSAH 21 to US Highway 169, turning east along CSAH 3 and then north cross-country along Enbridge's proposed route to Palisade Pump Station. This route is approximately 13.9 miles in length and combines route segments A, F, G, D, and I.
- **Route C/Pipeline Alternative**: Follows US Highway 169 north from the proposed Rice River Breaker Station, turning west along the south side of 435th Lane, then cross-country across the river to Great River Road/CSAH 21 back to US Highway 169, turning east along CSAH 3 and then north cross-country along Enbridge's proposed route to Palisade Pump Station. This route is approximately 13.5 miles in length and combines route segments A, B, H, G, D, and I.

VI. TRANSMISSION LINE STRUCTURE TYPES AND SPANS

46. Applicant proposes to use overhead construction with wood structures. Applicant proposes to primarily use single pole structures. Wood poles would be directly embedded and may require guying at certain locations including but not limited to, angle locations.[53]

47. H-Frame structures may be used in areas where longer spans are required to avoid or minimize impacts to wetlands or waterways.[54]

[53] Ex. 3, at 4-4 (Application); Ex. 107, at 19-20 (EA).

[54] Ex. 3, at 4-4 (Application); Ex. 107, at 19-20 (EA).

VII. TRANSMISSION LINE CONDUCTORS

48. The single circuit structures will have three single conductor phase wires and one shield wire. It is anticipated that the phase wires will be 477 ACSR, with seven steel core strands and 26 outer aluminum strands. The shield wire will be 0.528 optical ground wire.[55]

VIII. TRANSMISSION LINE ROUTE WIDTHS

49. Applicant is requesting approval of a 400-foot route width for the transmission line and wider route widths in the following areas:[56]

- **Palisade Pump Station:** A route width of approximately 825 feet in the area around Enbridge's proposed Palisade Pump Station. Detailed information on the specific location and design of the proposed pump station is not available at this point, and a greater route width in this area would provide design flexibility to accommodate the final location and design of the proposed pump station.
- **U.S. Highway 169 Mississippi River Crossing**: A variable route width in this area to address design challenges related to existing residential structures and uncertainty related to MnDOT permitting requirements. Applicant identified a route width that tapers from 850 feet beginning at 435th Lane to 650 feet at the junction of US Highway 169 and Great River Road/CR 21.
- **Alternative River Crossing (West Option)**: A route width of approximately 700 feet to provide for the flexibility to have an alignment on either side of the buildings located on the property.
- **Rice River Breaker Station**: A route width of approximately 1,200 feet to provide flexibility to modify the transmission alignment to match the final breaker station location and layout.

IX. TRANSMISSION LINE RIGHT-OF-WAY

50. Applicant requested to use its standard ROW for 115 kV transmission lines of 100 feet (50 feet on either side of the transmission line centerline) for the majority of the Project's route. Select locations may require a slightly wider ROW to accommodate transmission line guy wires and anchors. In certain areas where clearance is very limited by existing infrastructure (e.g. existing buildings), transmission ROW may be reduced to 35 feet on one or both sides of the centerline.

[55] Ex. 3, at 4-7 (Application).

[56] Ex. 3, at 1-3, 4-1 to 4-3 (Application).

X. PROJECT SCHEDULE

51. At the time the Application was filed, Applicant anticipated beginning route clearing in late 2016 or early 2017 and commencing construction of the Project in second quarter 2017, provided that Applicant had obtained a Route Permit by early 2016 and Enbridge had also secured applicable permits.[58] However, the timing of construction of the Project is dependent upon the timing of a Commission decision on the Line 3 Replacement Project. Commencement of construction of the Project would not commence before a Commission order issuing a route permit for the Line 3 Project including a Palisade Pump Station. If the Palisade Pump Station is permitted as part of the Line 3 Project, Applicant plans to schedule construction of the Project to be concurrent with Enbridge's construction of the proposed Palisade Pump Station.[59]

XI. PROJECT COSTS

52. Total Project costs are estimated to be approximately $13 million, depending on final route selection and mitigation.[60]

XII. PERMITTEE

53. The permittee for the Project is Great River Energy.[61]

XIII. PUBLIC AND LOCAL GOVERNMENT PARTICIPATION

A. Public Comments

54. Approximately 30 members of the public attended the public information and scoping meeting in Palisade and five people asked questions and provided comments about the Project. Public comments addressed the proposed location of the transmission line, ROW width and location, tax treatment of the Project, economic impacts to landowners from the Project, and health impacts from the Project. Participants at the meeting suggested investigating an alternative alignment that would move the Mississippi River crossing to the east side of US 169. One commenter suggested that an alternative routing option along the proposed Enbridge pipeline route be evaluated in the northern portion of the route.[62]

55. Approximately 20 members of the public attended the public hearing in Palisade and 10 people spoke on the record. Public comments included: a preference to stay on US Highway 169 for the Mississippi River crossing (2); a preference for the Chute Gardens

[58] *See* Ex. 3, at 4-9 (Application).

[59] *See* Ex. 107, at 26 (EA).

[60] Ex. 3, at 1-3 (Application).

[61] Ex. 3, at 1-1 (Application).

[62] Ex. 104, at 4 (EA Scoping Decision).

alternative to cross the Mississippi River (2); a preference to stay on US Highway 169 on the north end of the Project rather than follow the Pipeline Alternative Segment (2); a preference to follow the Pipeline Alternative Segment rather than US Highway 169 (1); a suggestion that the pump station be moved further south (1); a preference to not have the line along the Great River Road (1); and a question on whether land under the line can be farmed (1).[63]

56. Several members of the public submitted written comments during the public hearing comment period. In general, commenters expressed a preference for following existing ROWs. In addition, one commenter expressed concerns about the impacts of the West Option on future plans for his property.[64]

B. Local Government and State Agency Participation

57. During the EA scoping comment period, EERA received written comments from two state agencies (MnDOT and DNR).

58. MnDOT stated that its approach is to work to accommodate high voltage transmission lines within or as near as feasible to trunk highway ROW and referred to its utility accommodation policy. MnDOT noted that both the East and West Route Options for the Project would follow US Highway 169 for a majority of their length and that an Application for Utility Accommodation on Trunk Highway Right of Way for the Project will need to be reviewed on a pole-by-pole basis. In addition, MnDOT indicated it had discussed with the Applicant issues relating to interchanges and separated grade crossings, conductor movement envelope, and vegetation management.[65]

59. The DNR indicated that a cumulative impacts analysis of the Project and related projects (Enbridge Sandpiper and Line 3 Replacement projects) should be included in the EA. The DNR also said the EA should include the topic of avian mitigation measures, and asked that bird diverters be placed on the line at certain locations. DNR suggested that the EA include a discussion of using seasonal (winter) construction and maintenance activities as a mitigation measure for impacts to wetland, forest and rare species, as well as a discussion related to proposed maintenance methods (including a discussion of the wire zone/border zone method) and vegetation management at public water crossings.[66]

60. During the public hearing and subsequent comment period, written comments were received from two state agencies: MPCA and DNR.[67] MPCA filed a letter stating that it

[63] *E.g.*, Transcript of May 5, 2016 Public Hearing at 26 (May 17, 2016), eDockets Document No. 20165-121435-01.

[64] Public Comment (May 17, 2016), eDockets Document No. 20165-121430-01.

[65] MnDOT Comments (Nov. 10, 2015), eDockets Document No. 201511-115606-01.

[66] DNR Comments (Nov. 10, 2015), eDockets Document No. 201511-115613-01.

[67] *See* DNR Comments (May 16, 2016), eDockets Document Nos. 20165-121393-01 through -03; MPCA Letter (May 16, 2016), eDockets Document No. 20165-12364-01.

had no comments on the Project at that time. DNR recommended the use of bird diverters and border zone/wire zone vegetation management practices, as well as permit conditions requiring the Applicant to coordinate with DNR regarding avian mitigation and vegetation management. DNR further recommended a permit condition requiring the use of wildlife-friendly erosion control in or near wetlands, water crossings, Sites of Biodiversity Significance, and areas with rare species susceptible to entanglement. Overall, DNR indicated that Route A most effectively reduced natural resource impacts.

61. In addition, Applicant received comments from the following agencies, as detailed below:

- On August 17, 2015, the MnDOT Office of Aeronautics notified Applicant it had no issues with the proposed Palisade 115 kV transmission line.

- On May 28, 2015, the Minnesota Historical Society State Historic Preservation Office ("SHPO") recommended that a Phase 1 archeological survey be completed, but that it would reconsider the need for a survey if the Project area were previously surveyed or disturbed. After Applicant provided additional Project information, on July 15, 2015, SHPO concluded that there are no properties listed in the National or State Registers of Historic Places, and no known or suspected archaeological properties in the area that will be affected by the Project.

- On August 13, 2015, the United States Fish and Wildlife Service ("USFWS") noted that there is one known northern long-eared bat ("NLEB") roost tree within 0.25 mile of the Project area, but indicated that if tree removal associated with the Project is small and no clearing is done between April and September, then a no effect determination may be possible. The action could also result in a "may affect, but not likely to adversely affect" determination.[68]

- On August 7, 2015, the DNR noted that the following rare features may be adversely affected by the proposed Project: two Sites of Biodiversity Significance adjacent to the Project (in particular a Sedge Meadow, uncommon but not rare in Minnesota); rare birds in the vicinity of the Project (timing of construction and use of bird diverters should be considered); the NLEB; the creek heelsplitter and black sandshell (state-listed mussels of special concern) in the Mississippi River in the vicinity of the proposed overhead crossing (recommended effective erosion and sediment control practices be used).[69]

- On August 24, 2015, the United States Army Corps of Engineers ("USACE") provided general information on its regulatory program/Project permitting but

[68] Ex. 3, at Appendix E (Application).

[69] Ex. 3 at Appendix E (Application).

indicated it will not review or comment on the Project until there is a specific request before it. [70]

FACTORS FOR A ROUTE PERMIT

62. The Power Plant Siting Act ("PPSA"), Minnesota Statutes Chapter 216E, requires that route permit determinations "be guided by the state's goals to conserve resources, minimize environmental impacts, minimize human settlement and other land use conflicts, and ensure the state's electric energy security through efficient, cost-effective power supply and electric transmission infrastructure."[71]

63. Under the PPSA, the Commission must be guided by the following responsibilities, procedures, and considerations:

> (1) evaluation of research and investigations relating to the effects on land, water and air resources of large electric power generating plants and high-voltage transmission lines and the effects of water and air discharges and electric and magnetic fields resulting from such facilities on public health and welfare, vegetation, animals, materials and aesthetic values, including baseline studies, predictive modeling, and evaluation of new or improved methods for minimizing adverse impacts of water and air discharges and other matters pertaining to the effects of power plants on the water and air environment;
>
> (2) environmental evaluation of sites and routes proposed for future development and expansion and their relationship to the land, water, air and human resources of the state;
>
> (3) evaluation of the effects of new electric power generation and transmission technologies and systems related to power plants designed to minimize adverse environmental effects;
>
> (4) evaluation of the potential for beneficial uses of waste energy from proposed large electric power generating plants;[72]
>
> (5) analysis of the direct and indirect economic impact of proposed sites and routes including, but not limited to, productive agricultural land lost or impaired;

[70] Ex. 3 at Appendix E (Application).

[71] Minn. Stat. § 216E.03, Subd. 7.

[72] Factor 4 is not applicable because Applicant is not proposing to site a large electric generating plant.

(6) evaluation of adverse direct and indirect environmental effects that cannot be avoided should the proposed site and route be accepted;

(7) evaluation of alternatives to the applicant's proposed site or route proposed pursuant to subdivision 1 and 2;

(8) evaluation of potential routes that would use or parallel existing railroad and highway rights-of-way;

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

(10) evaluation of future needs for additional high-voltage transmission lines in the same general area as any proposed route, and the advisability of ordering the construction of structures capable of expansion in transmission capacity through multiple circuiting or design modifications;

(11) evaluation of irreversible and irretrievable commitments of resources should the proposed site or route be approved; and

(12) when appropriate, consideration of problems raised by other state and federal agencies and local entities.[73]

64. In addition, Minnesota Statutes Section 216E.03, Subdivision 7(e), provides that the Commission "must make specific findings that it has considered locating a route for a high-voltage transmission line on an existing high-voltage transmission route and the use of parallel existing highway ROW and, to the extent those are not used for the route, the [C]ommission must state the reasons."

65. In addition to the PPSA, the Commission is governed by Minnesota Rule 7850.4100, which mandates consideration of the following factors when determining whether to issue a route permit for a high voltage transmission line:

A. effects on human settlement, including, but not limited to, displacement, noise, aesthetics, cultural values, recreation, and public services;

B. effects on public health and safety;

C. effects on land-based economies, including, but not limited to, agriculture, forestry, tourism, and mining;

[73] Minn. Stat. § 216E.03, Subd. 7.

