

STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS

FOR THE PUBLIC UTILITIES COMMISSION

In the Matter of the Application of Dairyland
Power Cooperative for a Route Permit for
the Wabasha Relocation 161 kV
Transmission Line Project in Wabasha
County

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**FINDINGS OF FACT,
CONCLUSIONS OF LAW, AND
RECOMMENDATIONS**

In July 2024, this matter was assigned to Administrative Law Judge Jim Mortenson to conduct public hearings on the Route Permit Application (Application) (PUC Docket No. ET-3/TL-23-388) of Dairyland Power Cooperative (Applicant or Dairyland) to construct the Wabasha Relocation 161-kilovolt (kV) Transmission Line Project (Project) in Wabasha County, Minnesota. The Minnesota Public Utilities Commission (Commission or PUC) also requested that the Judge prepare findings of fact and conclusions of law and provide recommendations, if any, on conditions and provisions of the proposed route permit.

The Project involves relocating approximately 10.4 miles of the existing Dairyland LQ34 161-kV transmission line, which presently connects the Wabaco Substation to the Alma Substation and is co-located on the existing CapX2020 345-kV transmission line structures, near the town of Plainview, Minnesota. The existing 161-kV circuit must be relocated from the CapX2020 structures to make room for a new, second 345-kV circuit proposed for those structures. The new 161-kV line will extend 13.3 miles northeast and east, ending at a new 161-/69-kV substation within a 10.8-acre site off County Road 84, southeast of Kellogg and west of the Mississippi River (Kellogg substation). The Project route passes through Plainview, Highland, Watopa, and Greenfield Townships, concluding east of Kellogg in Wabasha County, Minnesota.

Public hearings on the Application were held in the evening on February 11, 2025 (in person) and February 12, 2025 (remote access - telephone and internet). The factual record remained open until March 10, 2025, for the receipt of written public comments.

Christina K. Brusven and Justin Chasco, Fredrikson & Byron, P.A., and Rob Maly, Applicant Staff Attorney, and Sage Williams, Applicant Manager, appeared on behalf of Dairyland.

Trevor Culbertson, Energy Facility Planner, Public Utilities Commission Staff (Commission Staff), appeared on behalf of the Commission.

Richard Dornfeld, Assistant Attorney General, and James E. Sullivan,

Environmental Review Manager, appeared on behalf of the Department of Commerce (DOC), Energy Environmental Review and Analysis (EERA).

STATEMENT OF ISSUES

Has Dairyland satisfied the criteria established in The Power Plant Siting Act (PPSA) Minn. Stat. §§ 216E.001 - .18 (2024), and Minn. R. 7850.1000 - .5600 (2023) for a Route Permit for the Project? If so, which route should be selected for the Project?

SUMMARY OF RECOMMENDATIONS

Dairyland has satisfied the applicable legal requirements and, accordingly, the Judge recommends that the Commission **GRANT** a Route Permit for the Project, subject to the conditions discussed below. Dairyland's proposed route, with alternatives RSA-AAA-2, as modified, and RSA-B, is the best route for the Project.

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

FINDINGS OF FACT

I. THE APPLICANT

1. Dairyland is a not-for-profit generation and transmission electric cooperative formed in December 1941 and based in La Crosse, Wisconsin. Dairyland provides the wholesale electrical requirements to more than 700,000 people through its 24 distribution cooperatives and 27 municipal utilities in a four-state area including Wisconsin, Minnesota, Iowa, and Illinois. This includes People's Energy Cooperative (People's) and MiEnergy Cooperative, the distribution cooperatives serving cooperative members in the area in which the Project will be located. Dairyland's transmission system is interconnected directly with neighboring transmission owners, and Dairyland is a member of the Midwest Reliability Organization (MRO) and Midcontinent Independent System Operator (MISO). Dairyland generates electricity by using both traditional and renewable energy resources to provide safe, reliable, and affordable electricity. Dairyland's power plants have the capability to generate more than 1,038 megawatts (MWs), of which approximately 18 percent is provided from renewable sources (i.e., wind, solar, hydroelectric power, and biomass generation). In addition, Dairyland has power purchase agreements for 207 MWs of wind, 193 MWs of solar, and 78 MWs of hydroelectric energy in Iowa, Illinois, Minnesota, South Dakota, and Wisconsin. Dairyland owns over 3,300 miles of transmission line (34.5-kV and higher) and 232 substations in Minnesota, Wisconsin, Iowa, and Illinois.¹

II. PROCEDURAL HISTORY

2. On January 29, 2024, Dairyland filed a notice of intent to submit a route permit application for the Project under the alternative permitting procedures of

¹ Ex. DPC-4 at 1-2 (Application).

Minn. R. 7850.2800 to 7850.3900.²

3. On March 27, 2024, Dairyland filed the Application for the Project.³ Dairyland also filed the notice required under Minn. R. 7850.2100 for the Project.⁴

4. On April 1, 2024, the Commission issued a notice of comment period on the completeness of the Application. The Commission accepted comments on the completeness of the Application and other procedural matters through April 26, 2024.⁵

5. On April 15, 2024, Dairyland filled a compliance filing documenting that it completed all notices required under Minn. Stat. § 216E.03, subd. 4 (2023), and Minn. R. 7850.2100.⁶

6. On April 15, 2024, EERA staff filed comments recommending that the Commission find the route permit portions of the Application to be complete.⁷

7. On April 22, 2024, Dairyland filed completeness reply comments in response to the initial comments filed by DER and EERA. Dairyland agreed with the comments and recommendations of DER and EERA.⁸

8. On April 22, 2024, Angie Murphy submitted a comment.⁹

9. On May 7, 2024, the Commission issued an order accepting the Application as substantially complete with respect to route permit application completeness requirements, authorizing joint environmental review and hearing processes for the certificate of need (CN) and route permit, including preparation of an environmental assessment (EA) in lieu of an environmental report, deciding not to appoint an advisory task force at this time, and requesting a full administrative law judge report with recommendations for the Project's public hearing.¹⁰

10. On May 29, 2024, the Commission filed the notice of public information and EA scoping meetings, scheduling an in-person meeting for June 12, 2024, in Kellogg, Minnesota, and a remote hearing for June 11, 2024, via WebEx. The Commission requested responses to the following questions: 1) What potential human and environmental impacts of the proposed Project should be considered in the EA?; 2) Are there any methods to minimize, mitigate, or avoid potential impacts of the proposed Project that should be considered in the EA?; 3) Are there any alternative routes or route segments that should be considered to address or mitigate potential impacts associated with the proposed Project?; 4) Are there any unique characteristics of the proposed route

² Ex. DPC-1 (Notice of Intent to Submit a Route Permit Application).

³ Ex. DPC-4 (Application).

⁴ Ex. DPC-5 (Project Notice Under 7850.2100).

⁵ Ex. PUC-1 (Notice of Comment Period on Application Completeness).

⁶ Ex. DPC-6 (Confirmation of Notice).

⁷ Ex. EERA-3 (EERA Comments on the Wabasha Relocation Project).

⁸ Ex. DPC-7 (Completeness Reply Comments).

⁹ Ex. PUC-2 (Public Comment - Angie Murphy).

¹⁰ Ex. PUC-3 (Order).

or the Project that should be considered?; and 5) Are there other ways to meet the stated need for the Project, instead of the proposed transmission line, e.g., a different size or type of facility? If so, what alternatives to the project should be studied in the EA? The written comment period was open through June 26, 2024.¹¹

11. On June 5, 2024, Dairyland filed a request to withdraw its application for a CN for the Project, citing a newly adopted statutory exemption from CN requirements.¹²

12. On June 11 and June 12, 2024, Ron and Elizabeth Sanders submitted comments.¹³

13. On June 25, 2024, the Commission issued a notice and order approving Dairyland's petition to withdraw its CN application.¹⁴

14. On June 26, 2024, Dairyland filed scoping comments addressing informal comments offered during the open house portion of the scoping meeting held on June 12, 2024, in Kellogg, Minnesota.¹⁵ International Union of Operating Engineers Local 49 (Local 49) and North Central States Regional Council of Carpenters (NCSRCC) submitted comments encouraging EERA to study the benefits and impacts to local workers.¹⁶ The Minnesota Department of Transportation (MnDOT) submitted scoping comments discussing the full Project review, mitigative suggestions, recommendations, permit requirements, and overall impacts.¹⁷

15. On July 2, 2024, EERA filed the transcripts from the in-person and remote public scoping and informational meetings.¹⁸

16. On July 3, 2024, EERA filed public comments it received from Kent Zarling, Joseph Zarling, James Zarling, Gene Zarling, Maurice Young, Rita Young, Gary Young, Darrin Young, Jack Stamschror, Cindy Stamschror, Elizabeth and Ron Sanders, Tom Miller, Bart McDonough, Gary Lehnertz, Leo and Jane Kottschade, Jason Klassen, Eric and Nicole Bartsch.¹⁹ EERA also filed a public comment it received from multiple

¹¹ Ex. PUC-4 (Notice of Public Information and EA Scoping Meetings).

¹² Ex. DPC-8 (CN Withdrawal Request).

¹³ Ex. PUC-5, 6 (Public Comments - Ron and Elizabeth Sanders) (eDocket Nos. 20246-207590-01, 20246-207609-02).

¹⁴ Ex. PUC-7 (Notice and Order Approving Petition to Withdraw Filing).

¹⁵ Ex. DPC-9 (Scoping Comments).

¹⁶ Local 49 and NCSRCC Scoping Comments (June 26, 2024) (eDocket No. 20246-207972-01).

¹⁷ MnDOT Scoping Comments (June 26, 2024) (eDocket No. 20246-207972-01).

¹⁸ Ex. EERA-4 (Oral Comments from the Dairyland Project Public Scoping Meetings).

¹⁹ Exs. EERA-5 (Public Comment – Leo and Jane Kottschade); EERA-6 (Public Comment – Bart McDonough); EERA-7 (Public Comment – Tom Miller); EERA-8 (Public Comment – Elizabeth and Ron Sanders); EERA-9 (Public Comment – Cindy Stamschror); EERA-10 (Public Comment – Maurice Young); EERA-11 (Public Comment – Kent Zarling); EERA-12 (Public Comment – Jason Klassen); EERA-13 (Public Comment – Joseph Zarling); EERA-14 (Public Comment – Eric and Nicole Bartsch); EERA-15 (Public Comment – James Zarling); EERA-16 (Public Comment – Gary Lehnertz); EERA-17 (Public Comment – Eric and Nicole Bartsch); EERA-18 (Public Comment – Multiple Residents); EERA-19 (Public Comment – Jack Stamschror); EERA-20 (Public Comment – Darrin Young); EERA-21 (Public Comment – Gary Young); EERA-22 (Public Comment – Rita Young); EERA-23 (Public Comment – Gene Zarling); and EERA-24 (Public Comment – Paul Kottschade).

residents.²⁰ On July 10, 2024, Dairyland filed reply comments in response to the route segment alternatives (RSA) proposed for evaluation in the EA. Dairyland did not oppose inclusion of the Southern and Central West RSAs in the scope of the EA. Dairyland recommended, however, that the Miller East RSAs and the McDonough Alignment Alternative not be included in the scope of the EA because neither alternative reduces potential Project impacts.²¹

17. On July 22, 2024, the Commission filed the sample route permit for the Project.²²

18. On July 30, 2024, Paul Kottschade submitted a comment.²³

19. On August 7, 2024, the Judge issued a Notice of Prehearing Conference scheduling a prehearing conference on September 3, 2024.²⁴

20. On August 29, 2024, DOC filed a letter with a proposed schedule for the Project.²⁵

21. On August 30, 2024, EERA filed comments recommending that the Applicant's Proposed Route (APR), and six other routing alternatives proposed by the public be included in the EA scoping decision. EERA staff recommended that one routing alternative proposed by the public (i.e. Route Segment Alternative H (RSA-H)) not be included in the EA scoping decision. EERA also attached maps of the scoping alternatives to its scoping comments.²⁶

22. On September 10, 2024, the Judge issued a Prehearing Order setting the procedural schedule of events and clarifying other procedural matters.²⁷

23. On September 17, 2024, the Commission issued an Order accepting Dairyland's proposed route, accepting the routing alternatives proposed by EERA in its August 30, 2024 comments, and determining that RSA-H should not be included in the EA scoping decision.²⁸

24. On September 25, 2024, EERA filed the EA Scoping Decision with route maps. EERA also filed the Notice of EA scoping decision.²⁹

25. On September 30, 2024, EERA filed the certificate of the mailing of the EA scoping decision to local government units, tribes, public libraries, public agencies,

²⁰ Ex. EERA-18 (Public Comment – Multiple Residents).

²¹ Ex. DPC-10 (Reply Comments).

²² Ex. PUC-8 (Sample HVTL Route Permit).

²³ Ex. EERA-24 (Public Comment – Paul Kottschade).

²⁴ Notice of Prehearing Conference (Aug. 7, 2024) (eDocket No. 20249-210077-01).

²⁵ DOC Letter - Proposed Schedule (Aug. 29, 2024) (eDocket No. 20248-209881-01).

²⁶ Ex. EERA-25 (Public Comment – Dairyland Power Cooperative Route Recommendation with Attachments).

²⁷ Prehearing Order (Sept. 10, 2024) (eDocket No. 20249-210077-01).

²⁸ Ex. PUC-9 (Order).

²⁹ Ex. EERA-26 (EERA Scoping Decision Notice).

businesses, and various individual landowners in the Project area.³⁰

26. On October 14, 2024, Angela Murphy submitted a comment.³¹

27. On January 27, 2025, the Commission issued the Notice of Public Hearings and Availability of the EA, scheduling an in-person public hearing for February 11, 2025, at 6:00 p.m. in Kellogg, Minnesota and a virtual public hearing for February 12, 2025, at 12:00 p.m. via WebEx. The Commission also asked for written comments on the following topics: (1) did the EA adequately address the issues identified in the scoping decision; (2) if the Commission should grant a route permit for the proposed Wabasha Relocation 161-kV Transmission Line Project; and (3) if granted, what additional conditions or requirements, if any, should be included in the route permit. The comment period remained opened until March 4, 2025.³²

28. On January 28, 2025, Dairyland filed the direct testimonies of Sage Williams³³ and Britta Bergland.³⁴

29. On January 31, 2025, the Commission filed a revised Notice of Public Hearings and Availability of the EA, correcting the schedule for the in-person public hearing for February 11, 2025, at 6:00 p.m. in Kellogg, Minnesota and a virtual public hearing for February 12, 2025, at 12:00 p.m. via WebEx. The Commission also asked for written comments on the following topics: (1) did the EA adequately address the issues identified in the scoping decision; (2) if the Commission should grant a route permit for the proposed Wabasha Relocation 161-kV Transmission Line Project; and (3) if granted, what additional conditions or requirements, if any, should be included in the route permit. The Commission also revised the comment period to remain open until March 4, 2025.³⁵

30. On January 31, 2025, EERA filed the EA for the Project.³⁶

31. On February 4, 2025, EERA filed the amended Draft Route Permit (DRP) for the Project.³⁷

32. On February 5, 2025, the Commission filed the affidavit of publication of the Notice of Public Information and EA Scoping meetings published on May 28, 2024, in the Wabasha County Herald newspaper.³⁸ The Commission also filed the affidavit of publication of the Notice of Public Hearings and Availability of EA published on

³⁰ Ex. EERA-27 (EERA Affidavit of Publication – Dairyland Scoping Decision Notice).

