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December 8, 2015

Daniel Wolf
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101-2147

RE: EERA Comments and Recommendations
Menahga Area 115 kV Transmission Line Project
Docket No. ET2, E015/TL-14-797

Dear Mr. Wolf,

Attached are comments and recommendations of Department of Commerce, Energy
Environmental Review and Analysis (EERA) staff in the following matter:

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

The application was filed on January 15, 2015, by:

Carole Schmidt
Great River Energy
12300 Elm Creek Blvd.
Maple Grove, MN 55369

EERA staff's comment and recommendations address (1) public comments on the environmental assessment prepared for the project, (2) the applicants' proposed findings and conclusions, (3) the applicants' suggested permit revisions, and (4) public comments on the summary of public testimony and the applicants' proposed findings and conclusions. Staff is available to answer any questions the Commission may have.

Sincerely,

A handwritten signature in black ink that reads "Ray Kirsch". The signature is written in a cursive, flowing style.

Ray Kirsch
EERA Staff

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BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

**COMMENTS AND RECOMMENDATIONS OF
MINNESOTA DEPARTMENT OF COMMERCE
ENERGY ENVIRONMENTAL REVIEW AND ANALYSIS**

DOCKET NO. ET2, E015/TL-14-797

Date: December 8, 2015

EERA Staff: Ray Kirsch.....651-539-1841

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

Issues Addressed: These comments and recommendations address: (1) public comments on the environmental assessment prepared for the project, (2) the applicants' proposed findings and conclusions for the project, (3) the applicants' suggested revisions to the generic route permit template for the project, and (4) public comments on the summary of public testimony for the project and the applicants' proposed findings and conclusions.

Documents Attached: (A) EERA edited findings of fact, (B) maps of proposed Andersen alignment, and (C) maps of 119th Ave. route alternative utilizing a portion of the Pipeline South route alternative.

Additional documents and information can be found on eDockets:
<https://www.edockets.state.mn.us/EFiling/search.jsp> (14-797) and on the Department's website:
<http://mn.gov/commerce/energyfacilities/Docket.html?Id=33985>.

This document can be made available in alternative formats (i.e. large print or audio) by calling 651-539-1530 (voice).

Introduction and Background

On October 19, 2015, administrative law judge James Mortenson presided over a public hearing on behalf of the Commission for Great River Energy and Minnesota Power's proposed Menahga Area 115 kV transmission line project.¹ Citizens were afforded the opportunity to provide oral

¹ Ex. 50 (Notice of Public Hearing). All exhibit references are to the final exhibit list filed by the court reporter for the hearing, eDockets Number [201511-115655-01](https://www.edockets.state.mn.us/EFiling/search.jsp).

comments at the hearing and written comments through November 2, 2015.² Subsequently, Great River Energy and Minnesota Power (applicants) provided proposed findings of fact and conclusions of law for the project.³ The applicants also provided recommended revisions to the generic route permit template for the project.⁴ On November 18, 2015, Judge Mortenson filed a summary of public testimony from the public hearing.⁵ On December 2, 2015, Donna and Curtis Andersen and the Donna J. Andersen Trust (Andersens) provided comments on the summary of public testimony and the applicants' proposed findings of fact and conclusions of law.⁶

Department of Commerce, Energy Environmental Review and Analysis (EERA) staff provides these comments to address: (1) public comments on the environmental assessment (EA) prepared for the project, (2) the applicants' proposed findings of fact and conclusions of law (FOF) for the project, (3) the applicants' proposed revisions to the generic route permit template, and (4) the Andersens' comments on the summary of public testimony for the project and the applicants' proposed findings and conclusions.

EERA Responses to Comments on the Environmental Assessment

Comments on the environmental assessment (EA) were received at the public hearing (oral comments) and during the public hearing comment period (written comments). EERA staff provides these responses to comments on the EA to ensure a complete record for the Commission.

Oral Comments

Two comments at the public hearing addressed the EA – the comments of Ms. Donna Andersen and of Ms. Carol Overland.

Ms. Donna Andersen

Ms. Donna Andersen is a landowner along the applicants' proposed transmission line route.⁷ Ms. Andersen owns approximately 78 acres, with some portion of this acreage in a Department of Natural Resources (DNR) woodland stewardship plan.⁸

Ms. Andersen noted that the text of the EA – in its listing of areas of biological significance that could be impacted by the project – inappropriately omits Section 31 of Straight River Township in Hubbard County.⁹

² Id.

³ Proposed Findings of Fact and Conclusions of Law, Great River Energy and Minnesota Power, November 18, 2015, eDockets Number [201510-115797-01](#).

⁴ Recommended Revision to Route Permit Template, Great River Energy and Minnesota Power, November 20, 2015, eDockets Number [201511-115848-01](#).

⁵ Summary of Public Testimony, Office of Administrative Hearings, November 18, 2015, eDockets Number [201511-115777-02](#).

⁶ Comment on Summary and Proposed Findings, Donna J. Andersen, Curtis Andersen, and Donna J. Andersen Trust, December 2, 2015, eDockets Number [201512-116129-01](#).

⁷ Public Hearing Comments of Ms. Donna Andersen, October 19, 2015, at 22-25, eDockets Number [201510-115070-01](#)[hereinafter Public Hearing Transcript].

⁸ Id.

⁹ Id.

EERA staff agrees. Though Section 31 of Straight River Township is indicated on Map E7-B of the EA as including an area of moderate biological significance, the text of the EA inadvertently omits listing this township section. The text on page 81 of the EA should read, “The Minnesota biological survey has identified an area of moderate biological significance in Section 30 of Hubbard Township and in Section 25, 26, 31, and 35 of Straight River Township in Hubbard County.”¹⁰

Ms. Andersen also noted that she disagrees with the EA’s characterization of potential impacts to this area of biological significance.¹¹ The EA indicates that impacts to rare and unique resources due to the project are anticipated to be minimal;¹² however, the EA also notes that impacts to forests due to the project are anticipated to be minimal to moderate.¹³ Ms. Andersen’s property falls into both of these categories – it is an area of biological significance (a rare and unique resource) and it is a forested area. EERA staff believes that the EA can be fairly read to say that impacts to the forested area of biological significance on her property are anticipated to be minimal to moderate. Ms. Andersen and the EA are in agreement regarding mitigation for potential impacts to this forested area of biological significance – impacts can be mitigated by placing the line away from this area.¹⁴

Lastly, Ms. Andersen noted that she is aware of a bat study being conducted by the applicants for the U.S. Fish and Wildlife Service (USFWS). She noted that she is concerned that she has not yet seen the results of the study.¹⁵ At the hearing, the applicants noted that they would provide Ms. Andersen with the results of the bat study once the applicants’ have met with the USFWS and the report is finalized.¹⁶ The applicants subsequently provided the study via electronic filing.¹⁷

Ms. Carol Overland

Ms. Carol Overland noted that the EA’s assessment of the no-build alternative was inadequate.¹⁸ She noted that the EA did not examine an upgrade of the existing 34.5 kV transmission system in the area.¹⁹

EERA staff respectfully disagrees with Ms. Overland’s characterizations. The no-build alternative is appropriately addressed in the EA in accordance with the scoping decision for the

¹⁰ Ex. 20 at 81 (EA) (underline indicating revised text).

¹¹ Public Hearing Comments of Ms. Donna Andersen, October 19, 2015, at 22-25, Public Hearing Transcript.

¹² Ex. 20 at 81-84 (EA).

¹³ Ex. 20 at 78-80 (EA).

¹⁴ Public Hearing Comments of Ms. Donna Andersen, October 19, 2015, at 22-25, Public Hearing Transcript; Ex. 20 at 83.

¹⁵ Public Hearing Comments of Ms. Donna Andersen, October 19, 2015, at 25, Public Hearing Transcript.

¹⁶ Public Hearing Comments of Ms. Carole Schmidt, October 19, 2015, at 26, Public Hearing Transcript.

¹⁷ Filing of Northern Long-Eared Bat Survey and Technical Memorandum for a Portion of the Menahga 115 kV Project, Great River Energy, November 5, 2105, eDockets Number [201511-115499-01](#) [hereinafter Applicant Bat Study].

¹⁸ Public Hearing Comments of Ms. Carole Overland, October 19, 2015, at 37, Public Hearing Transcript.

¹⁹ Id.

EA.²⁰ The EA examines a possible upgrade of the existing 34.5 kV transmission system in the project area as a system alternative.²¹

Ms. Overland also noted that phased and connected actions are not appropriately considered in the EA – specifically that double-circuiting for a future transmission line project is not appropriately examined.²²

EERA staff respectfully disagrees with Ms. Overland’s characterizations. The EA appropriately discusses possible double-circuiting a section of the project.²³ EERA staff agrees that phased and connected actions are part of environmental review.²⁴ EERA staff notes that for the Menahga project – a project that is part of an existing and planned transmission network – the project itself, with the possible addition of a section of double-circuiting is the appropriate project to be analyzed in the EA.²⁵

Lastly, Ms. Overland noted that the EA is inadequate because it does not contain a bat study being conducted by the applicants for the USFWS.²⁶ EERA staff respectfully disagrees. The EA was issued on September 28, 2015.²⁷ The applicants filed their bat study on November 5, 2015.²⁸ Accordingly, the bat study could not have been included in the EA. The EA does discuss the Northern Long-Eared Bat and the USFWS’s guidance regarding this threatened species.²⁹

Written Comments

Two written comments received during the public hearing comment period addressed the EA – the comments of Ms. Donna Andersen and of Ms. Carol Overland.

Ms. Donna Andersen

Ms. Donna Andersen noted that forest on her property has not been adequately documented in the EA and the impacts have not been considered.³⁰ EERA staff respectfully disagrees with Ms. Andersen’s characterization. Potential impacts to forests / trees are discussed appropriately in the EA.³¹ The EA notes that impacts to forests are unavoidable with the project, but that impacts can be mitigated, in part, by placing the line away from forested areas.³²

²⁰ Ex. 20 at 32 (EA).

²¹ Ex. 20 at 34-35 (EA).

²² Public Hearing Comment of Ms. Carol Overland, October 19, 2015, at 45, Public Hearing Transcript.

²³ Ex. 20 at 15, 44-46 (EA).

²⁴ Minnesota Rule 4410.2000, Subp 4.

²⁵ Id. (“For proposed projects such as highways, streets, pipelines, utility lines, or systems where the proposed project is related to a large existing or planned network...the RGU shall treat the present proposal as the total proposal”).

²⁶ Public Hearing Comment of Ms. Carol Overland, October 19, 2015, at 47, Public Hearing Transcript.

²⁷ Ex. 21 (Notice of EA Availability).

²⁸ Applicant Bat Study.

²⁹ Ex. 20 at 81-84 (EA).

³⁰ Comment Letter of Donna J. Andersen and Curtis Andersen, and the Donna J. Andersen Trust, Donna J. Andersen, Trustee, November 2, 2015, at 5, eDockets Number [201511-115330-01](#) [hereinafter Andersen Comment Letter].

³¹ Ex. 20 at 70-71, 78-80, and 87-90 (EA).

³² Id.

Ms. Andersen also noted that the EA does not address that impacts to forest cannot be mitigated.³³ EERA staff respectfully disagrees. The EA describes possible mitigation for impacts to forests but notes that, because of the prevalence of forests in the project area, impacts to forests are unavoidable.³⁴

Ms. Andersen also noted that the EA does not properly depict forested lands, specifically with respect to land on the south side of Hubbard Line Road.³⁵ EERA staff respectfully disagrees. The EA includes a land use resource map depicting land uses in the project area.³⁶ The EA also includes detailed route maps clearly depicting human and natural resources in the project area.³⁷ Read together, these maps indicate that the area south of Hubbard Line Road near Ms. Andersen's property is forested (in part), but much less so than Ms. Andersen's property on the north side of Hubbard Line Road.

Ms. Andersen noted that the text of the EA – in its listing of areas of biological significance that could be impacted by the project – inappropriately omits Section 31 of Straight River Township in Hubbard County.³⁸ EERA staff agrees (see discussion above – Oral Comments).

Lastly, Ms. Andersen noted that the EA improperly indicates that where the applicants' proposed route is near areas of biological significance, it follows existing rights-of-way.³⁹ Further, Ms. Andersen indicated that she does not have an existing 34.5 kV line on her property and that impacts are not minimized by utilizing the right-of-way of such a line.⁴⁰

With respect to following existing rights-of-way, EERA staff respectfully disagrees with Ms. Andersen's comment. The EA describes areas of biological significance in the project area and discusses the use of existing rights-of-way.⁴¹ Near Ms. Andersen's property, the applicants' proposed route utilizes the right-of-way of Hubbard Line Road (County Road 136).⁴²

With respect to existing 34.5 kV lines, EERA staff agrees – there is not a 34.5 kV line on Ms. Andersen's property. The EA does not depict such a line. The EA text cited by Ms. Andersen describes how impacts between the Hubbard substation and the Straight River substation are anticipated to be minimized by following an existing 34.5 kV line.⁴³ Ms. Andersen's property is not between the Hubbard substation and the Straight River substation. Thus, the EA text cited is not applicable to Ms. Andersen's property.

³³ Andersen Comment Letter at 5.

³⁴ Ex. 20 at 78-80, 87-90 (EA).

³⁵ Andersen Comment Letter at 5.

³⁶ Ex. 20, Map E1 (EA); land use data from the Minnesota Department of Natural Resources (see Appendix F, Spatial Data Sources).

³⁷ Ex. 20, Appendix D (EA).

³⁸ Andersen Comment Letter at 7.

³⁹ Andersen Comment Letter at 8.

⁴⁰ Id.

⁴¹ Ex. 20 at 81-84 (EA).

⁴² Ex. 20, Appendix D, Map Sheets 10 and 11 (EA).

⁴³ Andersen Comment Letter at 8; Ex. 20 at 82 (EA).

Ms. Carol Overland

Ms. Carol Overland noted that the applicants have requested double-circuiting a portion of the project to facilitate a transmission line project, at some time in the future, north of the Menahga project area.⁴⁴ Ms. Overland suggested that the EA indicates that this future project is a “driver” for the current Menahga project.⁴⁵ EERA staff respectfully disagrees with this characterization. The EA discusses this future project solely with respect to possible double-circuiting and the potential impacts of this double-circuiting.⁴⁶

Ms. Overland also noted that the EA’s assessment of the no-build alternative was inadequate and that an upgrade of the existing 34.5 kV transmission system was not examined.⁴⁷ EERA staff respectfully disagrees with Ms. Overland’s comment (see discussion above – Oral Comments).

Lastly, Ms. Overland noted that the EA does not utilize appropriate amperage levels for estimating magnetic fields associated with the project.⁴⁸ EERA staff respectfully disagrees. The EA uses amperage levels appropriate for the project, levels that reflect average and peak loads.⁴⁹ Ms. Overland appeared to suggest that appropriate amperage levels would be those levels that are limiting for the conductor – i.e., an amperage level that, if sustained, would cause the conductor to fail. To the extent this is the case, EERA staff believes this is not an appropriate analysis of amperage levels or of potential impacts due to magnetic fields associated with the transmission line.

EERA Comments on the Applicants’ Proposed Findings and Conclusions

EERA staff comments on the applicants’ proposed finding and conclusions (FOF) consist of two parts. Part one, below, discusses EERA staff’s recommended changes to the applicants’ proposed FOF. Part two (Attachment A) is an edited version (underline and strikethrough) of the applicants’ proposed FOF. References to specific findings in the following discussion are to the findings as numbered in EERA staff’s edited findings (Attachment A) unless otherwise noted.

Public and Local Government Participation

EERA staff recommends editing Finding 74 to indicate that Donna and Curtis Andersen (Andersens) proposed and requested that the alignment for the project along their property be on the south side of Hubbard Line Road (County Road 136). EERA staff also recommends moving the applicants’ proposed Finding 75 to become Finding 77. This move properly locates the comments of the Minnesota Department of Natural Resources (DNR) and the Minnesota Department of Transportation (MnDOT) under the heading of “Local Government and State Agency Participation.”

Further EERA staff recommends editing Finding 77 to include DNR’s recommendations that an Avian Mitigation Plan and Vegetation Management Plan be developed for the project.

⁴⁴ Comment Letter of Ms. Carol Overland, November 2, 2015, at 4, eDockets Number [201511-115353-01](#) [hereinafter Overland Comment Letter].

⁴⁵ Id.

⁴⁶ Ex. 20 at 15 and 45-46 (EA).

⁴⁷ Overland Comment Letter at 8.

⁴⁸ Id.

⁴⁹ Ex. 20 at 56-60 (EA).

Effects on Human Settlements

Noise

EERA staff recommends editing Finding 92 to note that noise levels at the Western Blueberry Substation site alternative are anticipated to be within state noise standards and slightly higher, at the nearest receptor, than noise levels for the applicants' proposed Blueberry substation site.

Aesthetics

EERA staff recommends editing Finding 94 to indicate that all route alternatives examined in the EA are near fewer residences than the applicants' proposed route. EERA staff recommends adding Finding 95 to describe those route alternatives that place like with like through utilization of existing infrastructure right-of-way (ROW). EERA staff recommends editing Finding 96 to describe methods for minimizing aesthetic impacts.

EERA staff recommends editing Finding 97 to clarify that the distance noted (150 feet) is from residences to the anticipated alignment of the applicants' proposed route. Lastly, EERA staff recommends editing Finding 99 to clarify that the aesthetic impacts of the proposed route and of all route alternatives are anticipated to be minimal, but that these impacts – though minimal – are anticipated to vary among routing options for the project.