D. effects on archaeological and historic resources;

E. effects on the natural environment, including effects on air and water quality resources and flora and fauna;

F. effects on rare and unique natural resources;

G. application of design options that maximize energy efficiencies, mitigate adverse environmental effects, and could accommodate expansion of transmission or generating capacity;

H. use or paralleling of existing rights-of-way, survey lines, natural division lines, and agricultural field boundaries;

I. use of existing large electric power generating plant sites;[74]

J. use of existing transportation, pipeline, and electrical transmission systems or rights-of-way;

K. electrical system reliability;

L. costs of constructing, operating, and maintaining the facility which are dependent on design and route;

M. adverse human and natural environmental effects which cannot be avoided; and

N. irreversible and irretrievable commitments of resources.[75]

66. There is sufficient evidence on the record for the Commission to assess the Proposed Route and Route Alternatives using the criteria and factors set forth above.

APPLICATION OF STATUTORY AND RULE FACTORS

I. APPLICATION OF ROUTING FACTORS TO THE PROPOSED ROUTE AND ROUTE ALTERNATIVES

A. Effects on Human Settlement

67. Minnesota law requires consideration of the Project's effect on human settlement, including displacement of residences and businesses; noise created during

[74] This factor is not applicable because it applies only to power plant siting.

[75] Minn. R. 7850.4100.

construction and by operation of the Project; and impacts to aesthetics, cultural values, recreation, and public services.[76]

68. Land use along the Project is a mixture of rural residential development, forested land, agriculture, rivers, streams, lakes, and open space. All route alternatives follow US Highway 169 for a majority of their length and cross the Mississippi River, either at an established crossing or by establishing a new crossing.[77]

1. Displacement

69. There is one home and one additional structure within the anticipated ROW.[78]

70. Applicant has stated that it will employ engineering modifications or a reduction in easement to avoid residential or commercial displacement as a result of the Project.[79]

2. Noise

71. MPCA has established standards for the regulation of noise levels.[80]

72. The most restrictive MPCA noise limits are 60-65 A-weighted decibels ("dBA") during the daytime and 50-55 dBA during the nighttime.[81]

73. Noise concerns for the Project may be associated with construction and operation of the transmission line.[82]

74. Transmission lines produce noise under certain conditions. The level of noise depends on conductor conditions, voltage level, and weather conditions. Generally, activity-related noise levels during the operation and maintenance of transmission lines are minimal and do not exceed the MPCA Noise Limits outside the ROW.[83]

[76] *See* Minn. Stat. § 216E.03, Subd. 7(b); Minn. R. 7850.4100(A).

[77] Ex. 107, at 37 (EA).

[78] Ex. 107, at 38-40 (EA).

[79] Ex. 20, at 40 (EA).

[80] Ex. 107, at 44-45 (EA).

[81] Ex. 107, at 457 (EA).

[82] Ex. 107, at 45-46(EA).

[83] Ex. 107, at 46 (EA).

75. Opening and closing the breakers at the Rice River Breaker Station will generate noise. The opening and closing occurs very infrequently during line maintenance or in the event of an accident that would trip the breakers to ensure the safety of the line.[84]

76. The audible noise levels for the Proposed Route are not predicted to exceed the MPCA Noise Limits.[85]

77. Similar noise levels (below the MPCA Noise Limits) are anticipated for all alternatives evaluated in the EA.[86]

3. Aesthetics

78. All routes evaluated follow existing roadway for the majority of their length, thereby placing new infrastructure where there is already existing linear infrastructure.[87] Aesthetic impacts are anticipated to be incremental.[88]

79. Route Alternatives B and C would each introduce a new river crossing in a previously undisturbed area.[89]

80. Depending on the route, there are between 15 and 20 homes within 200 feet of the anticipated alignment.[90]

Table 1: Home Distances

Structure Type	Distance (feet)	Structure County by Route Alternative[91]					
		Route A	Route B	Route C	Route A/ Pipeline	Route B/ Pipeline	Route C/ Pipeline
Homes	0 - 50	1	1	1	1	1	1
	50 - 100	3 (2)	2	2	2 (1)	1	1
	100 - 200	15 (16)	17	16	12 (13)	14	13

[84] Ex. 107, at 46 (EA).

[85] Ex. 107, at 46 (EA).

[86] Ex. 107, at 88 (EA).

[87] Ex. 107, at 37-38 (EA).

[88] Ex. 107, at 38 (EA).

[89] Ex. 107, at 66 (EA).

[90] Ex. 107, at 38 (EA). Table 6. In cases where the structure counts differ between alignments on the east and west side of US Highway 169, counts on the east side of US Highway 169 are presented in parentheses.

[91] In cases where the structures counts differ between alignments on the east and west side of US Highway 169, counts on the east side of US Highway 169 are presented in parentheses.

	>200, within Route[92]	12	8	9	10	6	7
Other Structures	0 - 50	1	1	1	1	1	1
	50 - 100	0	3	1	0	3	1
	100 - 200	14	14	17	9	8	12
	>200, within Route	17	14	16	11	8	10

81. Applicant has indicated it will work with landowners to best locate structures and minimize damage to vegetation and natural landscapes.[93]

82. Aesthetic impacts due to the proposed transmission line are minimized by paralleling existing road ROW for the majority of the route.[94]

4. Cultural Values

83. The region surrounding the Proposed Project derives from a diverse ethnic heritage. A majority of the reported ethnic backgrounds are of German, Norwegian, Swedish, and Irish origin.[95]

84. No impacts are anticipated to cultural values as a result of construction of any of the routes evaluated in the EA.[96]

5. Recreation

85. There are a number of existing recreational resources within the Project vicinity, including state forests, trails, rivers, and lakes. Popular activities include camping, fishing, hunting, bird watching, canoeing, kayaking, boating, swimming, biking, hiking, cross country skiing, and riding ATVs and snowmobiles.[97]

86. The Project would follow US Highway 169 through the Aitkin Wildlife Management Area ("WMA") and along a portion of the Waukenabo State Forest. The Project would also cross the Aitkin Sno-Drifters and Palisade snowmobile trails either along US Highway 169 or the Pipeline Route Alternative. The Project is not within one mile of any state parks,

[92] Category used to account for structures within requested route in areas where the requested route width is greater than 400 feet.

[93] Ex. 107, at 38-39 (EA).

[94] Ex. 107, at 38-39 (EA).

[95] Ex. 107, at 39 (EA).

[96] Ex. 107, at 39 (EA).

[97] Ex. 107, at 65 (EA).

state trails, Aquatic Management Areas, Scientific and Natural Areas, federal or county parks, or federal forests or refuges. No impacts to local recreational activities due to the Proposed Route or Route Alternatives are anticipated.[98]

87. Applicant will coordinate with the DNR, USFWS, and other resource agencies to minimize impacts from utility line construction on the surrounding natural resources. Where the route crosses through the WMA, it will parallel U.S. Highway 169 and will follow a distribution line (that will be carried on the new line or buried), minimizing impacts to undisturbed areas of the WMA. Locating the transmission line parallel to the highway will also minimize future impacts associated with maintaining the transmission line because the highway offers close access for maintenance vehicles and inspections.[99]

88. Route alternative A would cross the Mississippi River parallel to the existing US Highway 169 Bridge, but along new right-of-way. Route alternatives B and C would each introduce a new river crossing in a previously undisturbed area and follow along a portion of rural road that is used recreationally by vehicles and bicyclist following the Great River Road. Alternatives B or C may alter the visual experience for recreational users of the Mississippi River or of the segment of the Great River Road along County Road 21.[100]

89. Impacts to tourism and recreational opportunities from the Project are anticipated to be minimal to moderate depending on the route selected.[101]

6. Public Services and Infrastructure

90. Temporary impacts to public services resulting from the Project are anticipated to be minimal. Long-term impacts to public services are not anticipated.[102]

91. No impacts to water utilities are anticipated as a result of the Project.[103]

92. The electrical transmission system in the Project area will change as a result of the Project, but no adverse impacts to electrical service are anticipated.[104]

93. No impacts to natural gas service are anticipated as a result of the Project.[105]

[98] Ex. 107, at 65-66 (EA).

[99] Ex. 3, at 7-11 (Application).

[100] Ex. 107, at 66 (EA)

[101] Ex. 107, at 66 (EA).

[102] Ex. 107, at 56-60 (EA).

[103] Ex. 107, at 60 (EA).

[104] Ex. 107, at 60 (EA).

[105] Ex. 107, at 60 (EA).

94. No impacts to emergency services are anticipated due to the Project.[106]

95. Impacts to roads and highways due to the Project construction are anticipated to be minimal and temporary. Applicant has indicated that it will work with roadway authorities to minimize obstructions and inconvenience to the public and that construction equipment will be moved in a manner to minimize safety risks and avoid traffic congestion. Where the Project crosses roadways, Applicant will use temporary guard structures to ensure that the Project does not interfere with traffic. No impacts to roads and highways are anticipated after Project construction.[107]

96. No impacts to airports are anticipated as a result of the Project.[108]

97. Effects on public services and infrastructure from either the Proposed Route or Route Alternatives are expected to be minimal.[109]

B. Effects on Public Health and Safety

98. Minnesota high voltage transmission line routing factors require consideration of the Project's potential effect on health and safety.[110]

1. Construction and Operation of Facilities

99.The Project will be designed in compliance with local, state, National Electric Safety Code ("NESC"), and Applicant's standards regarding clearance to ground, clearance to crossing utilities, clearance to buildings, strength of materials, and ROW widths.[111]

100. Applicant's construction crews and/or contract crews will comply with local, state, NESC, and Applicant's standards regarding installation of facilities and standard construction practices. Applicant's and industry safety procedures will be followed during and after installation of the transmission line. This will include clear signage during all construction activities.[112]

101. The Project would be equipped with protected devices to safeguard the public if an accident occurs and a structure or conductor falls to the ground. The new Enbridge Palisade Substation will be equipped with breakers and relays located where the transmission

[106] Ex. 107, at 57 (EA).

[107] Ex. 107, at 58-69 (EA).

[108] Ex. 107, at 56-57 (EA).

[109] Ex. 107, at 56-60, 89-90 (EA).

[110] Minn. Stat. § 216E.03, Subd. 7(b)(1); Minn. R. 7850.4100(B).

[111] Ex. 3, at 7-2 (Application).

[112] Ex. 3, at 7-2 (Application).

line will connect to the substation. This protective equipment is designed to de-energize the transmission line should such an event occur.[113]

2. Electric and Magnetic Fields

102. There are no federal standards for transmission line electric fields.[114]

103. The Commission has imposed a maximum electric field limit of 8 kV/m measured at one meter above the ground at the edge of the ROW.[115]

104. The calculated electric fields for the Project are less than the maximum limit of 8 kV/m prescribed by the Commission.[116]

105. There are no federal or state regulations for the permitted strength of magnetic fields from transmission lines.[117]

106. Research has not been able to establish a cause and effect relationship between exposure to magnetic fields and adverse health effects.[118]

107. The potential impacts of EMF on human health were at issue in the Route Permit proceeding for the Brookings County to Hampton 345 kV transmission line. In that proceeding, ALJ Luis found that: "The absence of any demonstrated impact by EMF-ELF exposure supports the conclusion that there is no demonstrated impact on human health and safety that is not adequately addressed by the existing State standards for such exposure. The record shows that the current exposure standard for EMF-ELF is adequately protective of human health and safety."[119]

108. Similarly, in the Route Permit proceeding for the St. Cloud-Fargo 345 kV transmission line, ALJ Heydinger found: "Over the past 30 years, many epidemiological studies have been conducted to determine if there is a correlation between childhood leukemia and proximity to electrical structures. Some studies have shown that there is an association and some have not. Although the epidemiological studies have been refined and increased in size,

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[113] Ex. 3, at 7-2 (Application).

[114] Ex. 107, at 51 (EA).

[115] Ex. 107, at 52 (EA).

[116] Ex. 107, at 52 (EA).

[117] Ex. 107, at 52 (EA).

[118] Ex. 107, at 53 (EA).