³¹ Ex. EERA-28 (Public Comment – Angela Murphy) This comment was submitted after the close of the scoping comment period.

³² PUC Notice of Public Hearings and Availability of Environmental Assessment (Jan. 27, 2025) (eDocket No. 20251-214410-01).

³³ Ex. DPC-12 (Direct Testimony of Sage Williams with Schedules A and B).

³⁴ Ex. DPC-13 (Direct Testimony of Britta Bergland with Schedules A-F).

³⁵ Ex. PUC-10 (Revised Notice of Public Hearings and Availability of Environmental Assessment).

³⁶ Ex. EERA-29 (EA).

³⁷ Ex. EERA-30 (Amended Draft Route Permit – Environmental Assessment Appendix D).

³⁸ Affidavit of Publication (Feb. 5, 2025) (eDocket No. 20252-215018-01).

February 4, 2025, in the Wabasha County Herald newspaper.³⁹

33. On February 13, 2025, Tom and Kay Miller and Plainview Veterinary Clinic submitted comments.⁴⁰

34. On February 18, 2025, Marilyn Wallace submitted comments.⁴¹

35. On February 24, 2025, comments were submitted by Eric Bartsh,⁴² Cindy Stamschror,⁴³ Linda Stamschror,⁴⁴ Gene Zarling,⁴⁵ Toni McMillin,⁴⁶ Angie and Marty Murphy.⁴⁷

36. On March 3, 2025, Dairyland filed its comments on the EA and DRP.⁴⁸

37. On March 4, 2025, the Minnesota Department of Natural Resources (MDNR) provided comments responding to the EA and DRP. The MDNR letter recommended special permit conditions requiring: (1) a Karst Survey Plan; (2) conditions listed in Natural Heritage Reviews via the Minnesota Conservation Explorer (MCE) (MCE 2023-00935 and MCE 2024-000881); (3) development of a Calcareous Fen Management Plan; (4) facility lighting; (5) dust control; (6) wildlife-friendly erosion control; and (7) water appropriation permits.⁴⁹

38. On March 10, 2025, Dairyland submitted responses to public hearing comments on the preferred route alternatives, stray voltage, electromagnetic field (EMF) impacts on honeybees, and MDNR's recommended special permit conditions.⁵⁰

39. On March 13, 2025, Kent Zarling submitted a comment.⁵¹

40. On March 17, 2025, Kent Zarling and Jane Kottschade submitted comments.⁵²

41. On March 18, 2025, Kent Zarling and Joseph Zarling submitted

³⁹ Affidavit of Publication (Feb. 5, 2025) (eDocket No. 20252-215018-02).

⁴⁰ Comments by Tom and Kay Miller and Plainview Veterinary Clinic (Feb. 13, 2025) (eDocket No. 20252-215359-01).

⁴¹ Comment by Marilyn Wallace (Feb. 18, 2025) (eDocket No. 20252-215450-01).

⁴² Comment by Eric Bartsh (Feb. 18, 2025) (eDocket No. 20252-215706-01).

⁴³ Comment by Cindy Stamschror (Feb. 18, 2025) (eDocket No. 20252-215704-01).

⁴⁴ Comment by Linda Stamschror (Feb. 18, 2025) (eDocket No. 20252-215703-01).

⁴⁵ Comment by Gene Zarling (Feb. 18, 2025) (eDocket No. 20252-215701-01).

⁴⁶ Comment by Toni McMillin (Feb. 18, 2025) (eDocket No. 20252-215700-01).

⁴⁷ Comment by Angie and Marty Murphy (Feb. 18, 2025) (eDocket No. 20252-215698-01).

⁴⁸ Dairyland - EA and Draft Route Permit Comments (March 3, 2025) (eDocket No. 20253-215995-01).

⁴⁹ Comment by MDNR (March 4, 2025) (eDocket Nos. 20253-216053-01, 20253-216053-02, 20253-216053-03, 20253-216053-04).

⁵⁰ Dairyland - Response to Public Comments (March 10, 2025) (eDocket No. 20253-216220-01).

⁵¹ Comment by Kent Zarling (March 13, 2025) (eDocket No. 20253-216352-01).

⁵² Comment by Kent Zarling (March 17, 2025) (eDocket No. 20253-216456-01); Comment by Jane Kottschade (March 17, 2025) (eDocket No. 20253-216446-01).

comments.⁵³

III. THE PROPOSED PROJECT

A. Project Summary

42. The Project is to construct approximately 13.3 miles of 161-kV high voltage transmission line (HVTL) and a new substation in Wabasha County, Minnesota. The Project starts in Plainview Township, northeast of Plainview, and traverses northeast through Highland, Watopa, and Greenfield Townships, ending east of Kellogg near the Mississippi River.⁵⁴

43. The Project is a reroute of approximately 10.4 miles of the existing Dairyland LQ34 161-kV transmission line, which is presently located on the existing CapX2020 Hampton-Rochester-LaCrosse 345-kV structures. In July 2020, the MISO approved a long-range transmission portfolio, including a new Wilmarth-North Rochester-Tremval transmission line. This new 345-kV line will use the double-circuit capability of the CapX2020 system between North Rochester, Minnesota and Alma, Wisconsin. Consequently, Dairyland's existing 161-kV transmission line must be removed from the existing CapX2020 structures and relocated to make room for the new 345-kV circuit on the CapX2020 structures.⁵⁵

44. The Project will involve installation of 75- to 140-foot-high steel monopoles placed 250- to 1,000- feet apart within a 100-foot-wide right-of-way (ROW). In addition to the transmission line, construction of a new 4.0-acre substation located on a 10.8-acre site off of County Road 84, southeast of Kellogg, is also proposed as part of this Project.⁵⁶

B. Overview of Project Need

45. The Project is exempt from CN requirements pursuant to Minn. Stat. § 216B.243, subd. 8(a)(11) (2024), because the Project involves the relocation of an existing HTVL to new ROW, and the structures will not be designed for or capable of operation at a higher voltage.⁵⁷

C. Transmission Line Structures and Conductors

46. Most of the new 161-kV transmission line will consist of single circuit steel structures spaced approximately 250 to 1,000 feet apart. Transmission structures will typically range in height from 75 to 140 feet above ground, depending upon the terrain and environmental constraints. The average diameter of the steel structures at ground

⁵³ Comment by Kent Zarling (March 18, 2025) (eDocket No. 20253-216511-01); Comment by Joseph Zarling (March 18, 2025) (eDocket No. 20253-216510-0). These comments were submitted two weeks after the close of the comment period.

⁵⁴ Ex. EERA-29 at 1 (EA).

⁵⁵ Ex. EERA-29 at 1 (EA); Ex. DPC-12 at 3:15-18 and 5:11-16 (Direct Testimony of Sage Williams with Schedules A and B).

⁵⁶ Ex. DPC-4 at 1-1 (Application); Ex. DPC-12 at 3-4 (Direct Testimony of S. Williams).

⁵⁷ Ex. DPC-8 (CN Withdrawal Request).

level is 37 inches. Poles will be oriented in a delta configuration (one overhead ground wire at the top, two phases on one side and a single phase on the other) supported by suspension insulators at tangent structures and strain insulators at tension structures. All tangent poles with a line angle of two degrees or less will be directly embedded in the soil. Any structure with a line angle of greater than two degrees will be supported on a drilled shaft concrete foundation. Special horizontally configured structures (H-frame or three pole structures) may be required to cross under any higher voltage circuits in the corridor.⁵⁸

47. The horizontal configuration allows the 161-kV transmission line to be as low as possible at the crossing point, while still maintaining the required clearances set by the National Electrical Safety Code (NESC). Specific sizing of these structures will be determined after a Route Permit is issued and detailed engineering design is initiated. Dairyland anticipates use of H-frame or 3-pole structures only to cross under the 345-kV CapX2020 circuit.⁵⁹

48. Dead-end structures are also used as “storm structures” to limit the number of structures damaged by a cascading effect due to higher line tensions when a pole is knocked down by a storm. Dead-end structures will be steel on concrete foundation structures.⁶⁰

49. The single circuit structures will have three single conductor phase wires and one shield wire. It is anticipated that the phase wires will be 1590 thousand circular mil aluminum conductor steel supported (1590 Lapwing ACSS-HS) or a conductor with similar capacity. The shield wire will be 0.607-inch diameter optical ground wire.⁶¹

50. On some projects, Dairyland has allowed other distribution utilities to attach distribution lines to its HVTL structures. This is commonly called “underbuild” or “underbuilt.” Xcel Energy and Peoples Energy Cooperative have existing distribution lines along State Highway 42 and County Road 84. Dairyland currently understands that Xcel Energy and Peoples plan to bury these lines where they are overtaken by the Project, rather than attach them to the new 161-kV structures installed by Dairyland. This work will be undertaken by Xcel Energy and Peoples and will not be conducted or directed by Dairyland. Dairyland will be responsible for reimbursing Xcel Energy and Peoples for costs incurred to bury their distribution lines.⁶²

D. Substation and Associated Facilities

51. The Kellogg Substation is needed to connect the 161-kV transmission lines and the existing LN340 69-kV transmission line. Dairyland is proposing to develop 4.0 acres of a 10.8-acre property, which will include the fenced area, stormwater management system, parking, access road, and transmission line ROWs that will

⁵⁸ Ex. DPC-4 at 3-4 (Application); Ex. EERA-29 at 22 (EA).

⁵⁹ Ex. DPC-4 at 3-4 (Application); Ex. EERA-29 at 22 (EA).

⁶⁰ Ex. DPC-4 at 3-7 (Application).

⁶¹ Ex. DPC-4 at 3-8 (Application).

⁶² Ex. DPC-4 at 3-7 – 3-8 (Application).

enter/exit the substation.⁶³

52. The new Kellogg Substation will be designed to accommodate a full build out to a six-position 161-kV ring bus, eight-position 69-kV straight bus configuration, and two 161-/69-kV autotransformers. At the time of construction, three positions in the 161-kV ring bus, two positions in the eight-position 69-kV straight bus and one 161-/69-kV autotransformer will be built.⁶⁴

53. The scope of work at the Kellogg Substation includes:

- Installing three 161-kV circuit breakers, foundations, and control cables for transmission line switching;
- Installing two 69-kV circuit breakers, foundations, and control cables for transmission line switching;
- Installing one 161-/69-kV, 112 megavolt-ampere (MVA) autotransformer, foundation, and control cables;
- Installing 161-kV line steel dead-end structures with foundations to terminate the transmission lines;
- Installing a new building complete with auxiliary systems to house all necessary protection and control, communication, and Supervisory Data Control and Acquisition (SCADA) equipment;
- Installing fiber optic communication and SCADA equipment for system protection, remote control, and monitoring of the substation; and
- Installing disconnect switches, buswork, lightning protection structures, instrument transformers, surge arresters, and all appurtenances for a complete substation installation.⁶⁵

E. Right-of-Way and Route Width

54. In the Application, Dairyland requested a 400-foot-wide route width. However, the Dairyland also requested a variable route width (up to 2,300 feet wide) for specific portions of the route to consider existing infrastructure, mitigate potential engineering challenges, and/or to facilitate any necessary realignments to accommodate agency and/or landowner requests.⁶⁶ These areas include:

⁶³ Ex. EERA-29 at 21 (EA); Dairyland - EA and Draft Route Permit Comments at 2 (March 3, 2025) (eDocket No. 20253-215995-01).

⁶⁴ Ex. DPC-4 at 3-9 (Application).

⁶⁵ Ex. DPC-4 at 3-9 – 3-10 (Application).

⁶⁶ Ex. DPC-4 at 3-2 (Application).

- Variable width in some areas along State Highway 42 after the intersection with 215th Avenue (near milepost (MP) 1.6) to just north of 615th Street (near MP 7.8) to account for flexibility in routing around homes, buildings, and features along the highway.
- Up to 2,300-foot-wide route north of 615th Street (near MP 7.8) to just east of the U.S. Highway 61/Great River Road crossing (near MP 9.9) to account for flexibility in routing around steep slopes to the south of State Highway 42 and the U.S. Highway 61/Great River Road crossing.
- A variable, but up to 1,850-foot-wide route near the Kellogg Substation between MPs 12.9 to 13.3 to allow for flexibility in the ultimate placement of the substation.⁶⁷

F. Additional System Modifications

55. A number of modifications will need to be made to the existing system to accommodate the Project.⁶⁸ At the beginning of the Project (MP 0.0), an existing Dairyland structure will be removed and replaced with a new starting structure for the Project. Conductors that continue from this structure on to the CapX2020 structures (to the northeast) will be removed to make room for the planned 345-kV CapX2020 circuit. Conductors that continue to the southwest will be connected to Dairyland's first new structure. There is a possibility, based on engineering design, that additional structures (to the southwest) will need to be replaced or modified to accommodate the changes in line configuration. Distribution circuits along various parts of the APR will be buried underground.⁶⁹

56. The new 13.3-mile 161-kV transmission line will enter the Kellogg Substation from the west at MP 13.3. To the north of the Kellogg Substation, Dairyland structure X-N340-312 currently exists under the CapX2020 lines. This structure will be replaced or converted to 161-kV and brought directly into the northern side of the Kellogg Substation.⁷⁰

57. The new Kellogg Substation will then supply the LN340 69-kV transmission line, which travels north-south between Kellogg and the Utica area. Dairyland will modify approximately 1,500 feet of the existing 69-kV line to provide connection into the new Kellogg Substation. The 69-kV take-off structure in the Kellogg Substation will require some additional ROW as compared to the present ROW. Some 69-kV structures to the south of the Kellogg Substation will likely need to be replaced to accommodate the changes in line configuration. These structures will be wood poles and similar to what is presently installed.⁷¹

⁶⁷ Ex. EERA-29 at 20 (EA).

