

August 12, 2020

Honorable Judge James Mortenson
State of Minnesota Office of Administrative Hearings
600 N. Robert St.
St. Paul, MN 55101

RE: **Findings of Fact**
Detroit Lakes Public Utility 115 kV line and substation
Docket No. E229/TL-18-755/OAH Docket No. 5-2500-36529

Judge Mortenson:

Please find the proposed Findings of Fact for the Detroit Lakes Public Utility 115 kV Transmission Line and Substation in Becker County.

The hearing record does not include acceptance of the Application for a Route Permit (revised) or the Environmental Assessment (EA) therefore these findings do not reference an exhibit list.

I am available for any questions that you may have regarding the proposed Findings of Fact.

Sincerely,



Jamie MacAlister
Environmental Review Manager
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**STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS
FOR THE PUBLIC UTILITIES COMMISSION**

IN THE MATTER OF THE APPLICATION OF
DETROIT LAKES PUBLIC UTILITY AND
MINNESOTA POWER FOR A ROUTE PERMIT FOR
A 115 KV TRANSMISSION PROJECT IN THE
MENAHA AREA IN BECKER, HUBBARD AND
WADENA COUNTIES

PUC Docket No. E229/TL-18-755
OAH Docket No. 5-2500-36529 PROPOSED
PROPOSED FINDINGS OF FACT AND
CONCLUSIONS OF LAW

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

IN THE MATTER OF THE APPLICATION OF
DETROIT LAKES PUBLIC UTILITY FOR A ROUTE
PERMIT FOR A 115 KV TRANSMISSION AND
SUBSTATION PROJECT IN BECKER COUNTY.

PUC DOCKET NO. E229/TL-18-755
OAH DOCKET NO. 5-2500-36529

PROPOSED FINDINGS OF FACT

A remote- access public hearing was held before Administrative Law Judge (“ALJ”) Palmer-Denig, (filling in for James Mortenson) on June 30, 2019.

Vernell Roberts, General Manager for Detroit Lakes Public Utility (DLPU), 1025 Roosevelt Avenue, Detroit Lakes, MN 56501 appeared on behalf of Detroit Lakes Public Utility (“Applicant”).

Dennis Hasselhoff, DRG Engineering, appeared on behalf of the applicant.

Jamie MacAlister, Environmental Review Manager, 85 7th Place East, Suite 280, St. Paul, MN 55101 appeared on behalf of the Department of Commerce, Energy Environmental Review and Analysis (“EERA”).

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

STATEMENT OF ISSUE

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 and substation project near Detroit Lakes in Becker County (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, and written comments, the Commission makes the following:

FINDINGS OF FACT

I. APPLICANTS

1. Detroit Lakes Public Utilities (DLPU), of Detroit Lakes, Minnesota owns and operates a municipal electric system that provides electric service to the citizens of Detroit Lakes and surrounding areas.¹

II. PROCEDURAL HISTORY

2. On December 6, 2018 Detroit Lakes Public Utility filed with the Minnesota Public Utilities Commission (“Commission”) a Notice of Intent to File a Route Permit Application under the Alternative Permitting Process.²
3. On July 9, 2019 Detroit Lakes Public Utility submitted an Application for a Route Permit (“Application”) for the Project.³
4. On July 10, 2019 the Commission issued a Notice of Comment Period on Application Completeness.⁴
5. On July 24, 2019 EERA staff filed comments and recommendations regarding the completeness of the Application and recommended that the Applicant provide additional information on the proposed right-of-way and coordination efforts with the Minnesota Department of Transportation (MnDOT).⁵
6. On August 23, 2019 the Commission issued a Notice of Meeting on Application Completeness for September 5, 2019.⁶
7. On August 20, 2019 the Applicant filed 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, Subparts 2 and 4.⁷
8. On August 28, 2019 Commission staff filed Briefing Papers recommending the Commission find the Application complete.⁸

¹ Detroit Lakes Public Utility (November 6, 2019) *Application for a Route Permit for a 115 kV High Voltage Transmission Line (Revised)*, eDockets Nos. [201911-157283-02](#), [201911-157283-03](#), [201911-157283-04](#), [201911-157283-05](#), [201911-157283-06](#), [201911-157283-07](#), [201911-157283-08](#) (hereinafter “Application”).

² DLPU *Notice of Intent to File an Application for a Route Permit*, eDockets [201812-148292-01](#).