[119] *See In re Route Permit Application by Great River Energy and Xcel Energy for a 345 kV Transmission Line from Brookings County, South Dakota to Hampton, Minnesota,* Docket No. ET-2/TL-08-1474, ALJ's Findings of Fact and Conclusions of Law at 44 ¶ 216 (Apr. 22, 2010), eDockets Document No. 20104-49478-01, *adopted as amended*, Commission Order at 8 (Sept. 14, 2010), eDockets Document No. 20109-54429-01.

the studies do not show a stronger related effect. In addition, a great deal of experimental, laboratory research has been conducted to determine causality, and none has been found."[120]

109. There is no indication that any significant impact on human health and safety will arise from the Project.[121]

C. Effects on Land-Based Economies and Direct and Indirect Economic Impacts

110. Minnesota's high voltage transmission line routing factors require consideration of the Project's impacts to land-based economies, specifically agriculture, forestry, tourism, and mining.[122]

111. Impacts to land-based economies due to the Project are anticipated to be minimal to moderate, depending upon the route selected. Impacts to agriculture are anticipated to be minimal. Impacts for forested lands/forestry may be moderate. No impacts to mining or gravel pits are anticipated along any of the routes evaluated in the EA.[123]

1. Agriculture

112. Agriculture is a land-based economic resource along the Proposed Route. Agricultural lands in the Project area are predominantly pasture and hay, with some areas of cultivated crops. Crops grown in the area include hay crops and silage, corn, soybeans, wheat, and apples. Farms in the area raise a variety of livestock including beef and dairy cattle and poultry.[124]

113. Impacts to agricultural operations as a result of the Project are anticipated to be minimal. Agricultural areas along the Project are predominantly along the southern portion of the route alternatives evaluated. The route alternatives evaluated cross between 3.1 and 4.4 miles of agricultural land. However, as agricultural land within a transmission line ROW is generally available for agricultural production, the permanent impact to agricultural operations is much less. The amount of land that will be permanently removed from agricultural production as a result of the Project is estimated at 190 to 265 square feet.[125]

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[120] *In re Application for a Route Permit for the Fargo to St. Cloud 345 kV Transmission Line Project*, Docket No. ET-2, E002/TL-09-1056, ALJ's Findings of Fact, Conclusions of Law at 23 ¶ 125 (Apr. 25, 2011), eDockets Document No. 20114-61700-01, *adopted as amended*, Commission Order at 2 (June 24, 2011), eDockets Document No. 20116-64023-01.

[121] Ex. 20, at 55, 96, 108 (EA).

[122] Minn. Stat. § 216E.03, Subd. 7(b)(5); Minn. R. 7850.4100(C).

[123] Ex. 107, at 60 (EA).

[124] Ex. 107, at 61 (EA). Public Comments filed with the Commission, May 17, 2016, eDockets No. 20165-121430-01,

Table 2 Agricultural Impacts by Route Alternative

	Route	Route A	Route B	Route C	Route A/ Pipeline	Route B/ Pipeline	Route C/ Pipeline
Ag Length	feet	18,440	23,220	21,730	16,590	21,370	19,880
	miles	3.5	4.4	4.1	3.1	4.0	3.8
Impact[126]	Square feet	210.7	265.4	248.3	189.6	244.2	227.2

114. No impacts to irrigation systems are anticipated as a result of the Project.[127]

115. Temporary impacts, such as soil compaction, crop damage, and disruption to drainage systems may occur during construction of the Project. Construction vehicles are relatively large and can cause rutting and compaction at structure locations and along the transmission line ROW.[128]

116. Impacts to agricultural operations can be avoided and mitigated by prudent routing—i.e., by selecting a route that avoids agricultural fields to the extent possible and minimizes intrusion into agricultural fields by following existing infrastructure ROW, field lines, and property lines. Where poles are placed in fields, impacts can be mitigated by not placing structures diagonally across field, but rather parallel to existing infrastructure ROW or field lines.[129]

117. Agricultural impacts can also be mitigated by construction and remediation measures. Applicant has committed to the following measures to mitigate agricultural impacts from the Project:

- Scheduling construction during lulls in agricultural activity to the extent possible.
- Limiting movement of crews and equipment to the transmission line ROW to the greatest extent possible and obtaining permission from the landowner for construction activities outside of the ROW.

[125] Ex. 107 Table 16 at 61 (EA). Impacts are calculated as follows: (length/average span)* permanent impact per structure. Average spans are assumed to be 350 feet, permanent impacts are assumed to be 4 feet per structure.

[127] Ex. 107, at 62 (EA).

[128] Ex. 107, at 62 (EA).

[129] Ex. 107, at 62 (EA).

- Repairing and restoring areas disturbed by construction to pre-construction contours so that all surfaces drain naturally.
- Repairing ruts and soil compaction; filling, grading, scarifying, harrowing, disking.
- Placing structures to accommodate existing or proposed irrigation systems.
- Promptly repairing or replacing fences, gates and other improvements that may be removed or damaged during construction.
- Providing compensation to landowners for any crop and property damage.[130]

118. No long-term impacts are anticipated to the agricultural economy from construction of the Project.[131]

2. Forestry

119. Deciduous forest is the predominant land cover in the forested areas. Forested areas in the Project area are logged for both commercial sales and personal use (such as firewood).[132]

120. Direct impacts to forested areas and forestry operations, including timber harvest, are expected to be minimal. As shown in Table 3 below, the Project crosses between 39 to 62 acres of forested land, depending on the route selected. Depending upon the route, clearing the ROW will remove between approximately 5.4 and 13.7 acres of forested cover types, with routes along the Pipeline Alternative removing a larger acreage of trees. The pipeline alternative route ROWs impact more forested acres that the ROWs for Routes A, B, and C. Given the amount of forested cover in Aitkin County generally, this impact to the County is minimal.[133]

Table 3: Forested Areas by Route Alternative

Route Alternative	Forested Acres		Percentage	
	ROW	Route	ROW	Route
Route A* [169]	6.0 (6.6)	61.6	3	8
Route B	5.4	48.9	3	7
Route C	8.6	53.8	5	7
Route A - Pipeline	11.1 (11.7)	58.2	6	10
Route B - Pipeline	10.5	39.1	6	8
Route C - Pipeline	13.7	44.3	8	8

[130] Ex. 107, at 62-63 (EA).

[131] *See* Ex. 107, at 62-63, 90 (EA).

[132] Ex. 107, at 63-64 (EA).

[133] *See* Ex. 107, Table 17 at 63-64, 90 (EA).

[134] If impacts vary between alignments along the west and east side of US Highway 169, impacts on the east side are included in parentheses.

3. Tourism

121. As set forth in Section I.A.5 above, impacts to tourism and recreational opportunities from the Project are anticipated to be minimal to moderate depending on the route selected.[135]

4. Mining

122. There are no known gravel pits or other mining activity within the Proposed Route or Route Alternatives.[136]

D. Effects on Archaeological and Historic Resources

123. Minnesota Rule 7850.4100(D) requires consideration of the effects on historic and archaeological resources.

124. Applicant's review of SHPO records indicated there is one previously recorded archaeological site and 12 previously recorded standing historic structures within the study area (within one mile of the Proposed Route). The Phase IA literature search concluded that it is unlikely that the Project would have an adverse impact on any known or suspected cultural resources and that architectural review of potential impacts from the Project to existing historic structures is not recommended. After reviewing the results of the Phase IA literature search, SHPO concluded that there are no properties listed in the national or state register of historic places and no known or suspected archaeological properties that would be affected by the Project. [137]

125. Impacts to archaeological or historic sites are not anticipated and no field surveys were recommended.[138]

126. If archaeological sites or resources are identified during Project construction, work will be stopped and SHPO staff will be consulted on how to proceed.[139]

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[135] Ex. 107, at 66 (EA).

[136] *See* Ex. 107, at 64 (EA).

[137] Ex. 107, at 67 (EA).

[138] Ex. 107, at 67 (EA).

[139] Ex. 107, at 67 (EA).

E. Effects on Natural Environment

127. Minnesota's high voltage transmission line 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.[140]

1. Air Quality

128. Ozone and nitrous oxide emissions from the Project are anticipated to be less than state and federal standards. Impacts due to construction dust are anticipated to be minor and temporary.[141] Applicant will use dust control measures to minimize dust during Project construction.[142]

129. No significant impacts to air quality are anticipated from the Project.[143]

2. Water Quality and Resources

130. The Project avoids or spans surface waters. Applicant will use best management practices to prevent construction sediments from impacting surface waters. Thus, impacts to surface waters are anticipated to be minimal.[144]

131. No impacts to the 100-year floodplain and related development in the Project area are anticipated.[145]

132. Groundwater impacts are anticipated to be minimal. Potential impacts to groundwater could occur indirectly through surface water or directly from structure foundations. Direct impacts could occur as a result of the construction and placement of transmission line structures. Impacts to groundwater can be mitigated by measures to prevent impacts to surface waters.[146]

133. Permanent impacts to wetlands would occur where structures are located within wetland boundaries, and are estimated to be approximately 20 square feet per structure. Forested wetlands within the transmission line ROW would likely undergo a permanent change of vegetation type as a result of the Project.[147]

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[140] Minn. Stat. §§ 216E.03, Subd. 7(b)(1)-(2); Minn. R. 7850.4100(E).

[141] Ex. 107, at 68-69 (EA).

[142] Ex. 107, at 68-69 (EA).

[143] Ex. 107, at 69 (EA).

[144] Ex. 107, at 70 (EA).

[145] Ex. 107, at 74-75 (EA).

[146] Ex. 107, at 71-72 (EA).

[147] Ex. 107, at 72 (EA).

134. Depending on the route selected, there are between approximately 17 and 36 acres of wetlands within the anticipated ROW for the Project. Wetlands along the routes evaluated are predominantly comprised of scrub-shrub and forested wetlands.[148]

Table 4: NWI Wetlands within Anticipated Rights-of-Way

Cover Type		Route A	Route B	Route C	Route A/ Pipeline	Route B/ Pipeline	Route C/ Pipeline
Forested/ Scrub-Shrub	Acres	2.75	2.75	2.75	7.02	7.02	7.02
	%	16	13	16	22	19	22
Forested	Acres	0.10	0.26	0.26	4.12	4.28	4.28
	%	1	1	2	13	12	13
Scrub-Shrub Emergent	Acres	6.17	7.97	6.17	9.76	11.55	9.76
	%	37	39	36	30	32	30
Scrub-Shrub	Acres	7.21	7.28	7.28	10.96	11.03	11.03
	%	43	36	43	34	31	34
Unconsolidated Bottom	Acres	0.61	0.48	0.55	0.61	0.47	0.55
	%	4	2	3	2	1	2
Emergent	Acres	N/A	1.68	N/A	N/A	1.68	N/A
	%	N/A	8	N/A	N/A	5	N/A
Total Acres		16.86	20.41	17.01	32.48	36.03	32.63

135. The Project will require a Section 10 Permit from USACE for the crossing of the Mississippi River and a regional general permit from the USACE under Section 404 of the Clean Water Act. The USACE will likely require wetland mitigation for the conversion of forested wetlands to scrub-shrub or emergent wetlands. Applicant will restore all wetlands in accordance with agency requirements and within the requirements of Minnesota's Wetland Conservation Act.[149]

3. Flora

[148] Ex. 107, at 72-73, Table 18 (EA).

[149] Ex. 107 at 74 (EA).

136. Significant impacts to flora are not anticipated as part of the Project.[150]

137. Applicant will minimize the introduction and spread of invasive species by: revegetating disturbed areas using weed-free seed mixes; using weed-free straw and hay for erosion control; removing invasive species via herbicide and manual means consistent with easement conditions and landowner restrictions.[151]

138. The primary impact of the Project on vegetation will be the removal of trees within the ROW. Depending upon the route selected, approximately 5.4 to 13.7 acres of trees would be removed. This would result in a permanent change in vegetation in these areas, replacing the trees with lower-growing species.[152]

4. Fauna

139. The Project area includes a variety of habitats including forested areas, grasslands, agricultural fields, wetlands, rivers, lakes, and streams. There is one DNR-managed WMA within the Proposed Route (the Aitkin WMA) that provides habitat for coyotes, fox, deer, bear, sandhill cranes, sharp-tail and ruffed grouse, and a variety of waterfowl, raptors and songbirds. There are no Aquatic Management Areas, Scientific and Natural Areas, or USFWS Waterfowl Production Areas within one mile of the proposed Project.[153]

140. Applicant will work with DNR and USFWS to identify areas of the Project where bird flight diverters are needed.[154]

141. Impacts to fauna are anticipated to be similar across the Proposed Route and Route Alternatives.[155] Impacts to fauna as a result of the Project are anticipated to be minimal.[156]

F. Effects on Rare and Unique Natural Resources

142. Minnesota's high voltage transmission line routing factors require consideration of the Project's effect on rare and unique natural resources.[157]

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[150] Ex. 107 at 76 (EA).

[151] Ex. 107 at 76-77 (EA).

[152] Ex. 107, at 76-77 (EA).

[153] Ex. 107, at 77-78 (EA).

[154] Ex. 107, at 79 (EA).

[155] Ex. 107, at 93 (EA).

[156] Ex. 107, at 78-79, 93 (EA).

[157] Minn. Stat. § 216E.03, Subd. 7(b)(1); Minn. R. 7850.4100(F).

143. The Minnesota biological survey identifies two sites of biodiversity significance, both located on the west side of US Highway 169, in the Project vicinity (but not on the Project's route):

- An area of moderate biodiversity significance in Section 11 of Waukenabo Township.