⁶⁸ Exs. DPC-4 at 3-3 (Application) and EERA-29 at 21 (EA).

⁶⁹ Exs. DPC-4 at 3-3 (Application) and EERA-29 at 21 (EA).

⁷⁰ Exs. DPC-4 at 3-3 (Application) and EERA-29 at 21 (EA).

⁷¹ Exs. DPC-4 at 3-3 (Application) and EERA-29 at 21 (EA).

G. Project Schedule

58. Dairyland anticipates conducting site preparation activities at the Kellogg Substation site between June and July 2026. Dairyland would build the Kellogg Substation and 161-kV transmission line between June 2027 and July 2028. The start of construction is dependent on the receipt of all required permits and approvals. Dairyland anticipates that the Project will be energized in July 2028.⁷²

H. Project Costs

59. Estimated costs for the APR are approximately \$32.4 million (2023 dollars). Costs and tasks are divided into six phases: permitting, land acquisition and ROW, design/engineering, procurement of materials, construction costs, and contingency. If the Commission selects a route other than the APR or imposes non-standard construction conditions, the Project cost estimates may change. These cost estimates assume that the Applicant will pay prevailing wages for applicable positions for the construction of the Project. All capital costs for the Project will be borne by the Applicant. Additional cost associated with constructing the RSAs range from an estimated \$3.7 million for RSA-F to \$1.5 million for RSA-GAA-1.⁷³

I. Permittee

60. The permittee for the Project is Dairyland.⁷⁴

IV. PUBLIC AND LOCAL GOVERNMENT PARTICIPATION

A. Applicant's Outreach

61. Prior to submitting the Application, Dairyland initiated landowner outreach by providing information on the Project via letters mailed to landowners within a 5-mile buffer zone surrounding the Project Alignment, interested parties and federal, state, and local governmental officials; publishing notices in area newspapers; and holding two open house meetings at St. Agnes Catholic Church in the City of Kellogg, Minnesota, on November 9, 2023.⁷⁵

62. In addition to the in-person open houses, Dairyland hosted an online on-demand open house for the public to learn more about the Project and share their comments. The online open house was available November 2 through 23, 2023. The site hosted the same information that was available at the in-person open house, including all content from the open house boards. It also included an interactive map for participants to add comments and questions to the Proposed Route by dropping a pin at a specific location on the map.⁷⁶

⁷² Exs. DPC-4 at 3-12 (Application) and EERA-29 at 29-30 (EA).

⁷³ Exs. DPC-4 at 3-10 (Application) and EERA-29 at 29 (EA).

⁷⁴ Ex. DPC-4 at 1-3 (Application).

⁷⁵ Ex. DPC-4 at 9-1 (Application).

⁷⁶ Ex. DPC-4 at 9-2 (Application).

B. Participation in Route Permit Docket

63. Public Information Meetings and EA Scoping Meetings were held on June 11 and 12, 2024. The virtual meeting was held on June 11, 2024, via WebEx. The in-person meeting was held on June 12, 2024, at Saint Agnes Hall, in Kellogg, Minnesota. Approximately 25 members of the public attended the in-person meeting. No members of the public attended the virtual meeting.⁷⁷ Three members of the public offered comments during the in-person scoping meeting. The commenters expressed concern on a variety of potential impacts associated with the project, including impacts to land use and agricultural production (specifically, dairy operations) and potential impacts to human health from EMF. Dairyland responded to questions at the meetings.⁷⁸

64. Written comments from members of the public, a labor union, and a government agency were received before the written comment period on EA scoping closed on June 26, 2024.⁷⁹ Several of these comments proposed specific alternative routes for consideration in the EA.⁸⁰

65. In its scoping comments, MnDOT provided feedback on the application, highlighting potential impacts on various state and US highways. MnDOT emphasized the need for coordination regarding highway construction activities and oversize load transportation, suggesting regular communication with MnDOT's District 6 Office. Additionally, MnDOT's Office of Environmental Stewardship (OES) reviewed the application and outlined potential environmental concerns applicable permits and guidance, as well as permit requirements.⁸¹

66. Public hearings were held on February 11 and 12, 2025. The in-person public hearing was held on February 11, 2025, at Saint Agnes Hall, in Kellogg, Minnesota. The virtual public hearing was held on February 12, 2025, via WebEx. Approximately 24 members of the public offered comments during the in-person public hearing. Three members of the public offered comments during the virtual public hearing. The

⁷⁷ Ex. EERA-29 at 11 (EA).

⁷⁸ See Kellogg 6:00 p.m. Scoping and Informational Meeting Transcript (Kellogg 6:00 p.m. Tr.) (June 12, 2024).

⁷⁹ Exs. EERA-5 (Public Comment – Leo and Jane Kottschade); EERA-6 (Public Comment – Bart McDonough); EERA-7 (Public Comment – Tom Miller); EERA-8 (Public Comment – Elizabeth and Ron Sanders); EERA-9 (Public Comment – Cindy Stamschror); EERA-10 (Public Comment – Maurice Young); EERA-11 (Public Comment – Kent Zarling); EERA-12 (Public Comment – Jason Klasson); EERA-13 (Public Comment – Joseph Zarling); EERA-14 (Public Comment – Eric and Nicole Bartsch); EERA-15 (Public Comment – James Zarling); EERA-16 (Public Comment – Gary Lehnertz); EERA-17 (Public Comment – Eric and Nicole Bartsch); EERA-19 (Public Comment – Jack Stamschror); EERA-20 (Public Comment – Darrin Young); EERA-21 (Public Comment – Gary Young); EERA-22 (Public Comment – Rita Young); EERA-23 (Public Comment – Gene Zarling); and EERA-24 (Public Comment – Paul Kottschade).

⁸⁰ Exs. EERA-10 (Public Comment – Maurice Young); EERA-11 (Public Comment – Kent Zarling); EERA-13 (Public Comment – Joseph Zarling); EERA-15 (Public Comment – James Zarling); EERA-17 (Public Comment – Eric and Nicole Bartsch); Ex. EERA-18 (Public Comment – Multiple Residents); EERA-20 (Public Comment – Darrin Young); EERA-21 (Public Comment – Gary Young); EERA-22 (Public Comment – Rita Young); EERA-23 (Public Comment – Gene Zarling); and EERA-24 (Public Comment – Paul Kottschade).

⁸¹ MnDOT Scoping Comments (June 16, 2024) (eDocket No. 20246- 207970-01).

commenters expressed concern on a variety of potential impacts associated with the project, including impacts to dairy farms, agricultural operations, and nearby homes and businesses. Dairyland responded to questions at the hearings.⁸²

67. Written comments from members of the public and government agencies were received before the written public hearing comment period closed on March 3, 2025. Several members of the public expressed a preference for one or more of the route alternatives, with many commenters seeking to minimize impacts to dairy farms, agricultural operations, and nearby homes and businesses.⁸³ Several landowners also provided comments requesting certain pole placements or alignments with the designated route.⁸⁴

68. On March 4, 2025, the MDNR provided comments responding to the EA and DRP. The MDNR letter recommended special permit conditions requiring (1) a Karst Survey Plan; (2) conditions listed in Natural Heritage Reviews via the MCE (MCE 2023-00935 and MCE 2024-000881); (3) development of a Calcareous Fen Management Plan; (4) facility lighting; (5) dust control; (6) wildlife-friendly erosion control; and (7) water appropriation permits.⁸⁵

69. On March 3, 2025, Dairyland filed its EA and DRP Comments.⁸⁶ On March 10, 2025, Dairyland submitted responses to public hearing comments on the preferred route alternatives, stray voltage, EMF impacts on honeybees, and MDNR's recommended special permit conditions.⁸⁷

V. ROUTES EVALUATED FOR PROJECT

70. During the EA scoping comment period, members of the public suggested RSAs, which include modifications to the alignment proposed by Dairyland in the Application. The EA evaluates the APR, the route proposed in the Application and as modified by Dairyland's comments, as well as the seven RSAs (referred to as RSA-A through RSA-G) included in the scoping decision.⁸⁸ Three of the RSAs (RSA-AAA-1 and RSA-AAA-2; RSA-EAA-1 and RSA-EAAA-2; and RSA-GAA-1 and RSA-GAA-2) are further refined into sub-RSAs. The RSAs would add between zero and 2.6 miles to the

⁸² See Kellogg 6:00 p.m. Public Hearing Transcript (Kellogg 6:00 p.m. Tr.) (Feb. 11, 2025) and WebEx 12:00 p.m. Public Hearing Transcript (WebEx 12:00 p.m. Tr.) (Feb. 12, 2025).

⁸³ See Comment by Marilyn Wallace (Feb. 18, 2025) (eDocket No. 20252-215450-01); Comment by Cindy Stamschror (Feb. 24, 2025) (eDocket No. 20252-215704-01); Comment by Gerry Gilsdorf (March 3, 2025) (eDocket No. 20253-215963-01); Comment by Tim Gilsdorf (March 3, 2025) (eDocket No. 20253-215963-01); and Comment by Tom Gilsdorf (March 3, 2025) (eDocket No. 20253-215963-01).

⁸⁴ See Comment by Marilyn Wallace (Feb. 18, 2025) (eDocket No. 20252-215450-01); Comment by Eric Bartsh (Feb. 24, 2025) (eDocket No. 20252-215706-01); Comment by Cindy Stamschror (Feb. 24, 2025) (eDocket No. 20252-215704-01); Comment by Linda Stamschror (Feb. 24, 2025) (eDocket No. 20252-215703-01); Comment by Toni McMillin (Feb. 24, 2025) (eDocket No. 20252-215700-01); and Comment by Angie and Marty Murphy (Feb. 24, 2025) (eDocket No. 20252-215698-01).

⁸⁵ Comment by MDNR (March 4, 2025) (eDocket Nos. 20253-216053-01, 20253-216053-02, 20253-216053-03, 20253-216053-04).

⁸⁶ Dairyland - EA and Draft Route Permit Comments (March 3, 2025) (eDocket No. 20253-215995-01).

⁸⁷ Dairyland - Response to Public Comments (March 10, 2025) (eDocket No. 20253-216220-01).

⁸⁸ Ex. EERA-29 at 12 (EA).

route.

A. Applicant's Proposed Route

71. The APR begins in the vicinity of Structure X-Q3-75 on the Applicant's existing LQ34 161-kV transmission line, located approximately 0.6 miles northeast of the intersection of Township Road 232 and 215th Avenue in Plainview Township in Wabasha County (Appendix B, Maps 2-10). The APR then extends northwest for approximately 1.0 mile until 215th Avenue and then continues north for approximately 0.6 mile to State Highway 42 near MP 1.6. From there, it turns northeast and continues to follow State Highway 42 for approximately 6.4 miles until diverging south near MP 8.0. It then travels across open ground for 1.7 miles until the crossing of U.S. Highway 61/Great River Road near MP 9.7. The APR then crosses Great River Road and the Canadian Pacific Railroad, turning south on the east side of the railroad at MP 10.1. It parallels the railroad for approximately 0.5 mile before turning east, then north, then east again, to follow the south side of County Road 84. The APR then follows County Road 84 for approximately 1.7 miles to its connection point at the Kellogg Substation.⁸⁹

72. The APR will not be constructed within existing utility ROW but will be co-located with existing utility, road, and railroad ROW for approximately 9.5 miles – or 71 percent of the APR. Specifically, the APR is:

- Co-located with existing utility lines for 5.6 miles (Peoples' distribution lines for approximately 3.8 miles; Xcel Energy distribution lines for 1.3 miles; and Dairyland transmission lines for 0.5 mile). Some of these areas are also alongside state and local road ROWs.
- Co-located with township roads, county roads, and state highways for 8.4 miles. Some of these areas are adjacent to and parallel with existing utility ROWs.
- Co-located with the Canadian Pacific Railroad for 0.6 mile.⁹⁰

B. Route Alternatives Evaluated in EA

i. Route Segment Alternative A

73. Several community members proposed RSA-A, with two alignment variations (RSA-AAA-1 and RSA-AAA-2).⁹¹ After conducting its Alternatives Analysis, Dairyland proposed RSA-AAA-2, As Modified, in Sage Williams' direct testimony. RSA-A involves adjusting the APR departure from the existing 161 kV line approximately 1.0 mile south from its current location in Plainview Township. From this new starting point, the route extends north for about 0.75 miles, crossing the CapX2020 high voltage line, then continues northwest for a 0.25 mile before following property lines for approximately 0.9

⁸⁹ Ex. EERA-29 at 12 (EA).

⁹⁰ Ex. EERA-29 at 13 (EA).

⁹¹ Ex. EERA-29 at 13 (EA).

miles, ultimately connecting with State Highway 42 in Highland Township.⁹²

ii. Route Segment Alternative B

74. A member of the public provided RSA-B, which departs from State Highway 42, for approximately 0.7 miles, crossing north on County Road 14 (Section 26, Highland Township), for approximately 0.25 miles, then turning east in Section 23, where it rejoins the APR in the SW¼ of Section 24 of Highland Township.⁹³

iii. Route Segment Alternative C

75. The Applicant provided RSA-C, which is approximately 1.7 miles in length. It departs from the APR near State Highway 42 at the NW¼ of Section 26 of Highland Township, where it follows County Road 14 north for approximately 1.0 mile, then turns east at the NW¼ of Section 23 for approximately 0.6 miles, then rejoining the APR along State Highway 42 in the NW¼ SW¼ of Section 24 of Highland Township.⁹⁴

iv. Route Segment Alternative D

76. A member of the public provided RSA-D, which departs from State Highway 42 for approximately 0.7 miles (Section 26 in Highland Township), then crossing north on County Road 14 into Section 23 of Highland Township for approximately 0.7 miles, then east, rejoining the APR along State Highway 42 in the SW¼ of Section 24 of Highland Township.⁹⁵

v. Route Segment Alternative E

77. Members of the public provided RSA-E, which begins from the APR along State Highway 42 at the NW¼ SE¼ of Section 26 of Highland Township, then north for approximately 0.7 miles, crossing County Highway 14, where it turns to the northeast from the center of Section 23 of Highland Township, extending to the southern edge of the SW¼ of Section 13 of Highland Township, until it rejoins the APR at State Highway 42. RSA-E features two alignment alternatives (AAs), designated EAA-1 and EAA-2.⁹⁶

vi. Route Segment Alternative F

78. The proposed RSA-F was submitted by a member of the public. This alternative begins at the NW¼ SE¼ of Section 26 of Highland Township, extending north on County Highway 14 for approximately 1.7 miles. It then extends due east for approximately 0.7 miles along the northern Section boundary of the NW¼ of Section 23, to the SW¼ of Section 13, then extending to the northeast for approximately 0.7 miles

⁹² Ex. EERA-29 at 13 (EA).