³ Detroit Lakes Public Utility Commission (July 9, 2019) *Application for a Route Permit for a 115 kV High Voltage Transmission Line*, eDockets No(s). [20197-154248-01](#), [20197-154248-02](#), [20197-154248-03](#), [20197-154248-04](#), [20197-154248-05](#), [20197-154248-06](#), [20197-154248-07](#).

⁴ PUC, *Notice of Comment Period for Application Completeness*, eDockets [20197-154270-01](#).

⁵ EERA *Comments and Recommendations on Application Completeness*, eDockets [20197-154649-01](#).

⁶ PUC *Notice of Comment Period on Application Completeness and Meeting*, eDockets [20198-155404-02](#).

⁷ Affidavit of Mailing Publication of Notice, eDockets [20198-155306-01](#).

⁸ PUC *Staff Briefing Papers on Completeness*, eDockets [20198-155517-01](#).

9. On September 4, 2019 the Applicant filed supplemental information to the application.⁹
10. On September 5, 2019 the Commission met and found the Application complete pending additional information regarding the route width, the alignment within the route, and coordination efforts with MnDOT.¹⁰
11. On October 28, 2019 the Commission issued its Order Accepting the Application as Complete pending additional information. In addition to finding the application complete, the Commission also approved a summary report review process.¹¹
12. On November 6, 2019 the Applicant filed a revised application.¹²
13. On November 13, 2019 EERA staff filed a letter confirming that the revised application met the completeness requirements identified in the Commission's October 28, 2019 Order on application completeness.¹³
14. On November 13, 2019 the Commission and EERA issued a Notice of Public Information and EA Scoping Meeting.¹⁴ This notice was also published in the *Detroit Lakes Tribune* on November 13, 2019 as required under Minnesota Statutes 216E.04, Subdivision 5; and Minnesota Rule 7850.2300, Subpart 2.¹⁵
15. On November 26, 2019 Applicants filed the newspaper affidavits of publication for the December 4, 2019 Information and EA Scoping Meeting.¹⁶
16. On December 4, 2019 the Commission and EERA held a Public Information and EA Scoping Meeting at the City of Detroit Lakes, Detroit Lakes, Minnesota at 6:00 p.m.¹⁷
17. On December 27, 2019 the scoping comment period ended.¹⁸

⁹ Applicant, supplemental information, eDockets [20199-155665-01](#).

¹⁰ PUC *Notice of Comment Period on Application Completeness and Meeting*, eDockets [20198-155404-02](#).

¹¹ *Commission Order Accepting Application as Complete Pending Additional Information and Directing Use of Summary Report Review Process* eDockets [201910-156919-01](#).

¹² *Detroit Lakes Public Utility Application for a Route Permit for a 115 kV High Voltage Transmission Line (Revised)*, eDockets Nos. [201911-157283-02](#), [201911-157283-03](#), [201911-157283-04](#), [201911-157283-05](#), [201911-157283-06](#), [201911-157283-07](#), [201911-157283-08](#).

¹³ EERA, *Letter of Confirmation*, edockets [201911-157504-01](#).

¹⁴ EERA and PUC *Notice of Public Information and Environmental Assessment Scoping Meeting*, eDockets [201911-157520-01](#).

¹⁵ Affidavit of Publication (Scoping Notice), edockets [201911-157884-01](#).

¹⁶ Id.

¹⁷ EERA and PUC *Notice of Public Information and Environmental Assessment Scoping Meeting*, eDockets [201911-157520-01](#).

¹⁸ Id.

18. 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.¹⁹
19. The Minnesota Department of Natural resources filed comments during the scoping period requesting the use of flight diverters for the length of the transmission line; minimizing soil compaction during construction by using the road right-of-way; and noting that licenses to cross public waterways and wetlands will be required and that measures to avoid or minimize disturbances to rare features may be included as restrictions or conditions in any permits or licenses required by the DNR.²⁰
20. On January 10, 2020 EERA issued a Scoping Summary Report.²¹
21. On January 27, 2020 Commission staff issued Briefing Papers regarding route alternatives to be evaluated in the environmental assessment.²² No additional routes were recommended.
22. On February 27, 2020 EERA issued a Scoping Decision for preparation of the EA.²³
23. On June 1, 2020 EERA filed the EA and issued a Notice of Availability for the EA.²⁴ The Notice of Availability was published in the *EQB Monitor* on June 20, 2020.²⁵
24. On June 10, 2020 Commission staff issued a Notice for Public Hearing and Comment Period.²⁶ On June 30, 2020 the Office of Administrative Hearings held a remote Public Hearing via Webex at 6:00 pm.²⁷ On July 14, 2020 the public hearing comment closed.²⁸

¹⁹ Minnesota Department of Transportation *Comments*, eDockets No. [201912-158513-01](#).