- An area of high biodiversity significance, including a sedge meadow, in Section 35 of Waukenabo Township. The DNR classifies the sedge meadow as an "uncommon but not rare native plant community in Minnesota."[158]

144. In addition to the sites of biodiversity significance, there are breeding records of rare birds (Upland Sandpiper, Yellow Rail) and two mussel species (Creek Heelsplitter and Black Sandshell) in the vicinity of the Project.[159]

145. The NLEB was listed by the USFWS as a threatened species on April 2, 2015. One NLEB roosting location has been identified within one-quarter mile of the Project and it is likely that NLEB will use additional trees in the area for roosting.[160] Impacts to the NLEB can be mitigated by conducting tree removal between October and April and avoiding tree clearing between April 1 and September 30. Applicant will coordinate with USFWS to avoid and mitigate impacts to the NLEB.[161]

146. Impacts to rare and unique species due to the Project are anticipated to be minimal, due to the location of the Project along existing road ROWs for the majority of the routes evaluated.[162]

G. Application of Various Design Considerations

147. Minnesota's high voltage transmission line routing factors require consideration of the Project's applied design options that maximize energy efficiencies, mitigate adverse environmental effects, and could accommodate expansion of transmission or generating capacity.[163]

[158] Ex. 107, at 79.

[159] Ex. 107, at 79-80.

[160] Ex. 107, at 80 (EA).

[161] Ex. 107, at 82 (EA); *see also* Ex. 3 at Appendix E, USFWS Letter (Application).

[162] Ex. 107, at 80 (EA).

[163] Minn. Stat. § 216E.03, Subd. 7(a)-(b); Minn. R. 7850.1900, Subp. 2(L).

148. The Project is proposed to primarily serve the proposed Enbridge Palisade Pump Station. The transmission line is sized to meet the expected load at the pump station. No further future expansions are contemplated for the Project.[164]

H. Use or Paralleling of Existing Right-of-Way, Survey Lines, Natural Division Lines, and Agricultural Field Boundaries

149. Minnesota's high voltage transmission line routing factors require consideration of the Project's use or paralleling of existing ROW, survey lines, natural division lines, and agricultural field boundaries.[165]

150. Using existing corridors reduces and minimizes impacts on planned future residential areas, commercial properties, and environmental and sensitive resources.[166]

151. All routes evaluated parallel roadways for the majority of their length.[167]

I. Use of Existing Transportation, Pipeline, and Electrical Transmission System Rights-of-Way

152. Minnesota's high voltage transmission line routing factors require consideration of the Project's use of existing transportation, pipeline and electrical transmission system rights-of-way.[168]

153. All routes evaluated parallel roadways for the majority of their length (between 76 and 100 percent). Route C and its pipeline alternative traverse the most greenfield, at approximately 22 and 24 percent of their lengths, respectively.[169]

Table 5: ROW Comparison

ROW followed	Parallel Length (Miles)					
	Route A	Route B	Route C	Route A/ Pipeline	Route B/ Pipeline	Route C/ Pipeline
US Highway 169	12.6	11.5	12	9.6	8.5	9.0
Other Roads	0.3	2.0	1.2	0.5	2.2	1.4
Pipeline	0	0	0	3.1	3.1	3.1

[164] *See* Ex. 107, at 97 (EA).

[165] Minn. Stat. § 216E.03, Subd. 7(b)(9); Minn. R. 7850.4100(H).

[166] *See* Ex. 107, at 20-21, 23 (EA).

[167] Ex. 107, at 58, 101 (EA).

[168] Minn. Stat. § 216E.03, Subd. 7(b)(8); Minn. R. 7850.4100(J).

[169] Ex. 107, at 58, 101 (EA).

154. The Project will be constructed to meet reliability requirements (see Minn. Stat. § 216E.03, Subd. 7(b)(10); Minn. R. 7850.4100(K).

J. Electrical System Reliability

155. Minnesota's high voltage transmission line routing factors require consideration of the Project's impact on electrical system reliability.[170]

156. The Project will be constructed to meet reliability requirements.[171]

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

157. Minnesota's high voltage transmission line routing factors require consideration of the Project's cost of construction, operation, and maintenance.[172]

158. The estimated total cost of the Project is approximately $13 million, including permitting, land acquisition, design and construction of the breaker station and transmission line.[173] Estimated costs for the transmission line construction range from about $6.4 million to $7 million, depending upon the route.[174]

Table 6: Design Dependent Costs

	Route A	Route B	Route C	Route A/ Pipeline	Route B/ Pipeline	Route C/ Pipeline
Route Length (miles)	12.9	13.8	13.5	13.2	14.1	13.8
Construction Cost ($ million) (transmission line only)	$ 6.42	$ 6.87	$ 6.72	$ 6.57	$ 7.02	$ 6.87

159. For all of the overhead designs, operating and maintenance costs for the transmission line will be nominal for several years because the line will be new, and minimal

[170] Minn. Stat. § 216E.03, Subd. 7(b)(10); Minn. R. 7850.4100(K).

[171] Ex. 107, at 21 (EA).

[172] Minn. R. 7850.4100(L).

[173] Ex. 107, at 26 (EA).

174 Minn. Stat. § 216E.03, Subd. 7(b)(10); Minn. R. 7850.4100(K).

[174] Ex. 107, at 101, Table 30 (EA).

vegetation maintenance will be required. Annual operating and maintenance costs for the 115 kV wooden transmission structures across Great River Energy's Minnesota system average approximately $2,000 per mile of transmission ROW for scheduled maintenance. The Applicant's practice provides for the inspection of 115 kV transmission lines every two years. ROW clearing practices include a combination of mechanical and hand clearing, along with herbicide application where allowed.[175]

L. Cumulative Potential Effects.

160. The EA analyzed the cumulative potential effects of the Project and the proposed Sandpiper and Line 3 Replacement projects based on information available at that time with respect to those projects..[176]

161. Cumulative effects are not anticipated when considering cultural values, displacement, interference, public health and safety, mining, recreation and tourism, archaeological and historic resources, geology, groundwater, rare and unique resources.[177] If the Project is constructed along US Highway 169, cumulative effects to property values, forestry, surface water, and wildlife are also not anticipated.[178]

162. Cumulative potential effects would remain minimal when considering land use and zoning, noise, socioeconomics, roads and highways, agriculture, air quality, and soils.[179]

163. Cumulative potential effects would remain moderate when considering aesthetics, vegetation, and wetlands.[180]

M. Adverse Human and Natural Environmental Effects Which Cannot be Avoided

164. Minnesota's high voltage transmission line routing factors require consideration of the adverse human and natural environmental effects, which cannot be avoided, for each proposed route.[181]

165. Unavoidable adverse impacts associated with construction of the Project include traffic delays, temporary visual and noise disturbance, soil compaction and erosion, vegetative clearing (including forested areas and woody wetlands)), and the temporary disturbance and displacement of wildlife. Unavoidable adverse impacts associated with operational phase of the Project include visual impact of the transmission line and associated

[175] Ex. 3, at 6-5 (Application).

[176] Ex. 107, at 89, 91, 93 (EA).

[177] Ex. 107, at 87, 89, 90, 91, 92 (EA).

[178] Ex. 107, at 89, 91, 93 (EA).

[179] Ex. 107, at 88, 90 (EA).

[180] Ex. 107, at 88, 93 (EA).

[181] Minn. Stat. § 216E.03, Subd. 7(b)(5)-(6); Minn. R. 7850.4100(M).

breaker station, loss of land for other uses where structures are placed, direct impacts to avian species that collide with conductors, a potential decrease in neighboring property values, and ongoing maintenance of trees along the ROW[182] However, as detailed in the Application and EA, Applicant will employ mitigation measures to limit Project impacts.

N. Irreversible and Irretrievable Commitments of Resources

166. Minnesota's high voltage transmission line routing factors require consideration of the irreversible and irretrievable commitments of resources that are necessary for each proposed route.[183]

167. Irreversible and irretrievable resource commitments are related to the use of nonrenewable resources and the effects that the use of those resources have on future generations. Irreversible effects result primarily from the use or destruction of a specific resource that cannot be replaced within a reasonable timeframe. Irretrievable resource commitments involve the loss in value of an affected resource that cannot be restored as a result of action.[184]

168. There are few commitments of resources associated with this Project that are considered irretrievable, or not recoverable for later use by future generations, but those few resources relate primarily to construction of the Project. Construction resources, such as concrete, steel, and hydrocarbon fuels, will be irretrievably committed to this Project, as will labor and fiscal resources.[185]

O. Summary of Factors Analysis

169. Route A (the Proposed Route + East Option) meets Minnesota's route selection criteria as well or better than the other alternatives considered in the EA in terms of impacts to human settlement and land based economies. Specifically, Route A is anticipated to have minimal impacts as to the following elements: recreation, electronic interference, noise, land use, property values, agriculture, and recreation and tourism.[186]

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[182] Ex. 107, at 94 (EA).

[183] Minn. Stat. § 216E.03, Subd. 7(b)(11); Minn. R. 7850.4100(N).

[184] Ex. 107, at 94-95 (EA).

[185] Ex. 107, at 94-95 (EA).

[186] Ex. 107 at 58 (EA).

170. Route A also meets Minnesota's route selection criteria as well or better than the other alternatives considered in the EA in terms of cost.[187]

171. In addition, Route A meets Minnesota's route selection criteria as well or better than the other alternatives considered in the EA in terms of impacts on natural resources (specifically, wetlands and wildlife) use of existing ROW. Route A is entirely along existing ROW.[188]

172. As to the remaining factors, the impacts among the routes evaluated in the EA are expected to be similar and minimal.[189]

173. Based on consideration of all routing factors, Route A (the Proposed Route + East Option) is the most appropriate route for the Project analyzed in the EA.

II. NOTICE

174. Minnesota statutes and rules require Applicant to provide certain notice to the public and local governments before and during the Application for a Route Permit process.[190]

175. Applicant provided notice to the public and local governments in satisfaction of Minnesota statutory and rule requirements.[191]

[187] Ex. 107 at 58 (EA).

[188] Ex. 107 at 58 (EA).

[189] *See* Ex. 107, at 96-101 (EA).

[190] Minn. Stat. § 216E.03, Subds. 3a, 4; Minn. R. 7850.2100, Subps. 2, 4.

[191] Ex. 4 (Notice of Route Permit Application); Ex. 7 (Newspaper Affidavits for Information and Scoping Meeting), Affidavit of Publication for Notice of Public Meeting (May 6, 2016), eDockets Document No. 20165- 121140-01.

176. Minnesota statutes and rules also require the Department of Commerce and the Commission to provide notice to the public throughout the Route Permit process.[193] The Department of Commerce and the Commission provided the notice in satisfaction of Minnesota statutes and rules.[192]

III. COMPLETENESS OF EA

177. The EA process is the alternative environmental review approved by the Environmental Quality Board ("EQB") for high voltage transmission lines.[193] The Commission is required to determine the completeness of the EA.[194] An EA is complete if it and the record address the issues and alternatives identified in the Scoping Decision.[195]

178. The evidence on the record demonstrates that the EA is adequate because the EA and the record created at the public hearing and during the subsequent comment period address the issues and alternatives raised in the Scoping Decision.[196]

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

CONCLUSIONS

1. The Commission has jurisdiction to consider the Application.

2. The Commission determined that the Application was substantially complete and accepted the Application on October 19, 2015.[197]

3. EERA has conducted an appropriate environmental analysis of the Project for purposes of this Route Permit proceeding and the EA satisfies Minnesota Rule 7850.3700. Specifically, the EA and the record address the issues and alternatives identified in the Scoping Decision to a reasonable extent considering the availability of information, and the EA includes

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[192] Minn. Stat. § 216E.03, Subd. 6; Minn. R. 7850.2300, Subp. 2; Minn. R. 7850.2500, Subps. 2, 7-9.

[193] Ex. 104 (EA Scoping Decision); Ex. 105 (Notice of EA); Ex. 106 (Letters Notifying Landowners of Additional Routes Under Consideration); Ex. 107 (EA); Ex. 108 (Notice of Availability of EA); Ex. 109 (Notice in *EQB Monitor* of Availability of EA); Notice of Comment Period on Application Completeness (Sep. 14, 2015), eDockets Document No. 20159-113971-01; Notice of Commission Meeting (Sep. 18, 2015), eDockets Document No. 20159-113971-01; Notice of Public Information and Scoping Meeting (Oct. 7, 2015), eDockets Document No. 201510-114655-01; Notice of Commission Meeting (Dec. 4, 2015), eDockets Document No. 201512-116183-02; Notice of Public Hearing (Apr. 22, 2016).

[194] Minn. R. 4410.4400, Subp. 6.

[195] Minn. R. 7850.3900, Subp. 2.

[196] *Id.*

[197] *See* Ex. 104 (EA Scoping Decision); Ex. 107 (EA).