⁹³ Ex. EERA-29 at 13 (EA).

⁹⁴ Ex. EERA-29 at 13-14 (EA).

⁹⁵ Ex. EERA-29 at 14 (EA).

⁹⁶ Ex. EERA-29 at 14 (EA).

until it rejoins the APR at State Highway 42.⁹⁷

vii. Route Segment Alternative G

79. RSA–G, which was submitted by a member of the public, features two AAs; RSA-GAA-1 and RSA-GAA-2. Both proposals depart and rejoin the APR at common points along the south-side of Highway 42 in Section 8 of Watopa Township. They are distinguished through the way they rejoin the APR. Both would enter in a similar spot, but RSA-GAA-2 has more of an angle in its approach than RSA-GAA-1.⁹⁸

VI. FACTORS FOR A ROUTE PERMIT

80. The PPSA requires that route permit determinations “be guided by the state’s goal 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.”⁹⁹

81. 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;¹⁰⁰
- (5) analysis of the direct and indirect economic impact of proposed sites

⁹⁷ Ex. EERA-29 at 14 (EA).

⁹⁸ Ex. EERA-29 at 14 (EA).

⁹⁹ Minn. Stat. § 216E.03, subd. 7.

¹⁰⁰ Factor 4 is not applicable because Applicant is not proposing to site a large electric generating plant in this docket.

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 subdivisions 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 the 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;
- (12) when appropriate, consideration of problems raised by other state and federal agencies and local entities;
- (13) evaluation of the benefits of the proposed facility with respect to (i) the protection and enhancement of environmental quality, and (ii) the reliability of state and regional energy supplies;
- (14) evaluation of the proposed facility's impact on socioeconomic factors; and
- (15) evaluation of the proposed facility's employment and economic impacts in the vicinity of the facility site and throughout Minnesota, including the quantity and quality of construction and permanent jobs and their compensation levels. The commission must consider a facility's local employment and economic impacts, and may reject or place conditions on a site or route permit based on the local employment and economic impacts.¹⁰¹

82. In addition, Minn. Stat. § 216E.03, subd. 7(e) (2023) 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 line route and the

¹⁰¹ Minn. Stat. § 216E.03, subd. 7.

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.”

83. In addition to the PPSA, the Commission is governed by Minn. R. 7850.4100, which mandates consideration of the following factors when determining whether to issue a route permit for a HVTL:

- 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;¹⁰²
- 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.¹⁰³

84. There is sufficient evidence in this record to assess the Project using the

¹⁰² This factor is not applicable because it applies only to power plant siting.

¹⁰³ Minn. R. 7850.4100.

criteria and factors set forth above.

VII. APPLICATION OF ROUTING FACTORS

A. Environmental Setting

85. The Project area is located within the Rochester till plain physiographic region. The Rochester till plain consists of a broad region blanketed in glacial till and outwash, although the most recent Wisconsin glacial advances (75,000 to 11,000 years ago) did not cover the area. The region is described as generally “featureless” and is dominated by an elevated expanse that ranges from flat to gently undulating. Exceptions to the lack of topographic relief that generally characterizes the region occur near the Mississippi River in the form of deeply dissected tributaries. The deeply dissected valleys along the Mississippi River give the eastern edge of the region a mountainous look. Sedimentary rocks mantled by colluvium or loess outcrop along the valley slopes of creeks and rivers throughout the eastern portion of the region.¹⁰⁴

86. The western portion of the APR and RSA-A through RSA-F cross over a rolling upland divide covered in pasture and row-crop fields, with scattered fallow patches and developed area. The upper portions of several intermittent drainages flow through these alignments as constructed grass waterways or heavily channelized streams. From approximately MP 8.5 to MP 10.0 along the APR and RSA-GAA-1 and RSA-GAA-2 transect slightly rugged bluff lands on the western edge of the Mississippi River trench. Vegetation includes patchy and fairly continuous upland forest and pasture. Around MP 10.0, the APR enters the flat Mississippi River trench and valley floor, including Gorman Creek at the foot of the bluffs. Topography is level to slightly undulating. Kellogg and surrounding homes and business occur immediately east of U.S. Highway 61. The eastern leg of the APR crosses over agricultural fields into the Kellogg Substation. McCarthy Lake is located east of the Canadian-Pacific Railroad and immediately north of the APR.¹⁰⁵

B. Human Settlements

i. Aesthetics

87. The eastern half of the Project area is relatively flat and dominated by the agricultural land uses with scattered farmsteads and natural wooded landscapes. The western half consists of rolling topography with large tracts of natural wooded areas with agricultural activities located on flatter topography in the valleys. Various water features also make up the environmental setting including wetlands, ponds, streams, lakes including McCarthy Lake, Gorman Creek, and the Mississippi River to the east of the Kellogg Substation.¹⁰⁶

88. Recreational uses throughout the Project area consist of Zumbrowatha

¹⁰⁴ Ex. EERA-29 at 34 (EA).

¹⁰⁵ Ex. EERA-29 at 34-35 (EA).

¹⁰⁶ Ex. EERA-29 at 35 (EA).

Snowmobile Trail, McCarthy Lake Wildlife Management, and Great River Road National Scenic Byway.¹⁰⁷

89. The Project area is located along existing utility corridors where residents and recreationalists are acclimated to build structures. The Project will cross the Great River Road National Scenic Byway at MP 9.7 approximately 0.1 mile south of the intersection with State Highway 42. The surrounding land uses at this crossing consist of agricultural fields.¹⁰⁸

90. The APR has the most structures within the regions of influence (ROI), but most of these structures are located along State Highway 42 where existing utility corridors exist. The APR will be co-located with existing utilities to reduce aesthetic impacts. In addition, limited tree removal would be necessary for the APR due to its location within existing utility corridors for most of its length.¹⁰⁹

91. As compared to the APR, RSA GAA-1 and RSA GAA-2 are expected to have the most impact on visual resources due to second and third most structures within the ROI,¹¹⁰ tree clearing outside of existing ROW, and impacts to the Zumbrowatha Snowmobile Trail and the Great River Road Scenic Byway.¹¹¹

92. Due to the location of the Project within existing ROW and with the implementation of the mitigation measures outlined below, impacts to aesthetic concerns are expected to be minor:

- Tree clearing will be minimized as much as possible.
- Site poles behind natural screens such as treed areas and hills to the extent practicable to screen from observers.
- Use perpendicular crossings rather than paralleling roadways.
- Set back poles as far as possible.
- Choose a color for the poles that harmonizes with the existing landscape.¹¹²

¹⁰⁷ Ex. EERA-29 at 35 (EA).

¹⁰⁸ Ex. EERA-29 at 37 (EA).

¹⁰⁹ Ex. EERA-29 at 37 (EA).

¹¹⁰ The EA analyzes potential impacts to human and environmental resources within specific spatial bounds or ROI. The ROI for each resource is the geographic area within which a particular impact may exert some influence. The ROI for most human and environmental resources is the permanent footprint of the proposed Project, as represented by the transmission line ROW. However, for analyzing aesthetic impacts, the size of the impact would be linear based on the ROI width of 500 feet (250 feet either side of the proposed alignment) for the length of the Project of 13.3 miles. See Ex. EERA-29 at 33-34 and 37 (EA).

¹¹¹ Ex. EERA-29 at 37 (EA).

¹¹² Ex. EERA-29 at 37 (EA).

ii. Cultural Values

93. The natural or scenic views of the area and recreational opportunities throughout the ROI¹¹³ include hunting, fishing, wildcrafting, and hiking throughout Richard J. Dorer Memorial Hardwood State Forest and McCarthy Lake Wildlife Management Area (WMA).¹¹⁴

94. The installation of the Xcel Energy and Peoples distribution lines would have no indirect effect on cultural values.¹¹⁵

95. Impacts to cultural values are expected to be negligible. The Project is not expected to impact the cultural values of Wabasha County or its communities. No businesses, residences, churches, government facilities, or institutions will be displaced, relocated, or closed during the construction or operation of the Project. Recreational opportunities throughout Richard J. Dorer Memorial Hardwood State Forest and McCarthy Lake WMA may be temporarily impacted during construction but will continue as normal upon completion of construction.¹¹⁶

iii. Displacement

96. There are number of residences, commercial and agricultural buildings, and other buildings within 500 feet of the APR and RSAs. The Applicant indicates that final design will realign the transmission line within the approved route so that the permanent ROW would avoid direct impacts to residences or other buildings.¹¹⁷

97. Dairyland reviewed the locations of homes, buildings, and other structures during the development of the APR and has sited the Project purposely to avoid these features, moving the transmission line to the other side of the road, or further offset from the road, to avoid impacts to farmsteads, homes, or buildings that were built closer to the road. The nearest residences to the Project are located along State Highway 42. There is one home within 200 feet of the APR, and it is approximately 134 feet away near MP 8.7. The nearest residence to the substation is approximately 430 feet to the northern edge of the substation property boundary, with existing transmission lines separating the substation from the property structures.¹¹⁸

98. No displacement of any residences, businesses, other structures will occur as a result of the project. The width of the alignment provides sufficient design flexibility and distances from existing homes and structures for the transmission line design to achieve the clearances required by the NESC. Impacts are expected to be negligible.¹¹⁹

¹¹³ The ROI is Wabasha County.

¹¹⁴ Ex. EERA-29 at 39 (EA).

¹¹⁵ Ex. EERA-29 at 39 (EA).

¹¹⁶ Ex. EERA-29 at 39 (EA).

¹¹⁷ Ex. EERA-29 at 40 (EA).

¹¹⁸ Ex. DPC-4 at 8-8 (Application).

¹¹⁹ Ex. EERA-29 at 40 (EA).

iv. Electronic Interference

99. Electronic interference caused by the operation of the transmission line is not anticipated but may occur. Signals that require high frequency, such as cellular phones and television signals, are not likely to experience electronic interference. Television signals may be interfered with by line-of-sight; this type of interference is managed by slightly moving the location of satellites and antennas.¹²⁰

100. There is a cellular tower located approximately 130 feet south of the proposed centerline of the APR, south of State Highway 42. Although the proposed Project is located within 500 feet of the cell tower, electronic interference with this cellular tower is expected to be negligible. Television, cellular phones, and GPS units operate at frequencies outside of the range of electromagnetic noise. Impacts to radio signals are expected to be negligible.¹²¹

101. Because no impacts to radio, television, cellular phones, or GPS units are anticipated, the EA did not propose any mitigation measures for this Project. If interference with television signals were to occur through multi-path reflections or line-of-sight interference, the EA suggests that the impacts can be mitigated by using an outdoor antenna to improve signal or by moving the affected satellite to a slightly different location.¹²²

v. Land Use and Zoning

102. The Project area includes land that has undergone significant development, including agricultural farming, development of private and public ROWs for roads, railroads, pipelines, and an electrical transmission line, and construction of solar-generating facilities. Other land uses in the county within or near the Project include conservation easements and U.S. Army Corps of Engineers (USACE) property to store dredge material.¹²³

a. Comprehensive Land Use Plan

103. The Wabasha County Board of Commissioners adopted the Comprehensive Land Use Plan in August 1998 to guide development and management activities throughout the county. The Plan divides Wabasha County into four geographic areas that are identified as the Agricultural Area, Common Interest Areas, the Lower Valley area, and the Upper Valley Area. The Plan is set up to guide ways to address major issues of concern to Wabasha County. These issues include conflicts caused by non-farm residential development in agricultural areas and environmental issues including water quality, steep slope development, feedlot development, and blufftop

¹²⁰ Ex. EERA-29 at 41 (EA).

¹²¹ Ex. EERA-29 at 41 (EA).

¹²² Ex. EERA-29 at 41 (EA).

¹²³ Ex. EERA-29 at 41 (EA).

development.¹²⁴

b. Zoning

104. Wabasha County has adopted a zoning ordinance which purpose is to “promote, preserve, and protect the public health, safety, and general welfare of the citizens of Wabasha County, along with the integrity of the land and water resources of the County.”¹²⁵ The Project area is within zoning districts A-1 (Agricultural Protection) and A-2 (Agricultural Fringe). These districts are designated to maintain, conserve, and enhance agricultural lands that are historically important for agricultural production and to provide for agricultural use and urban expansion in areas close to incorporated urban centers within Wabasha County. In addition to the zoning districts, there are three overlay districts: floodplain, shoreland, and bluff land. These overlays are implemented to protect sensitive resources within the county. The Project area crosses the Shoreland Overlay Zone for 2.1 miles and 1.6 miles of the General Floodplain District. The Project area does not impact bluff land districts. Bluff land area is defined as an area that has a rise of 25 feet, with an average slope of 18 percent or greater. In these areas, there is a 30-foot structure setback requirement from either the toe or top of a bluff.¹²⁶

c. Public Land

105. The USACE owns 994 acres (referred to as the Rolling Prairie Multiple Use Area) of cropland that intersect with the Project area near the eastern terminus of the Project. This land has been designated to store sediment dredged from Pool 5 of the Mississippi River for the next 100 years. As dredge material is placed on the site, the USACE has future plans to create a rolling prairie habitat that can be open to the public for recreational purposes. The Project area intersects the property in Section 36, Township 110 North, Range 10 West where the Project runs north to south along the western edge of the property and then west to east along the south side of County Road 84. The USACE initially expressed concern with the clearance under the transmission line and whether that would affect the site’s development. However, during the siting process it was determined that the proposed alignment would not affect the site’s development.¹²⁷

d. Conservation Easements

106. The Project area borders a conservation easement on private land held by the Minnesota Board of Soil and Water Resources (BWSR) near the eastern terminus of the Project. The Project and the ROW are outside of the easement boundaries.¹²⁸ There will be no impacts to the easement during construction or operation.¹²⁹

¹²⁴ Ex. EERA-29 at 41-42 (EA).

¹²⁵ Wabasha County Zoning Ordinance.

¹²⁶ Ex. EERA-29 at 42 (EA).

¹²⁷ Ex. EERA-29 at 42 (EA).