Zoning and Land Use Compatibility

EERA staff recommends adding a section to the FOF to discuss an additional element of effects on human settlements – zoning and land use compatibility. EERA staff recommends adding Findings 113 through 117 to describe potential land use impacts of the project, including potential impacts on the Alajoki Cemetery.

Effects on Land-Based Economies

Forestry

EERA staff recommends editing Finding 134 to indicate the acreage of forested land that will be impacted by the proposed route. EERA staff recommends editing Finding 135 to note that impacts to forested lands can be minimized by prudent routing and prudent placement of the alignment within the route.

Effects on the Natural Environment

Wetlands

EERA staff recommends editing Finding 151 to correctly note those route alternatives that impact more and fewer wetland acres than the applicants' proposed route.

Flora

EERA staff recommends editing Findings 152 and 156 to note and distinguish impacts to non-tree flora. EERA staff recommends adding Finding 153 to describe mitigation measures for potential impacts to flora. EERA staff recommends adding Finding 155 to note DNR's recommendations regarding vegetation management for the project.

Fauna

EERA staff recommends editing Finding 158 to include DNR's recommendations regarding mitigation of potential impacts to avian species. EERA staff recommends editing Finding 159 to note and distinguish impacts to avian and non-avian species.

Effects on Rare and Unique Natural Resources

EERA staff recommends editing Finding 161 to include rare and unique plant species in the project area. EERA staff recommends editing Finding 162 and adding Finding 163 to include additional detail regarding the Northern Long-Eared Bat (NLEB). EERA staff recommends adding Findings 164 and 165 to note DNR's recommended mitigation measures for specific rare and unique resources in the project area. Lastly, EERA staff recommends adding Finding 166 to note how impacts to rare and unique natural resources can be avoided and minimized generally.

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

EERA staff recommends editing Finding 172 to more completely describe use of existing ROW by route alternatives.

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

EERA staff recommends editing Finding 174 to more completely describe the use of existing ROW by route alternatives.

Electrical System Reliability

EERA staff recommends editing Finding 176 to note that the project is anticipated to improve electrical reliability and service in the project area.

Costs of Constructing, Operating, and Maintaining the Facility

EERA staff recommends editing Finding 178 to more completely describe project costs. EERA staff recommends adding Finding 179 to include cost information for the western Blueberry substation site alternative.

Adverse Human and Natural Environmental Effects Which Cannot be Avoided

EERA staff recommends editing Finding 182 to more completely describe impacts of the project that cannot be avoided.

Irreversible and Irretrievable Commitments of Resources

EERA staff recommends editing Finding 185 to note that the commitment of land for a transmission line ROW is likely an irreversible commitment. EERA staff recommends removing applicants' proposed Finding 175 as it is a conclusion regarding the route for the project rather than a finding that addresses commitments of resources.

Summary of Factor Analysis

EERA staff recommends editing and adding to the Summary of Factor Analysis to create findings that reflect specific segments of the project (Findings 187, 188, 189) and to summarize mitigation measures for the project (Finding 190). EERA staff recommends removing applicants' proposed Finding 177 as it is a conclusion rather than a summary.

Completeness of EA

EERA staff recommends editing Finding 194 to remove discussion of the EA as a form of alternative environmental review. The environmental review process for the Menahga project, including development of the EA, is statutorily prescribed by the Power Plant Siting Act.⁵⁰ The environmental review process is not a form of alternative environmental review as provided for by Environmental Quality Board (EQB) rules.⁵¹

Findings that Include Conclusory Statements

EERA staff recommends editing several findings to remove conclusory phrases and statements (Findings 104, 112, and 136).

Conclusions

EERA recommends that the conclusions be numbered separately from the findings (i.e. beginning 1, 2, 3, etc.). EERA staff has not undertaken this renumbering in Attachment A. References here utilize the numbering scheme provided in the applicants' proposed FOF as revised by EERA edits in Attachment A.

EERA staff recommends editing applicants' proposed Conclusion 185 to remove discussion of the EA and the Minnesota Environmental Policy Act. As noted above, the environmental review process for the Menahga project is statutorily prescribed by the Power Plant Siting Act,⁵² and is not a form of alternative environmental review as provided for by EQB rules.⁵³

EERA staff recommends adding Conclusion 202 to note that modifying the applicants' proposed alignment near the Andersens property to place the alignment on the south side of Hubbard Line Road (Andersen alignment) mitigates potential impacts to trees and rare and unique natural resources and is appropriate for the project (see Attachment B).

EERA staff recommends splitting applicants' proposed Conclusion 189 into two conclusions to better reflect the analysis in the EA and to accommodate the possibility of the Commission selecting a route other than the applicants' proposed route. EERA staff recommends Conclusion 202 to note that for the segment of the project between the Hubbard substation and the proposed Blueberry substation, the proposed route – with the Andersen alignment and the proposed Blueberry substation site – is the most appropriate route for the project.

In Conclusion 204, EERA staff provides an option for the Commission to select either the proposed route or the 119th Ave. route alternative as the most appropriate route for the project between the proposed Blueberry substation and the proposed Red Eye substation. EERA staff finds that these two routing options are the most consistent with the routing factors of Minnesota Rule 7850.4100 and that the differences between them are minimal. The differences that do exist are discussed here.

⁵⁰ Minnesota Statute 216E.04.

⁵¹ Minnesota Rule 4410.3600.

⁵² Minnesota Statute 216E.04.

⁵³ Minnesota Rule 4410.3600.

The 119th Ave. route alternative minimize aesthetic impacts by placing the line near fewer residences – 7 residences versus 14 for the proposed route.⁵⁴ However, one of these residences is within 51-100 feet of the anticipated alignment and no residences are at this distance for the proposed route.⁵⁵ The number of residences near the anticipated alignment for the 119th Ave route alternative could be further reduced by utilizing a segment of the Pipeline South route alternative (see Attachment C) – making it 5 residences versus 14 for the proposed route.

The proposed route minimizes aesthetic impacts by best utilizing existing infrastructure ROW and placing like with like. The proposed route follows existing infrastructure ROW for 95 percent of its length; the 119th Ave. route alternative follows existing infrastructure ROW for 89 percent of its length.⁵⁶ Additionally, the roadway followed by the proposed route is a paved county road; the roadway followed by the 119th Ave. route alternative is a non-paved township road.⁵⁷

The proposed route impacts slightly fewer forested acres than the 119th Ave. route alternative (17.8 acres versus 22.4 acres).⁵⁸ In sum, the 119th Ave. route alternative places the line away from residences in a slightly more rural and forested setting, while the proposed route places the line along existing infrastructure ROW with relatively more residences.

EERA staff recommends removing applicants’ proposed Conclusions 190 and 191. Applicants’ proposed Conclusion 190 uses the phrase “no feasible and prudent alternative” – a phrase that, to EERA staff’s reading, implies a presumption that the applicants’ proposed route should be granted if there are no feasible and prudent alternatives. EERA staff finds no such presumption in Minnesota Statute 216E.04 or in Minnesota Rule 7850.4100. Additionally, as discussed above, EERA staff believes there are feasible and prudent alternatives to the applicants’ proposed route. Applicants’ proposed Conclusion 191 is repetitive with applicant’s proposed Conclusion 189 and is replaced by Conclusions 203 and 204.

EERA staff recommends adding Conclusion 206 to mitigate potential impacts to the Alajoki Cemetery.

EERA staff recommends adding Conclusion 207 to provide for a Phase I archaeological survey for the project as recommended by the State Historic Preservation Office.

EERA staff recommends adding Conclusion 208 to require the development of an avian mitigation plan in consultation with the DNR and USFWS, as recommended by the DNR.

EERA staff recommends adding Conclusion 209 to require the development of a vegetation management plan in consultation with the DNR, as recommended by the DNR.

⁵⁴ Ex. 20 at 103 (EA).

⁵⁵ Id.

⁵⁶ Ex. 20 at 103-104 (EA).

⁵⁷ Ex. 20, Appendix D (EA).

⁵⁸ Ex. 20 at 105 (EA).

EERA staff recommends adding Conclusion 210 to require the mitigation strategies recommended by DNR for rare and unique natural resources.

EERA staff recommends adding Conclusion 211 to require that the Commission be informed of any additional bat studies conducted for the project.

EERA Comments on the Applicants' Proposed Revisions to the Generic Route Permit Template

EERA staff's comments on the applicants' proposed revisions to the generic route permit template for the project are organized according to the proposed revisions. Each revision and the applicants' "reason for change" are followed by EERA staff's comments.

Permit Template Section 4.0

Section 4.0. “. . . Where the transmission line route parallels existing highway and other road rights-of-way, the transmission line right-of-way shall be located between 3 and 7 feet outside of existing right of way ~~occupy and utilize the existing right of way to the maximum extent possible~~, consistent with the criteria in Minn.R. 7850.4100, the other requirements of this permit, and for highways under the jurisdiction of the Minnesota Department of Transportation (Mn/DOT) rules, policies, and procedures for accommodating utilities in trunk highway rights-of-way.”

Reason for change: Applicants suggest this revision for consistency with the application, which states that the project will be placed 3 to 7 feet outside of road rights-of-way. If the Minnesota Public Utilities Commission (“Commission”) grants a route permit for the applicants' proposed route, the anticipated alignment would also be expected to be consistent with this revision.

EERA Staff Comment

EERA staff believes that the route permit should reflect the anticipated alignment for the project as described in the route permit application and EA – generally, 3 to 7 feet outside of existing road rights-of-way. This could be achieved by the applicants' suggested edit; however, this edit removes the requirement to occupy and utilize existing rights-of-way to the maximum extent possible.

EERA staff recommends retaining the requirement to occupy and utilize existing rights-of way and suggests that this can be achieved by referencing the record in lieu of inserting specific distances into the permit. EERA staff recommends (1) leaving the above paragraph unedited, i.e., rejecting the applicants' proposed edit, and (2) editing earlier text in Section 4.0 to read:

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

Permit Template Section 5.1

Section 5.1. “The Permittee shall provide all affected landowners with a copy of this permit and, as a separate information piece, the complaint procedures ~~at the time of the first contact with the landowners~~ after issuance of this permit. . .”

Reason for change: Applicants propose to delete the language referenced above for purposes of clarity, as applicants have been working with landowners to acquire easements for the northern portion of the project. Applicants will provide the route permit and complaint procedures to landowners after the route permit is issued.

EERA Staff Comment

EERA staff recommends rejecting this proposed revision as it can discern no reason why the permittees should not provide the permit and complaint procedures at the time of first contact after issuance of the permit versus at some undefined time after issuance of the permit. Even if permittees are negotiating and meeting with landowners on a regular basis, once the permit is issued, permittees can provide the permit and complaint procedures at their next meeting with landowners.

Permit Template Section 5.2.8

Section 5.2.8. “The Permittee shall ~~minimize the number of trees to be removed in selecting the right of way~~ specifically preserving preserve to the maximum extent practicable windbreaks, shelterbelts, living snow fences, and vegetation”

Reason for change: Applicants propose this change for purposes of clarity. Applicants have completed preliminary design for the project and generally identified the rights-of-way. Applicants have identified an alignment that minimizes tree removal and will preserve trees on the approved alignment to the maximum extent practicable.

EERA Staff Comment

EERA staff recommends rejecting this proposed revision as it can see no reason for the change. Whether the applicants have or have not completed a preliminary design is not relevant to the requirements of this permit section. Additionally, the applicants proposed revision could be read to preserve trees solely “in areas such as trail and stream crossings” – a result that is at odds with the existing permit template language.

Permit Template Section 5.2.12

Section 5.2.12. “. . . To minimize impacts, construction in wetland areas shall occur during frozen ground conditions where practicable and will be according to permit requirements by the applicable permitting authority. . . .”

Reason for change: Applicants have been and will continue to coordinate with applicable agencies regarding construction in wetland areas and proposes this change to allow for flexibility while still ensuring minimization of wetland impacts.

EERA Staff Comment

EERA staff believes the text of this section of the route permit template already provides the flexibility sought by the applicants. Text in Section 5.2.12 states:

To minimize impacts, construction in wetland areas shall occur during frozen ground conditions. When construction during winter is not possible, wooden or composite mats shall be used to protect wetland vegetation... All requirements of the U.S. Army Corps of Engineers [and other wetland permitting agencies]...shall be met.

This text conditions construction in wetland areas during frozen ground conditions using the word “possible” – the applicants suggest “practicable.” Both texts require that the permittee comply with the requirements of wetland permitting agencies. EERA staff recommends rejecting this proposed revision of Section 5.2.12.

Permit Template Section 5.2.13

Section 5.2.13. Applicants recommend removal of the requirements to (1) submit a Construction Environmental Control Plan (“CECP”) and (2) employ a monitor that reports to an Environmental Monitor to identify and report archaeological resources encountered during construction of the Project and to coordinate with the State Historic Preservation Office on appropriate mitigation measures.

Reason for change: The construction supervisor will monitor environmental compliance for the project. Also, the results of the Phase I archaeological survey and applicable avoidance and mitigation measures will be submitted to the Commission with the project’s plan and profile.

Applicants believe that assigning environmental compliance to the construction supervisor and submission of the Phase I data to the Commission provide appropriate environmental and cultural resources oversight for this project. Also, to applicants’ knowledge, a CECP has not previously been required from applicants in other projects subject to the alternative process and applicants generally have not employed a monitor specifically for cultural resources.

EERA Staff Comment

EERA staff agrees with the applicants' suggested revision. This section of the route permit template assumes that a Phase I archaeological survey is appropriate for the project, that a construction environmental control plan (CECP) is appropriate for the project, and that a dedicated environmental monitor is appropriate for the project. EERA staff believes these mitigation measures must flow from the record for the project and cannot be assumed as necessary for the project. To EERA staff's reading of the record, these measures – excepting the Phase I archaeological survey (discussed above, Conclusion 207) – are not required for the project.

EERA staff notes that a vegetation management plan and an avian mitigation plan – plans that are commonly included in a CECP – are appropriate for this project (discussed above, Conclusions 208 and 209).

Permit Template Section 5.2.17

Section 5.2.17. The Permittee shall fairly restore or compensate landowners for damage to crops, fences, private roads and lanes...

Reason for change: Applicants propose this change to provide flexibility to landowners and applicants in resolving damages arising from construction of the project.

EERA Staff Comment

EERA staff believes the applicants' proposed revision to allow for restoration of landowners' damaged resources is reasonable.

Permit Template Section 9.1

Section 9.1. 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, and structure specifications and locations, ~~cleanup, and restoration for the transmission line.~~

Reason for change: Applicants propose this change to avoid duplication, as these items are already covered in Sections 5.2.11, 5.2.15, and 5.2.17.

EERA Staff Comment

EERA staff believes the applicants' proposed revision of this section is reasonable, given that Sections 5.2.11 and 5.2.15 of the route permit template address restoration and cleanup related to the project.

Permit Template Sections 9.4 and 9.5

Section 9.4. Within ~~60~~180 days after completion of construction, the Permittee shall submit copies of all final as-built plans and specifications developed during the Project.

Reason for change: Applicants suggest this change to be consistent with past practice. Applicants do not believe it is reasonably feasible to submit as-built plans and specifications within 60 days of construction completion.

Section 9.5. Within ~~60~~180 days after completion of construction, the Permittee shall submit to the Commission, in the format requested by the Commission, geo-spatial information...

Reason for change: While GPS data can sometimes be obtained within 60 days of Project completion, GPS and as-built plans and specifications are typically submitted jointly, and applicants request they be allowed to do so here.

EERA Staff Comment

EERA staff believes it would be appropriate to provide permittees more time (greater than 60 days) to provide as-built plans and geo-spatial information. However, EERA staff believes that the applicants' proposal of 180 days is too long a time. EERA staff suggests that a middle ground be struck. EERA staff believes 90 days for submittal of as-built plans and geo-spatial information to the Commission would be appropriate.

EERA Comments on the Andersens' Comments on the Summary of Public Testimony and the Applicants' Proposed Findings

EERA staff comments first address the Andersens' comments on the summary of public testimony and then those on the applicants' proposed findings. As the Andersens' comments do not include page numbers, references here are to general and specific areas of the text.

Summary of Public Testimony

The first five paragraphs of the Andersens' comments on the summary of public testimony (underline and strikethrough) appear to function as a means to ensure that the summary reflects the specific exhibits introduced at the hearing by Ms. Carol Overland. EERA staff believes that it not necessary to include this text, as all exhibits entered at the public hearing are in the record. To EERA's reading, the difference between the Andersens' comments and the administrative law judge's (ALJ's) summary appears to be a matter of interpreting the word "summary."

The Andersens' comments suggest adding language to note that a future project in the Itasca Mantrap Osage service area could be for the Sandpiper pipeline. This language is incorrect and not relevant. The applicants indicated that they have an existing need for additional electrical power in the Itasca Mantrap Osage service area.⁵⁹ The applicants also indicated that there could

⁵⁹ Public Hearing Transcript at 40.

be, at some future date, a pumping station for the Sandpiper pipeline in this service area.⁶⁰ The Andersen's comments conflate an existing need with the possibility of a future pumping station. Further, and independent of this conflation, the end users of the electrical power in the Itasca Mantrap Osage service area are not relevant to the Menahga project.

The Andersen's comments suggest adding language to describe the place of employment of Ms. Lisa Agrimonti, counsel for the applicants. This language is not relevant to the Menahga project.