²⁰ Minnesota Department of Natural Resources *Comments*, eDockets No. [201912-158602-01](#), [201912-158602-02](#), [201912-158602-03](#).

²¹ EERA *Scoping Summary Report*, eDockets [20201-159030-01](#)

²² Commission Staff *Briefing Papers*, [20201-159613-01](#).

²³ EERA *Scoping Decision*, eDockets [20202-160758-01](#).

²⁴ EERA *Environmental Analysis of the Potential Human and Environmental Impacts of the Detroit Lakes Public Utility 115kV Transmission Line and Substation*, eDockets No. [20206-163636-01](#), [20206-163636-02](#), [20206-163636-03](#), [20206-163636-04](#), [20206-163636-05](#).

²⁵ EERA *Notice of EA Availability in EQB Monitor*, eDockets No. [20207-164911-01](#).

²⁶ PUC *Notice of Public Hearing and Comment Period*, eDockets No. [20206-163871-02](#).

²⁷ Id.

²⁸ Id.

III. DESCRIPTION OF THE PROJECT

25. The Project includes new 115 kV transmission lines and substation south of the City of Detroit Lakes in Becker County, Minnesota. The project utilizes existing road-right-of way along US 59, owned by the Minnesota Department of Transportation.²⁹
26. DLPU will construct approximately 2.2 miles of north-south transmission line. The new transmission line will tie into the existing 115 kV transmission line owned and operated by Great River Energy located in Section 33, T138N, R41W. The transmission line then follows the east side of US 59 north for approximately .70 mile, before crossing US 59 and continuing north for 1.5 miles on the west side of US 59 to the new substation.³⁰
27. The south terminus of the proposed HVTL will be a new switch structure that will be installed within an existing HVTL owned and operated by Great River Energy (GRE). GRE is responsible for the design of this structure. GRE has requested to DLPU that the switch structure be installed outside of the ROW. The current plan is to have the switch structure installed ten (10) feet from the ROW line on private property. DLPU will need to acquire a private easement from the landowner for overhang of the proposed HVTL. Great River Energy will construct the tie-in at the southern terminus.³¹
28. The proposed 115/12.47 kV Substation will have a 14 mega volt ampere (MVA) transformer along with associated equipment, control house, circuit breakers, and surge arrestors. The estimated dimensions for the new South substation, subject to final design, are 140 feet by 160 feet.³²
29. Applicants propose to use single pole structures between 70 and 80 feet in height with spans ranging from 275-310 feet depending on conductor configuration.³³
30. Applicants are generally requesting approval of a variable route width from 100-160 feet from the centerline of US 59.³⁴ At MnDOT's request, the structures will be placed at least 65 feet from the centerline of the highway and as far back as practicable within the ROW, allowing MNDOT to maintain roadway safety standards and DLPU to meet National Electric Safety Codes.³⁵

²⁹ Application at 1.

³⁰ Id.

³¹ Application at 11.

³² Application at 11.

³³ Application at 12.

³⁴ EA at 8.

³⁵ Id.

IV. NEED OVERVIEW

31. The Project is designed to improve reliability and reduce system deficiencies within DLPU's service territory.³⁶

V. ROUTES EVALUATED

A. Route Proposed by Applicants.

32. Based on projected load and system deficiencies, Detroit Lakes Public Utility selected the proposed 2.2 mile route because it minimizes impacts to landowners and agriculture by utilizing MnDOT's ROW and is the most direct route between the tie-in with the GRE line and the proposed substation location.³⁷ A map of the proposed route is included in Exhibit A.

B. Routes Proposed Through Public Participation.

33. No additional routes were proposed or introduced during scoping, as reflected in the EA Scoping Decision.³⁸

VI. TRANSMISSION LINE STRUCTURE TYPES AND SPANS

34. The Applicant proposes to use three types of self-weathering steel monopoles capable of carrying a single-circuit 115 kV HVTL. Structures will be direct-embedded to a depth of nine to 14 feet.³⁹ Three types of structures will be utilized depending on pole location within the ROW.
35. The majority of the structures will have a stacked configuration, with all of the insulators on one side of the pole. This configuration will be used where the structures are close to the edge of MNDOT's ROW. The structures will be oriented so that the conductors are on the road side of the pole.⁴⁰
36. Where the right of way is wider, the structures will have a staggered configuration. Where large angles are anticipated within the alignment, such as where the line crosses the road and near the tie-in location, concrete foundations will be used.⁴¹

³⁶ Application at 9.