¹²⁸ Ex. EERA-29 at 42 (EA).

¹²⁹ Ex. DPC-4 at 8-18 (Application).

107. The 100-foot width easement necessary for the APR would allow continued land use activities under the 161-kV line. The area necessary for structural tower bases ranges from 5.2 to 14.2 square feet and the span between bases is between 250 to 1,000 feet. The tower base would impact activities but would allow existing land use to continue such as agricultural activities adjacent to the base. The exact number of towers is unknown until geotechnical borings and design work is completed to locate towers. However, based on the proposed 13.3-mile total Project distance, approximately 80 to 240 towers would be necessary. In addition, the Kellogg Substation will change the land use of 10.8 acres of agricultural land.¹³⁰

108. The installation of the Xcel Energy and Peoples distribution line would not indirectly affect land use or zoning, as the buried lines would be placed within the existing public ROW along state and local roads.¹³¹

109. The impact intensity level for land use is anticipated to be minor for common agricultural land uses due to the potential number of tower bases necessary for the Project. This impact would be noticeable to landowners who farm property that may have new towers located across their fields. Farming equipment will need to avoid tower bases and go around the structures, which may be placed inconveniently. These impacts would be long-term. In addition, the Kellogg Substation will remove 10.8 acres of agricultural land from production.¹³²

110. Residential properties and other structures are located within the vicinity of the Project, but APR would cross the Cowpokes Western Shop property.¹³³

111. Impacts in the Bluffland Area from RSA-GAA-1 and RSA-GAA-2 are not expected as long as the location of structures from the top or toe of a bluff is a minimum of 30-feet. This will need to be further assessed during engineering if one of these RSAs are selected.¹³⁴

112. The APR and RSAs are co-located along existing road ROW and other linear features where possible to minimize changes to land use. The Applicant will coordinate with landowners during the easement acquisition process to address alignment adjustments or pole placement, especially where it crosses the Cowpokes Western Shop property. When possible, pole placement will be placed at property lines where farming impacts would be less. The design will maximize the distance between tower bases as practicable to also minimize farming and other land use impacts. Clearance to buildings and ROW widths will comply with local, state, NESC, and Dairyland standards. Compensation for easement acquisition will follow all federal and state laws.¹³⁵

¹³⁰ Ex. EERA-29 at 42 (EA).

¹³¹ Ex. EERA-29 at 42 (EA).

¹³² Ex. EERA-29 at 44 (EA).

¹³³ Ex. EERA-29 at 44 (EA).

¹³⁴ Ex. EERA-29 at 44 (EA).

¹³⁵ Ex. EERA-29 at 44 (EA).

113. The Applicant will need to assess the Wabasha County Bluffland Area protections when engineering the Project to confirm that the requirements of this area can be complied with. County zoning setbacks for shoreland and floodplains will also be followed for any potential pole placement.¹³⁶

vi. Noise

114. Noise created by construction activities are anticipated to be minimal for both the APR and RSAs. As operational noises are not expected to rise above background levels for any significant time period, potential impacts are expected to be minimal.¹³⁷

115. Noise impacts are unavoidable but can be minimized. The contractor will take reasonable measures to control construction-related noise, including limiting transmission line and substation construction activities to daylight hours, maintaining equipment in good working order, and using manufacturer-supplied silencers on heavy equipment when available and when required by local ordinances. Operational noise will be minimized by using industry standards during design and construction.¹³⁸

vii. Property Values

116. Although the private landowners may have no intentions of selling their property now, during the scoping meetings, concerns were raised by landowners along the proposed routes regarding the potential for property value impacts if the Project were to be located on their property.¹³⁹

117. The proposed Project is expected to have minor impacts to property values.¹⁴⁰

118. It is recognized that existing property values are variable and unique, making the potential project impacts to property values difficult to calculate with certainty. The majority of the APR and RSAs follow existing linear features, including roads and other aboveground utilities which assists in minimizing direct effects to private property. Additionally, the Project will not significantly reduce the use of the land for agricultural purposes nor remove areas from future development.¹⁴¹

119. The EA recommends the following mitigation measures to reduce potential Project-related property value impacts:

- Reduce impacts to aesthetics.

¹³⁶ Ex. EERA-29 at 45 (EA).

¹³⁷ Ex. EERA-29 at 46 (EA).

¹³⁸ Ex. EERA-29 at 46 (EA).

¹³⁹ Ex. EERA-29 at 48 (EA).

¹⁴⁰ Ex. EERA-29 at 48 (EA).

¹⁴¹ Ex. EERA-29 at 48 (EA).

- Avoid impacting future land uses.
- Use measures or conditions specific to each individual easement agreement with landowners (i.e., restoration or vegetation management) including potential negotiation for compensation of perceived real or loss to property value.¹⁴²

viii. Socioeconomic and Environmental Justice

120. No environmental justice, low-income, or minority communities would be affected by construction of any of the APR or RSAs. No disadvantaged residences or business will be dislocated or adversely affected.¹⁴³

121. During construction, there may be short-term positive impacts to the nearby communities. Potential increases in local revenue may occur for businesses (such as hotels, grocery stores, gas stations and restaurants) to support construction workers and other contractors. Long term benefits of the Project include the ongoing reliable electrical services and the ability to serve existing and new local load growth.¹⁴⁴

122. Socioeconomic and environmental justice impacts are expected to be negligible. Because impacts to socioeconomics will be generally short-term and beneficial and because no Environmental Justice communities would be affected, no mitigation is proposed.¹⁴⁵

C. Human Health and Safety

i. Electric and Magnetic Fields

a. Electric Fields (EFs)

123. EFs are created wherever there is electricity and when any device or wire is connected to a source of electricity, even when current is not flowing, or if the device is not turned on. EFs produced by high-voltage electric transmission lines have little ability to penetrate buildings, or even skin, and are easily shielded by common objects such as trees, fences, and walls.¹⁴⁶

124. Although there is no state or federal standard for transmission line EF exposures, the Minnesota Environmental Quality Board (EQB) developed a standard of a maximum EF limit of 8-kV per meter (kV/m) at one meter (3.28 feet) above ground; the Commission has adopted this standard.¹⁴⁷

¹⁴² Ex. EERA-29 at 48 (EA).

¹⁴³ Ex. EERA-29 at 52 (EA).

¹⁴⁴ Ex. EERA-29 at 52 (EA).

¹⁴⁵ Ex. EERA-29 at 52-53 (EA).

¹⁴⁶ Ex. DPC-4 at 8-25 (Application).

¹⁴⁷ Ex. DPC-4 at 8-25 (Application); *In re Applications of Plum Creek Wind Farm LLC*, IP 6997/TL-18-701, 2021 WL 4357047 *43 (Minn. P.U.C., Sept. 23, 2021).

b. Magnetic Fields (MFs)

125. MFs are created only when there is an electric current, the motion of electric charges (electrons) in a conductor, such as a wire. The magnitude of an MF is proportional to the current flow through an electric line, not the voltage. As the current increases, so does the MF. MFs become weaker rapidly with distance from the source; however, they do pass through most non-metallic materials and are therefore more difficult to shield. In literature, MF data is measured in units of gauss (G) or tesla (T).¹⁴⁸

126. EF and MF are expected to be present when the transmission line is in operation. The proposed Project will have varying levels of EF and MF depending on the time of day but even at peak demand, both EF and MF for the Project is expected to be below the EQB accepted levels. For EF, the Applicant estimates the line to operate at 1.2-kV/m at one meter above ground.¹⁴⁹

127. The typical MF magnitude associated with the Project is expected to be well below the calculated highest intensity when the powerline will be at its peak rated load. Based on the average historic load with a line current of 541 amperes (amps), the Project MF would be at a maximum of 43.67 milligauss (mG) when under the center of the alignment, with it dissipating rapidly moving outwards, being at 17.32 mG and 19.43 mG at 50 feet out from the centerline. Even at the peak rated load for the Project at 2,000 Amps, the maximum MF would be 199.06 mG at the centerline, dissipating to 69.66 mG and 78.83 mG at 50 feet from the center of the alignment.¹⁵⁰

128. EF levels will be within the state standards of 8-kV/m and will be the same no matter the route selected for the Project. Robotic dairy operations, agricultural operations, commercial business, and residential properties near the proposed route expressed concerns about electro-magnetic fields (EMFs). Several EMF studies have been completed in the 25-plus years, with the first study completed in 1979. The Wisconsin Public Utility Commission in 2008 compiled and reviewed several of these studies. Although each of these studies had different controls, collectively, the study results have not been able to establish a direct link between EMF exposure and cancer or other health effects including cellular or DNA damage.¹⁵¹

129. Based on the current study findings, residential as well as dairy and other livestock operations that exist near or are crossed by the Project are unlikely to experience EMF-related impacts.¹⁵²

130. No impacts to public health and safety are anticipated as a result of the Project. The Project will be designed in compliance with local, state, NESC, and Dairyland standards regarding clearance to ground, clearance to crossing utilities, clearance to buildings, strength of materials, and ROW widths. The Kellogg Substation will be

¹⁴⁸ Ex. DPC-4 at 8-26 (Application).

¹⁴⁹ Ex. EERA-29 at 54 (EA).

¹⁵⁰ Ex. EERA-29 at 54 (EA).

¹⁵¹ Ex. EERA-29 at 55 (EA).

¹⁵² Ex. EERA-29 at 57 (EA).

equipped with protective breakers and relays. The protective equipment is designed to de-energize the transmission line when needed. The Kellogg Substation will be protected by barbed-wire-topped fencing. Signage attached to the fence will list the owner (the Kellogg Substation will be owned by Dairyland), provides a telephone contact number, and warns about electrical hazards within the substation.¹⁵³

131. The EA did not propose any mitigation for EMFs.¹⁵⁴

132. Marilyn Wallace, a homeowner in Kellogg, MN, submitted comments during the public hearing comment period expressing concern about the APR intersecting with the corner of her property. She also expressed concerns about the inability to continue beekeeping and the unknown impacts of close, long-term proximity to EMFs.¹⁵⁵ Dairyland responded to Ms. Wallace's concerns in its March 10, 2025, response to public comments and provided summaries of several studies focused on determining the impacts of EMF produced by HVTLs on honeybees. Based on those studies, it does not appear that the expected levels of EMFs resulting from the Project would result in any negative impacts to honeybees within the HVTL ROW.¹⁵⁶

ii. Implantable Medical Devices

133. Implantable medical devices are assumed to be in the surrounding area at unknown times when the transmission line is in operation. EMF interference from electrical line operation is unlikely, though possible depending on the age of the device. The line is expected to operate at a voltage level much lower than what is typically needed to interfere with the operation of implantable medical devices.¹⁵⁷

134. Although the Project may cross or pass near residential, agricultural, and commercial areas where individuals with implantable medical devices may reside, the Project is expected to operate well below the 6-kV/m level of concern for individuals with these devices. Therefore, potential impacts to implantable medical device users are not expected (negligible).¹⁵⁸

135. Since the likelihood of EMF impact on implantable medical devices is unlikely, the EA did not propose any mitigation measures. The transmission line project will be designed in compliance with local, state, NESC, and Dairyland standards which dictate clearance to ground, crossing utilities, and buildings, as well as strength of materials and ROW widths.¹⁵⁹

iii. Stray Voltage

136. "Stray voltage" is a voltage that exists between the neutral wire of the

¹⁵³ Ex. DPC-4 at 8-30 (Application).

¹⁵⁴ Ex. EERA-29 at 57 (EA).

¹⁵⁵ Comment by Marilyn Wallace (Feb. 18, 2025) (eDocket No. 20252-215450-01).

¹⁵⁶ Dairyland Response to Public Comments at 10 (March 10, 2025) (eDocket No. 20253-216220-01).

¹⁵⁷ Ex. EERA-29 at 58 (EA).

¹⁵⁸ Ex. EERA-29 at 58 (EA).

¹⁵⁹ Ex. EERA-29 at 58 (EA).

service entrance and grounded objects in buildings such as barns and milking parlors.¹⁶⁰

137. Unlike distribution lines which are the primary electrical system that connects to a secondary farmstead's electric system, transmission lines do not independently create stray voltage, because they do not connect to businesses or residences as the distribution lines do. However, transmission lines can induce a current on transmission/distribution circuits and pipelines that are parallel and directly under the transmission line due to the EF around the energized conductors. Induced current and voltage may affect structures and other facilities that are made of conductive material located in close proximity to the electric transmission lines. The NESC requires increased clearances or a decrease in EF to limit the induced current due to electrostatic effects to 5 milliamperes (mA), if the largest anticipated truck, vehicle, or equipment under the line were short-circuited to ground. The 5 mA threshold is used as a conservative measurement for "let-go" current.¹⁶¹

138. Stray voltage may occur when the transmission line is in operation. Buildings or structures made of conductive materials that are parallel to and immediately below the line may experience stray voltage. However, no buildings, structures, or residences are expected to be within those parameters.¹⁶²

139. Comments received during the scoping meetings and public hearings included concerns with robotic dairies and stray voltage regarding concerns that cows will get shocked when they are being milked in the rotary milking parlor.¹⁶³ According to the EA, if cows are shocked while in the parlor, they are not as willing to enter the parlor following the incident. The EA recommends testing for stray voltage by a trained professional to identify if stray voltage exists at the dairy.¹⁶⁴

140. Dairyland has committed to following grounding and EF requirements in Sections 5.4.1 and 5.4.2 of the DRP, respectively. These standard conditions are routinely included in the Commission's transmission line route permits to avoid and minimize potential stray voltage, induced voltage, and EF impacts of new transmission lines.¹⁶⁵ When following these recommended standards, the EA concludes that stray voltage is not expected to occur and impacts from stray voltage are anticipated to be negligible.¹⁶⁶ Dairyland committed to working with the area distribution utilities and landowners to conduct pre- and post- construction testing of dairy farms and confined animal operations (i.e., dairy cattle, goats, and swine) adjacent to the designated route to confirm that the Project is not causing induced voltage on the distribution system.¹⁶⁷

¹⁶⁰ Ex. DPC-4 at 8-23 (Application).

¹⁶¹ Ex. EERA-29 at 59 (EA).

¹⁶² Ex. EERA-29 at 60-61 (EA).

¹⁶³ Comment by Tom Miller (July 3, 2024) (eDocket No. 20247-208307-01).

¹⁶⁴ Ex. EERA-29 at 61 (EA).

¹⁶⁵ Dairyland Response to Public Comments at 4 (March 10, 2025) (eDocket No. 20253-216220-01).