The Andersen's comments note that a map offered by Ms. Donna Andersen at the public hearing was not accepted into the record as an exhibit by the ALJ. Though technically correct, this point is not relevant. The ALJ's intent was not to refuse an exhibit but to determine if the area depicted on the map was already depicted on a map in the record.⁶¹ It was.⁶²

Lastly, the Andersen's comments suggest including the phrase "which is not true" in a description of the analysis in the EA. Ms. Andersen certainly took exception to parts of the analysis in the EA (discussed above); however, it is not appropriate for an ALJ's summary of public testimony to conclude that any part of an environmental review document is "not true."

Applicants Proposed Findings

EERA staff recommends that the Andersen's comments on the applicants' proposed FOF not be incorporated into the Commission's findings for the project. First, many of the comments are already reflected in EERA's proposed edits (Attachment A) – e.g., placing the anticipated alignment for the project on the south side of Hubbard Line Road near the Andersen's property (Andersen's proposed Findings 75, 76, 158, 162, 193). Second, several of the comments are not relevant and/or are incorrect as proposed (Andersen's proposed Findings 47, 63, 64, 125). Third, several of the comments are a continuation of the Andersen's comments on the EA and are inappropriate as findings (Andersen's proposed Findings 95, 131, 176). Lastly, several of the comments are directed to the need for the project and are not relevant with respect to routing (Andersen's proposed Findings 67, 167).

⁶⁰ Id.

⁶¹ Public Hearing Transcript at 23.

⁶² Id.

**STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS
FOR THE PUBLIC UTILITIES COMMISSION**

IN THE MATTER OF THE APPLICATION OF
GREAT RIVER ENERGY AND MINNESOTA
POWER FOR A ROUTE PERMIT FOR A 115 kV
TRANSMISSION PROJECT IN THE MENAHGA
AREA IN BECKER, HUBBARD AND WADENA
COUNTIES

PUC Docket No. ET2, E015/TL-14-797
OAH Docket No. 5-2500-32715

GREAT RIVER ENERGY AND MINNESOTA
POWER
PROPOSED FINDINGS OF FACT AND
CONCLUSIONS OF LAW

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PUC DOCKET No. ET2, E015/TL-14-797
OAH DOCKET No. 5-2500-32715

PROPOSED FINDINGS OF FACT AND
CONCLUSIONS OF LAW

A public hearing was held before Administrative Law Judge (“ALJ”) James Mortenson on October 19, 2015 at the Menahga Senior Center in Menahga, Minnesota.

Lisa Agrimonti, Fredrikson & Byron, P.A., 200 South Sixth Street, Minneapolis, Minnesota 55402, appeared on behalf of Great River Energy. Michelle Lommel, Senior Field Representative; Carole Schmidt, Supervisor, Transmission Permitting and Compliance; Chuck Lukkarila, Project Manager; Eric Messerich, Planning Engineer; Rick Jeanson, Senior Transmission Line Design Engineer, and Jenny Guardia, Communications Coordinator, of Great River Energy, 12300 Elm Creek Boulevard, Maple Grove, MN 55369, attended on behalf of Great River Energy and Minnesota Power (“Applicants”).

Ray Kirsch, 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”).

Scott Ek, 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

Have Applicants 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 in the Menahga area in Becker, Hubbard, and Wadena Counties (the “Project”)?

SUMMARY

The Commission concludes that the Applicants have satisfied the criteria set forth in Minnesota law for a Route Permit and the Commission GRANTS the Applicants 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. APPLICANTS

1. Great River Energy is 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 Todd-Wadena Electric 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

2. Minnesota Power is an investor-owned public utility headquartered in Duluth, Minnesota. Minnesota Power supplies retail electric service to 143,000 retail customers and wholesale electric service to 16 municipalities in a 26,000-square-mile electric service territory located in northeastern Minnesota. Minnesota Power generates and delivers electric energy through a network of transmission and distribution lines and substations throughout northeastern Minnesota.²

II. PROCEDURAL HISTORY

3. On December 11, 2014, Great River Energy filed with the Minnesota Public Utilities Commission ("Commission") a Notice of Intent to File a Route Permit Application under the Alternative Permitting Process.³ Applicants had previously also provided local government units with notice of the Project.⁴

4. On January 15, 2015, Great River Energy and Minnesota Power submitted their Application for a Certificate of Need and Route Permit ("Application") for the Project.⁵

5. On January 21, 2015, the Commission issued a Notice of Comment Period on Application Completeness.⁶

6. On January 26, 2015, Applicants provided notice of the Application to the General List, persons who own land on or adjacent to the proposed route, local officials, and agencies.⁷

7. On January 30, 2015, Applicants filed a revised Appendix J of the Application with the corrected list of landowners. This corrected list of landowners is the same list of landowners that was used for the notice of the Application sent on January 26, 2015.⁸

¹ Ex. 6 at 1-1 (Application).

² Ex. 6 at 1-3 (Application).

³ Ex. 6 at Appendix D (Application).

⁴ See Ex. 6 at Appendix A (Application).

⁵ Ex. 6 (Application).

⁶ Ex. 36 (Notice of Comment Period on Application Completeness).

⁷ Ex. 7 (Notice of Route Permit Application).

⁸ Revised App. J (Jan. 30, 2015), eDocket Document No. 20151-106873-01.

8. On February 4, 2015, EERA staff filed its comments and recommendations regarding the completeness of the Application and recommended the Application be found complete.⁹

9. Several members of the public filed comments during the comment period on Application Completeness.¹⁰ Comments included a suggested system alternative, a suggested route alternative, and concerns about: an organic farm, irrigators, stray voltage, lady slippers, property values, electric and magnetic fields (“EMF”), and television interference.

10. On February 13, 2015, the Commission issued a Notice of Meeting on Application Completeness for February 26, 2015.¹¹

11. On February 17, 2015, Applicants 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 4.¹²

12. On February 19, 2015, Commission staff filed Briefing Papers recommending the Commission find the Application complete.¹³

13. On February 26, 2015, the Commission met and found the Application complete.¹⁴

14. On March 18, 2015, the Commission issued its Order Accepting the Application as Complete.¹⁵ In addition to finding the Application complete, the Commission approved joint hearings and combined environmental review for the Certificate of Need and Route Permit proceedings.

15. On February 27, 2015, the Commission and EERA issued a Notice of Public Information and EA Scoping Meeting.¹⁶ This notice was also published in the *Detroit Lakes Tribune* on March 4, 2015, the *Verndale Sun* on March 5, 2015, the *Northwoods Press* on March 4, 2015, and the *Review Messenger* on March 4, 2015, as required under Minnesota Statutes Sections 216E.03, Subdivision 4 and 216E.04, Subdivision 4; and Minnesota Rule 7850.2100, Subpart 2.¹⁷

⁹ Ex. 11 (EERA Comments and Recommendations on Application Completeness).

¹⁰ Ex. 37 (Public Comment Letters Received During Comment Period on the Permit Application Completeness).

¹¹ Ex. 38 (Commission Meeting Notice on Completeness).

¹² Compliance Filing (Feb. 17, 2015), eDocket Document No. 20152-107393-01.

¹³ Ex. 39 (Staff Briefing Papers on Completeness).

¹⁴ Ex. 41 (Commission Order Accepting Application as Complete).

¹⁵ Ex. 41 (Commission Order Accepting Application as Complete).

¹⁶ Ex. 40 (Notice of Public Information and EA Scoping Meetings Affidavit of Service).

¹⁷ Ex. 35 (Affidavit of Publication for Notice of Public Meeting).

16. On March 19, 2015, Applicants filed the newspaper affidavits of publication for the March 24, 2015 Information and EA Scoping Meeting.¹⁸

17. On March 24, 2015, the Commission and EERA held a Public Information and EA Scoping Meeting at the Menahga Senior Center in Menahga, Minnesota at 6:00 p.m.¹⁹

18. On April 10, 2015, the scoping comment period ended.²⁰

19. On April 14, 2015, EERA posted the transcript of oral comments from the March 24, 2015 meeting and written comments received during the comment period.²¹

20. Ten members of the public filed comments during the scoping comment period.²²

21. The Minnesota Department of Transportation (“MnDOT”) filed a comment during the scoping period indicating its interest in any impacts the new transmission line may have on the safety of the state transportation system, the effectiveness of the operations or maintenance of the state trunk highway system and any additional costs that may be imposed on the state trunk highway fund as a result of the proposed transmission line.²³

22. On May 6, 2015, EERA issued comments and recommendations on the EA Scoping Process and Alternative Routes to the Commission.²⁴ EERA recommended that six alternatives be included in the EA.

23. On May 8, 2015, the Commission issued a Notice of Commission Meeting noting that it would consider what action it should take in regard to route alternatives to be evaluated in the EA.²⁵

24. On May 13, 2015, Commission staff issued Briefing Papers on the EA scoping process and alternative routes.²⁶

25. On May 18, 2015, EERA filed supplemental comments on hearing processes.²⁷

¹⁸ Ex. 35 (Affidavit of Publication for Notice of Public Meeting).

¹⁹ Ex. 35 at 8 (Affidavit of Publication for Notice of Public Meeting); Ex. 40 (Notice of Public Information and EA Scoping Meeting).

²⁰ Ex. 40 (Notice of Public Information and EA Scoping Meeting).

²¹ Exs. 12, 13 (Written and Oral Comments on Scope of EA).

²² Ex. 12 (Written Comments on Scope of EA).

²³ Ex. 12 at 2-3 (Written Comments on Scope of EA).

²⁴ Ex. 14 at 5 (Comments and Recommendations to Commission on Scoping Process and Route and Site Alternatives).

²⁵ Ex. 42 (Notice of Commission Meeting on Route Alternatives and Generic Route Permit Template).

²⁶ Ex. 43 (Commission Staff Briefing Papers on Route Alternatives and Generic Route Permit Template).

²⁷ Ex. 15 (Supplemental Comments to Commission on Hearing Processes).

26. On May 26, 2015, the Department of Commerce issued its EA Scoping Decision.²⁸

27. On May 27, 2015, EERA filed a letter to new landowners that may be affected by new site or route alternatives.²⁹

28. On May 29, 2015, the Commission filed the minutes from the February 26, 2015 Commission meeting.³⁰

29. On July 2, 2015, the Commission filed a Generic Route Permit Template.³¹

30. On July 6, 2015, the Commission posted two more landowner comments, dated February 3, 2015, and March 15, 2015.³²

31. On July 8, 2015, the Commission issued its Order Directing Use of Summary Report Process and Granting Variance.³³

32. On August 21, 2015, EERA posted additional Project information provided by Applicants for the EA.³⁴

33. On September 22, 2015, the Commission filed the minutes from the May 21, 2015 Commission meeting.³⁵

34. On September 28, 2015, EERA issued the EA for the Project and its Notice of Availability of the EA.³⁶

35. On October 1, 2015, EERA filed the certificate of service for mailing of the EA to public agencies.³⁷

36. On October 2, 2015, the Commission issued the Notice for the Public Hearing to be held October 19, 2015 at the Menahga Senior Center at 6:00 p.m.³⁸ The notice further provided that the Commission would accept public comments on the Project through November 2, 2015, at 4:30 p.m.

²⁸ Ex. 17 (EA Scoping Decision).

²⁹ Ex. 18 (Notice of EA Scoping Decision to New Landowners).

³⁰ Minutes of Commission Meeting (Feb. 26, 2015), eDocket Document No. 20155-110950-07.

³¹ Ex. 46 (Generic Route Permit Template).

³² Additional Written Comments on Scope of EA (July 6, 2015), eDocket Document No. 20157-112148-01.

³³ Ex. 48 (Commission Order Directing Use of the Summary Report Process and Granting Variance).

³⁴ Ex. 19 (Additional Project Information for the EA).

³⁵ Ex. 49 (Minutes from Commission's May 21, 2015, Agenda Meeting).

³⁶ Ex. 20 (EA); Ex. 21 (Notice of Availability of the EA).

³⁷ Ex. 22 (Certificate of Service for EA to Public Agency Representatives).

³⁸ Ex. 50 (Public Hearing Notice and Affidavit of Service).

37. On October 12, 2015, EERA published notice of the EA Availability in the *EQB Monitor* as required by Minnesota Rule 7850.3700, Subpart 6.³⁹

38. On October 12, 2015, the Donna J. Andersen and Curtis Andersen and Donna J. Andersen Trust (the “Andersens”) filed Petitions for Full Process and Contested Case Intervention.⁴⁰

39. On October 14, 2015, the OAH issued an Order denying the Andersens’ Petition to Intervene and Motion for Full Process and Referral for Contested Case.⁴¹

40. On October 16, 2015, the Andersens filed a Motion for Reconsideration.⁴² Also on October 16, 2015, the Andersens filed a Petition for an Environmental Impact Statement (“EIS”).⁴³

41. On October 19, 2015, Applicants filed comments in response to the Andersen Petition for an EIS.⁴⁴

42. On October 19, 2015, the ALJ held a Public Hearing at the Menahga Senior Center in Menahga, Minnesota at 6:00 p.m.⁴⁵

43. On October 20, 2015, the Andersens submitted a reply to Applicants’ response to the Petition for an EIS.⁴⁶

44. On October 26, 2015, Applicants filed affidavits of publication of the Notice of Public Hearings, confirming that notice for the October 19, 2015 public hearing was published in the *Detroit Lakes Tribune* on October 7, 2015, the *Verndale Sun* on October 8, 2015, the *Northwoods Press* on October 7, 2015, and the *Review Messenger* on October 7, 2015.⁴⁷

45. On November 2, 2015, the public hearing comment period ended.⁴⁸

³⁹ Ex. 23 (Notice in EQB Monitor of EA Availability).

⁴⁰ Petitions for Full Process and Contested Case Intervention (Oct. 12, 2015), eDocket Document No. 201510-114752-01.

⁴¹ Order Denying Andersens’ Petition to Intervene and Motion for Full Process and Referral for Contested Case (Oct. 14, 2015), eDocket Document No. 201510-114794-01.

⁴² Motion for Reconsideration (Oct. 16, 2015), eDocket Document No. 201510-114880-01.

⁴³ Petition for an Environmental Impact Statement (Oct. 16, 2015), eDocket Document No. 201510-114911-02.

⁴⁴ Applicants’ Reply to Anderson’s Petition for an EIS (Oct. 19, 2015), eDocket Document No. 201510-114933-01.

⁴⁵ Ex. 50 (Notice of Public Hearing).

⁴⁶ Letter (Oct. 20, 2015), eDocket Document No. 201510-114950-02.

⁴⁷ Compliance Filing (Oct. 26, 2015), eDocket Document No. 201510-115106-01.

⁴⁸ Ex. 50 (Notice of Public Hearing and Certificate of Service).

III. DESCRIPTION OF THE PROJECT

46. The Project includes new 115 kV transmission lines and substations in Becker, Hubbard, and Wadena counties, Minnesota:

- Construction of approximately 7 miles of east-west transmission line between the existing Great River Energy Hubbard Substation and proposed new Minnesota Power Straight River Substation, which will replace the existing Minnesota Power 34.5 kV “522” feeder line. The first 4.5 miles between the Hubbard Substation and County Road (CR) 115 will be double-circuit 115 kV line to accommodate a future Great River Energy project to the north. The approximate 2.5 miles between CR 115 and the proposed Minnesota Power Straight River Substation will be single-circuit 115 kV line.⁴⁹
- Construction of a generally north to south, single-circuit transmission line (approximately 15.5 miles) between the proposed Minnesota Power Straight River Substation and the proposed new Todd-Wadena Red Eye distribution substation.⁵⁰
- Construction of the proposed new Minnesota Power Straight River Substation, Great River Energy Blueberry Substation, and Todd-Wadena Red Eye Substation (that will serve the new Minnesota Pipeline Company (“MPL”) pump station); relocation of the existing Todd-Wadena Menahga Substation to the new Blueberry Substation and conversion of the voltage from 34.5 kV to 115 kV; and modifications to the existing Great River Energy Hubbard Substation and the Minnesota Power Pipeline Substation.⁵¹

47. Applicants propose to use single pole structures between 60 and 90 feet in height for the majority of the Project. Spans for the 115 kV single circuit and 115 kV/115 kV double circuit portions of the Project are proposed to range from 350 feet to 400 feet. H-Frame structures (between 60 and 90 feet in height, spans ranging from 600 to 1000 feet) may be used in areas where longer spans are required to avoid or minimize impacts to wetlands or waterways.⁵²

48. Applicants are generally requesting approval of a 500-foot route width (250 feet either side of the transmission line in areas where the transmission line will be cross-country, or 250 either side of the centerline of road right-of-way in areas where the transmission line follows a road). In a few areas (particularly around proposed substations), Applicants are requesting a route width wider than 500 feet to accommodate facility designs.⁵³

49. Applicants propose a right-of-way of 100 feet in width for the Project.

⁴⁹ Ex. 6 at 1-5 (Application).

⁵⁰ Ex. 6 at 1-5 (Application).

⁵¹ Ex. 6 at 1-5 (Application).

⁵² Ex. 6 at 14 (EA).

⁵³ Ex. 6 at 1-5 (Application).