[198] Order Finding Application Complete, Granting Variance, and Referring Application to the Office of Administrative Hearings (Oct. 19, 2015), eDockets Document No. 201510-114930-01.

the items required by Minnesota Rule 7850.3700, Subpart 4, and was prepared in compliance with the procedures in Minnesota Rule 7850.3700.

4. Applicant gave notice as required by Minnesota Statutes Section 216E.04, Subdivision 4; Minnesota Rule 7850.2100, Subpart 2; Minnesota Rule 7850.2100, Subpart. 4.

5. Notice was provided as required by Minnesota Statutes Section 216E.04, Subdivision 6; Minnesota Rule 7850.3500, Subpart 1; Minnesota Rule 7850.3700, Subparts 2, 3, and 6; and Minnesota Rule 7850.3800.

6. A public hearing was conducted near the Project area. Proper notice of the public hearing was provided, 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.

7. The evidence on the record demonstrates that the Proposed Route East Option (Route A) satisfies the Route Permit factors set forth in Minnesota Statutes Section 216E.04, Subdivision 8 (referencing Minnesota Statutes Section 216E.03, Subdivision 7) and Minnesota Rule 7850.4100.

8. The evidence on the record demonstrates that the general Route Permit conditions are appropriate for the Project.

9. A special Route Permit condition requiring the Permittee to coordinate with DNR regarding avian mitigation is appropriate.

10. A special Route Permit condition requiring the Permittee to consult with the DNR to develop a vegetation management plan is appropriate for the Project. It is appropriate for the plan to incorporate expressed recommendations of the DNR including management of vegetation within the right-of-way to maintain low-growing plants on the border of the right-of-way wire zone/border zone management) and maintaining natural vegetation within a 50-foot buffer on both banks at all stream crossings.

11. A special Route Permit condition requiring the Permittee to use wildlife-friendly erosion control near water crossings, Minnesota Biological Survey Sites of Biodiversity Significance, and areas with rare species susceptible to entanglement in erosion control mesh is appropriate.

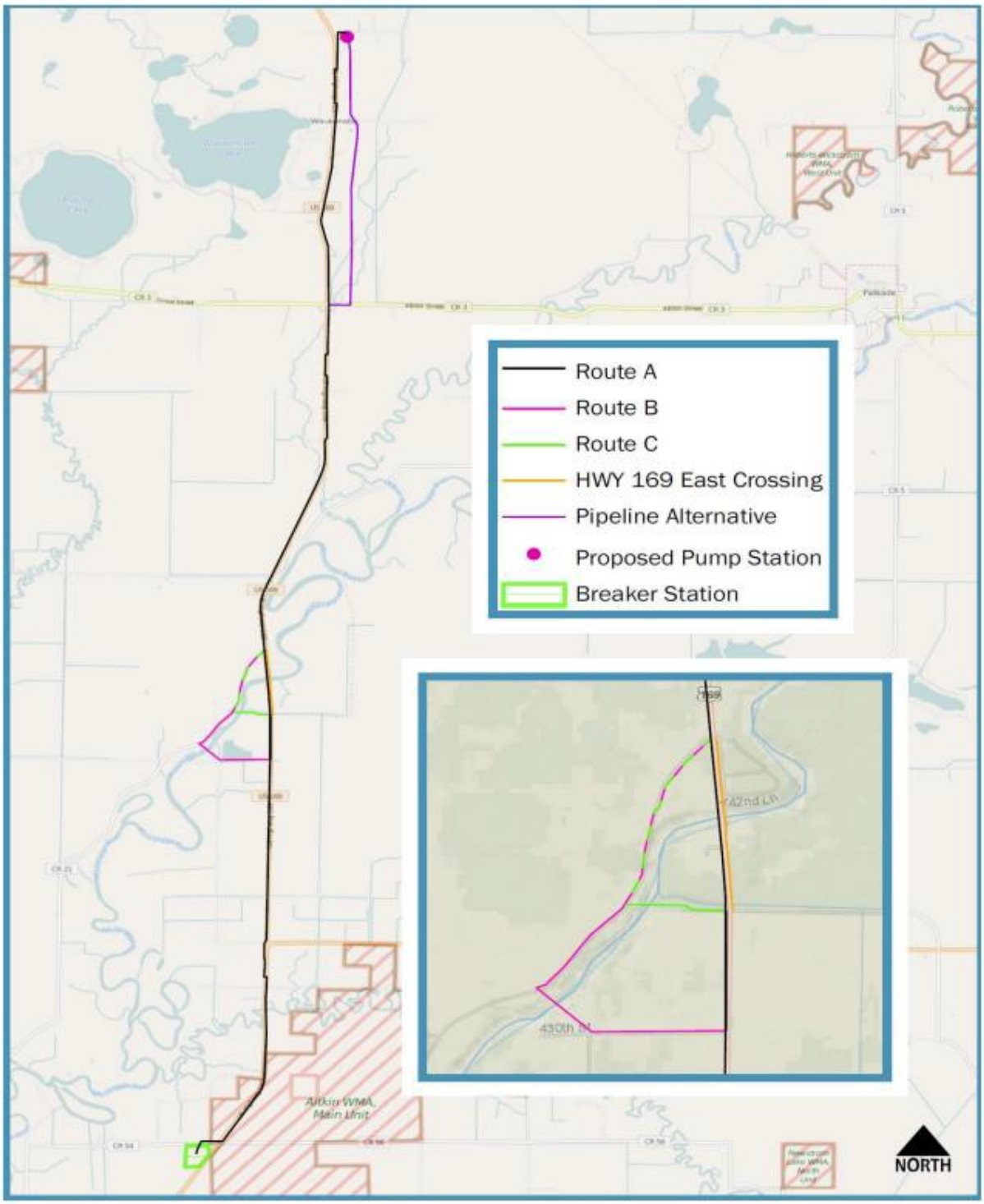
[200] Minn. Stat. § 116B.01.

11. A special Route Permit condition requiring the Permittee to coordinate with USFWS regarding impacts to the NLEB is appropriate.

12. Any of the foregoing Findings more properly designated Conclusions are hereby adopted as such.

Exhibit A - Route Alternatives Evaluated in the EA

Figure 7: Route Alternatives



STATE OF MINNESOTA PUBLIC UTILITIES COMMISSION

ROUTE PERMIT FOR A HIGH-VOLTAGE TRANSMISSION LINE AND ASSOCIATED FACILITIES

IN
AITKIN COUNTY

ISSUED TO
GREAT RIVER ENERGY

PUC DOCKET NO. ET2/TL-15-423

In accordance with the requirements of Minnesota Statutes Chapter 216E and Minnesota Rules Chapter 7850, this route permit is hereby issued to:

GREAT RIVER ENERGY

Great River Energy is authorized by this route permit to construct and operate approximately 13 miles of a new 115 kilovolt (kV) transmission line and build a new 115 kV breaker station.

The high-voltage transmission line and associated facilities shall be built within the route identified in this permit and as portrayed on the official route maps, and in compliance with the conditions specified in this permit.

Approved and adopted this ____ day of _____, 2016_

BY ORDER OF THE COMMISSION

_____

Daniel P. Wolf,
Executive Secretary

CONTENTS

FIGURES

ATTACHMENTS

1.0 ROUTE PERMIT

The Minnesota Public Utilities Commission (Commission) hereby issues this route permit to Great River Energy (Permittee) pursuant to Minnesota Statutes Chapter 216E and Minnesota Rules Chapter 7850. This permit authorizes the Great River Energy to construct and operate approximately 13 miles of a new 115 kV transmission line and build a new 115 kV Rice River Breaker Station as identified in the attached route permit maps, hereby incorporated into this document.

1.1 Pre-emption

Pursuant to Minn. Stat. § 216E.10, this route permit shall be the sole route approval required to be obtained by the Permittee for construction of the transmission facilities and this permit shall supersede and preempt all zoning, building, or land use rules, regulations, or ordinances promulgated by regional, county, local and special purpose government.

2.0 PROJECT DESCRIPTION

The project includes construction of approximately 13 miles of new 115 kV transmission line and a new 115 kV breaker station to be located in Aitkin County, northeast of the city of Aitkin.

2.1 Project Location

The new 115 kV transmission line will run between Enbridge's proposed Palisade Pump Station, east of U.S. U.S. Highway 169 and south of 510th Lane, and a new Rice River Breaker Station, west of U.S. U.S. Highway 169 and south of 390th Street. The Project will connect to the existing Minnesota Power Cromwell to Riverton 115 kV transmission line (“13 Line”).

County	Township (N)	Range (R)	Section(s)
Aitkin	Spenser (47)	26	3, 9, 10
Aitkin	Morrison (48)	26	2, 3, 10, 11, 14, 15, 22, 23, 26, 27, 34, 35
Aitkin	Waukenabo (49)	26	11, 14, 23, 26, 35

2.2 Substations and Associated Facilities

The Rice River Breaker Station will be constructed at the southern terminus of the project west of U.S. U.S. Highway 169 and south of 390th Street.

2.3 Structures

The 115 kV transmission line will primarily consist of single circuit, single pole wood, steel, or ductile iron structures spaced approximately 275 to 450 feet apart. Typical 115 kV structure types for the project include single circuit, single circuit with distribution underbuild, and H-Frame. The transmission line structures will be single-pole wood structures with horizontal post insulators for most of the transmission line. H-frame, laminated wood poles, or steel poles may be required in some locations (e.g. to cross over a river, to cross under an existing line, for angles poles, or in areas where soil conditions are poor and guying is not practical). Transmission structures will typically range in height from 60 to 90 feet above ground. Taller structures may be used when necessary due to terrain, agency requirements, and environmental constraints. (e.g., highway crossings, river and stream crossings, and required angle structures). The average diameter of the single pole structures at ground level will be 20 inches. In areas where the permitted alignment overtakes existing distribution circuits, those circuits may be buried or underbuild.

2.4 Conductors

The single high voltage circuit for the project will be composed of three conductor phase wires (i.e., not bundled conductors). The transmission line will also be equipped with a shield wire(s). In special circumstances where an H-frame structure is used, the structure will have three conductor phase wires with each conductor mounted on one of the insulators and a single shield wire mounted on top of each of the two poles, for a total of two shield wires per H-frame structure. The phase wires will be 477 thousand circular mil aluminum conductor steel-reinforced (ACSR) with seven steel core strands and 26 outer aluminum strands. The shield wire will be 0.528 optical ground wire.

The table below details specifics on the structure and conductor type(s) as presented in the route permit application.

Line Type	Conductor	Structure		Foundation	Height	Span
		Type	Material			
Single-Circuit 115 kV AC overhead transmission line	Three conductor phase 477 ACSR with	Monopole or H-Frame	Wood, steel or ductile iron	Direct embed (approximately 8-11 feet) or concrete	60 -90 feet, taller structures may be required	275 to 400 feet apart

	shield wires				for longer spans	

3.0 DESIGNATED ROUTE

The route designated by the Commission in this permit is the route described below and shown on the route maps attached to this permit as "Applicant Route A". The route is generally described as follows:

The route follows US U.S. Highway 169 between proposed Rice River Breaker Station, turning east along 510th Lane to the proposed Palisade Pump Station. This route is approximately 13 miles in length and combines route segments A, B, C, D, and E as identified in the Environmental Assessment.

The designated route follows U.S. Highway 169 between Rice River Breaker Station and 430th Street for approximately 4.69 miles (Segment A). The designated route then follows U.S. Highway 169 for approximately 0.49 miles to a point 2,000 feet north of 430th Street (Segment B, or "East River Crossing"). The designated route then proceeds along U.S. Highway 169 - 435th Lane to Great River Road/County Highway 21 (including alternative alignments on both the west and east side of US U.S. Highway 169) for approximately 0.71 miles (Segment C or "East River Crossing"). The designated route then proceeds north for approximately 3.96 miles along U.S. Highway 169 – Great River Road/Aitkin County Highway 21 to Aitkin County Highway 3 (Segment D). The designated route then proceeds north for 3.14 miles along U.S. Highway 169 –Aitkin County Highway 3 then east on 510th Lane to the Palisade Pump Station location (Segment E).

Except as indicated below, the approved route width for the project is up to 400 feet (200 feet on each side of the centerline or 200 feet each side of the proposed alignment for portions of the route that do not follow a road). Wider route widths are required in some areas to accommodate guy wires and anchors. Larger route areas may also be required where the pump station and breaker station will be located to accommodate design flexibility.

The identified route widths will provide the Permittee with flexibility for minor adjustments of the specific alignment or right-of-way to accommodate landowner requests and unforeseen conditions. The final alignment (i.e., permanent and maintained rights-of-way) will be located within this designated route unless otherwise authorized by the Commission.

3.0.1 Palisade Pump Station

A route width of 825 feet is required in the area around Enbridge's proposed Palisade Pump Station.