¹⁶⁶ Ex. EERA-29 at 61 (EA).

¹⁶⁷ Dairyland Response to Public Comments at 4-6 (March 10, 2025) (eDocket No. 20253-216220-01).

D. Public Services and Infrastructure

i. Airports

141. Airports have defined safety zones based on several factors including: length of runway, type of aircraft, and approach procedures used by aircraft. Due to their height, transmission lines can impact the safe operation of airports if they infringe on these designated safety zones. The Winona Municipal Airport (Max Conrad Field) is the closest airport, located 18 miles southeast of the Project. The Red Wing Regional Airport is over 30 miles northwest in Hager City, Wisconsin.¹⁶⁸

142. The only airport within the ROI¹⁶⁹ is the Winona Municipal Airport located 18 miles southeast. The potential for effects from the Project would not be noticeable due to the distance between the airport and proposed Project.¹⁷⁰

143. The APR and RSAs do not cross any of the designated safety zones for this airport, and the Project is not expected to impact any airport activities.¹⁷¹

144. The Applicant has initiated consultation with the Federal Aviation Administration (FAA) and will complete a Part 7460 Airport Obstruction Evaluation once a route is determined to confirm that no impacts to aviation will occur. No impacts are expected due to the distance to the nearest airport.¹⁷²

ii. Emergency Services

145. Emergency agencies that serve the immediate area include Wabasha County Emergency Management, Wabasha County Sheriff, and various municipal and private medical centers.¹⁷³

146. Impacts to emergency services from transmission lines generally occur due to interference with emergency communication systems or traffic delays.¹⁷⁴

147. Project effects to emergency services are anticipated to be negligible.¹⁷⁵ No impacts to emergency communication systems are anticipated. Temporary impacts to road during construction may cause traffic delays and disrupt emergency responses. However, these impacts are expected to be minimal and manageable through traffic control standard practices.¹⁷⁶

148. The local emergency responders will be contacted prior to construction to

¹⁶⁸ Ex. EERA-29 at 61 (EA).

¹⁶⁹ The ROI is Wabasha County.

¹⁷⁰ Ex. EERA-29 at 62 (EA).

¹⁷¹ Ex. EERA-29 at 62 (EA).

¹⁷² Ex. EERA-29 at 62 (EA); Ex. DPC-4 at 8-22 and 9-4 (Application).

¹⁷³ Ex. EERA-29 at 62 (EA).

¹⁷⁴ Ex. EERA-29 at 63 (EA).

¹⁷⁵ Ex. EERA-29 at 63 (EA).

¹⁷⁶ Ex. EERA-29 at 63 (EA).

discuss measures to avoid any disruptions to emergency services.¹⁷⁷

iii. Roads, Highways and Railroads

149. Sixteen roadways intersect or parallel the route alternatives: 12 township roads, two county roads, one state highway, and one U.S. Highway. County Road 84, which parallels and crosses the APR, has been identified for possible expansion and curve realignment by the Wabasha County Highway Department (WCHD) in the next eight to ten years.¹⁷⁸

150. The Canadian Pacific Railroad is crossed just past MP 10.0 and is located adjacent to the Project area for approximately half a mile. No other railroads are located within the Project area.¹⁷⁹

151. The Applicant consulted with MnDOT and the WCHD during the application process to discuss potential impacts to roadways. MnDOT did not identify any planned projects that would be impacted by the Project. Because the WCHD plans to modernize County Road 84 in the future, the APR was placed to minimize conflicts.¹⁸⁰

152. In its scoping comments, MnDOT emphasized the need for coordination regarding highway construction activities and oversize load transportation, suggesting regular communication with MnDOT's District 6 Office. Additionally, MnDOT's OES reviewed the application and outlined potential environmental concerns, applicable permits and guidance, as well as permit requirements if construction work is done or structures are placed in the MnDOT ROW.¹⁸¹

153. Dairyland has committed to continue coordinating with MnDOT to mitigate impacts to the state trunk highway system and to obtain all necessary MnDOT permits for the Project. Dairyland also responded to each of MnDOT's comments, recommendations and requirements in Britta Bergland's direct testimony.¹⁸²

154. In addition, roadways and highways maybe temporarily impacted by the Project during the construction and maintenance phases. Impacts may include temporary traffic delays, road closures, and detours within the Project area.¹⁸³

155. There are no expected railroad interruptions during construction or maintenance of the transmission line. Transmission poles will be located outside of railroad ROW.¹⁸⁴

156. Impacts are expected to be negligible to minor with implementation of

¹⁷⁷ Ex. EERA-29 at 63 (EA).

¹⁷⁸ Ex. EERA-29 at 63 (EA).

¹⁷⁹ Ex. EERA-29 at 65 (EA).

¹⁸⁰ Ex. EERA-29 at 65 (EA).

¹⁸¹ MnDOT Scoping Comments (June 26, 2024) (eDocket No. 20246-207970-01).

¹⁸² See Ex. DPC-13 at 6:24-30 and Schedule F (Direct Testimony of Britta Bergland with Schedules A-F).

¹⁸³ Ex. EERA-29 at 65 (EA).

¹⁸⁴ Ex. EERA-29 at 65 (EA).

mitigation measures. The EA recommends the following mitigation measures be implemented to avoid impacts to roadways:

- Coordinate with affected road authorities to schedule large material/equipment deliveries to avoid periods of high traffic volumes.
- When appropriate, pilot vehicles will accompany the movement of heavy equipment.
- Use traffic control barriers and warning devices when appropriate.
- Coordinate with the Canadian Pacific Railroad and obtain any permits that may be necessary for work within or crossing railroad ROW.¹⁸⁵

iv. Utilities and Existing Infrastructure

157. Several utilities will be crossed during the construction of the proposed transmission line, where the potential for impacts may occur as a result of these crossings. Water wells and septic systems have the potential to be impacted if the transmission line structures impede the utilities. It is anticipated that two electric lines will be crossed, which are the CapX2020 and a proposed Xcel Energy 345-kV transmission line. Several utilities or infrastructure owned by DirectTV, MidCo, Xcel Energy, and Peoples have the potential to be crossed. Propane services are provided by local companies and may be encountered during the construction process. The APR will cross and parallel the Canadian Pacific Railroad line.¹⁸⁶

158. Existing utilities and infrastructures are not significant to the proposed transmission line, because the line is being relocated to allow room for other builds to take place without installing new structures. The Applicant will coordinate with Canadian Pacific Railroad and will make efforts to mitigate and design accordingly to best avoid potential impacts to existing utilities and infrastructure. The Applicant will also coordinate with any potentially impacted utility company.¹⁸⁷

159. The Project will design accordingly to minimize impacts to existing utilities and infrastructure. Impacts are not anticipated but may occur. Any potential impacts are anticipated to be negligible. The EA does not propose additional mitigation measures.¹⁸⁸

E. Land Based Economies

i. Agriculture

160. Some agricultural land may be temporarily removed from production during transmission line construction. Construction of the proposed transmission structures will

¹⁸⁵ Ex. EERA-29 at 65 (EA).

¹⁸⁶ Ex. EERA-29 at 66-67 (EA).

¹⁸⁷ Ex. EERA-29 at 67 (EA).

¹⁸⁸ Ex. EERA-29 at 67 (EA).

require repeated access to structure locations for pole installation and line-stringing. Equipment used in the construction process will include backhoes, cranes, boom trucks, and assorted small vehicles. Vehicle operation on adjoining farm fields can cause rutting and soil compaction, particularly during springtime and other wet periods. Permanent impacts will occur where transmission structures are placed.¹⁸⁹

161. Short- and long-term financial impacts (such as crop losses) can be mitigated through easement agreements. All routing options will convert a minimal amount of prime farmland and agricultural land to an industrial use. Removal of agricultural land is not expected to negatively affect the general farm community within the route width. Once construction is complete, agricultural production within the ROW will resume. Localized impacts will be of a small size and affect prime farmland – a unique resource that is common to the APR and all RSAs. Impacts can be mitigated through implementation of appropriate best management practices (BMPs). Conversion of agricultural land associated with the Kellogg Substation can be mitigated by purchase or easement agreements.¹⁹⁰

162. It is anticipated that additional temporary workspace (ATWS) on property adjacent to the ROW and on private property will be needed. The Applicant will work with local landowners to lease the space by agreement with the respective landowner(s), remove and properly dispose of all material and debris, and repair all damages and perform restoration, as necessary.¹⁹¹

163. The Project will be designed to avoid any displacement of homes or businesses, with tower placement to avoid impacts to irrigation systems of agricultural operations. Agricultural operations will be able to continue to operate.¹⁹²

164. The Project is not expected to significantly affect agricultural operations. Impacts are anticipated to be minor during the construction and operation phases of the Project.¹⁹³

165. To minimize the amount of farmland impacted, local roads will be used for moving equipment and installing structures. Where local roads cannot be utilized, movement will be restricted to the extent of the ROW. If movement outside the ROW is necessary, permission will be requested and any damages incurred through project construction will be paid to the landowner. Construction will be scheduled during periods when agricultural activity (e.g., planting and harvesting) will be as limited as possible. Otherwise, the landowner will be compensated accordingly. Any ruts that may occur during the construction process will be filled, compacted soils will be loosed, and any crops or vegetation disturbed will be corrected with landowner approved seeds. Any other miscellaneous structures (such as fences and gates) that are removed or damaged will

¹⁸⁹ Ex. EERA-29 at 67 (EA).

¹⁹⁰ Ex. EERA-29 at 69 (EA).

¹⁹¹ Ex. EERA-29 at 69 (EA).

¹⁹² Exs. EERA-29 at 40 (EA) and DPC-4 at 8-9 (Application).

¹⁹³ Ex. EERA-29 at 69 (EA).

be promptly repaired or replaced.¹⁹⁴ Many landowners in the area expressed a preference for RSA-AAA-2 because it increases the distance between the transmission line and farmsteads and places poles along property lines, minimizing impacts to agricultural operations.¹⁹⁵

ii. Forestry

166. The APR and RSA-A through RSA-F do not cross any MDNR fee surface lands that are managed as part of a State Forest. Notably, RSA-GAA-2 crosses a parcel owned and administered by the MDNR as part of the Richard J. Dorer Memorial Hardwood State Forest for approximately 0.3 mile.¹⁹⁶ Based on review of forested areas using aerial photographs, there are approximately 14.4 acres of trees within the 100-foot-wide ROW of the APR to construct and operate the Project. The ROW will need to be maintained for the safe and reliable operation of the transmission line and therefore, woody vegetation that is removed or cut back within the 100-foot-wide ROW will not be allowed to re-grow to heights that present a concern for transmission line safety.¹⁹⁷

167. Because the Project will largely be co-located and paralleled with existing utility and road ROWs, there will be minimal incremental impacts to forested areas from Project construction and maintenance. No existing logging or milling operations would be affected by the Project.¹⁹⁸

168. Over most of the APR and RSA-A through RSA-F, forestry impacts are expected to be negligible. From MP 8.5 to MP 9.5 on the APR and RSA-GAA-1 and RSA-GAA-2, impacts are expected to be minor to moderate with implementation of mitigation measures and BMPs.¹⁹⁹

169. Mitigation for potential forest resource impacts would include: 1) following forest edges to minimize habitat fragmentation; 2) compensation for removal of vegetation in the ROW will be offered to landowners during easement negotiations; and 3) landowners will be given the option to keep any of the timber cut within the easement area.²⁰⁰

170. A VMP has been developed to manage the ROW and restore any disturbed areas to a natural state.²⁰¹

¹⁹⁴ Ex. EERA-29 at 69 (EA).

¹⁹⁵ See Comment by Eric Bartsh (Feb. 24, 2025) (eDocket No. 20252-215706-01); Comment by Gene Zarling (Feb. 24, 2025) (eDocket No. 20252-215701-01); and Dairyland Response to Public Comments at 2 (March 10, 2025) (eDocket No. 20253-216220-01).

¹⁹⁶ Ex. DPC-12 at Schedule B (Direct Testimony of Sage Williams with Schedules A and B).

¹⁹⁷ Ex. EERA-29 at 70 (EA).

¹⁹⁸ Ex. EERA-29 at 70 (EA).

¹⁹⁹ Ex. EERA-29 at 70 (EA).

²⁰⁰ Ex. EERA-29 at 71 (EA).

²⁰¹ Ex. DPC-4 at Appendix I (Application).

iii. Mining

171. There is no mining activity within the APR or RSAs. According to the EA, a review of the MDNR's Mineral Resource data did not locate any mines within 2 miles of the Project.²⁰² Several sand and gravel quarries are located in Wabasha County, with the closest mines located outside of Wabasha.²⁰³

172. Impacts to mining activities are negligible. Thus, no mitigation related to mining is proposed.²⁰⁴

iv. Recreation and Tourism

173. The Project avoids impacts to areas in Wabasha County that would be considered tourist destinations. The Project would not preclude recreational activities or appreciably diminish the use or experience at tourist destinations. The Applicant has minimized impacts to tree clearing by selecting a route through areas that have already been predominately cleared and will implement the mitigation measures recommended by the Mississippi River Parkway Commission for the U.S. Highway 61 Scenic Byway crossing. The Applicant has coordinated with USACE to select a route that is compatible with the Rolling Prairie property, which may be used for future tourism opportunities.²⁰⁵

174. The APR crosses two sections of the Zumbrowatha Grant-In-Aid snowmobile trail system at MP 0.2 and MP 9.7, which is managed by the Elba Snowbirds. The APR also crosses USACE interests associated with the Rolling Prairie Property and the U.S. Highway 61 Scenic Byway.²⁰⁶

175. The Applicant plans to construct the Project from June 2027 through July 2028, which will likely not conflict with the winter use of the trail system by snowmobilers. If construction activities impact any of the snowmobile trails, they will coordinate with the trail associations regarding notifications and possible temporary trail closures or re-routes.²⁰⁷

176. Any impacts are expected to be minor, and mitigation is not proposed.²⁰⁸

F. Archaeological and Historic Resources

177. Seven archaeological sites and fourteen historic buildings and structures were identified during the literature review conducted by Merjent, Inc. (Merjent).²⁰⁹

178. According to the EA, a review was conducted of the GLO plat maps and

²⁰² Ex. EERA-29 at 71 (EA).

²⁰³ Ex. EERA-29 at 71 (EA).

²⁰⁴ Ex. EERA-29 at 71 (EA).

²⁰⁵ Ex. EERA-29 at 72 (EA).