IV. NEED OVERVIEW

50. The Project is designed to serve two needs. First, the Project is designed to meet a load-serving need. Specifically, the Project will address existing low voltage and transmission system overloads in the area, which will improve reliability and provide a long-term load-serving capability transmission system for the area. Second, the Project will provide electrical service to the proposed new Todd-Wadena Red Eye distribution substation, which will in turn serve MPL's proposed Sebeka Pump Station, which is part of MPL's Reliability Project, for which MPL received a certificate of need from the Commission on August 31, 2015.⁵⁴

V. ROUTES EVALUATED

A. Route Proposed by Applicants.

51. Great River Energy evaluated the Project area and determined that identifying route options were constrained by a need to connect to existing infrastructure, the location of the proposed MPL pump station, the geographical area of the proposed Project, and engineering constraints associated with getting proper clearances around existing infrastructure.⁵⁵

52. Applicants' proposed route is approximately 22.5 miles long and is located in Becker, Hubbard, and Wadena counties near the cities of Menahga and Sebeka and in the townships of Hubbard, Straight River, Blueberry, and Red Eye (the "Proposed Route").⁵⁶ A map of the Proposed Route is included on Exhibit A.

53. The Application identified two alternatives, the East Route Alternative and the Central Alternative Segment, which Applicants analyzed and rejected. The East Route Alternative was rejected because it did not meet the Project's need, was longer, resulted in additional environmental impacts, and would be less reliable.⁵⁷ The Central Alternative Segment would have placed the Project along Highway 71 south of the City of Menahga and was rejected because of development along Highway 71, which created routing constraints. Applicants did not consider routing along Highway 71 north of the City of Menahga because the highway goes right through the city and is adjacent to a golf course.⁵⁸

B. Routes Proposed Through Public Participation.

54. Several alternative sites and routes in the southern portion of the Project area were introduced in the EA Scoping Decision:

⁵⁴ Order Granting Certificate of Need, *In the Matter of the Application of Minnesota Pipe Line Company, LLC for a Certificate of Need for the Minnesota Pipe Line Reliability Project to Increase Pumping Capacity on the Line 4 Crude Oil Pipeline in Hubbard, Wadena, Morrison, Meeker, McLeod, and Scott Counties*, MPUC Docket No. PL-5/CN-14-320 (Aug. 31, 2015).

⁵⁵ *E.g.*, Ex. 6 at 7-1 to 7-2 (Application).

⁵⁶ Ex. 6 at 1-1 (Application).

⁵⁷ Ex. 6 at 7-1 (Application).

⁵⁸ Ex. 6 at 7-2 (Application).

1. Blueberry Route Alternative and Western Blueberry Substation Site Alternative

55. The Blueberry Route Alternative, instead of following the Applicants' proposed route along Highway 87, follows the county line (Wadena Line Rd.) south approximately 0.7 miles and then turns eastward crossing Section 30 of Blueberry Township and enters the Blueberry Substation from the west.⁵⁹

56. The Western Blueberry Substation Site Alternative would place the Blueberry Substation on the western edge of Section 30 of Blueberry Township, at the point where the Blueberry Route Alternative turns eastward. If the Blueberry Substation were constructed at this alternative site, an existing 34.5 kV line would need to be extended westward to reach the substation. This alternative substation site would only be used in conjunction with the Blueberry Route Alternative.⁶⁰

2. Blueberry to Red Eye Route Alternatives

57. The Pipeline South Route Alternative proceeds from the Blueberry Substation, east along the 34.5 kV line right-of-way, and then southeast along the western edge of the MPL right-of-way to the Red Eye Substation.⁶¹

58. The East of 109th Avenue Route Alternative proceeds from the Blueberry Substation, south along 111th Avenue and then cross country, east of and parallel to 109th Avenue to County State Aid Highway 13 ("CSAH 13"). From CSAH 13, this alternative follows the Applicants' proposed route to the Red Eye Substation.⁶²

59. The 119th Avenue Route Alternative proceeds from the Blueberry Substation, south along 111th Avenue, east along 350th Street, and then south along 119th Avenue and cross country to CSAH 13. From CSAH 13, this alternative would follow the Applicants' proposed route to the Red Eye Substation.⁶³

60. The U.S. Route 71 Route Alternative proceeds from the Blueberry Substation, east along the 34.5 kV line right-of-way, and then south along U.S. Route 71 to CSAH 13. From CSAH 13, this alternative would follow the Applicants' proposed route to the Red Eye Substation.⁶⁴

61. The EA evaluated the Proposed Route and these alternatives.⁶⁵ A map of the alternatives reviewed in the EA is provided in Exhibit B.

⁵⁹ Ex. 20 at 21 (EA).

⁶⁰ Ex. 20 at 21 (EA).

⁶¹ Ex. 20 at 21 (EA).

⁶² Ex. 20 at 21 (EA).

⁶³ Ex. 20 at 21 (EA).

⁶⁴ Ex. 20 at 21 (EA).

⁶⁵ Ex. 20 (EA).

VI. TRANSMISSION LINE STRUCTURE TYPES AND SPANS

62. For the Project, Applicants propose to use overhead construction with wood structures. Applicants propose 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.⁶⁶

63. H-Frame structures may be used in areas where longer spans are required to avoid or minimize impacts to wetlands or waterways.⁶⁷

VII. TRANSMISSION LINE CONDUCTORS

64. 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, which will have a summer rating of 141.6 MVA, with seven steel core strands and 26 outer aluminum strands. The shield wire will be 0.528 optical ground wire.⁶⁸

65. The engineering evidence in the record demonstrates that the conductor is appropriate to meet the Project's need.⁶⁹

VIII. TRANSMISSION LINE ROUTE WIDTHS

66. For the Project, Applicants requested a route width of 500 feet for the majority of the Proposed Route except for the following areas:

- At the existing Hubbard Substation, an additional 150 by 650 feet north of the route width that encompasses the substation.
- In Section 26 of Straight River Township, a wider triangular route width is proposed to allow flexibility for the crossing of Minnesota Power's 230 kV "909" Line, although only a single alignment with an easement that is 50 feet on each side of the transmission line will be required in this area.
- Around the Straight River Substation, an area that accommodates the proposed location, plus an additional 650 feet to the west of the north-south alignment; and 500 feet north and 250 south of the road centerline is necessary to accommodate the transmission line.
- Around the Blueberry Substation, an additional route width of 100 feet to the north, 150 feet to the south, and 450 feet to the west of the substation is necessary to accommodate the transmission lines that will go in and out of the substation.

⁶⁶ Ex. 6 at 4-6 (Application); Ex. 20 at 23 (EA).

⁶⁷ Ex. 6 at 4-6 (Application); Ex. 20 at 24 (EA).

⁶⁸ Ex. 6 at 4-6 (Application); Ex. 20 at 24 (EA); Applicants' Comments (Nov. 2, 2015), eDocket Document No. 201511-115396-01.

⁶⁹ Ex. 6 at 4-6 (Application); *e.g.*, Public Hearing Transcript, at 35, 42-43.

- Around the Red Eye Substation, an additional area of 400 feet by 750 north of the east-west alignment that extends into the substation (property owned by MPL) to allow flexibility in design and to minimize conflict with MPL and Todd-Wadena's facilities.⁷⁰

IX. TRANSMISSION LINE RIGHT-OF-WAY

67. Applicants requested a right-of-way width of 100 feet. Where the Proposed Route is adjacent to a roadway, poles would generally be placed approximately three to five feet outside the public right-of-way. In these locations, the easement required from the adjacent landowner may be of lesser width because a portion of the transmission right-of-way can overlap with the public right-of-way.⁷¹

X. PROJECT SCHEDULE

68. Applicants anticipate a spring 2017 in-service date for the Project.⁷²

XI. PROJECT COSTS

69. Total project costs are estimated to approximately \$23 million, depending on final route selection and mitigation.⁷³

XII. PERMITTEE

70. The permittees for the Project are Great River Energy and Minnesota Power.⁷⁴

XIII. PUBLIC AND LOCAL GOVERNMENT PARTICIPATION

A. Public Comments

71. EERA received written comments from 10 members of the public during the EA scoping comment period.⁷⁵ In general, comments related to concerns about potential impacts to property values, gravel pits, rare plants, windbreaks, and television/cellular reception.⁷⁶

72. Alternative routes to the Proposed Route were also discussed during the scoping meeting and in written comments received during the scoping period.⁷⁷

73. Several members of the public spoke at the public hearing on October 19, 2015. Ms. Carol Overland provided testimony under oath and asked questions of Applicants'

⁷⁰ Ex. 6 at 4-1 (Application).

⁷¹ Ex. 6 at 4-6, 8-2 (Application).

⁷² See Ex. 6 at 4-14 (Application).

⁷³ Ex. 6 at 4-11 (Application).

⁷⁴ Ex. 6 at 1-1 (Application).

⁷⁵ Ex. 12 (Written Comments on Scope of EA).

⁷⁶ Ex. 17 at 2 (EA Scoping Decision).

⁷⁷ See Exs. 12 and 13 (Written and Oral Comments on Scope of EA).

representatives regarding the Project.⁷⁸ Her questions related to the proposed conductor size, the need for the Project, transmission planning studies, growth rates and electrical load, the load at the existing MPL pump station the area, the distribution system in the area, and the Northern Long-Eared Bat (“NLEB”) study.⁷⁹ The Andersens requested that Applicants submit the NLEB study, and Applicants agreed to do so after further consultation with the United States Fish & Wildlife Service (“USFWS”).⁸⁰ The Applicants filed and served the study that includes the Andersens’ property in this docket on November 5, 2015.⁸¹ The study determined that NLEB were likely absent from the studied area.⁸² The Andersens also expressed concerns about potential tree clearing on their property and further questioned the adequacy of the EA and indicated concerns related to wetlands.⁸³ Another landowner expressed opposition to the Blueberry Route Alternative. In addition, a landowner questioned why the Proposed Route did not follow existing pipeline right-of-way.⁸⁴ Great River Energy and EERA responded to these questions from the public.⁸⁵

74. Multiple members of the public provided written comments during the public hearing comment period.⁸⁶ Comments generally related to [the need for the project](#), tree removal, sensitive species, and alternative routes.⁸⁷ ~~The Andersens’ comments related to the Project’s need, and scope and content of the adequacy of the environmental review EA, and potential impacts to the Andersens’ property. The Andersens requested that any alignment near their property be on the south side of Hubbard Line Road.~~⁸⁸

~~75. — MnDOT and the Minnesota Department of Natural Resources (“DNR”) also submitted comments during the public hearing comment period. MnDOT provided comments regarding route alternatives and identified several concerns related to the U.S. 71 Route Alternative, such as physical encroachment due to overhead and diagonal road crossings.⁸⁹ DNR’s comments recommended various mitigation measures for the Project, including the use of bird diverters at public water crossings, minimization of habitat fragmentation, habitat maintenance, vegetation management, and practices for wetland construction.⁹⁰ In addition, DNR noted that the Applicants’ Proposed Route resulted in fewer impacts than the Blueberry~~

⁷⁸ E.g., Public Hearing Transcript at 18:3-22:11. Ms. Overland did not expressly state whether she was testifying on behalf of her clients, the Andersens, or herself, individually.

⁷⁹ See, e.g., Public Hearing Transcript at 24:10-25, 25:1-18.

⁸⁰ Public Hearing Transcript at 26:11-16.

⁸¹ NLEB (Nov. 5, 2015), eDocket Document No. 201511-115499-01.

⁸² NLEB at 5 (Nov. 5, 2015), eDocket Document No. 201511-115499-01.

⁸³ See Public Hearing Transcript at 24:10-24, 27:7-16.

⁸⁴ See Public Hearing Transcript at 54:22-25.

⁸⁵ See Public Hearing Transcript *passim*.

⁸⁶ Ex. 47 (Public Written Comments).

⁸⁷ See, e.g., Ex. 55 (Documents Regarding Bat Study); Andersen Comments (Nov. 2, 2015), eDocket Document No. 201511-115330-01; Comments of Carol Overland (Nov. 2, 2015), eDocket Document No. 201511-115353-01; Comments of Peter-Mark and Lynn Hendrickson (Nov. 3, 2015), eDocket Document No. 201511-115409-01.

⁸⁸ See Comments of Carol Overland (Nov. 2, 2015), eDocket Document No. 201511-115353-01.

~~⁸⁹ MnDOT Comments (Nov. 2, 2015), eDocket Document No. 201511-115379-01.~~

~~⁹⁰ DNR Comments (Nov. 2, 2015), eDocket Document No. 201511-115391-01.~~

~~Route Alternative, and that the Proposed Route and the 119th Avenue South Alternative have fewer environmental impacts compared to the remaining route alternatives.⁹⁴~~

B. Local Government and State Agency Participation

~~76.75.~~ During the EA scoping comment period, EERA received written comments from one state agency (MnDOT).⁹²

~~76.~~ During the public hearing and subsequent comment period, written comments were received from two state agencies.⁹³ MnDOT provided comments regarding route alternatives and identified several concerns related to the U.S. 71 Route Alternative, such as physical encroachment due to overhead and diagonal road crossings. The Minnesota Department of Natural Resources' (DNR's) comments recommended various mitigation measures for the Project, including the use of bird diverters at public water crossings, minimization of habitat fragmentation, habitat maintenance, vegetation management, and practices for wetland construction. DNR recommended that an Avian Mitigation Plan and a Vegetation Management Plan be developed for the project. In addition, DNR noted that the Applicants' Proposed Route resulted in fewer environmental impacts than the Blueberry Route Alternative, and that the Proposed Route and the 119th Avenue South Alternative have fewer environmental impacts compared to other route alternatives.

77. In addition, Applicants have received comments from the following agencies, as detailed below:

- On October 7, 2014, the MnDOT Office of Aeronautics notified Applicants that the Project has been determined to have no significant effect to the operations of Park Rapids Municipal Airport, Wadena Municipal Airport, and New York Mills Municipal Airport.
- On October 22, 2014, the Minnesota Historical Society State Historic Preservation Office (“SHPO”) recommended that Applicants complete a Phase I Archeological Survey for the Project.
- On October 17, 2014, the USFWS notified Applicants that the NLEB is proposed to be a listed species in the Project counties, but that USFWS had no known occurrence records in close proximity to the Project. USFWS stated that consultation may be necessary if habitat removal is anticipated after listing and between April 1 and September 30. USFWS further recommended that Applicants place bird flight diverters on transmission lines and raptor perch deterrents on power poles adjacent to the Marrs Farm Services Agent easement and Red Eye Wildlife Management Area. Applicants have stated that they will work with

⁹⁴ ~~DNR Comments (Nov. 2, 2015), eDocket Document No. 201511-115391-01.~~

⁹² Ex. 20 at 9 (EA).

⁹³ See DNR Public Hearing Comments (Nov. 21, 2015, eDocket Document No. 201511-115391-01; MnDOT Public Hearing Written Comments (Nov. 21, 2015), eDocket Document No. 201511-115379-01.

USFWS regarding the use of bird flight diverters and raptor perch deterrents in this area.⁹⁴

- On December 17, 2014, the DNR recommended that Applicants avoid or minimize disturbance to old growth forests, minimize disturbance to identified Sites of Moderate Biodiversity Significance, and implement erosion prevention and sediment control practices in Kettle Creek and the Blueberry River because of state-listed mussels of special concern.⁹⁵

FACTORS FOR A ROUTE PERMIT

78. 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.”⁹⁶

79. 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;

⁹⁴ Ex. 6 at 9-44 (Application).

⁹⁵ Ex. 6 at Appendix K (Application).

⁹⁶ Minn. Stat. § 216E.03, Subd. 7.

- (4) evaluation of the potential for beneficial uses of waste energy from proposed large electric power generating plants;⁹⁷
- (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;
- (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.⁹⁸

80. 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 right-of-way and, to the extent those are not used for the route, the [C]ommission must state the reasons."

81. In addition to the PPSA, the Commission and the ALJ are 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:

⁹⁷ Factor 4 is not applicable because Applicants are not proposing to site a large electric generating plant.

⁹⁸ Minn. Stat. § 216E.03, Subd. 7.

- 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;
- 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;⁹⁹
- 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.¹⁰⁰

82. 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

⁹⁹ This factor is not applicable because it applies only to power plant siting.

¹⁰⁰ Minn. R. 7850.4100.

A. Effects on Human Settlement

83. Minnesota law requires consideration of the Project's effect on human settlement, including displacement of residences and businesses; noise created during construction and by operation of the Project; and impacts to aesthetics, cultural values, recreation, and public services.¹⁰¹

84. The Proposed Route primarily crosses lands used for agriculture, forestry, and tourism. Built infrastructure in the area includes cities, roads, and utilities. The largest community in the Project area is the City of Menahga, which has approximately 1,300 residents.¹⁰²

1. Displacement

85. None of the routes under consideration is within 50 feet of a residence or non-residential buildings.¹⁰³

86. No residential or commercial displacement will occur as a result of the Project.¹⁰⁴

2. Noise

87. The Minnesota Pollution Control Agency ("MPCA") has established standards for the regulation of noise levels.¹⁰⁵

88. The most restrictive MPCA noise limits are 60-65 A-weighted decibels ("dBA") during the daytime and 50-55 dBA during the nighttime.¹⁰⁶

89. Noise concerns for the Project may be associated with construction and operation of the transmission lines and substations.¹⁰⁷

90. 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 right-of-way.¹⁰⁸ Noises associated with a

¹⁰¹ See Minn. Stat. § 216E.03, Subd. 7(b); Minn. R. 7850.4100(A).

¹⁰² Ex. 20 at 42 (EA).

¹⁰³ Ex. 20 at 49 (EA).

¹⁰⁴ Ex. 20 at 49 (EA).

¹⁰⁵ Ex. 20 at 46 (EA).

¹⁰⁶ Ex. 20 at 47 (EA).

¹⁰⁷ Ex. 20 at 47 (EA).