³⁷ Application at 11.

³⁸ Scoping Decision at 9.

³⁹ Application at 12.

⁴⁰ Id.

⁴¹ Id.

VII. TRANSMISSION LINE CONDUCTORS

- 37. The 115 kV HVTL will consist of a single self-weathering steel pole with horizontal line post and braced line post insulators with a single shield wire. The selected conductor size for this project is 336 kcmil ACSR ‘Linnet’.⁴²
- 38. The engineering evidence in the record demonstrates that the conductor is appropriate to meet the Project’s need.⁴³

VIII. TRANSMISSION LINE ROUTE WIDTHS

- 39. The Applicant is requesting a variable route width to meet MNDOT’s right-of way-requirements. The width of MnDOT’s right-of way- along US Hwy 59 varies; at the narrowest location the ROW is 100 feet from centerline and 160 feet at the widest. DLPU has consulted with MNDOT on placement of the proposed HVTL within the ROW. MNDOT and DLPU have agreed on an alignment for the proposed HVTL and will continue to work on the placement of the structures during the MNDOT permitting application process.⁴⁴
- 40. The Applicant has requested a 30 foot easement from the landowner at the southern terminus to accommodate the switching station.⁴⁵

IX. TRANSMISSION LINE RIGHT-OF-WAY

- 41. Applicant requests a variable right-of-way width ranging from 15 to 49 feet.⁴⁶

X. PROJECT SCHEDULE

- 42. Construction is anticipated to begin in the fourth quarter of 2020.⁴⁷
- 43. Applicants anticipate an in-service date in the fourth quarter of 2021.⁴⁸

XI. PROJECT COSTS

- 44. Total project costs are estimated at approximately \$3.5 million.⁴⁹
- 45. The substation is estimated to cost \$2.2 million.⁵⁰

⁴² Application at 13.

⁴³ Id.

⁴⁴ Application at 11.

⁴⁵ Id.

⁴⁶ Application at Appendix A, Map 2, Sheets 4 and 8.

⁴⁷ Application at 9.

⁴⁸ Id.

⁴⁹ Id.

⁵⁰ Id.

46. Construction of the transmission line is estimated to cost \$1.3 million.⁵¹

XII. PERMITTEE

47. The permittee for the Project is Detroit Lakes Public Utility.⁵²

XIII. PUBLIC AND LOCAL GOVERNMENT PARTICIPATION

A. Public Comments

48. No comments were received from the public during scoping.⁵³

B. Local Government and State Agency Participation

49. During the EA scoping comment period, EERA received written comments from two state agencies; MnDOT and MDNR.⁵⁴
50. MnDOT provided comments on pole location within the ROW and the need for a *Utility Accommodation on Trunk Highway Right of Way Permit for the project to utilize the ROW*. MnDOT requests that the applicant continue to coordinate with them on any construction work that may impact MnDOT right of way, road closings, or roadway safety.⁵⁵
51. The Minnesota Department of Natural resources provided comments requesting the use of flight diverters for the length of the transmission line; minimizing soil compaction during construction by using the road right-of-way; and noting that licenses to cross public waterways and wetlands will be required, with the potential for additional measures to avoid or minimize disturbances to rare features in any permits or licenses required by the DNR.⁵⁶

FACTORS FOR A ROUTE PERMIT

52. 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.”⁵⁷

⁵¹ Id.

⁵² Application at 7.

⁵³ Scoping Decision at 4.

⁵⁴ Id.

⁵⁵ Minnesota Department of Transportation *Comments*, eDockets No. [201912-158513-01](#).

⁵⁶ Minnesota Department of Natural Resources *Comments*, eDockets No. [201912-158602-01](#), [201912-158602-02](#), [201912-158602-03](#).

⁵⁷ Minn. Stat. § 216E.03, Subd. 7.