²⁰⁶ Ex. EERA-29 at 72 (EA).

²⁰⁷ Ex. EERA-29 at 72 (EA).

²⁰⁸ Ex. EERA-29 at 72 (EA).

²⁰⁹ Ex. DPC-4 at 8-40 (Application).

notes on file with the Bureau of Land Management. Seventeen archaeological sites were identified within 1.0 mile of the Project, but none within 1,000 feet of the APR or RSAs. Due to distance, no impact to the known sites is anticipated.²¹⁰

179. Thirty-eight historic buildings and structures were identified within the ROI.²¹¹ Four are crossed by or adjacent to the APR: U.S. Highway 61 is a linear resource which the Project crosses immediately to the southwest of Kellogg; 161st Avenue is crossed by the Project south of Kellogg; and the Chicago, Milwaukee, and St. Paul Railroad (CMSP) ROW is crossed to the southeast of Kellogg. Previous recordings of these three linear sites indicate that both U.S. Highway 61 and 161st Avenue are not eligible for listing on the National Register, while the CMSP has been previously evaluated as potentially eligible for listing on the National Register of Historic Places under Criteria C. The fourth site that the Project crosses is State Highway 42, which the Project crosses to the southeast of Kellogg. From the crossing, the Project parallels the southern edge of highway until the southwest end of the Project.²¹²

180. Dairyland has developed an Unanticipated Discoveries Plan (UDP) that outlines the procedures to follow, in accordance with state and federal laws, should archaeological materials or human remains be discovered during construction of the Project. If any such discovery occurs, construction work will be stopped and the UDP will be consulted as to how to proceed. If human remains are encountered during construction activities, all ground disturbing activity will cease, and local law enforcement will be notified per Minn. Stat. § 307.08 (2024).²¹³

181. No known archeological resources are within the corridor.²¹⁴

182. The aboveground nature of a transmission line potentially reduces impacts on cultural, historic, and archaeological resources. Poles supporting the existing distribution lines will be visible from the four linear sites noted above. Because the Project is co-located and parallels existing utility and road ROWs, it will not present an appreciable change in the existing viewshed. The remaining identified 34 historic buildings and structures will not be impacted due to distance from the Project. The remaining buildings and structures include farmsteads and associated outbuildings, dwellings, commercial buildings, churches, and bridges.²¹⁵

183. The EA states that there has been a lack of previous archaeological survey over much of the ROI and therefore recommends that a Phase I archaeological reconnaissance of the final route and substation location be conducted.²¹⁶

184. Dairyland will complete a Phase I archaeological survey for the route that is

²¹⁰ Ex. EERA-29 at 73 (EA).

²¹¹ The ROI is 1 mile from the proposed alignment.

²¹² Ex. EERA-29 at 73-74 (EA).

²¹³ Ex. DPC-4 at 8-40 (Application).

²¹⁴ Ex. EERA-29 at 74 (EA).

²¹⁵ Ex. EERA-29 at 74 (EA).

²¹⁶ Ex. EERA-29 at 74 (EA).

designated by the Commission in the route permit.²¹⁷

G. Natural Resources

i. Air Quality

185. Higher concentrations of air pollutants, especially particulate matter, will be experienced by residences, pedestrians, businesses, and roadway travelers closer to the construction. Particulate matter emissions may temporarily reduce visibility near the APR. Impacts are expected to be minimal and short term. Because construction of the line will move from one structure to the next, construction will not be occurring in one place along the line for very long.²¹⁸

186. Minor operational emissions would occur throughout the lifespan of the transmission line and substation. Transmission lines produce small amounts of ozone (O₃) and nitrous oxides (N₂O) through ionization of air molecules during corona discharge. Other operational emissions would be due to fuel combustion and particulate matter emissions from vehicle usage to and from the transmission line and substation for regular maintenance activities and emergency maintenance. Particulate matter emissions could also occur if operational maintenance requires disturbing ground. Maintenance activities of the substation could include activities such as repairing circuit breakers and conductors, cleaning, and replacing parts. Maintenance activities of the transmission line could include replacing poles, tree trimming, and access road maintenance. Emissions during operation of the transmission line and substation are expected to be minimal and temporary. The Kellogg Substation construction is expected during the summer of 2026 and the transmission line construction is expected from 2027 to 2028. An air quality permit from the Minnesota Pollution Control Agency (MPCA) would not be required for any construction element or operation of the Project.²¹⁹

187. Construction activities will create exposed areas susceptible to wind erosion. Projects that involve movement of soil and/or exposure of erodible surfaces generate fugitive dust emissions during excavation, trenching, and other earthmoving activities. The magnitude of emissions is dependent on weather conditions and the construction activity taking place. The Applicant will minimize dust generated by construction activities by utilizing soil moistening techniques during construction along the roads traveled and within the ROW and limiting vehicle speeds. Additionally, soil should only be disturbed if necessary for construction.²²⁰

188. Emissions of criteria pollutants during operation of the transmission line and substation are expected to be minor. Transmission lines produce small amounts of O₃ and NO_x through ionization of air molecules during corona discharge. The State of Minnesota has an O₃ limit of 0.08 parts per million (ppm). The federal O₃ limit is 0.07 ppm. Corona-induced O₃ and NO_x are typically not a concern for power lines with

²¹⁷ Ex. DPC-13 at 5:17-18 (Direct Testimony of Britta Bergland with Schedules A-F).

²¹⁸ Ex. EERA-29 at 76 (EA).

²¹⁹ Ex. EERA-29 at 76 (EA).

²²⁰ Ex. EERA-29 at 77 (EA).

operating voltages at or below 161-kV because the EF intensity is too low to produce significant corona. Therefore, the Applicant expects O₃ and NO_x concentrations associated with the Project including the Kellogg Substation to be negligible, and well below all federal and state standards. An air quality permit from the MPCA would not be required for any construction element or operation of the Project. Routine maintenance and emergency maintenance events of the substation and transmission line during operation would be infrequent and are expected to emit minor amounts of criteria pollutants during each visit. An air quality permit from the MPCA would not be required for any construction element or operation of the Project.²²¹

189. Appropriate dust control methods will be implemented, including but not limited to:

- Reduced speed limits on access roads and water or other non-chloride-containing dust suppression applications;
- Water application to the ROW to suppress dust during dry weather, as needed;
- If the ROW is wet during construction activities, vehicle tracking of soil from the ROW will be minimized by using wooden or plastic matting at access points; and
- Street sweeping where soils are tracked onto paved roads in accordance with the MPCA Construction Stormwater General Permit.²²²

ii. Climate Change

190. Construction of the Project, including the Kellogg Substation, is estimated to emit 2,895 tons of carbon dioxide equivalent (CO₂e); the annual estimated CO₂e emittance in the State of Minnesota was 137,208,328 tons in 2020. Emissions during operation of the transmission line and substation are expected to be minimal and temporary.²²³

191. Long-term Project impacts to climate change will be negligible. The existing 161-kV circuit is being relocated to a new location. Impacts from the new transmission line are expected to be similar to the existing line, although the new transmission line will be approximately 3 miles longer than the existing line.²²⁴

192. The Project will be designed to withstand the evolving environmental conditions with a changing climate according to modern design standards.²²⁵

²²¹ Ex. EERA-29 at 77 (EA).

²²² Ex. EERA-29 at 77 (EA).

²²³ Ex. EERA-29 at 79 (EA).

²²⁴ Ex. EERA-29 at 80 (EA).

²²⁵ Exs. EERA-29 at 80 (EA) and DPC-4 at 8-34 (Application).

iii. Geology and Topography

193. The topography is common along the APR from MP 0.0 to MP 8.5 and MP 9.5 into the Kellogg Substation and RSA-A through RSA-F. It is uncommon from MP 8.5 to MP 9.6 along the APR and RSA-GAA-1 and RSA-GAA-2.²²⁶

194. Construction of the Project will not alter the topography along the APR and RSAs and associated 100-foot-wide ROW.²²⁷

195. Because the topography will not be altered, mitigation is not proposed.²²⁸

196. The Project is located within a region prone to surface karst and within 1,000 feet of at least two documented karst features. Karst conditions can be found between MP 0 and MP 8.6 and along RSA-A, and RSA-B through RSA-F.²²⁹

197. Final route construction, whether it is the APR or portions of the RSA, will not likely affect karst landscape. To ensure structural stability in this geological setting, the Applicant will perform geotechnical investigations, including development of a Karst Survey Plan and additional coordination with the MDNR. Following completion of the studies, the Applicant will work with the MDNR to develop a Karst Contingency Plan prior to construction that will identify the locations of the proposed geotechnical investigations in relation to proposed structure locations and geophysical studies and includes actions to mitigate any unexpected voids encountered during construction.²³⁰ A Karst Contingency Plan and a Karst Survey Plan, which will become an enforceable provision of the final route permit, will be implemented with help from the MDNR.²³¹

198. With implementation of mitigation measures and BMPs, geological impacts are anticipated to be minor.²³²

iv. Surface Water

199. The Project lies within the Mississippi River- Winona and Zumbro River watersheds in the east-central portion of the Lower Mississippi River Basin.²³³

a. Lakes and Ponds

200. There are no lakes or ponds crossed by the APR or RSA-B through RSA-G. However, a single pond occurs within the RSA-AAA-1 and RSA-AAA-2. In addition, McCarthy Lake is located approximately 240 feet north of the APR and associated ROW

²²⁶ Ex. EERA-29 at 82 (EA).

²²⁷ Ex. EERA-29 at 82 (EA).

²²⁸ Ex. EERA-29 at 84 (EA).

²²⁹ Ex. EERA-29 at 82 (EA).

²³⁰ Ex. EERA-29 at 84 (EA).

²³¹ Ex. EERA-29 at 82 (EA).

²³² Ex. EERA-29 at 84 (EA).

²³³ Ex. EERA-29 at 84 (EA).

near MP 11.0.²³⁴

b. Rivers and Streams

201. The MDNR Hydrography dataset has mapped fifteen rivers and streams that intersect the APR and RSAs. All but one of the streams are mapped as unnamed, intermittent streams. The remaining stream is located near MP 9.5 and is a perennial stream named Gorman Creek. It is also an MDNR Public Waters watercourse. The RSAs intersect some streams that do not intersect the APR. Five of the alternative routes cross two of the streams included in the APR route (MAJ-070413040 and M-034-017- 003). A combination of the RSAs cross nine additional streams – all unnamed, intermittent first-order streams. In addition, all the RSAs cross three unnamed streams (MAJ-07046396, MAJ-070411303, MAJ-07046913) as well as Gorman Creek, following the path of the APR. All the streams are tributaries to the Mississippi River, which is approximately 0.4 miles east of the Kellogg Substation.²³⁵

c. Public Waters

202. The APR and RSAs intersect one MDNR Public Water at MP 9.5, a watercourse named Gorman Creek. Gorman Creek is a tributary to the Zumbro River, which ultimately connects to the Mississippi River. One additional public water basin (McCarthy Lake) is adjacent to but outside the APR. It is approximately 240 feet north of the ROW at MP 11.0. None of the RSAs cross additional public waters.²³⁶

d. Impaired Waters

203. The segment of Gorman Creek that crosses the APR is listed in the 2022 Impaired Waters data as impaired for Aquatic Macroinvertebrate Bioassessments and is further listed in the Draft 2024 Impaired Waters data as impaired for Fishes Bioassessments. The next closest impaired water is the Zumbro River. The Zumbro River is approximately 0.3 mile east of the Kellogg Substation and was listed in 2022 and is proposed for relisting in 2024 as impaired for fecal coliform, mercury in fish tissue, PCB in fish tissue, and turbidity. None of the RSAs cross additional impaired waters.²³⁷

204. The Applicant may elect to install temporary bridges across waterways prior to construction along the ROW. In addition, the Applicant will use erosion and sediment control BMPs (silt fencing) to reduce the potential for sediment to reach any streams or ponds adjacent construction activities. The Project will not contribute to Gorman Creek's impaired listing for aquatic macroinvertebrate bioassessments as no work will occur within the waterbody.²³⁸

205. There are no streams or waterbodies that would be directly impacted from

²³⁴ Ex. EERA-29 at 84 (EA).

²³⁵ Ex. EERA-29 at 85 (EA).

²³⁶ Ex. EERA-29 at 87 (EA).

²³⁷ Ex. EERA-29 at 87 (EA).

²³⁸ Ex. EERA-29 at 88 (EA).

substation work at proposed Kellogg Substation. Impacts to the Mississippi River through runoff is not anticipated.²³⁹

206. Impacts to water resources are expected to be minor with implementation of mitigation measures and BMPs.²⁴⁰

207. The EA suggests that construction in streambeds, lakes, ponds, and other bodies of water be avoided whenever possible. If not feasible, the EA recommends the following precautions be used:

- Work should be conducted during low flow.
- Disturbed vegetated area should be reseeded with native species seed mix suitable to local conditions.
- If possible, work under frozen ground conditions.
- All preconstruction contours should be maintained or restored after construction is done.
- Use of wildlife friendly erosion control measures, such as straw bales, mulch, or silt fences should be used during the construction process.²⁴¹

v. Groundwater

208. The APR and RSAs do not cross any Drinking Water Supply Management Areas (DWSMAs) or Wellhead Protection Areas (WHPA). The closest DWSMA is the Kellogg DWSMA, located approximately 770 feet northwest of MPs 9.4 to 9.6 along the APR. No WHPAs are crossed by any of the routes.²⁴²

209. Groundwater resources would not be significantly affected by the Project. Dewatering activities are not expected for this Project, and if the need arises, would likely be minor. The MDNR can issue water appropriation authorizations if dewatering should exceed permit thresholds.²⁴³

210. Anticipated impacts on for groundwater resources are expected to be negligible. Thus, relevant mitigation is not proposed.²⁴⁴

²³⁹ Ex. EERA-29 at 88 (EA).

²⁴⁰ Ex. EERA-29 at 88 (EA).

²⁴¹ Ex. EERA-29 at 88 (EA).

²⁴² Ex. EERA-29 at 89 (EA).

²⁴³ Ex. EERA-29 at 90 (EA).