¹⁰⁸ Ex. 20 at 48 (EA).

substation result from the operation of transformers and switchgear. Applicants modeled and estimated noise levels for each of the substations.¹⁰⁹

91. The audible noise levels for the Proposed Route are not predicted to exceed the MPCA Noise Limits.¹¹⁰

92. The route alternatives are anticipated to result in similar noise levels as the Project.¹¹¹ The Western Blueberry Substation Site Alternative is anticipated to result in noise levels that are within MPCA Noise Limits and slightly higher at the nearest receptor than noise levels ~~than of~~ the proposed Project.¹¹²

3. *Aesthetics*

93. The Proposed Route follows existing transmission and roadway rights-of-way. This placement makes the new line relatively harmonious with the existing landscape.¹¹³ In addition, for that segment between the Hubbard Substation and Straight River Substation, the new line will replace an existing 34.5 kV line. Thus, aesthetic impacts are anticipated to be minimal because they will be incremental.¹¹⁴

94. As set forth in Tables 1.1 and 1.2 below, the Blueberry Route Alternative and the Blueberry to Red Eye Route Alternatives, Pipeline South, and East of 109th Avenue Route Alternatives are near fewer residences than the Proposed Route. The Blueberry Route Alternative and the East of 109th Ave., 119th Ave., and U.S. Route 71 Route Alternatives have residences that are closer to the anticipated alignment for the project than the Proposed Route. ~~However, the Proposed Route and the 119th Avenue and U.S. 71 Route Alternatives make better use of existing rights-of-way and thus minimize aesthetic impact by co-locating infrastructure.~~¹¹⁵

Table 1.1 – Distance of Residences from Anticipated Alignment – Proposed Route and Blueberry Route Alternative¹¹⁶

Route	0 to 50 feet	51 to 100 feet	101 to 150 feet	151 to 200 feet	201 to 250 feet	Total
Proposed Route	0	0	0	5	1	6
Blueberry Route Alternative	0	1	1	0	0	2

¹⁰⁹ Ex. 20 at 48 (EA).

¹¹⁰ Ex. 20 at 48 (EA).

¹¹¹ Ex. 20 at 96, 107 (EA).

¹¹² Ex. 20 at 99 (EA).

¹¹³ Ex. 20 at 45 (EA).

¹¹⁴ Ex. 20 at 45 (EA).

~~¹¹⁵ Ex. 20 at 97, 101 (EA).~~

¹¹⁶ Ex. 20 at 92, 103 (EA).

Table 1.2 – Distance of Residences from Anticipated Alignment – Proposed Route and Blueberry to Red Eye Route Alternatives ¹¹⁷

Route	0 to 50 feet	51 to 100 feet	101 to 150 feet	151 to 200 feet	201 to 250 feet	Total
Proposed Route	0	0	2	8	4	14
East of 109th Avenue Route Alternative	0	1	0	3	1	5
119th Avenue Route Alternative	0	1	0	5	1	7
Pipeline South Route Alternative	0	0	2	0	0	2
U.S. Route 71 Route Alternative	0	2	2	2	3	9

95. However, the Proposed Route and the 119th Avenue and U.S. Route 71 Route Alternatives minimize aesthetic impacts of the project by utilizing make better use of existing infrastructure rights-of-way and placing like with like, and thus minimize aesthetic impact by co-locating infrastructure.¹¹⁸ Though the Pipeline Route Alternative utilizes existing infrastructure right-of-way, it does not place like with like in a manner that minimizes aesthetic impacts.¹¹⁹

95-96. Aesthetic impacts can be minimized by placing the alignment of the transmission line away from residences and by limiting damage to natural landscapes.¹²⁰ Applicants have indicated they will work with landowners to best locate structures and minimize damage to vegetation and natural landscapes.¹²¹

96-97. Aesthetic impacts may occur between the Straight River Substation and the Red Eye Substation. However, only a few structures will likely be visible from any one location, and most residences are located more than 150 feet from the anticipated alignment of the Proposed Route Project area.¹²²

97-98. Aesthetic impacts due to the Straight River Substation and Blueberry Substation are anticipated to be minimal because they are near existing distribution substations and residences are relatively distant from the substations.¹²³

¹¹⁷ Ex. 20 at 92, 103 (EA).

¹¹⁸ Ex. 20 at 97, 103-104 (EA).

¹¹⁹ Ex. 20 at 103 (EA).

¹²⁰ Ex. 20 at 46 (EA).

¹²¹ Ex. 20 at 46 (EA).

¹²² Ex. 20 at 45 (EA).

¹²³ Ex. 20 at 45 (EA).

~~98.99.~~ Aesthetic impacts resulting from the Project if constructed along the Proposed Route are anticipated to be minimal.¹²⁴ Aesthetic impacts resulting from the Project if constructed along any of the Route Alternatives are anticipated to be minimal.¹²⁵ ~~Nonetheless, aesthetic impacts vary among routing options for the project, and are anticipated to be similar to the aesthetic impacts of route alternatives.~~¹²⁶

4. Cultural Values

~~99.100.~~ The region surrounding the Proposed Route derives from a diverse ethnic heritage. However, a majority of the reported ethnic backgrounds are of German, Norwegian, and Irish origin.¹²⁷

~~100.101.~~ No impacts are anticipated to cultural values as a result of construction of the Project or route alternatives.¹²⁸

5. Recreation

~~101.102.~~ There are a number of existing recreational resources within the Project vicinity, including parks, trails, rivers, and lakes. Popular activities include camping, fishing, hunting, bird watching, canoeing, kayaking, boating, swimming, golfing, biking, hiking, cross country skiing, and riding ATVs and snowmobiles.¹²⁹ Applicants will coordinate with DNR, USFWS, and other agencies as applicable to ensure the Project does not impact surrounding natural resources.¹³⁰

~~102.103.~~ No impacts to recreational resources are anticipated. The closest wildlife management area (“WMA”) to the Project is the Red Eye WMA, but the Project will be on the opposite side of the road from the WMA. Thus, the Red Eye WMA will not be impacted.¹³¹

~~103.104.~~ No impacts to recreational resources are anticipated as result of construction of the Project or route alternatives~~ne of the route alternatives offers a distinct advantage over the Proposed Route when considering recreation.~~¹³²

6. Public Service and Infrastructure

~~104.105.~~ Temporary impacts to public services resulting from the Project are anticipated to be minimal. Long-term impacts to public services are not anticipated.¹³³

¹²⁴ Ex. 20 at 44-46, 86 (EA).

¹²⁵ Ex. 20 at 92-93, 102-104 (EA).

¹²⁶ Ex. 20 at ~~46, 97~~92-93, 108-102-104 (EA).

¹²⁷ Ex. 6 at 9-12 (Application).

¹²⁸ Ex. 6 at 9-12 (Application); Ex. 20 at 96, 107 (EA).

¹²⁹ Ex. 6 at 9-13 (Application).

¹³⁰ See Ex. 20 at 72 (EA).

¹³¹ Ex. 20 at 72 (EA).

¹³² Ex. 20 at 96, 108 (EA).

~~105.~~106. No impacts to water utilities are anticipated as a result of the Project.¹³⁴

~~106.~~107. 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.¹³⁵

~~107.~~108. No impacts to natural gas service are anticipated as a result of the Project.¹³⁶

~~108.~~109. No impacts to emergency services are anticipated due to the Project.¹³⁷

~~109.~~110. Applicants must obtain permits and approvals from MnDOT for crossing state and federal highways. Applicants are also required to comply with MnDOT's accommodation policy for placement of utilities along and across state highways. Impacts to roads and highways due to the Project construction are anticipated to be minimal and temporary. Applicants have indicated that they 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, Applicants 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.¹³⁸

~~110.~~111. No impacts to airports are anticipated as a result of the Project.¹³⁹

112. No impacts to public services and infrastructure are anticipated as a result of the Project or ~~ne of the route alternatives offer a distinct advantage over the Proposed Route when considering public service and infrastructure.~~¹⁴⁰

7. Zoning and Land Use Compatibility

113. The Project is generally compatible with current and future land uses in the project area and impacts to land uses due to the Project are anticipated to be minimal.¹⁴¹

114. The Alajoki Cemetery is located along the Proposed Route in Section 18 of Blueberry Township, Wadena County.¹⁴² The cemetery will be expanding in the near future by 75 feet to the north along Wadena Line Road.¹⁴³

¹³³ Ex. 20 at 65 (EA).

¹³⁴ Ex. 20 at 67 (EA).

¹³⁵ Ex. 20 at 67 (EA).

¹³⁶ Ex. 20 at 67 (EA).

¹³⁷ Ex. 20 at 68 (EA).

¹³⁸ Ex. 20 at 65-66 (EA).

¹³⁹ Ex. 20 at 66 (EA).

¹⁴⁰ Ex. 20 at 96, 107 (EA).

¹⁴¹ Ex. 20 at 54 (EA).

¹⁴² Ex. 20 at 54 (EA).

¹⁴³ Ex. 20 at 54 (EA).

115. The Proposed Route would impact the Alajoki Cemetery by placing conductors, and possibly structures, across the front edge of the cemetery, thus impacting the aesthetics of the cemetery and its approachability for visitors.¹⁴⁴

116. Impacts to the Alajoki Cemetery could be minimized by placing transmission line structures on either side of the cemetery, i.e., by not placing a structure along the front edge of the existing cemetery or its future expansion.¹⁴⁵

B. Effects on Public Health and Safety

~~111.~~117. Minnesota high voltage transmission line routing factors require consideration of the Project's potential effect on health and safety.¹⁴⁶

1. Construction and Operation of Facilities

~~112.~~118. The Project will be designed in compliance with local, state, National Electric Safety Code ("NESC"), and Applicants' standards regarding clearance to ground, clearance to crossing utilities, clearance to buildings, strength of materials, and right-of-way widths.¹⁴⁷

~~113.~~119. Applicants' construction crews and/or contract crews will comply with local, state, NESC, and Applicants' standards regarding installation of facilities and standard construction practices. Applicants' and industry safety procedures will be followed during and after installation of the transmission lines. This will include clear signage during all construction activities.¹⁴⁸

~~114.~~120. 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 existing substations are already equipped with breakers and relays located where existing transmission lines connect to the substations. The protective equipment is designed to de-energize the transmission lines should such an event occur.¹⁴⁹

¹⁴⁴ Ex. 20 at 54 (EA).

¹⁴⁵ Ex. 20 at 55, 87 (EA).

¹⁴⁶ Minn. Stat. § 216E.03, Subd. 7(b)(1); Minn. R. 7850.4100(B).

¹⁴⁷ Ex. 6 at 9-2 (Application).

¹⁴⁸ Ex. 6 at 9-2 (Application).

¹⁴⁹ Ex. 6 at 9-2 (Application).

2. Electric and Magnetic Fields

~~115.~~121. There are no federal standards for transmission line electric fields.¹⁵⁰

~~116.~~122. 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 right-of-way.¹⁵¹

~~117.~~123. The calculated electric fields for the Project are less than the maximum limit of 8 kV/m prescribed by the Commission.¹⁵²

~~118.~~124. There are no federal or state regulations for the permitted strength of magnetic fields from transmission lines.¹⁵³

~~119.~~125. Research has not been able to establish a cause and effect relationship between exposure to magnetic fields and adverse health effects.¹⁵⁴

~~120.~~126. 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.”¹⁵⁵

~~121.~~127. 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, 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.”¹⁵⁶

¹⁵⁰ Ex. 20 at 57 (EA).

¹⁵¹ Ex. 20 at 57 (EA).

¹⁵² Ex. 20 at 59 (EA).

¹⁵³ Ex. 20 at 57 (EA).

¹⁵⁴ Ex. 20 at 57 (EA).

¹⁵⁵ 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), eDocket Document No. 20104-49478-01, *adopted as amended*, Commission Order at 8 (Sept. 14, 2010), eDocket Document No. 20109-54429-01.

¹⁵⁶ *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), eDocket Document No. 20114-61700-01, *adopted as amended*, Commission Order at 2 (June 24, 2011), eDocket Document No. 20116-64023-01.

~~122.~~128. There is no indication that any significant impact on human health and safety will arise from the Project or any of the route alternatives.¹⁵⁷

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

~~123.~~129. 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.¹⁵⁸

1. Agriculture

~~124.~~130. Agriculture is a land-based economic resource along the Proposed Route.¹⁵⁹

~~125.~~131. Impacts to agricultural operations as a result of the Project are anticipated to be minimal. The Proposed Route crosses approximately 8.8 miles of agricultural land, and the right-of-way will cross approximately 182 acres of farmland. However, agricultural land within a transmission line right-of-way is generally available for agricultural production. Approximately 1,500 square feet of land is expected to be permanently removed from agricultural production.¹⁶⁰

~~126.~~132. To mitigate the Project's impacts on agriculture, Applicants will: limit the movement of crews and equipment to the greatest extent possible; repair and restore disturbed areas to pre-construction contours; repair ruts and soil compaction; conduct filling, grading, scarifying, harrowing, and disking; repair damage to ditches, tile, terraces, roads, and other land features; place structures to avoid irrigation systems; and provide compensation to landowners for any crop and property damage.¹⁶¹

~~127.~~133. No long-term impacts are anticipated to the agricultural economy from construction of the Project.¹⁶² Impacts to agriculture are anticipated to be similar across the Proposed Route and route alternatives; thus, none of the route alternatives offers an advantage over the Proposed Route.¹⁶³

2. Forestry

~~128.~~134. The Proposed Route crosses approximately 4.7 miles of forested land.¹⁶⁴
The Proposed Route will require the removal of approximately 60 acres of forest.¹⁶⁵

¹⁵⁷ Ex. 20 at 55, 96, 108 (EA).

¹⁵⁸ Minn. Stat. § 216E.03, Subd. 7(b)(5); Minn. R. 7850.4100(C).

¹⁵⁹ Ex. 20 at 68 (EA).

¹⁶⁰ Ex. 20 at 69 (EA).

¹⁶¹ Ex. 20 at 70 (EA).

¹⁶² See Ex. 20 at 69-70 (EA).

¹⁶³ Ex. 20 at 96, 108 (EA).

¹⁶⁴ Ex. 20 at 70 (EA).

~~129.~~^{135.} Impacts to forested areas and forestry operations as a result of the Project are anticipated to be moderate.¹⁶⁶ Impacts and can be mitigated by prudent routing and prudent placement of structures within the route to avoid forested areas. Impacts can also be mitigated through ~~by~~ new plantings compatible with the Project and compensation to landowners.¹⁶⁷

~~130.~~^{136.} As shown in Tables 2.1 and 2.2, each of the route alternatives impact more forested acres than the Proposed Route.¹⁶⁸ ~~Accordingly, the Proposed Route better meets this route-selection criterion.~~

Table 2.1 – Forested Acres Within Right-of-Way – Proposed Route and Blueberry Route Alternative¹⁶⁹

Route	Forested Acres within Right-of-Way (100 ft.)
Proposed Route	4.03
Blueberry Route Alternative	18.38

Table 2.2 – Forested Acres Within Right-of-Way – Proposed Route and Blueberry to Red Eye Route Alternatives¹⁷⁰

Route	Forested Acres within Right-of-Way (100 ft.)
Proposed Route	17.80
East of 109th Avenue Route Alternative	28.88
119th Avenue Route Alternative	22.40
Pipeline South Route Alternative	22.02
U.S. Route 71 Route Alternative	22.73

¹⁶⁵ [Ex. 20 at 70 \(EA\).](#)

¹⁶⁶ [Ex. 20 at 70-71 \(EA\).](#)

¹⁶⁷ Ex. 20 at 70-71 (EA).

¹⁶⁸ Ex. 20 at 98, 105, 110 (EA).

¹⁶⁹ Ex. 20 at 93 (EA).

¹⁷⁰ Ex. 20 at 105 (EA).

3. Mining

~~131.~~137. There are several active gravel pits in the Project area.¹⁷¹

~~132.~~138. Impacts to gravel pits are anticipated to be minimal and similar across the Proposed Route and route alternatives.¹⁷² The Proposed Route is near two gravel pits in Blueberry Township, one active and one inactive. Because the gravel pits must be set back from the roadway, it is anticipated that the Project can be placed between the gravel pits and the roadway without impacting current or future gravel mining activities.¹⁷³

D. Effects on Archeological and Historic Resources

~~133.~~139. Minnesota Rule 7850.4100(D) requires consideration of the effects on historic and archaeological resources.

~~134.~~140. Applicants' review of SHPO records indicated that there are eight previously recorded archeological sites and six previously recorded historic structures within one mile of the Proposed Route. None of the archeological sites is within the Proposed Route.¹⁷⁴ One of the historic structures is within the Proposed Route, but it is not within the proposed right-of-way, and the Project is not anticipated to impact the structure.¹⁷⁵

~~135.~~141. There is a moderate to high potential that the Proposed Route could impact unrecorded archeological sites. Accordingly, SHPO has recommended that a Phase I archeological survey be completed for the Project, and Applicants have agreed to perform this survey.¹⁷⁶

~~136.~~142. If archeological sites or resources are identified during Project construction, work will be stopped and SHPO staff will be consulted on how to proceed.¹⁷⁷

~~137.~~143. Impacts to archeological and historic resources are anticipated to be similar across the Proposed Route and route alternatives.¹⁷⁸ No impacts to previously identified archaeological or historic resources are anticipated as a result of construction of the Project along the Proposed Route.¹⁷⁹

E. Effects on Natural Environment

¹⁷¹ Ex. 20 at 71 (EA).

¹⁷² Ex. 20 at 96, 108 (EA).