53. Under the PPSA, the Commission must be guided by the following responsibilities, procedures, and considerations:
- (1) evaluation of research and investigations relating to the effects on land, water and air resources of large electric power generating plants and high-voltage transmission lines and the effects of water and air discharges and electric and magnetic fields resulting from such facilities on public health and welfare, vegetation, animals, materials and aesthetic values, including baseline studies, predictive modeling, and evaluation of new or improved methods for minimizing adverse impacts of water and air discharges and other matters pertaining to the effects of power plants on the water and air environment;
 - (2) environmental evaluation of sites and routes proposed for future development and expansion and their relationship to the land, water, air and human resources of the state;
 - (3) evaluation of the effects of new electric power generation and transmission technologies and systems related to power plants designed to minimize adverse environmental effects;
 - (4) evaluation of the potential for beneficial uses of waste energy from proposed large electric power generating plants;⁵⁸
 - (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

⁵⁸ Factor 4 is not applicable because Applicants are not proposing to site a large electric generating plant.

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.⁵⁹

54. 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.”
55. 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:
- 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;⁶⁰

⁵⁹ Minn. Stat. § 216E.04, Subd. 7(b)(12).

⁶⁰ This factor is not applicable because it applies only to power plant siting.

- 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.⁶¹
56. There is sufficient evidence on the record for the Commission to assess the Proposed Route and route alternatives using the criteria and factors set forth above.

APPLICATION OF STATUTORY AND RULE FACTORS

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

A. Effects on Human Settlement

57. Minnesota law requires consideration of the Project's effects 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.⁶²
58. The proposed Project is located along US Highway 59 in Becker County Minnesota, just south of the city of Detroit Lakes. US 59 is a major transportation corridor in the county. The nearest population center is Detroit Lakes. In the surrounding area, human settlement is a mix of year round and seasonal homes along lakeshores and local roads, with most businesses located along major roadways and towns.⁶³
1. *Displacement*
59. There are no residences within 50 feet of the route. There is one commercial building within 50 feet of the route.⁶⁴

⁶¹ Minn. R. 7850.4100.

⁶² Minn. Stat. § 216E.03, subd. 7(b); Minn. R. 7850.4100, subp. A.

⁶³ EA at 25.

⁶⁴ EA at 26.

60. No residential or commercial displacement will occur as a result of the Project.⁶⁵

2. Noise

61. The Minnesota Pollution Control Agency (“MPCA”) has established standards for the regulation of noise levels.⁶⁶

62. The most restrictive MPCA noise limits are 60-65 A-weighted decibels (“dBA”) during the daytime and 50-55 dBA during the nighttime.⁶⁷

63. Noise concerns for the Project may be associated with construction and operation of the transmission lines and substations.⁶⁸

64. 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.⁶⁹ Noises associated with a substation result from the operation of transformers and switchgear. Applicants modeled and estimated noise levels for each of the substations.⁷⁰

65. The audible noise levels associated with operation of the project are not predicted to exceed the MPCA Noise Limits.⁷¹

3. Aesthetics

66. The Proposed Route parallels US 59 and utilizes the adjacent road ROW. Land use in the corridor includes a mix of agriculture, residential and commercial use. Commercial businesses along the route include public storage facilities, a liquor store, RV and Marine dealer, and a flea market area.⁷² Visual impacts are unavoidable and are expected to be most noticeable for residents and businesses in the immediate vicinity of the transmission line and substation.⁷³

⁶⁵ EA at 27.

⁶⁶ EA at 29.

⁶⁷ EA at 30.

⁶⁸ Id.

⁶⁹ EA at 31.

⁷⁰ Id.

⁷¹ Id.

⁷² EA at 26.

⁷³ Id.

Table 1 Residential and Commercial Buildings within 200 Feet of the Anticipated Alignment

Building Type	Buildings within 50 ft.	Buildings within 50 to 100 ft.	Buildings within 100 to 200 ft.	Total Buildings within 200 ft.
Residential	0	7	7	14
Commercial	1	2	12	15

67. Aesthetic impacts can be minimized by placing the alignment and structures of the transmission line away from residences and by limiting impacts to natural landscapes.⁷⁴ Applicants have indicated they will minimize impacts to vegetation and natural landscapes.⁷⁵

68. Aesthetic impacts resulting from the Project if constructed along the Proposed Route are anticipated to be minimal.⁷⁶

4. Cultural Values

69. Cultural values include shared community beliefs or attitudes, among a given area or population that define what is collectively important and worthwhile to the group.⁷⁷

70. Detroit Lakes and the surrounding area value the rich natural amenities of the region. Lakes, forests, and managed public lands enhance the lives of residents and provide an array of outdoor recreation opportunities that contribute to regional tourism economy.⁷⁸

71. No long-term impacts to cultural values is anticipated as a result of construction of the Project.⁷⁹

5. Recreation

72. 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 snowmobiling.⁸⁰

73. Impacts to recreational resources will be minimal and primarily visual in nature.⁸¹

⁷⁴ EA at 29.