3.0.2 The U.S. U.S. Highway 169 Mississippi River Crossing Area

A variable route width is provided to address design challenges related to existing residential structures and uncertainty related to Minnesota Department of Transportation (MNDOT) permitting requirements. The approved route width generally tapers from 850 feet beginning at 435th Lane to 650 feet at the junction of US U.S. Highway 169 and Great River Road/CR 21.

3.0.3 Alternative River Crossing (Route Segment H)

A route width of approximately 700 feet is provided for flexibility in order to have alignment options on either side of the buildings that are located on the property.

3.0.4 Rice River Breaker Station

A route width of approximately 1,200 feet is provided to allow flexibility to modify the transmission alignment to match the final breaker station location and layout.

4.0 RIGHT-OF-WAY

The approved right-of-way width for the project is up to 100 feet (50 feet on either side of the transmission centerline). Select locations may require a slightly wider right-of-way to accommodate transmission line guy wires and anchors. In certain areas where clearance is very limited by existing infrastructure (e.g. existing buildings), transmission right-of-way may be reduced to 35 feet on one or both sides of the centerline.

This permit anticipates that the right-of-way will generally conform to the anticipated alignment as noted on the attached route permit maps unless changes are requested by individual landowners or unforeseen conditions are encountered or are otherwise provided for by this permit.

Any right-of-way modifications within the designated route shall be located so as to have comparable overall impacts relative to the factors in Minn. R. 7850.4100, as does the right-of-way identified in this permit, and shall be specifically identified and documented in and approved as part of the plan and profile submitted pursuant to Section 9.1 of this permit.

Where the transmission line parallels existing highway and other road rights-of-way, the transmission line shall occupy and utilize the existing right-of-way to the maximum extent possible; consistent with the criteria in Minn. R. 7850.4100 and the other requirements of this permit; and for highways under the jurisdiction of the Minnesota Department of Transportation, the permittee shall utilizes MnDOT's procedures for accommodating utilities in trunk highway rights-of-way.

5.0 GENERAL CONDITIONS

The Permittee shall comply with the following conditions during construction and operation of the transmission line and associated facilities over the life of this permit.

5.1 Permit Distribution

Within 30 days of permit issuance, the Permittee shall provide all affected landowners with a copy of this permit and the complaint procedures. In no case shall the landowner receive this route permit and complaint procedures less than five days prior to the start of construction on their property. An affected landowner is any landowner or designee that is within or adjacent to the permitted route.

At the time of first contact, the Permittee shall also provide all affected landowners with a copy of the Department of Commerce's Rights-of-Way and Easements for Energy Facility Construction and Operation fact sheet.[1]

5.2 Notification

The Permittee shall notify landowners or their designee at least 14 days in advance but not greater than 60 days in advance of conducting construction activities on the property.

5.3 Construction and Operation Practices

The Permittee shall follow those specific construction practices and material specifications described in Great River Energy's Application and representations to the Commission for a route permit for the Palisade 115 kV Project dated August 25, 2015, unless this permit establishes a different requirement in which case this permit shall prevail.

5.3.1 Field Representative

[1] http://mn.gov/commerce/energyfacilities/documents/Easements%20Fact%20Sheet_08.05.14.pdf

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

The Permittee 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 commencing construction. The Permittee shall provide the field representative's contact information to affected landowners, residents, local government units and other interested persons at least 14 days prior to construction. The Permittee may change the field representative at any time upon notice to the Commission, affected landowners, residents, local government units and other interested persons.

5.3.2 Employee Training and Education of Permit Terms and Conditions

The Permittee shall inform and educate all employees, contractors, and other persons involved in the construction and ongoing operation of the transmission line of the terms and conditions of this permit.

5.3.3 Public Services, Public Utilities, and Existing Easements

During construction, the Permittee shall minimize any disruption to public services or public utilities. To the extent disruptions to public services or public utilities occur these will be temporary and the Permittee will restore service promptly. Where any impacts to utilities have the potential to occur the Permittee will work with both landowners and local agencies to determine the most appropriate transmission structure placement.

The Permittee shall work with the landowners, townships, cities, and counties along the route to accommodate concerns regarding tree clearing, distance from existing structures, drain tiles, pole depth and placement in relationship to existing roads and road expansion plans.

The Permittee shall cooperate with county and city road authorities to develop appropriate signage and traffic management during construction.

5.3.4 Temporary Work Space

The Permittee 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. Temporary easements

outside of the authorized transmission line right-of-way will be obtained from affected landowners through rental agreements and are not provided for in this permit.

Temporary driveways may be constructed between the roadway and the structures to minimize impact using the shortest route possible. Construction mats should be used to minimize impacts on access paths and construction areas.

5.3.5 Noise

The Permittee shall comply with noise standards established under Minn. R. 7030.0010 to 7030.0080. Construction and maintenance activities shall be limited to daytime working hours to the extent practicable to ensure nighttime noise level standards will not be exceeded.

5.3.6 Aesthetics

The Permittee 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. Care shall be used to preserve the natural landscape, minimize tree removal and prevent any unnecessary destruction of the natural surroundings in the vicinity of the project during construction and maintenance. The Permittee 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. Structures shall be placed at a distance, consistent with sound engineering principles and system reliability criteria, from intersecting roads, highways, or trail crossings and could cross roads to minimize or avoid impacts.

5.3.7 Soil Erosion and Sediment Control

The Permittee shall implement those erosion prevention and sediment control practices recommended by the Minnesota Pollution Control Agency (MPCA) Construction Stormwater Program.

The Permittee 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 facilities shall be returned to pre-construction conditions.

In accordance with MPCA requirements, the Permittee shall obtain a National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) Construction Stormwater permit from the MPCA.

5.3.8 Wetlands and Water Resources

Wetland impact avoidance measures that shall be implemented during design and construction of the transmission line will include spacing and placing the power poles at variable distances to span and avoid wetlands, watercourses, and floodplains. Unavoidable wetland impacts as a result of the placement of poles shall be limited to the immediate area around the poles. To minimize impacts, construction in wetland areas shall occur during frozen ground conditions where practicable and shall be according to permit requirements by the applicable permitting authority. When construction during winter is not possible, wooden or composite mats shall be used to protect wetland vegetation. Soil excavated from the wetlands and riparian areas shall be contained and not placed back into the wetland or riparian area. The Permittee shall use wildlife-friendly erosion control near water crossings, Minnesota Biological Survey Sites of Biodiversity Significance, and areas with rare species susceptible to entanglement in erosion control mesh.

Wetlands and riparian areas shall be accessed using the shortest route possible in order to minimize travel through wetland areas and prevent unnecessary impacts. No staging or stringing set up areas shall be placed within or adjacent to wetlands or water resources, as practicable. Power pole structures shall be assembled on upland areas before they are brought to the site for installation.

Areas disturbed by construction activities shall be restored to pre-construction conditions. Restoration of the wetlands will be performed by the Permittee in accordance with the requirements of applicable state and federal permits or laws and landowner agreements.

All requirements of the U.S. Army Corps of Engineers (wetlands under federal jurisdiction), Minnesota Department of Natural Resources (Public Waters/Wetlands), and County (wetlands under the jurisdiction of the Minnesota Wetland Conservation Act) shall be met.

5.3.9 Vegetation Removal and Protection

The Permittee 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.

Tall growing species located within the transmission line right-of-way that endanger the safe and reliable operation of the transmission facility will be removed by the Permittee. The Permittee 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 that will not pose a threat to the transmission facility or impede construction.

5.3.10 Application of Pesticides

The Permittee shall restrict pesticide use to those pesticides and methods of application approved by the Minnesota Department of Agriculture, Minnesota Department of Natural Resources, and the U.S. Environmental Protection Agency. Selective foliage or basal application shall be used when practicable. The Permittee shall contact the landowner or his designee to obtain approval for the use of pesticide prior to any application on their property. The landowner may request that there be no application of pesticides on any part of the right-of-way within the landowner's property. All pesticides shall be applied in a safe and cautious manner so as not to damage crops, orchards, tree farms, or gardens. The Permittee shall provide notice of pesticide application to affected landowners, and known beekeepers operating apiaries within three miles of the project site at least 14 days prior to such application.

5.3.11 Invasive Species

The Permittee shall employ best management practices to avoid the potential spread of invasive species on lands disturbed by project construction activities.

5.3.12 Noxious Weeds

The Permittee 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 Permittee shall select site appropriate seed certified to be free of noxious weeds. To the extent possible, the Permittee shall use native seed mixes. The Permittee shall consult with landowners on the selection and use of seed for replanting.

5.3.13 Roads

The Permittee 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

project. Where practical, existing roadways shall be used for all activities associated with construction of the transmission facilities. Oversize or overweight loads associated with the facility shall not be hauled across public roads without required permits and approvals.

The Permittee shall construct the least number of access roads it can. 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 Permittee shall promptly repair private roads or lanes damaged when moving equipment or when obtaining access to the route, unless otherwise negotiated with the affected landowner.

5.3.14 Archaeological and Historic Resources

The Permittee shall make every effort to avoid impacts to identified archaeological and historic resources when constructing the transmission facility. In the event that a resource is encountered, the Permittee shall contact and 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 project impacts on the resource consistent with State Historic Preservation Office and State Archaeologist requirements.

Prior to construction, workers shall be trained 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 Permittee shall immediately halt construction and promptly notify local law enforcement and the State Archaeologist. Construction at such location shall not proceed until authorized by local law enforcement or the State Archaeologist.

5.3.15 Avian Protection

The Permittee's standard transmission design shall incorporate power line design included as Chapter 6 of the Avian Power Line Interaction Committee 2006 State of the Art Report to eliminate the risk of electrocution to raptors with larger wingspans that may simultaneously come in contact with a conductor and grounding devices. The Permittee will consult with the Minnesota Department of Natural Resources (DNR) regarding type and placement of bird diverters.

5.3.16 Restoration

The Permittee shall restore the right-of-way, temporary work spaces, access roads, abandoned right-of-way, and other public or private lands affected by construction of the transmission line.

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 Permittee shall advise the Commission in writing of the completion of such activities.

5.3.17 Cleanup

All waste and scrap that is the product of construction shall be removed from the right-of-way and all premises on which construction activities were conducted and properly disposed of upon completion of each task. Personal litter, including bottles, cans, and paper from construction activities shall be removed on a daily basis.

5.3.18 Pollution and Hazardous Wastes

All appropriate precautions to protect against pollution of the environment must be taken by the Permittee. The Permittee shall be responsible for compliance with all laws applicable to the generation, storage, transportation, clean up and disposal of all wastes generated during construction and restoration of the right-of-way.

5.3.19 Damages

The Permittee shall fairly compensate landowners for damage to crops, fences, private roads and lanes, landscaping, drain tile, or other damages sustained during construction.

5.4 Electrical Performance Standards

5.4.1 Grounding

The Permittee 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 milliampere 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 Permittee shall address and rectify any induced current problems that arise during transmission line operation.

5.4.2 Electric Field

The transmission line shall be designed, constructed, and operated 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 line, the Permittee shall take whatever action is feasible to restore or provide reception equivalent to reception levels in the immediate area just prior to the construction of the line.

5.5 Other Requirements

5.5.1 Safety Codes and Design Requirements

The transmission line and associated facilities shall be designed 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 Permittee shall comply with all applicable state rules and statutes. The Permittee shall obtain all required permits for the project and comply with the conditions of these permits. A list of the permits known to be required is included in the permit application. The Permittee shall submit a copy of such permits to the Commission upon request.

6.0 SPECIAL CONDITIONS

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

6.1 Northern Long-Eared Bat

The Permittee shall coordinate with the United Fish and Wildlife Service regarding mitigation of potential impacts to the Northern Long-Eared Bat.

6.2 Vegetation Management Plan

The Permittee shall consult with the DNR to develop a vegetation management plan for the Project. The plan must incorporate DNR's recommendations including management of vegetation within the right-of-way to maintain low-growing plants on the border of the right-of-way (wire zone / border zone management) and maintaining natural vegetation buffers at all water crossings. The Vegetation Management Plan shall also include a right-of-way management approach, invasive species control and prevention measures, shoreland vegetation management, and herbicide used.

6.3 Wildlife-Friendly Erosion Control

The Permittee shall use wildlife-friendly erosion control materials in areas known to be inhabited by wildlife species (birds, small mammals, reptiles, and amphibians) susceptible to entanglement in plastic netting as outlined in the DNR *Wildlife-Friendly Erosion Control Fact Sheet*.[2]

7.0 DELAY IN CONSTRUCTION

If the Permittee has not commenced construction or improvement of the route within four years after the date of issuance of this permit the Permittee shall file a report on the failure to construct and the Commission shall consider suspension of the permit in accordance with Minn. R. 7850.4700.

8.0 COMPLAINT PROCEDURES

Prior to the start of construction, the Permittee shall submit to the Commission the procedures that will be used to receive and respond to complaints. The 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 permit.