¹⁷³ Ex. 20 at 72 (EA).

¹⁷⁴ Ex. 20 at 73 (EA).

¹⁷⁵ Ex. 20 at 73 (EA).

¹⁷⁶ Ex. 20 at 73 (EA).

¹⁷⁷ Ex. 20 at 74 (EA).

¹⁷⁸ Ex. 20 at 96, 105 (EA).

¹⁷⁹ Ex. 20 at 73 (EA).

~~138.144.~~ Minnesota's high voltage transmission line routing factors require consideration of the Proposed Route's effect on the natural environment, including effects on air and water quality resources and flora and fauna.¹⁸⁰

1. Air Quality

~~139.145.~~ 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.¹⁸¹ Applicants will use dust control measures to minimize dust during Project construction.¹⁸²

~~140.146.~~ No significant impacts to air quality are anticipated from the Project or any of the route alternatives.¹⁸³

2. Water Quality and Resources

~~141.147.~~ The Project avoids or spans surface waters. Applicants will use best management practices to prevent construction sediments from impacting surface waters and follow DNR recommendations to minimize impacts at crossings of public waters. Thus, impacts to surface waters are anticipated to be minimal.¹⁸⁴

~~142.148.~~ No impacts to the 100-year floodplain and related development in the Project area are anticipated.¹⁸⁵

~~143.149.~~ Groundwater impacts are anticipated to be minimal.¹⁸⁶

~~144.150.~~ Because most wetlands within the Proposed Route can be avoided or spanned, Project impacts to wetlands are anticipated to be minimal. Applicants anticipate that the Project will qualify for a regional general permit from the United States Army Corps of Engineers ("USACE"). Applicants will restore all wetlands in accordance with USACE requirements and within the requirements of Minnesota's Wetland Conservation Act.¹⁸⁷

~~145.151.~~ As shown in Tables 3.1 and 3.2, the ~~119th Avenue~~ [Blueberry Route Alternative](#), and the Pipeline South, and U.S. Route 71 Route Alternatives impact more acres of wetlands than the Proposed Route.¹⁸⁸ [The East of 109th Ave. and 119th Ave. Route Alternatives impact fewer acres of wetlands than the Proposed Route.](#)¹⁸⁹ -Use of the U.S. Route 71 Route

¹⁸⁰ Minn. Stat. §§ 216E.03, Subd. 7(b)(1)-(2); Minn. R. 7850.4100(E).

¹⁸¹ Ex. 20 at 65 (EA).

¹⁸² Ex. 20 at 65 (EA).

¹⁸³ Ex. 20 at 65, 97, 108 (EA).

¹⁸⁴ Ex. 20 at 74-75 (EA).

¹⁸⁵ Ex. 20 at 75 (EA).

¹⁸⁶ Ex. 20 at 76 (EA).

¹⁸⁷ Ex. 20 at 76-77 (EA).

¹⁸⁸ Ex. 20 at 94, 106 (EA).

¹⁸⁹ [Ex. 20 at 106 \(EA\).](#)

Alternative would permanently change approximately 7.61 acres of forested wetlands into non-forested wetlands.¹⁹⁰

Table 3.1 – Wetlands Within Right-of-Way – Proposed Route and Blueberry Route Alternative¹⁹¹

Route	Forested Wetland Acres Within Right-of-Way (100 ft.)	Total Wetland Acres Within Right-of-Way (100 ft.)
Proposed Route	1.95	3.14
Blueberry Route Alternative	3.40	4.38

Table 3.2 – Wetlands Within Right-of-Way – Proposed Route and Blueberry to Red Eye Route Alternatives¹⁹²

Route	Forested Wetland Acres Within Right-of-Way (100 ft.)	Total Wetland Acres Within Right-of-Way (100 ft.)
Proposed Route	2.03	4.13
East of 109th Avenue Route Alternative	2.02	3.73
119th Avenue Route Alternative	2.87	4.06

¹⁹⁰ Ex. 20 at 106, 108 (EA).

¹⁹¹ Ex. 20 at 94 (EA).

¹⁹² Ex. 20 at 106 (EA).

Pipeline South Route Alternative	5.32	8.63
U.S. Route 71 Route Alternative	7.61	10.13

3. *Flora*

~~146.~~152. ~~Significant impacts to flora are not anticipated as part of due to the Project are anticipated to be minimal to moderate.~~¹⁹³ Impacts to non-tree flora are anticipated to be minimal; impacts to trees are anticipated to be moderate.¹⁹⁴

153. Impacts to flora can be mitigated by (1) placement of the alignment and specific structures to avoid trees and other tall-growing species, (2) construction during fall and winter months to limit plant damage, (3) leaving or replanting compatible plants at the edge of the transmission line ROW, (4) replanting on the ROW with low growing, native species, and (5) avoiding the introduction of native species.¹⁹⁵

154. Applicants 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.¹⁹⁶

~~147.~~155. The DNR recommended several strategies to minimize impacts to flora, including use of border zone/wire zone ROW management, the maintenance of vegetation at all stream crossings, and development of a Vegetation Management Plan for the Project.¹⁹⁷

~~148.~~156. Impacts to non-tree flora are not anticipated to vary among routing options.¹⁹⁸ Because they impact more acres of forested land, each of the route alternatives is anticipated to have a relatively greater impact on ~~flora-trees~~ than the Proposed Route.¹⁹⁹

4. *Fauna*

~~149.~~157. The Project area includes a variety of habitats including forested areas, grasslands, agricultural fields, wetlands, and lakes and streams. There are four WMAs in the Project area: Lowe WMA, Red Eye WMA, Kitten Creek WMA, and Wood Eye WMA.²⁰⁰

¹⁹³ Ex. 20 at 79 (EA).

¹⁹⁴ Ex. 20 at 87(EA).

¹⁹⁵ Ex. 20 at 79 (EA).

¹⁹⁶ Ex. 20 at 79 (EA).

¹⁹⁷ DNR Public Hearing Comments (Nov. 21, 2015, eDocket Document No. 201511-115391-01.

¹⁹⁸ Ex. 20 at 94, 106 (EA).

¹⁹⁹ Ex. 20 at 97, 110 (EA).

~~150.158.~~ ~~Applicants will work with DNR and USFWS to identify areas of the Project where bird flight diverters are needed.~~ USFWS has ~~already~~ indicated a need for bird flight diverters and raptor perch deterrents near the Red Eye WMA to minimize impacts to avian species.²⁰¹ The DNR indicated a need for bird flight diverters at all public water crossings.²⁰² The DNR recommended the development of an Avian Mitigation Plan for the Project.²⁰³ Applicants indicated that they will work with DNR and USFWS to identify areas of the Project where bird flight diverters are needed.

~~151.159.~~ Impacts to non-avian fauna species are anticipated to be similar across the Project and route alternatives and minimal.²⁰⁴ Impacts to ~~fauna-avian species~~ as a result of the Project are anticipated to be minimal to moderate; however, impacts can be mitigated through the use of bird flight diverters.²⁰⁵

F. Effects on Rare and Unique Natural Resources

~~152.160.~~ Minnesota's high voltage transmission line routing factors require consideration of the ~~Proposed Route~~Project's effect on rare and unique natural resources.²⁰⁶

~~153.161.~~ There are rare and unique plant communities in the Project area; there are three rare and unique plant species in the Project area: Yellow Rail, Rams-head Lady's-slipper, and Dragon's Mouth.²⁰⁷ There are three rare and unique animal species in the Project area: the Greater Prairie Chicken, Eastern Hog-Nosed Snake, and Creek Heelsplitter.²⁰⁸

162. ~~In addition,~~ The Northern Long-Eared Bat (NLEB) was listed by the USFWS as a threatened species on April 2, 2015.²⁰⁹ The NLEB was listed due to white nose syndrome, a fungal disease that has spread throughout the NLEB's range.²¹⁰ Because of this disease, other possible cause of NLEB mortality may be important factors affecting the viability of NLEB populations.²¹¹ One such cause is the loss or degradation of summer roosting habitat.²¹²; ~~There~~ are no known occurrences of NLEB roosting in the Project area; however the Project area includes trees that may serve as roosting habitat for NLEB.²¹³

²⁰⁰ Ex. 20 at 80 (EA).

²⁰¹ Ex. 20 at 81 (EA).

²⁰² [DNR Public Hearing Comments \(Nov. 21, 2015, eDocket Document No. 201511-115391-01\).](#)

²⁰³ [DNR Public Hearing Comments \(Nov. 21, 2015, eDocket Document No. 201511-115391-01\).](#)

²⁰⁴ Ex. 20 at ~~9794~~, ~~1086~~ (EA).

²⁰⁵ Ex. 20 at ~~80-94~~, ~~106~~ (EA).

²⁰⁶ Minn. Stat. § 216E.03, Subd. 7(b)(1); Minn. R. 7850.4100(F).

²⁰⁷ [Ex. 20 at 81-82 \(EA\).](#)

²⁰⁸ Ex. 20 at 81-82 (EA).

²⁰⁹ [Ex. 20 at 82 \(EA\).](#)

²¹⁰ [Ex. 20 at 82 \(EA\).](#)

²¹¹ [Ex. 20 at 82 \(EA\).](#)

²¹² [Ex. 20 at 82 \(EA\).](#)

²¹³ Ex. 20 at 82 (EA).

163. The USFWS recommends minimizing the removal of trees that could be used as roosting habitat for the NLEB.²¹⁴ The USFWS has indicated that an incidental take permit may be necessary for projects that result in greater than one acre of tree removal.²¹⁵ The take permit may impose conditions to mitigate potential impacts to NLEB.²¹⁶

164. A segment of the Proposed Route from the Hubbard substation to the Straight River substation passes through an area of biological significance and old growth forest remnants.²¹⁷ The DNR recommended several mitigation strategies for this segment, including: (1) constructing the project within already disturbed areas, (2) minimizing vehicular disturbance, (3) avoiding equipment or supply stockpiles in the area, (4) inspecting and cleaning all equipment to prevent introduction of invasive species, (5) conducting work under frozen ground conditions, (6) using effective erosion control measures, and (7) revegetating with native species and weed-free seed mixes.²¹⁸

165. The DNR recommended that erosion control measures be implemented near Kettle Creek and the Blueberry River to mitigate potential impacts to the Creek Heelsplitter mussel.²¹⁹

~~154.~~166. Impacts to rare and unique natural resources can be avoided through prudent routing.²²⁰ Within a route, impacts can be mitigated by placing the alignment and specific structures away from rare resources.²²¹

~~155.~~167. The Proposed Route is generally located away from rare communities and species in the Project area. Where the Proposed Route crosses and/or is near such communities, it follows existing rights-of-way. Thus, impacts to rare and unique species are anticipated to be minimal.²²² Impacts to rare and unique natural resources along the route alternatives are anticipated to be similar to those along the Proposed Route and minimal.²²³

G. Application of Various Design Considerations

~~156.~~168. 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.²²⁴

²¹⁴ Ex. 20 at 84 (EA).

²¹⁵ Ex. 20 at 84 (EA).

²¹⁶ Ex. 20 at 84 (EA).

²¹⁷ Ex. 20 at 82 (EA).

²¹⁸ Ex. 20 at 84 (EA).

²¹⁹ Ex. 20 at 84 (EA).

²²⁰ Ex. 20 at 83 (EA).

²²¹ Ex. 20 at 83 (EA).

²²² Ex. 20 at 82 (EA).

²²³ Ex. 20 at 100, 106 (EA).

²²⁴ Minn. Stat. § 216E.03, Subd. 7(a)-(b); Minn. R. 7850.1900, Subp. 2(L).

~~157.169.~~ 169. The Project is designed to improve electrical service and reliability in the Project area. It is also designed to accommodate future expansion of the transmission system in the area.²²⁵

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

~~158.170.~~ 170. Minnesota’s high voltage transmission line routing factors require consideration of the ~~Proposed Route~~ Project’s use or paralleling of existing rights-of-way, survey lines, natural division lines, and agricultural field boundaries.²²⁶

~~159.171.~~ 171. Using existing corridors reduces and minimizes impacts on planned future residential areas, commercial properties, and environmental and sensitive resources.²²⁷

~~160.172.~~ 172. As shown in Tables 4.1 and 4.2, the Blueberry, East of 109th Avenue, and 119th Avenue Route Alternatives utilize less existing right-of-way than the Proposed Route.²²⁸ The Pipeline South and U.S. Route 71 Route Alternatives utilize slightly more existing ROW than the Proposed Route.²²⁹ In areas where the East of 109th Avenue and 119th Avenue Route Alternatives do not follow existing ROW, they do follow field boundaries.²³⁰

Table 4.1 – Use of Existing Right-of-Way – Proposed Route and Blueberry Route Alternative²³¹

Route	Total Length (miles)	Length Following Roadway, Pipeline, or Transmission Line Right-of-Way (miles/percent)	Length Following Field Boundaries (miles/percent)
Proposed Route	1.95	1.58 / 81%	0 / 0%
Blueberry Route Alternative	2.07	0.77 / 37%	0 / 0%

Table 4.2 – Proposed Route and Blueberry to Red Eye Route Alternatives²³²

Route	Total Length (miles)	Length Following Roadway, Pipeline, or Transmission Line	Length Following Field Boundaries

²²⁵ Ex. 20 at 89 (EA).

²²⁶ Minn. Stat. § 216E.03, Subd. 7(b)(9); Minn. R. 7850.4100(H).

²²⁷ Ex. 20 at 46 (EA).

²²⁸ See Ex. 20 at 92, 104 (EA).

²²⁹ [Ex. 20 at 92, 104 \(EA\).](#)

²³⁰ [Ex. 20 at 104 \(EA\).](#)

²³¹ Ex. 20 at 92 (EA).

²³² Ex. 20 at 104 (EA).

		Right-of-Way (miles/percent)	(miles/percent)
Proposed Route	7.85	7.44 / 95%	1.84 / 23%
East of 109th Avenue Route Alternative	7.51	4.42 / 59%	2.67 / 36%
119th Avenue Route Alternative	4.55	6.75 / 89%	2.36 / 31%
Pipeline South Route Alternative	5.70	5.65 / 99%	0.52 / 9%
U.S. Route 71 Route Alternative	7.55	7.50 / 99%	1.87 / 25%

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

~~161.~~[173.](#) Minnesota’s high voltage transmission line routing factors require consideration of the ~~Proposed Route~~Project’s use of existing transportation, pipeline and electrical transmission system rights-of-way.²³³

~~162.~~[174.](#) As shown in Tables 4.1 and 4.2 above, the Blueberry, East of 109th Avenue, and 119th Avenue Route Alternatives utilize less existing right-of-way than the Proposed Route.²³⁴ [The Pipeline South and U.S. Route 71 Route Alternatives utilize slightly more existing ROW than the Proposed Route.](#)²³⁵

J. Electrical System Reliability

~~163.~~[175.](#) Minnesota’s high voltage transmission line routing factors require consideration of the Project’s impact on electrical system reliability.²³⁶

~~164.~~[176.](#) The Project will be constructed to meet reliability requirements.²³⁷ [The Project is anticipated to improve electrical service and reliability in the Project area.](#)²³⁸

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

~~165.~~[177.](#) Minnesota’s high voltage transmission line routing factors require consideration of the ~~Proposed Route~~Project’s cost of construction, operation, and maintenance.²³⁹

~~166.~~[178.](#) The estimated cost of the Project along the Proposed Route is \$23 million, depending on final route selection and mitigation.²⁴⁰ As shown in Tables 5.1 and 5.2, the

²³³ Minn. Stat. § 216E.03, Subd. 7(b)(8); Minn. R. 7850.4100(J).

²³⁴ Ex. 20 at 92, 104 (EA).

²³⁵ [Ex. 20 at 104 \(EA\).](#)

²³⁶ Minn. Stat. § 216E.03, Subd. 7(b)(10); Minn. R. 7850.4100(K).

²³⁷ Ex. 6 at 4-1 to 4-11, 5-1 to 5-7 (Application).

²³⁸ [Ex. 20 at 89 \(EA\).](#)

²³⁹ Minn. R. 7850.4100(L).

²⁴⁰ Ex. 6 at 4-11 (Application).

Blueberry, Pipeline South, and U.S. Route 71 Route Alternatives are anticipated to have higher costs than the Proposed Route.²⁴¹ [The East of 109th Avenue and 119th Avenue Route Alternatives are anticipated to have slightly lower costs than the Proposed Route.](#)²⁴²

Table 5.1 – Estimated Costs – Proposed Route and Blueberry Route Alternative²⁴³

Route	Estimated Cost
Proposed Route	\$1.01 million
Blueberry Route Alternative	\$1.25 million

Table 5.2 – Estimated Costs – Proposed Route and Blueberry to Red Eye Route Alternatives²⁴⁴

Route	Estimated Cost
Proposed Route	\$4.34 million
East of 109th Avenue Route Alternative	\$3.83 million
119th Avenue Route Alternative	\$4.23 million
Pipeline South Route Alternative	\$5.13 million
U.S. Route 71 Route Alternative	\$4.62 million

[179. The cost of the Western Blueberry Substation Site Alternative is higher than the Proposed Blueberry Substation Site by approximately \\$430,000 dollars.](#)²⁴⁵

~~167.~~[180.](#) 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 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 right-of-way for scheduled maintenance.²⁴⁶ The Applicant’s practice provides for the inspection of 115 kV transmission lines every two years. Right-of-way clearing practices include a combination of mechanical and hand clearing, along with herbicide application where allowed.²⁴⁷

²⁴¹ Ex. 20 at 95, 107 (EA).