⁷⁵ Id.

⁷⁶ Id.

⁷⁷ EA at 27.

⁷⁸ Id.

⁷⁹ Id.

⁸⁰ EA at 32.

⁸¹ Id.

6. Public Service and Infrastructure

- 74. Temporary impacts to public services resulting from the Project are anticipated to be minimal. Long-term impacts to public services are not anticipated.⁸²
- 75. No impacts to water utilities are anticipated as a result of the Project.⁸³
- 76. No impacts to natural gas service are anticipated as a result of the Project.⁸⁴
- 77. No impacts to emergency services are anticipated due to the Project.⁸⁵
- 78. 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.⁸⁶

7. Zoning and Land Use Compatibility

- 79. The Project is generally compatible with current and future land use in the project area and impacts to land uses due to the Project are anticipated to be minimal.⁸⁷

B. Effects on Human Health and Safety

- 80. Minnesota high voltage transmission line routing factors require consideration of the Project's potential effect on health and safety.⁸⁸

1. Construction and Operation of Facilities

- 81. 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.⁸⁹
- 82. Applicants' construction crews and/or contract crews will comply with local, state, NESC, and Applicants' standards regarding installation of facilities and standard

⁸² EA at 34.

⁸³ EA at 35.

⁸⁴ Id.

⁸⁵ Id.

⁸⁶ EA at 35.

⁸⁷ EA at 29.

⁸⁸ Minn. Stat. § 216E.03, Subd. 7(b)(1); Minn. R. 7850.4100(B).

⁸⁹ Application at 13.

construction practices. Applicants' and industry safety procedures will be followed during construction and after installation of the transmission lines.⁹⁰

83. DLPU will conduct monthly inspections of the substation after construction.⁹¹ DLPU personnel will perform annual line inspections, maintain equipment, and repair any damage. DLPU would also conduct regular route maintenance for removal of undesired vegetation that would interfere with the operation of the proposed transmission line.⁹²

2. Electric and Magnetic Fields

84. There are no federal standards for transmission line electric fields.⁹³
85. 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.⁹⁴
86. The calculated electric fields for the Project are less than the maximum limit of 8 kV/m prescribed by the Commission.⁹⁵
87. There are no federal or state regulations for the permitted strength of magnetic fields from transmission lines.⁹⁶
88. Research has not been able to establish a cause and effect relationship between exposure to magnetic fields and adverse health effects.⁹⁷
89. There is no indication that any significant impact on human health and safety will result from the Project.⁹⁸

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

90. 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.⁹⁹

1. Agriculture

⁹⁰ Id.

⁹¹ Application at 14.

⁹² Id.

⁹³ EA at 36.

⁹⁴ Id.

⁹⁵ Id.

⁹⁶ Id.

⁹⁷ Id.

⁹⁸ EA at 37.

⁹⁹ Minn. Stat. § 216E.03, Subd. 7(b)(5); Minn. R. 7850.4100(C).

91. Agriculture is a land-based economic resource along the Proposed Route.¹⁰⁰
92. The proposed project is located within the existing MnDOT right-of-way and no poles will be placed in agricultural lands.¹⁰¹
93. No impacts to agricultural operations will result from construction and operation of the project.¹⁰²

2. Forestry

94. There are no forestry resources within the proposed route.¹⁰³

3. Mining

95. There are no mining resources within the proposed route.¹⁰⁴

D. Effects on Archeological and Historic Resources

96. Minnesota Rule 7850.4100(D) requires consideration of the effects on historic and archaeological resources.
97. SHPO recommended that an archaeological survey be completed if the project location could not be documented as previously disturbed or previously surveyed.¹⁰⁵
98. DLPU considers the ROW to be “previously disturbed” since the project location is located in public ROW with existing underground utilities, and that an archaeological survey is unnecessary.¹⁰⁶ DLPU has not provided information on previous surveys that would indicate the proposed project would not impact to historic or archaeological resources.¹⁰⁷
99. Avoidance of known archaeological and historic resources is the preferred mitigation strategy. Additional mitigation includes stopping construction and contacting SHPO to determine how best to proceed.¹⁰⁸

¹⁰⁰ EA at 39.

¹⁰¹ Id.

¹⁰² Id.

¹⁰³ Id.

¹⁰⁴ Id.

¹⁰⁵ EA at 41.

¹⁰⁶ EA at 41.

¹⁰⁷ Id.

¹⁰⁸ Id.