Upon request, the Permittee shall assist the Commission 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.

9.0 COMPLIANCE REQUIREMENTS

[2] http:// files.dnr.state.mn.us/eco/nongame/wildlife-friendly-erosion-control.pdf

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

9.1 Plan and Profile

At least 30 days before right-of-way preparation for construction begins on any segment or portion of the project, the Permittee shall provide the Commission 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 line. 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 per this permit.

The Permittee may not commence construction until the 30 days has expired or until the Commission has advised the Permittee in writing that it has completed its review of the documents and determined that the planned construction is consistent with this permit. If the Permittee intends to make any significant changes in its plan and profile or the specifications and drawings after submission to the Commission, the Permittee shall notify the Commission 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 permit.

9.2 Status Reports

The Permittee shall report to the Commission on progress during finalization of the route, design of structures, and construction of the transmission line. The Permittee need not report more frequently than monthly. Reports shall begin with the submittal of the plan and profile for the project and continue until completion of restoration.

9.3 Notification to Commission

At least three days before the line is to be placed into service, the Permittee shall notify the Commission of the date on which the line will be placed into service and the date on which construction was complete.

9.4 As-Built Plans and Specifications

Within 90 days after completion of construction, the Permittee shall submit copies of all final as-built plans and specifications developed during the project.

9.5 GPS Data

Within 90 days after completion of construction, the Permittee 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 line and each substation connected.

10.0 PERMIT AMENDMENT

This permit may be amended at any time by the Commission. Any person may request an amendment of the conditions of this permit by submitting a request to the Commission in writing describing the amendment sought and the reasons for the amendment. The Commission will mail notice of receipt of the request to the Permittee. The Commission may amend the conditions after affording the Permittee and interested persons such process as is required.

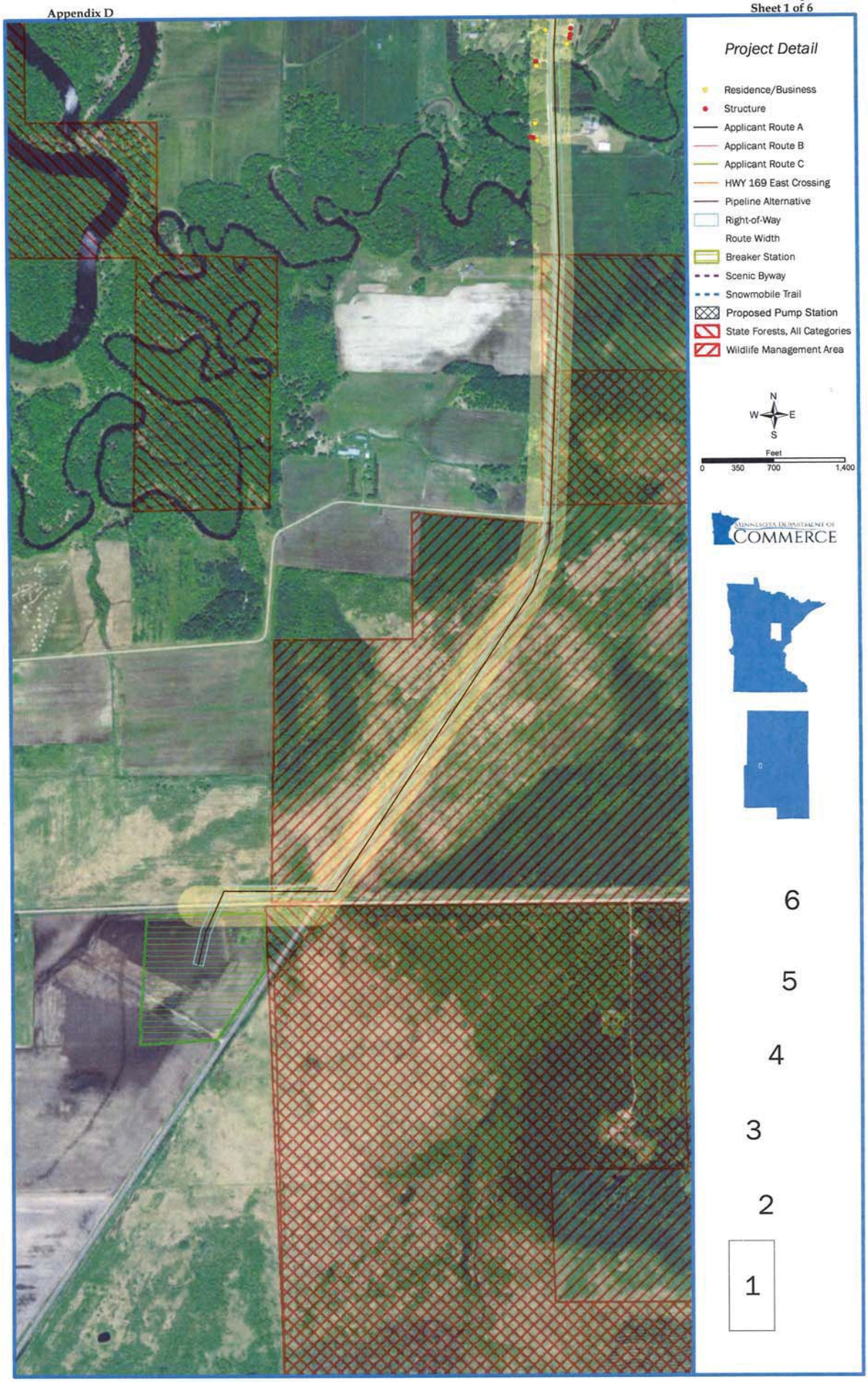
11.0 TRANSFER OF PERMIT

The Permittee may request at any time that the Commission transfer this permit to another person or entity. The Permittee shall provide the name and description of the person or entity to whom the permit is requested to be transferred, the reasons for the transfer, a description of the facilities affected, and the proposed effective date of the transfer.

The person to whom the permit is to be transferred shall provide the Commission with such information as the Commission shall require to determine whether the new Permittee can comply with the conditions of the permit. The Commission may authorize transfer of the permit after affording the Permittee, the new Permittee, and interested persons such process as is required.