²⁴² [Ex. 20 at 95, 107 \(EA\).](#)

²⁴³ Ex. 20 at 95 (EA).

²⁴⁴ Ex. 20 at 107 (EA).

²⁴⁵ [Ex. 20 at 102 \(EA\).](#)

²⁴⁶ [Ex. 20 at 29 \(EA\).](#)

²⁴⁷ Ex. 6 at 8-6 (Application).

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

~~168.~~181. 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.²⁴⁸

~~169.~~182. Unavoidable adverse impacts include ~~the physical impacts to the land due to the construction of the Project~~aesthetic impacts, impacts to agriculture and forestry, impacts to vegetation, and impacts to wildlife and wildlife habitat.²⁴⁹

M. Irreversible and Irrecoverable Commitments of Resources

~~170.~~183. 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.²⁵⁰

~~171.~~184. 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.²⁵¹

~~172.~~185. The commitment of land for a transmission line ROW is likely an irreversible commitment of resources.²⁵² The majority of the Proposed Route parallels land that has already been committed to transmission line or roadway right-of-way.²⁵³

~~173.~~186. There are few commitments of resources associated with this Project that are irreversible and irretrievable, but those few resources relate primarily to construction of the Project. Only construction resources, such as concrete, steel, and hydrocarbon fuels, will be irreversibly and irretrievably committed to this Project.²⁵⁴

~~174. — As set forth above, because the Proposed Route makes use of existing rights-of-way, impacts the fewest forested acres, and generally compares favorably in terms of cost to the route alternatives, the record demonstrates that the Proposed Route best meets Minnesota's route selection criteria.~~

N. Summary of Factors Analysis

²⁴⁸ Minn. Stat. § 216E.03, Subd. 7(b)(5)-(6); Minn. R. 7850.4100(M).

²⁴⁹ Ex. 20 at 89-90 (EA).

²⁵⁰ Minn. Stat. § 216E.03, Subd. 7(b)(11); Minn. R. 7850.4100(N).

²⁵¹ Ex. 20 at 90 (EA).

²⁵² Ex. 20 at 90 (EA).

²⁵³ Ex. 20 at 104 (EA).

²⁵⁴ Ex. 20 at 90 (EA).

187. For that segment of the Project from the Hubbard Substation to the proposed Blueberry Substation, the Proposed Route and the Blueberry Route Alternative are anticipated to have similar impacts with respect to the routing factors except for: aesthetic impacts, impacts to forestry and flora, impacts on rare and unique resources and use of existing rights-of-way.²⁵⁵ The Proposed Route has lesser impacts than the Blueberry Route Alternative on forestry, flora, and rare and unique resources.²⁵⁶ -The Proposed Route ~~also compares more favorably in terms of cost and use of~~utilizes more existing rights-of-way than the Blueberry Route Alternative and minimizes aesthetic impacts by placing like with like.²⁵⁷ The Blueberry Route Alternative is near fewer residences; these residences are closer to the anticipated alignment for the Project than residences along the Proposed Route.²⁵⁸

188. The Proposed Blueberry Substation Site and the Western Blueberry Substation Site Alternative are anticipated to have similar impacts with respect to the routing factors except for cost.²⁵⁹ The Western Blueberry Substation Site Alternative is anticipated to cost \$430,000 dollars more than the Proposed Blueberry Substation Site.²⁶⁰

189. For that segment of the Project from the Proposed Blueberry Substation to the Proposed Red Eye Substation, the Proposed Route and the Blueberry to Red Eye Route Alternatives are anticipated to have similar impacts with respect to the routing factors except for: aesthetic impacts, impacts to forestry and flora, use of existing rights-of-way, and cost.²⁶¹ The Proposed Route has lesser impacts than the Route Alternatives on forestry and flora.²⁶² The Proposed Route and the 119th Avenue, Pipeline South, and U.S Route 71 Route Alternatives make the best of use of existing ROW.²⁶³ The Proposed Route and the 119th Avenue and U.S Route 71 Route Alternatives minimize aesthetic impacts by placing like with like.²⁶⁴ All of the Blueberry to Red Eye Route Alternatives are near fewer residences than the Proposed Route.²⁶⁵ The East of 109th Avenue, 119th Avenue, and U.S. Route 71 Route Alternatives have residences that are closer to the anticipated alignment for the Project than the Proposed Route.²⁶⁶ The Pipeline South Route Alternative is anticipated to be more expensive to construct than other routing options.²⁶⁷ ~~The Proposed Route meets Minnesota's route selection criteria as well as or better than the Blueberry to Red Eye Route Alternatives in terms of impacts to forestry, flora, use of existing rights of way, and cost. Although the East of 109th Avenue Route Alternative and the 119th Avenue Route Alternative are near the fewest residences, the Proposed Route places~~

²⁵⁵ Ex. 20 at 96-98 (EA).

²⁵⁶ Ex. 20 at 96-98 (EA).

²⁵⁷ Ex. 20 at ~~96-98, 102~~(EA).

²⁵⁸ Ex. 20 at 92 (EA).

²⁵⁹ Ex. 20 at 101-102 (EA).

²⁶⁰ Ex. 20 at 101-102 (EA).

²⁶¹ Ex. 20 at 107-110 (EA).

²⁶² Ex. 20 at 107-110 (EA).

²⁶³ Ex. 20 at 107-110 (EA).

²⁶⁴ Ex. 20 at 107-110 (EA).

²⁶⁵ Ex. 20 at 107-110 (EA).

²⁶⁶ Ex. 20 at 107-110 (EA).

²⁶⁷ Ex. 20 at 107-110 (EA).

~~like infrastructure with like.²⁶⁸ The Proposed Route and route alternatives are anticipated to have similar impacts in terms of the remaining factors included in Minnesota's route selection criteria.²⁶⁹~~

~~175.190. There are several routing factors for which impacts are anticipated to be minimal to moderate and which may require permit conditions in order for the impacts to be mitigated.²⁷⁰ These are: impacts on zoning and land use compatibility; impacts on archaeological and historic resources; impacts on forestry, flora, and fauna; and impacts on rare and unique natural resources.²⁷¹~~

~~176. Based on consideration of all routing factors, the Proposed Route is the best route for the Project.~~

II. NOTICE

~~177.191. Minnesota statutes and rules require Applicants to provide certain notice to the public and local governments before and during the Application for a Route Permit process.²⁷²~~

~~178.192. Applicants provided notice to the public and local governments in satisfaction of Minnesota statutory and rule requirements.²⁷³~~

~~179.193. Minnesota statutes and rules also require EERA and the Commission to provide certain notice to the public throughout the Route Permit process.²⁷⁴ EERA and the Commission provided the notice in satisfaction of Minnesota statutes and rules.²⁷⁵~~

III. COMPLETENESS OF EA

~~180.194. The EA process is the alternative environmental review approved by the Environmental Quality Board ("EQB") for high voltage transmission lines.²⁷⁶ The Commission~~

~~²⁶⁸ Ex. 20 at 110 (EA).~~

~~²⁶⁹ Ex. 20 at 98, 110 (EA).~~

²⁷⁰ Ex. 20 at 87-88 (EA).

²⁷¹ Ex. 20 at 87-88 (EA).

²⁷² Minn. Stat. § 216E.03, Subds. 3a, 4; Minn. R. 7850.2100, Subps. 2, 4.

²⁷³ Ex. 7 (Notice of Route Permit Application Submission); Notice (Jan. 26, 2015), eDocket Document No. 20151-106621-01; Notice (Feb. 17, 2015), eDocket Document No. 20152-107393-01.

²⁷⁴ Minn. Stat. § 216E.03, Subd. 6; Minn. R. 7850.2300, Subp. 2; Minn. R. 7850.2500, Subps. 2, 7-9.

²⁷⁵ Ex. 17 (EA Scoping Decision); Ex. 21 (Notice of Availability of EA); Ex. 23 (Notice of Availability of EA in EQB Monitor); Ex. 36 (Notice of Comment Period on Application Completeness); Ex. 38 (Commission Meeting Notice on Completeness); Ex. 40 (Notice of Public Information and Scoping Meeting); Compliance Filing (Oct. 26, 2015), eDocket Document No. 20150-115106-01.

~~²⁷⁶ Minn. R. 4410.4400, Subp. 6. To the extent the Andersens suggest that Minnesota Rules Chapters 7849 and 7850 were not properly promulgated, the content of Minnesota Rules Chapters 7849 and 7850 reflect not only rule-making proceedings, but also changes made by the Revisor at the direction of the Minnesota Legislature.~~

is required to determine the completeness of the EA.²⁷⁷ An EA is complete if it and the record address the issues and alternatives identified in the Scoping Decision.²⁷⁸

~~181.195.~~ 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.²⁷⁹

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

CONCLUSIONS

~~182.196.~~ The Commission has jurisdiction to consider the Application.

~~183.197.~~ The Commission determined that the Application was substantially complete and accepted the Application on March 18, 2015.²⁸⁰

~~184.198.~~ ~~The EA process is the alternative environmental review approved by the EQB for high voltage transmission lines.²⁸¹ Accordingly, the EA process satisfies the requirements of the Minnesota Environmental Policy Act (“MEPA”), which does not require that an EIS be completed for the Project.²⁸²~~ EERA has conducted an appropriate environmental analysis of the Project for purposes of this Route Permit proceeding and the EA satisfies Minnesota Rules 7850.3700 and 7850.3900. 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 the items required by Minnesota Rule 7850.3700, Subpart 4, and was prepared in compliance with the procedures in Minnesota Rule 7850.3700.

~~185.199.~~ Applicants gave notice as required by Minnesota Statutes Section 216E.04, Subdivision 4; Minnesota Rule 7850.2100, Subpart 2; Minnesota Rule 7850.2100, Subpart. 4.

~~186.200.~~ 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.

~~187.201.~~ A public hearing was conducted near the Proposed Route. Proper notice of the public hearing was provided, and the public was given the opportunity to speak at the

²⁷⁷ Minn. R. 7850.3900, Subp. 2.

²⁷⁸ *Id.*

²⁷⁹ See Ex. 17 (EA Scoping Decision); Ex. 20 (EA).

²⁸⁰ Ex. 41 (Commission Order Accepting Application as Complete).

~~²⁸¹ See Minn. R. 4410.4400 Subp. 6.~~

~~²⁸² See Minn. Stat. § 116D.04 Subd. 4a (authorizing the EQB to identify alternative forms of environmental review).~~

hearing and to submit written comments. All procedural requirements for the Route Permit were met.

202. The evidence on the record demonstrates that the alignment proposed by the Andersens on the south side of Hubbard Line Road (Andersen Alignment) mitigates potential impacts to trees and rare and unique natural resources and is appropriate for the Project.

203. The evidence on the record demonstrates that for that segment of the Project between the Hubbard Substation and the proposed Blueberry Substation, the Proposed Route – including the Anderson Alignment and the proposed Blueberry Substation site – best 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.

~~188.~~204. The evidence on the record demonstrates that for that segment of the Project between the proposed Blueberry Substation and the proposed Red Eye Substation, the [Proposed Route – OR – 119th Avenue Route Alternative] best 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

~~189. There is no feasible and prudent alternative to the construction of the Project along the Proposed Route, and the Project is consistent with and reasonably required for the promotion of public health and welfare in light of the state's concern for the protection of its air, water, land, and other natural resources as expressed in the Minnesota Environmental Rights Act.²⁸³~~

~~190. The evidence on the record demonstrates that the Proposed Route is the best route for the Project.~~

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

206. A special Route Permit condition to mitigate potential impacts to the Alajoki Cemetery is appropriate for the Project:

The permittees shall avoid placing structures along the existing frontage of the Alajoki Cemetery and its planned future expansion, consistent with engineering constraints for the line.

207. A special Route Permit condition requiring a Phase I archaeological survey is appropriate for the Project:

The permittees shall consult with the State Historic Preservation Office concerning the extent of a Phase I archaeological survey and appropriate mitigation measures for the Project. Permittees shall document and submit to the Commission the results of the consultation, including those portions of the Project that will be

²⁸³ See Minn. Stat. § 116B.01.

surveyed and the extent of the survey. For those portions of the Project that are surveyed, permittees shall submit, with the plan and profile for these portions, the results of the survey and all avoidance and mitigation measures employed or to be employed.

208. A special Route Permit condition requiring that the permittees consult with the DNR and USFWS to develop an avian mitigation plan is appropriate for the Project. It is appropriate for the plan to incorporate expressed recommendations of the DNR and USFWS, including the use of bird flight diverters at public water crossings and near the Red Eye WMA and the use of raptor perch deterrents for structures near the Red Eye WMA.

209. A special Route Permit condition requiring that the permittees 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 ROW to maintain low-growing plants on the border of the ROW (wire zone / border zone management) and maintaining natural vegetation within a 50 foot buffer on both banks at all stream crossings.

210. A special Route Permit condition requiring that the permittees implement those mitigation strategies recommended by the DNR for rare and unique natural resources (Findings 164 and 165) is appropriate for the Project.

211. A special Route Permit condition requiring that the permittees file with the Commission the results of any additional bat studies conducted for the Project is appropriate. Further, if the permittees are required to obtain an incidental take permit from the USFWS, it is appropriate for the permittees to file a copy of the permit with the Commission.

~~191.~~212. Any of the foregoing Findings more properly designated Conclusions are hereby adopted as such.