E. Effects on Natural Environment

100. 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.¹⁰⁹

1. Air Quality

101. 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.¹¹⁰ Applicants will use dust control measures to minimize dust during Project construction.¹¹¹

102. No significant impacts to air quality are anticipated from the Project or any of the route alternatives.¹¹²

2. Water Quality and Resources

103. 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.¹¹³

104. Utilizing the existing MNDOT right-of-way avoids permanent impacts to surrounding wetlands, waterbodies, watercourses or mapped floodplains.¹¹⁴ Short-term construction impacts may occur, including sedimentation.¹¹⁵ Long-term impacts are not expected as a result of construction or operation of the Project.¹¹⁶

105. Groundwater impacts are anticipated to be minimal.¹¹⁷

3. Flora

¹⁰⁹ Minn. Stat. § 216E.03, Subd. 7(b)(1)-(2); Minn. R. 7850.4100(E).

¹¹⁰ EA at 42.

¹¹¹ Id.

¹¹² EA at 43.

¹¹³ EA at 44.

¹¹⁴ Id.

¹¹⁵ Id.

¹¹⁶ Id.

¹¹⁷ EA at 45.

106. Impacts to flora due to the Project are anticipated to be minimal.¹¹⁸ Tree trimming and removal will be minimized to the extent practicable to maintain roadway and electrical safety standards.¹¹⁹
107. 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.¹²⁰

4. Fauna

108. The Project area includes a variety of habitats including forested areas, grasslands, agricultural fields, wetlands, and lakes and streams.¹²¹
109. There are no public lands or wildlife management areas within or adjacent to the proposed route.¹²²
110. The DNR indicated a need for bird flight diverters for the length of the transmission line due to the close proximity of lakes and wetlands bisected by US 59.¹²³ Impacts to 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.¹²⁴ Short-term and long-term impacts to other wildlife species, such as displacement or loss of habitat due to tree removal may occur during construction and operation. but such impacts are anticipated to be minimal.¹²⁵

F. Effects on Rare and Unique Natural Resources

111. Minnesota's high voltage transmission line routing factors require consideration of the Project's effect on rare and unique natural resources.¹²⁶
112. There are rare and unique plant communities in the Project area, including a Lake of Biological Significance containing an Aquatic Management Area on Meadow Lake. Meadow Lake contains records of a fish species, the least darters (*Etheostoma microperca*), which is listed as a state species of special concern.¹²⁷

¹¹⁸ EA at 46

¹¹⁹ Id.

¹²⁰ Id.

¹²¹ EA at 46.

¹²² EA at 47.

¹²³ Id.

¹²⁴ Id.

¹²⁵ EA at 46.

¹²⁶ Minn. Stat. § 216E.03, Subd. 7(b)(1); Minn. R. 7850.4100(F).

¹²⁷ EA at 47.

113. The proposed project is not expected to impact threatened, endangered, or species of special concern and further minimizes potential impacts by utilizing an existing roadway corridor and ROW, which tends to minimize the impacts on rare and unique natural resources (vegetation, wildlife, and natural communities).¹²⁸

G. Application of Various Design Considerations

114. 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.¹²⁹
115. 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.¹³⁰

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

116. Minnesota's high voltage transmission line routing factors require consideration of the Project's use or paralleling of existing rights-of-way, survey lines, natural division lines, and agricultural field boundaries.¹³¹
117. Using existing corridors reduces and minimizes impacts on planned future residential areas, commercial properties, and environmental and sensitive resources.¹³²
118. The proposed project will be located within MnDOT's right-of-way along US 59.¹³³

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

119. Minnesota's high voltage transmission line routing factors require consideration of the Project's use of existing transportation, pipeline and electrical transmission system rights-of-way.¹³⁴

¹²⁸ Id.

¹²⁹ Minn. Stat. § 216E.03, Subd. 7(a)-(b); Minn. R. 7850.1900, Subp. 2(L).

¹³⁰ Application at 9 and 11.

¹³¹ Minn. Stat. § 216E.03, Subd. 7(b)(9); Minn. R. 7850.4100(H).

¹³² EA at 18.

¹³³ EA at 7.

¹³⁴ Minn. Stat. § 216E.03, Subd. 7(b)(8); Minn. R. 7850.4100(J).