12.0 REVOCATION OR SUSPENSION OF THE PERMIT

The Commission may initiate action to revoke or suspend this permit at any time. The Commission shall act in accordance with the requirements of Minn. R. 7850.5100, to revoke or suspend the permit.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Structure
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Applicant Route B
Applicant Route C
HWY 169 East Crossing
Pipeline Alternative
Right-of-Way
Route Width
Breaker Station
Scenic Byway
Snowmobile Trail
Proposed Pump Station
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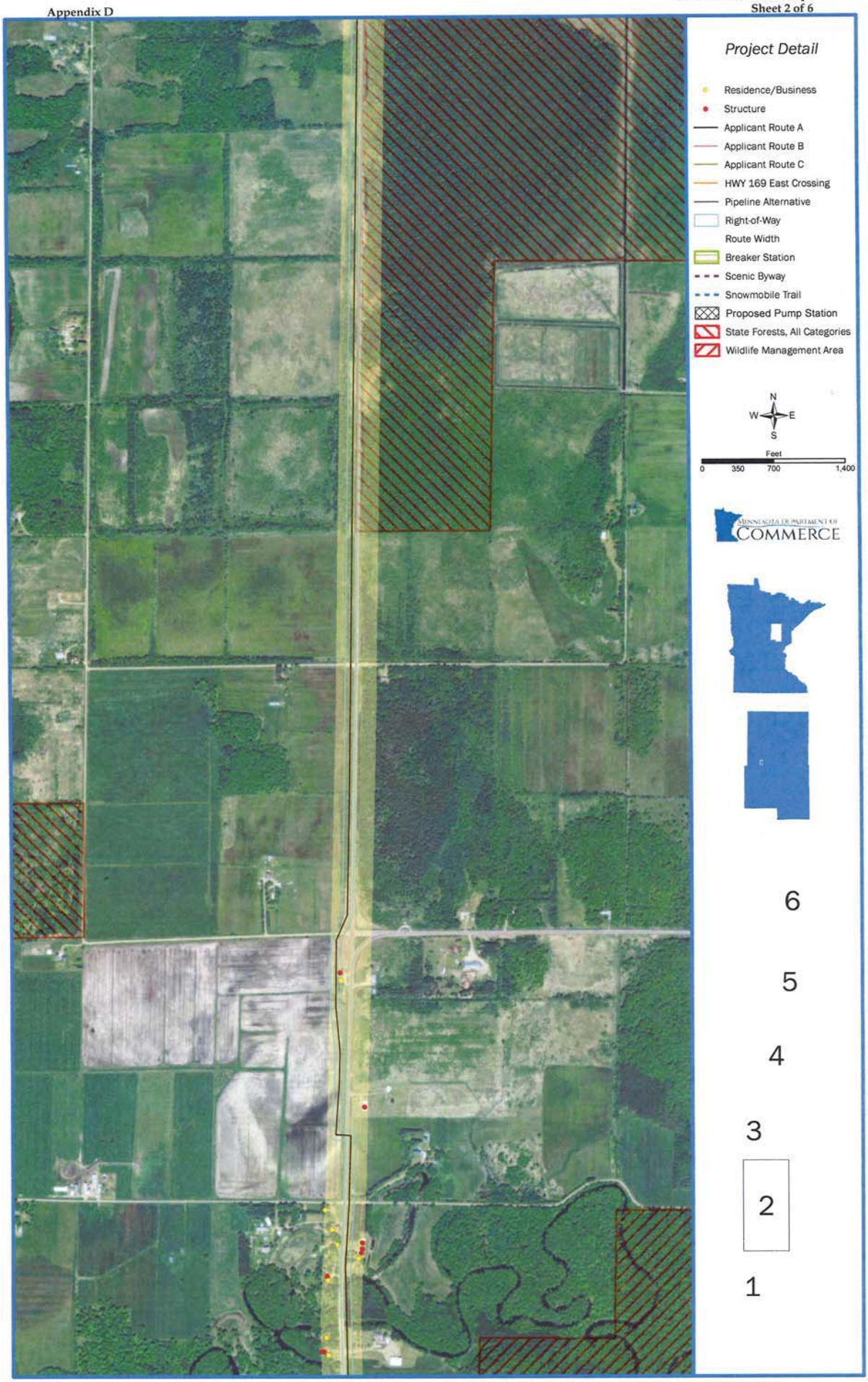
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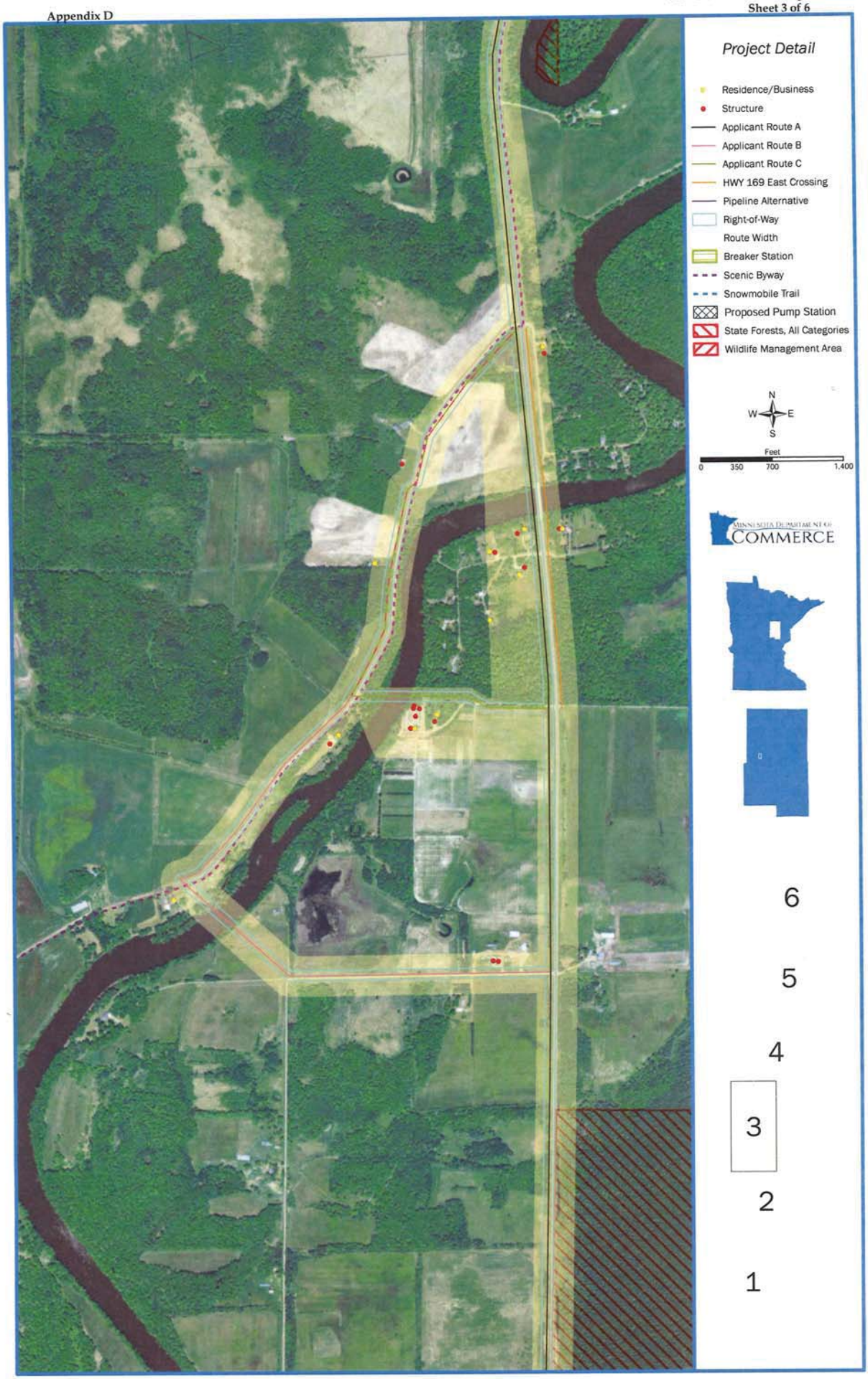
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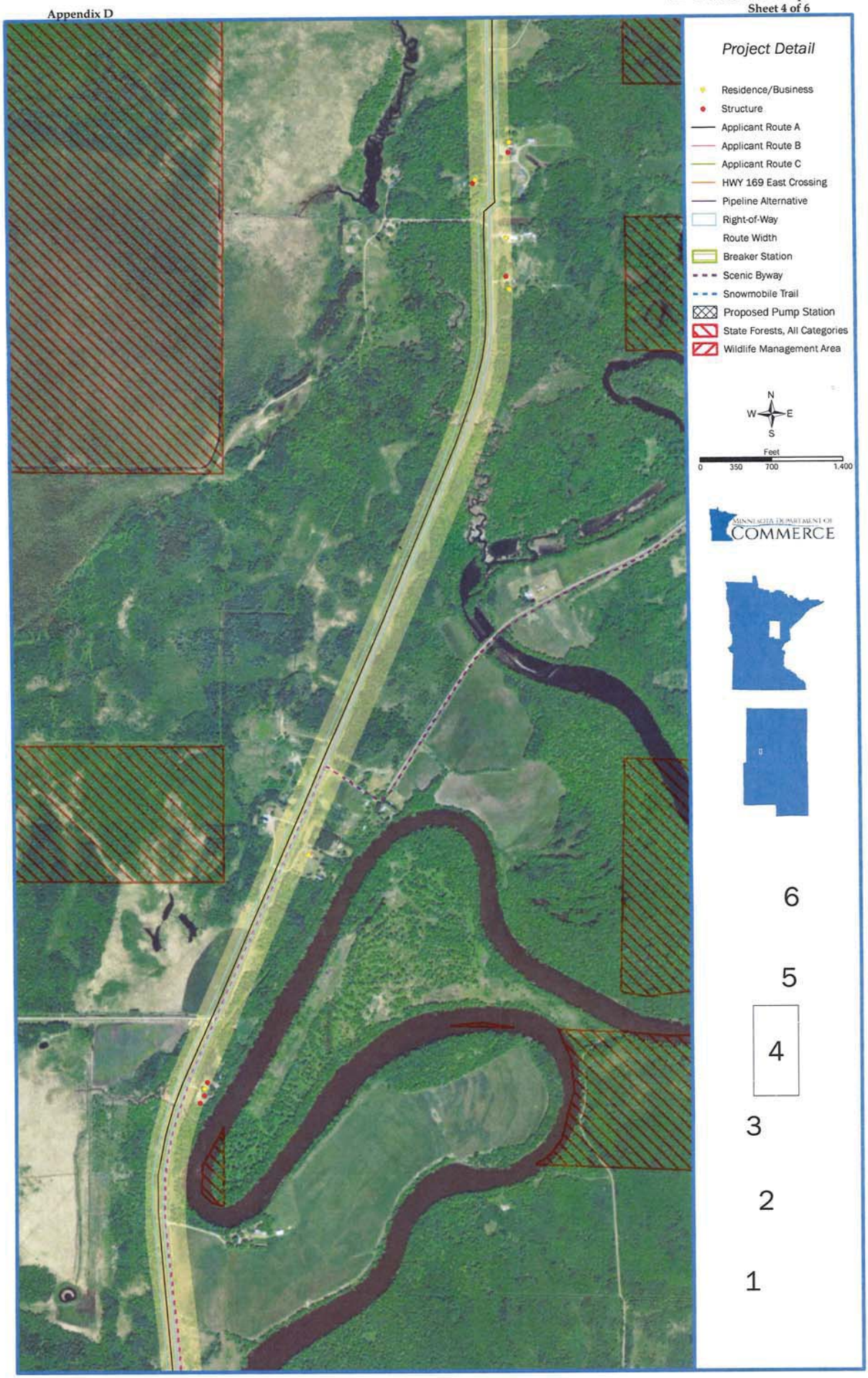
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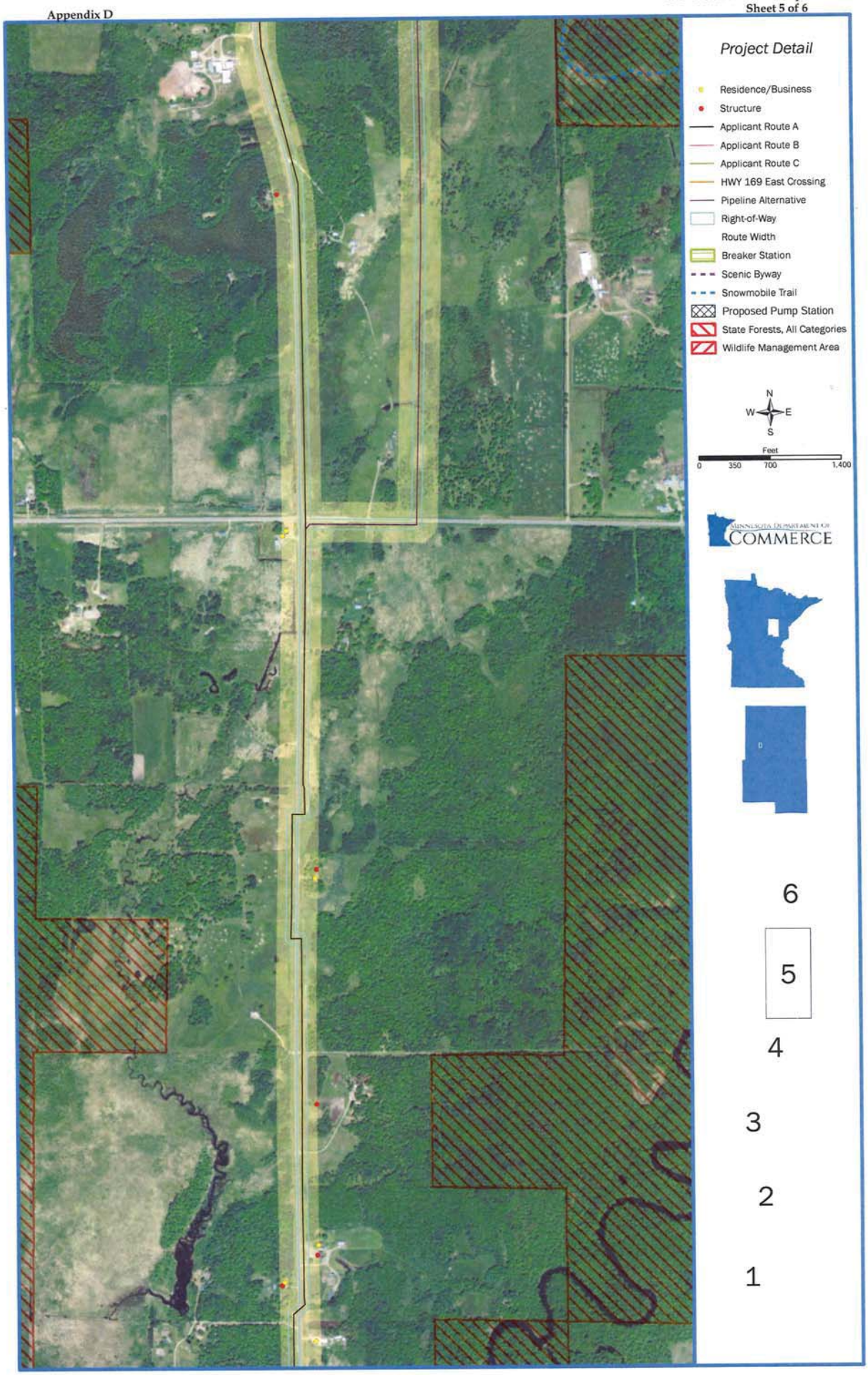
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MINNESOTA PUBLIC UTILITIES COMMISSION
COMPLAINT HANDLING PROCEDURES FOR
PERMITTED ENERGY FACILITIES

A. Purpose

To establish a uniform and timely method of reporting and resolving complaints received by the permittee concerning permit conditions for site 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 preparation, cleanup or restoration or other route and associated facilities 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 both or one 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 an individual to summarize complaints for the Commission. This person's name, phone number and email address shall accompany all complaint submittals.

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. date of complaint;
    c. tract or parcel number; and
    d. whether the complaint relates to a permit matter or a compliance issue.

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. activities undertaken to resolve the complaint; and
    g. 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. 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 EFP Complaint" and include the appropriate project docket number.

Monthly Reports: During project construction and restoration, 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 Daniel P. Wolf, Executive Secretary, Public Utilities Commission, using the eDockets system. The eDockets system is located at: https://www.edockets.state.mn.us/EFiling/home.jsp

If no complaints were received during the preceding month, the permittee shall file a summary indicating that no complaints were received.

G. Complaints Received by the Commission

Complaints received directly by the Commission from aggrieved persons regarding site preparation, construction, cleanup, restoration, operation and maintenance shall be promptly sent to the permittee.

H. Commission Process for Unresolved Complaints

Commission staff shall perform an initial evaluation of unresolved complaints submitted to the Commission. Complaints raising substantial permit issues shall be processed and resolved by the Commission. Staff shall notify the permittee and appropriate persons if it determines that the complaint is a substantial complaint. With respect to such complaints, each party shall submit a written summary of its position to the Commission no later than ten days after receipt of the staff notification. The complaint will be presented to the Commission for a decision as soon as practicable.

I. Permittee Contacts for Complaints and Complaint Reporting

Complaints may filed by mail or email to:

Carol Schmidt, Supervisor, Transmission Planning
Great River Energy
12300 Elm Creek Blvd
Maple Grove, MN 55369
763-445-5214
cschmidt@grenergy.com

This information shall be maintained current by informing the Commission of any changes as they become effective.

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 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 with Daniel P. Wolf, Executive Secretary, Public Utilities Commission, through the eDockets system. The eDockets system is located at: https://www.edockets.state.mn.us/EFiling/home.jsp

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. Filings that are graphic intensive (e.g., maps, engineered drawings) must, in addition to being electronically filed, be submitted as paper copies and on CD. Paper copies and CDs should be sent to: 1) Daniel P. Wolf, Executive Secretary, Minnesota Public Utilities Commission, 121 7th Place East, Suite 350, St. Paul, MN 55101-2147, and 2) Department of Commerce, Energy Environmental Review and Analysis, 85 7th Place East, Suite 500, St. Paul, MN 55101-2198.

The Commission may request a paper copy of any electronically filed document.

PERMIT COMPLIANCE FILINGS[1]

PERMITTEE:	Great River Energy
PERMIT TYPE:	HVTL Route Permit
PROJECT LOCATION:	Aitkin County
PUC DOCKET NUMBER:	ET2/TL-15-423

Filing Number	Permit Section	Description of Compliance Filing	Due Date
1	Complaint Handling Procedures	Complaint reports	By the 15th of each month
2	5.1	Permit Distribution	First contact with landowners after permit
3	5.2	Contact information for field representative	14 days prior to construction
5	5.3.14	Notification of previously unrecorded archaeological sites	Upon discovery
4	5.3.16	Restoration complete	60 days after completion of all restoration
6	6.3	Vegetation Management Plan	14 days prior to submission of plan and profile
7	8.0	Complaint procedures	Prior to start of construction
8	9.1	Plan and profile of right-of-way (ROW)	At least 30 days before ROW preparation for construction
9	9.2	Periodic status reports	Monthly

[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
10	9.3	Notice of completion and date of placement in service	Three days prior to energizing
11	9.4	Provide as-built plans and specifications	Within 90 days after completion of construction
12	9.5	Provide GPS data	Within 90 days after completion of construction