Exhibit A – Applicants’ Proposed Route

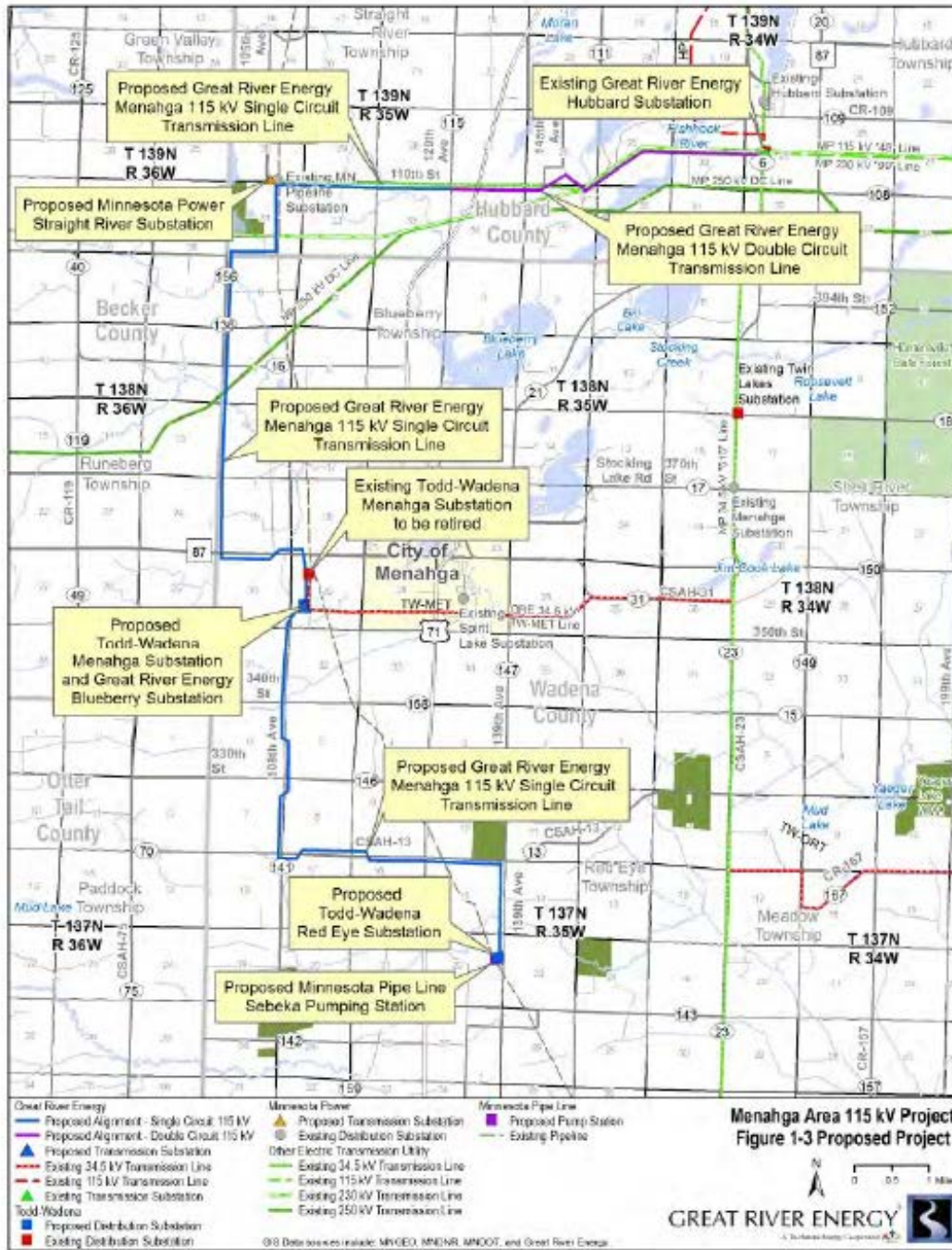
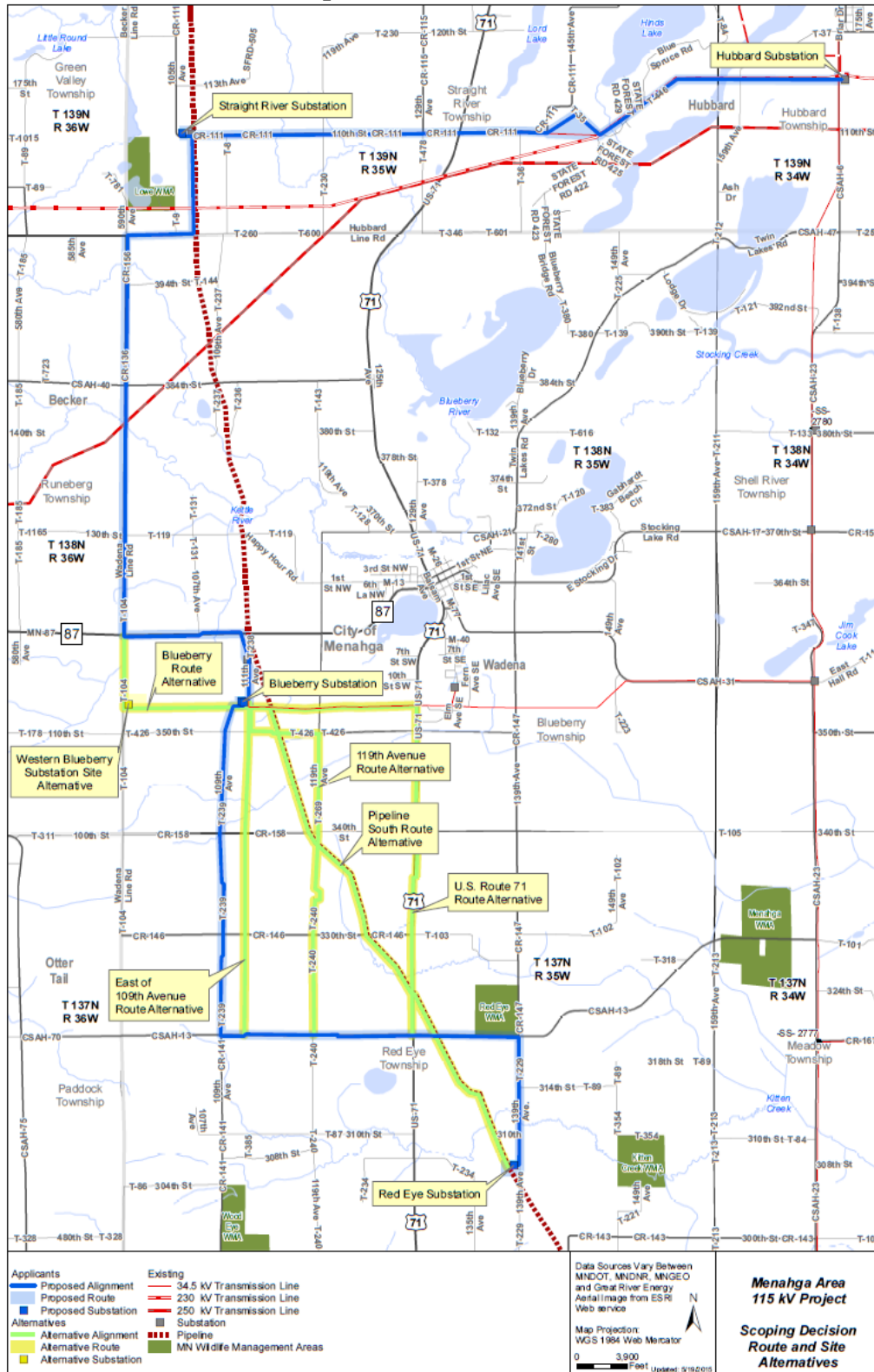
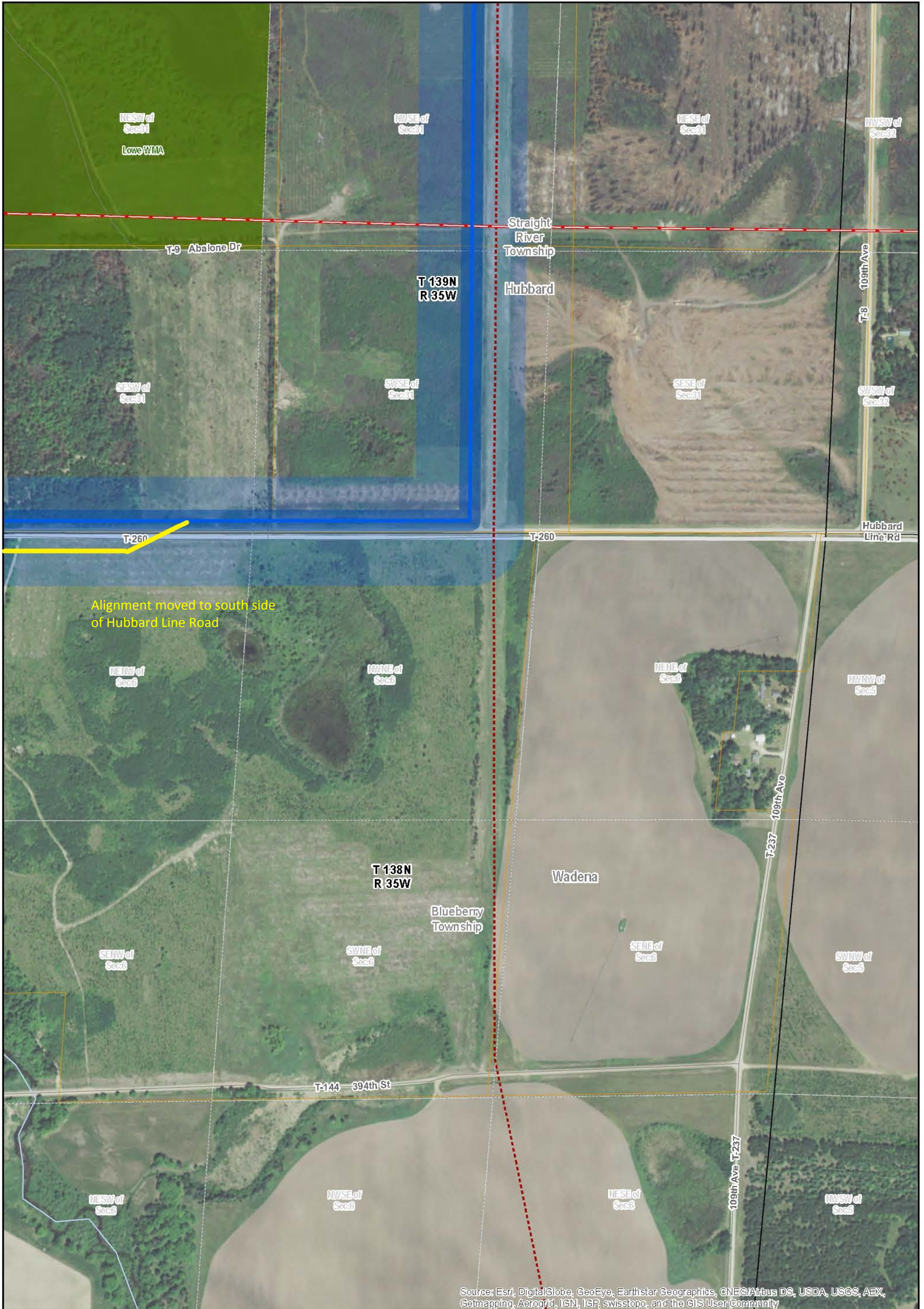


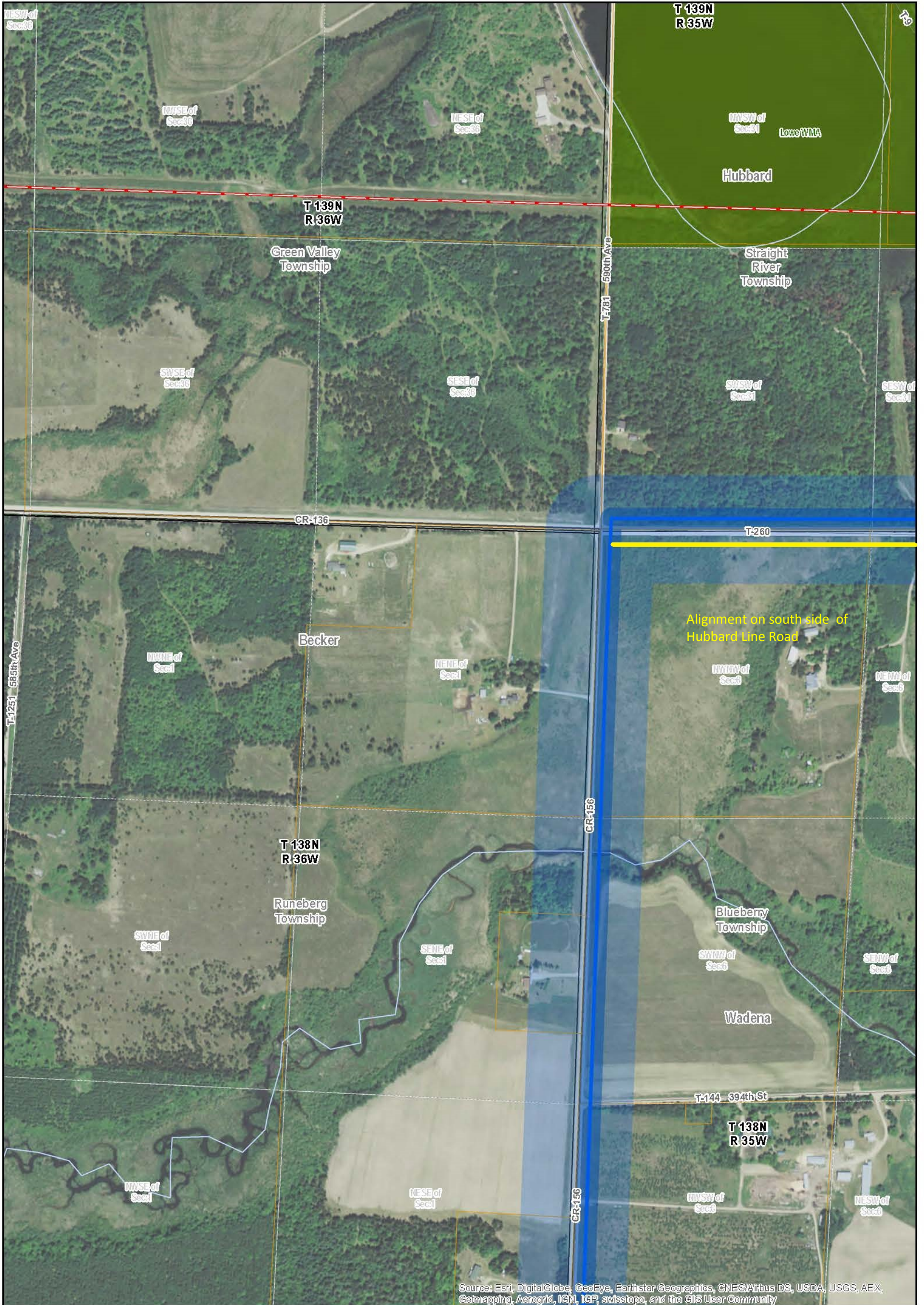
Exhibit B – Proposed Route and Route Alternatives





Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

<p>Applicant</p> <ul style="list-style-type: none"> Proposed Alignment Proposed Route (500' width) Proposed Easement Area (100' width) Proposed Substation <p>Alternatives</p> <ul style="list-style-type: none"> Alternative Alignment – Single Circuit 115 kV Alternative Easement Area (100' width) Alternative Substation 	<p>Existing</p> <ul style="list-style-type: none"> 34.5 kV Transmission Line 115 kV Transmission Line 230 kV Transmission Line 250 kV Transmission Line Oil pipeline Gas pipeline Substation Substation Fence 	<p>Residence</p> <ul style="list-style-type: none"> Residence 50-100' Residence 100-150' Residence 150-200' Residence 200-250' <p>Non-Residential Building</p> <ul style="list-style-type: none"> Non-Residential Building 0-250' Cemeteries Gravel Pits 		<p>Map Sheet 10 of 30</p> <p>Route Maps</p> <p>Data Sources Vary Between MNDOT, MNDNR, MNGEO and Great River Energy Aerial Image from ESRI</p> <p>Web service Map Projection: UTM NAD 83 Zone 15</p> <p>Menahga Area 115 kV Project</p> <p>0 225 Feet Updated: 7/29/2015</p>
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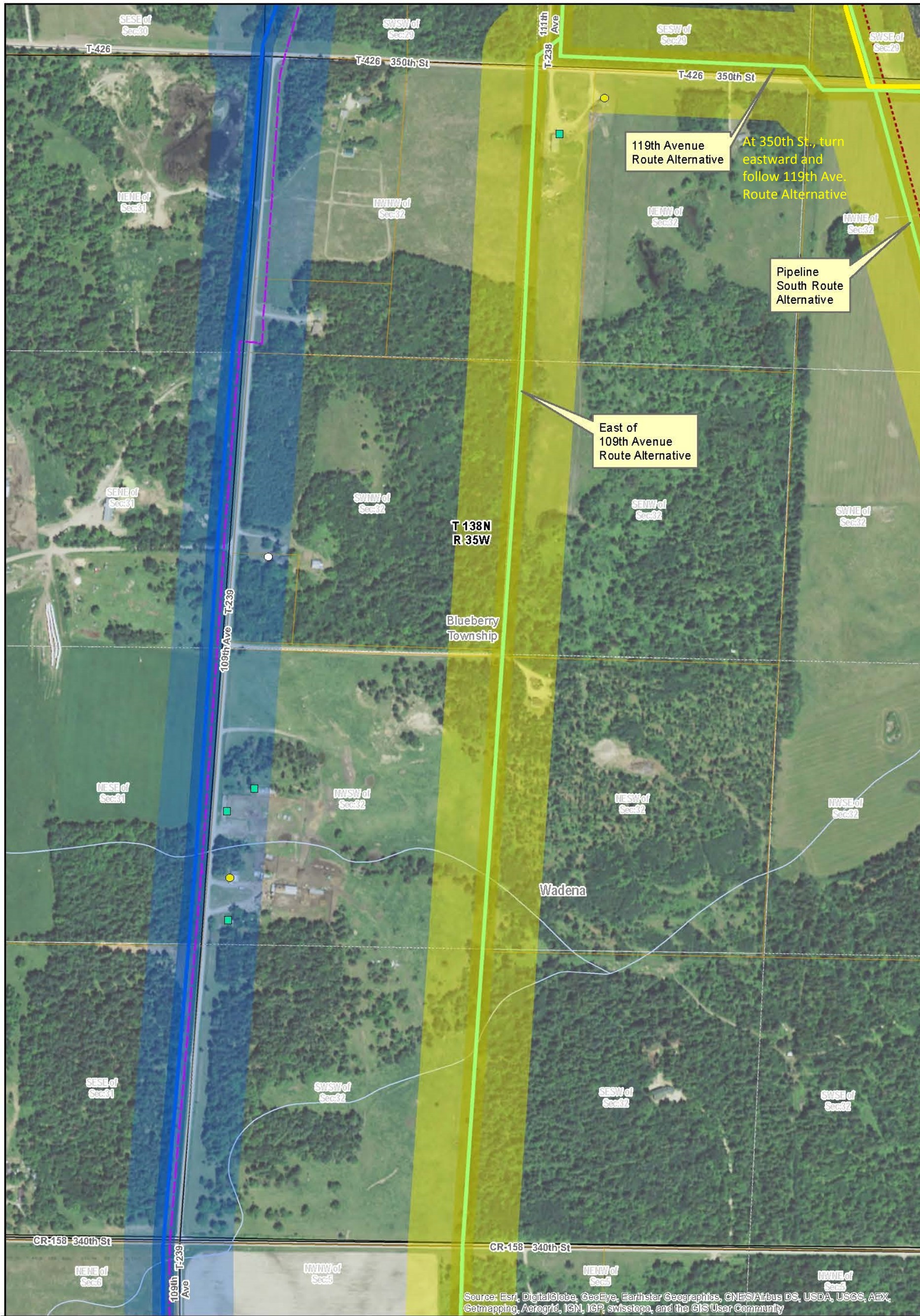
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Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

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<p>Applicant</p> <ul style="list-style-type: none"> — Proposed Alignment Proposed Route (500' width) Proposed Easement Area (100' width) Proposed Substation <p>Alternatives</p> <ul style="list-style-type: none"> Alternative Alignment – Single Circuit 115 kV Alternative Easement Area (100' width) Alternative Substation 	<p>Existing</p> <ul style="list-style-type: none"> 34.5 kV Transmission Line 115 kV Transmission Line 230 kV Transmission Line 250 kV Transmission Line Oil pipeline Gas pipeline Substation Substation Fence 	<p>Residence</p> <ul style="list-style-type: none"> ● Residence 50-100' ● Residence 100-150' ● Residence 150-200' ● Residence 200-250' <p>Non-Residential Building</p> <ul style="list-style-type: none"> Non-Residential Building 0-250' Ⓜ Cemeteries Ⓜ GravelPits 		<p style="text-align: right;">Map Sheet 18 of 30</p> <p style="text-align: center;">Route Maps</p> <p style="text-align: center;">Menahga Area 115 kV Project</p> <p>Data Sources Vary Between MNDOT, MNDNR, MNGEO and Great River Energy Aerial Image from ESRI Web service: Map Projection: UTM NAD 83 Zone 15</p> <div style="text-align: right;"> <p>N</p> <p>0 225 Feet</p> <p>Updated: 7/29/2015</p> </div>
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