120. The proposed project will be located within MnDOT's right-of-way along US 59.¹³⁵

J. Electrical System Reliability

121. Minnesota's high voltage transmission line routing factors require consideration of the Project's impact on electrical system reliability.¹³⁶
122. The proposed Project will improve electrical service and reliability in the Project area.¹³⁷

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

123. Minnesota's high voltage transmission line routing factors require consideration of the Project's cost of construction, operation, and maintenance.¹³⁸
124. The estimated cost to construct the Project (HVTL and substation) is approximately \$3.5 million.¹³⁹
125. Maintenance costs after construction will be nominal for several years, since the proposed transmission line will be new and there will be minimal initial vegetation management required.¹⁴⁰ DLPU conducts annual line inspection on the HVTL. Maintenance and repair are performed on an as-needed basis.
126. DLPU performs periodic inspections of substations and equipment. The type and frequency of inspection varies depending on the type of equipment.¹⁴¹ Typical inspection intervals are semi-annual or annual. Maintenance and repair are performed on an as-needed basis, and therefore the cost varies from substation to substation.¹⁴²

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

127. 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.¹⁴³

¹³⁵ EA at 7.

¹³⁶ Minn. Stat. § 216E.03, Subd. 7(b)(10); Minn. R. 7850.4100(K).

¹³⁷ Application at 9.

¹³⁸ Minn. R. 7850.4100(L).

¹³⁹ Application at 9.

¹⁴⁰ Id.

¹⁴¹ Application at 10.

¹⁴² Id.

¹⁴³ Minn. Stat. § 216E.03, Subd. 7(b)(5)-(6); Minn. R. 7850.4100(M).

128. Unavoidable adverse impacts include aesthetic impacts, impacts to vegetation, and impacts to wildlife and wildlife habitat.¹⁴⁴

M. Irreversible and Irretrievable Commitments of Resources

129. 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.¹⁴⁵
130. 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.¹⁴⁶
131. 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.¹⁴⁷

II. NOTICE

132. 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.¹⁴⁸
133. Applicants provided notice to the public and local governments.¹⁴⁹
134. Minnesota statutes and rules also require EERA and the Commission to provide certain notice to the public throughout the Route Permit process.¹⁵⁰ EERA and the Commission provided the notice in satisfaction of Minnesota statutes and rules.¹⁵¹

¹⁴⁴ EA at 50.

¹⁴⁵ Minn. Stat. § 216E.04, Subd. 7(b)(11); Minn. R. 7850.4100(N).

¹⁴⁶ EA at 50.

¹⁴⁷ Id.

¹⁴⁸ Minn. Stat. § 216E.03, Subds. 3a, 4; Minn. R. 7850.2100, Subps. 2, 4.

¹⁴⁹ Application, Appendix E.

¹⁵⁰ Minn. Stat. § 216E.03, Subd. 6; Minn. R. 7850.2300, Subp. 2; Minn. R. 7850.3700, Subps. 2, 3, and 6.

¹⁵¹ EA Scoping Decision; Notice of Availability of EA; Notice of Availability of EA in EQB Monitor; Notice of Comment Period on Application Completeness; Commission Meeting Notice on Completeness; Notice of Public Information and Scoping Meeting; Notice of Hearing.

III. COMPLETENESS OF EA

135. The Commission is required to determine the completeness of the EA.¹⁵² An EA is complete if it and the record address the issues and alternatives identified in the Scoping Decision.¹⁵³
136. The evidence on the record demonstrates that the EA is adequate; 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.¹⁵⁴

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

CONCLUSIONS

137. The Commission has jurisdiction to consider the Application.
138. The Commission determined that the Application was substantially complete and accepted the Application on September 5, 2019.¹⁵⁵
139. 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.
140. 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.
141. 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.

¹⁵² Minn. R. 7850.3900, Subp. 2.

¹⁵³ *Id.*

¹⁵⁴ EERA *Scoping Decision*, eDockets [20202-160758-01](#) and *Environmental Analysis of the Potential Human and Environmental Impacts of the Detroit Lakes Public Utility 115kV Transmission Line and Substation*, eDockets No. [20206-163636-01](#), [20206-163636-02](#), [20206-163636-03](#), [20206-163636-04](#), [20206-163636-05](#).

¹⁵⁵ Commission Order Accepting Application as Complete, eDockets [201910-156919-01](#).

142. 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 hearing and to submit written comments. All procedural requirements for the Route Permit were met.
143. The evidence on the record demonstrates that the Proposed Route best meets 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.
144. The evidence on the record demonstrates that the general Route Permit conditions are appropriate for the Project.
145. Any of the foregoing Findings more properly designated Conclusions are hereby adopted as such.

Exhibit A – Applicants’ Proposed Route