²⁴⁴ Ex. EERA-29 at 90 (EA).

vi. Wetlands

a. Wetlands

211. The APR intermittently crosses over three wetland communities and wetland complexes between MP 11.3 and MP 12.9. Wetland Cowardin classifications contained within the APR includes Palustrine Emergent (PEM). The only RSA that crosses wetlands is RSA-A, which crosses two PEM Wetlands (PEM1D and PEM1Fh).²⁴⁵

212. The condition and status of the wetland at MP 11.3 along the APR and the two PEM wetlands along RSA-AAA-1 and RSA-AAA-2 are not known. The PEM wetland complex (two distinct areas) at MP 11.8 to MP 12.1 is in actively cultivated field and is in poor condition.²⁴⁶

213. The PEM wetland complex along the APR at MP 12.9 is listed as a High-Quality in the Minnesota Biological Survey (MBS).²⁴⁷

214. The wetland complex crossed by the APR between MP 12.8 and MP 12.9 is listed as an MBS site ranked as “High” and qualifies as a potential Rare Natural Community (RNC). The condition and status of the wetland at MP 11.3 along the APR and the two PEM wetlands along RSA-AAA-1 and RSA-AAA-2 are not known.²⁴⁸

215. Construction mats will be installed in wetlands to minimize compaction and impacts to vegetation. The Applicant will avoid placement of ATWS for material storage and staging or stringing setup areas within or adjacent to water resources to the extent practicable. Wetlands will be restored to pre-construction conditions following completion of construction activities.²⁴⁹

216. Span distances between pole structures will vary between 250 and 1,000 feet, which would allow the Applicant to place most poles outside of the wetland footprints and avoid permanent fill and wetland impacts. However, if the final transmission line design cannot enable the Project to span discrete wetland segments, then permanent impacts to wetlands will occur where a structure is located in the wetland. The wetland complex crossed by the APR between MP 12.8 and MP 12.9 is listed as an MBS site ranked as “High” and qualifies as a potential RNC. No poles will be placed in this wetland.²⁵⁰

217. Vegetation maintenance procedures under transmission lines prohibit the establishment of trees. Existing trees will be removed throughout the entire ROW. The Applicant has developed a VMP for the Project.²⁵¹

²⁴⁵ Ex. EERA-29 at 91 (EA).

²⁴⁶ Ex. EERA-29 at 92, 160 (EA).

²⁴⁷ Ex. EERA-29 at 92 (EA).

²⁴⁸ Ex. EERA-29 at 92-93 (EA).

²⁴⁹ Ex. EERA-29 at 94 (EA).

²⁵⁰ Ex. EERA-29 at 94 (EA).

²⁵¹ Ex. EERA-29 at 94 (EA).

218. As specified by the MPCA under the National Pollutant Discharge Elimination System (NPDES) Construction Stormwater Permit, riparian buffers are required during and after construction. For common resources such as ponds and streams, a temporary 50-foot buffer is required during construction. In any work near these bodies of water, the Applicant will install a buffer of at least 50 feet to ensure proper standards are met. For rare resources defined in Sections 23 and 25 of the NPDES Permit, McCarthy Lake Fen would require a permanent 100-foot buffer to avoid impacts to the water resource.²⁵²

219. The Applicant anticipates project activities will be covered under the Utility Regional General Permit for Section 404 wetland. The Project has been assigned a Regulatory File Number (No. MVP-2023-01630-RMH) and a USACE Project Manager for this Project. The MPCA has issued Section 401 Water Quality Certification for projects that meet the conditions of the Regional General Permit. Stipulations and conditions required under the Utility Regional General Permit will be integrated into the final project design plans. Permanent impacts to wetland resources will be mitigated through purchase of credits from a certified wetland bank at the ratio stipulated by the Regulatory Branch of the St. Paul District. The Applicant will also coordinate with the Wabasha County Soil and Water Conservation District regarding WCA.²⁵³

b. Calcareous Fens

220. The Applicant submitted an MCE online review of the Project on December 13 and 14, 2023. The MCE online review identified a designated calcareous fen in the vicinity of the Project. Based on the review of the MDNR's Calcareous Fen geospatial dataset, one designated fen is located 1.4 miles south of MP 10.8 within the MDNR's McCarthy Lake WMA.²⁵⁴

221. The MDNR requested a special permit condition for calcareous fens requiring the Applicant to coordinate with the MDNR to determine if any impacts will occur during the Project. If the Project is anticipated to impact a calcareous fen, the Applicant would be required to develop a Calcareous Fen Management Plan in coordination with the MDNR, as specified in Minn. Stat. § 103G.223 (2024).²⁵⁵

222. Dairyland has agreed with the MDNR's recommendation to continue to coordinate with the agency regarding impacts to fens.²⁵⁶

vii. Floodplains

223. According to FEMA Flood Hazard Zones, the APR will cross approximately 8,000 feet of Flood Hazard Zones (FIRM Panels 27157C0240D and 27157C0225D). Floodplains are common occurrences alongside major river systems, such as the

²⁵² Ex. EERA-29 at 94 (EA).

²⁵³ Ex. EERA-29 at 94 (EA).

²⁵⁴ Ex. EERA-29 at 92 (EA).

²⁵⁵ Comment by MDNR at 2 (March 4, 2025) (eDocket Nos. 20253-216053-01).

²⁵⁶ Dairyland - Response to Public Comments at 9 (March 10, 2025) (eDocket No. 20253-216220-01)

Mississippi River east of the APR.²⁵⁷

224. Flood Hazard Zones will not likely be affected by an above ground transmission line, as the towers will be designed to withstand flooding.²⁵⁸

225. Any work done within a Flood Hazard Zone will likely have little to no impact, as transmission lines will be above ground and will not displace any soil that would otherwise absorb flood water. Construction of the Kellogg Substation is expected to have negligible impacts on flooding.²⁵⁹

226. No party or commenter cited a legal requirement for a permit related to working on a floodplain.²⁶⁰

viii. Soils

227. Potential construction impacts are compaction of the soil associated with construction equipment traffic and exposing the soils to wind and water erosion. Soil compaction within wetlands would be mitigated by installation of construction mats. The restoration contractor would take measures to alleviate soil compaction where needed. Erosion and sediment control methods and BMPs will be used to minimize runoff during line construction. There should be no long-term impacts to soil resulting from transmission line construction. Permanent impacts to soil would be limited to areas associated with construction of the structures and the Kellogg Substation.²⁶¹

228. Impacts are expected to be minor along the transmission line and moderate to significant at the Kellogg Substation.²⁶²

229. Erosion and sediment control methods and BMPs will be utilized to minimize runoff during line construction. BMPs may include – but are not limited to – the installation of sediment barriers (silt fence, straw bales, bio-logs), filter socks, mulch, upslope diversions, and slope breakers. Disturbed areas will be restored to their original condition to the extent practicable.²⁶³

ix. Vegetation

230. The APR crosses one MBS site known as “McCarthy Lake” (ranked as High) for approximately 440 feet between MP 12.8 and MP 12.9. Because this is a wetland MBS site, it may qualify as an RNC following review by MDNR. All the alternative routes also cross the McCarthy Lake MBS site. RSA-GAA-1 and RSA-GAA-2 cross the northern section of an MBS site known as “Snake Creek Bluffs South” (ranked as

²⁵⁷ Ex. EERA-29 at 95 (EA).

²⁵⁸ Ex. EERA-29 at 95 (EA).

²⁵⁹ Ex. EERA-29 at 95 (EA).

²⁶⁰ See *e.g.* Dairyland EA and Draft Route Permit Comments at 3 (March 3, 2025) (eDocket No. 20253-215995-01).

²⁶¹ Ex. EERA-29 at 96 (EA).

²⁶² Ex. EERA-29 at 96 (EA).

²⁶³ Ex. EERA-29 at 96 (EA).

Moderate) for approximately 2,520 feet and an MBS site known as “Snake Creek Bluffs North” (ranked as Below) for approximately 620 feet. There are no other MBS sites within the APR or all other RSAs.²⁶⁴

231. There are no NPCs within the APR. RSA-GAA-1 and RSA-GAA-2 intersect the edge of one NPC (ranked as Moderate) – a Red Oak – White Oak Forest within the Snake Creek Bluffs South MBS site. There are no other NPCs within the APR or other RSAs.²⁶⁵

232. There are no other designated areas within the APR or RSAs that are associated with rare flora communities, such as MDNR SNAs, native prairies, or Railroad ROW Prairies.²⁶⁶

233. Some unavoidable and irretrievable impacts associated with forest clearing and maintenance may occur. The APR and RSAs will primarily follow existing road corridors or would be located in agricultural fields, which will minimize impacts to previously undisturbed vegetation in that area. The Applicant will clear approximately 14.4 acres of trees within the 100-foot-wide ROW associated with the APR. RSA-GAA-2’s ROW intersects 0.0 acres of the Red Oak-White Oak forest, but is only 80 feet southeast of the ROW, which could mean interception with the Red Oak-White Oak forest.²⁶⁷

234. Impacts are expected to be negligible for most of the APR, RSA-A through RSA-H, and the Kellogg Substation. Impacts along the APR from MP 8.5 to MP 9.5 and along RSA-GAA-1 and RSA-GAA-2 are expected to be moderate to significant.²⁶⁸

235. The Applicant will manage documented occurrences of terrestrial plant invasive and noxious species that are listed as “eradicate” or “control” under the “Prohibited Noxious Weed” category by the MDA. Further, the Applicant will adhere to the requirements set forth by the MDNR Utility License to Cross Public Waters and Natural Heritage Review consultation process. The Applicant has proposed to implement the following BMPs during construction to minimize the potential for the introduction or spread of terrestrial plant invasive and noxious species:

- Limiting grading and excavation to areas surrounding pole structure foundations, and only as needed along access roads and workspace areas for a level and safe working area.
- Installing construction mats for travel lanes in wetlands and other specific locations.
- Installation and maintenance of a buffer between the Project and MBS

²⁶⁴ Ex. EERA-29 at 99 (EA).

²⁶⁵ Ex. EERA-29 at 99 (EA).

²⁶⁶ Ex. EERA-29 at 99 (EA).

²⁶⁷ Ex. EERA-29 at 101 (EA).

²⁶⁸ Ex. EERA-29 at 101 (EA).

sites.

- Confine construction to the side opposite of the BMS site. If not feasible, restrict construction to existing road ROWs.
- Minimize vehicle disturbance in the area, avoiding parking and stockpiling within the area.
- All disturbed areas will be revegetated using “Noxious Weeds; None Found” seed mixes.
- All disturbed areas will be revegetated using seed mixes labelled “Noxious Weeds; None Found” in accordance with regulations and will utilize yellow tag seed when available.
- Compliance with MPCA Construction Stormwater General Permit, including stabilization requirements, and inspection, maintenance and repair of erosion and sediment control BMPs. Certified weed-free straw or weed-free hay will be used for erosion and sediment control BMPs.
- All construction equipment must be clean prior to entering and before leaving the work site.
- Manual, mechanical, or chemical management of invasive and noxious weed infestations.
- The construction field representative will oversee BMP installation and effectiveness.²⁶⁹

236. The Applicant has also developed a VMP for this Project that will incorporate these BMPs. The Applicant will not conduct activities within waterbodies; therefore, no mitigation to manage aquatic invasive and noxious species are proposed.²⁷⁰

237. The APR would be co-located with County Road 84 at the McCarthy Lake MBS crossing. Temporary impacts to the MBS site will occur during construction activities. To minimize impacts to this MBS site, the Applicant has developed the following BMPs:

- Use construction mats to minimize ground disturbance;
- Prohibit parking equipment, stockpile supplies, or place spoil within the MBS site;

²⁶⁹ Ex. EERA-29 at 101-02 (EA).

²⁷⁰ Ex. EERA-29 at 102 (EA).

- Inspect and clean all equipment prior to bringing it to the site to prevent the introduction and spread of invasive species;
- Use effective erosion and sediment control BMPs;
- Revegetate disturbed soil with native species suitable to the local habitat as soon after construction as possible; and
- Use only certified weed-free mulches and seed mixes.²⁷¹

238. Further, the Applicant will avoid placement of pole structures within the MBS site by spanning this area and will minimize forested vegetation clearance by collocating with the road ROW.²⁷²

x. Wildlife

239. Neither the APR nor any of the RSAs cross any MDNR WMAs. The closest MDNR WMA is the McCarthy Lake WMA, which is located approximately 0.2 miles south of the APR near MP 11.3. No RSAs are located close to the McCarthy Lake WMA. RSA-GAA-1 and RSA-GAA-2 cross over portions of the RJD Memorial State Hardwood Forest. The U.S. Fish & Wildlife Service (USFWS) National Realty tract data indicates the Upper Mississippi River National Wildlife and Fish Refuge is located approximately 265 feet northeast of the Kellogg Substation. This area is also designated as an Important Bird Area. No USFWS-administered properties are located in or are crossed by the APR and RSAs.²⁷³

240. There is minimal potential for the displacement of wildlife and loss of habitat from construction of the Project. Wildlife that inhabits natural areas could be impacted in the short-term within the immediate area of construction. The distance that animals will be displaced will depend on the species. Additionally, these animals will be typical of those found in agricultural and forested settings and should not incur population level effects due to construction.²⁷⁴

241. Raptors, waterfowl, and other bird species may be affected by the construction and placement of the transmission lines. Avian collisions are a possibility after the completion of the transmission lines. Waterfowl are typically more susceptible to transmission line collision, especially if the transmission line is placed between agricultural fields that serve as feeding areas, or between wetlands and open water, which serve as resting areas.²⁷⁵

242. The APR and RSAs will primarily follow existing road corridors or would be located in agricultural fields, which will minimize impacts to previously undisturbed

²⁷¹ Ex. EERA-29 at 102 (EA).

²⁷² Ex. EERA-29 at 102 (EA).

²⁷³ Ex. EERA-29 at 103 (EA).

²⁷⁴ Ex. EERA-29 at 104 (EA).

²⁷⁵ Ex. EERA-29 at 104 (EA).

vegetation in that area. The Applicant will clear approximately 14.4 acres of trees within the 100-foot-wide ROW associated with the APR. The Applicant would have to clear additional timber for some of the RSAs, with RSA-GAA-1 and RSA-GAA-2 requiring the most acres removed at 8.1 acres.²⁷⁶

243. Impacts to wildlife are expected to be negligible to minor, short-to-long term, and limited to the ROW.²⁷⁷

244. Project design and construction will be done in accordance with Avian Power Line Interaction Committee (APLIC) guidelines. Any eagle or other migratory bird nests discovered during survey of the line or in the land acquisition process will be reported to the USFWS, and the Applicant will adhere to guidance provided.²⁷⁸ Dairyland notes that this language appears to be an overly broad requirement. In its comments on the EA and DRP, Dairyland suggests that this language be revised to state that, “Dairyland will comply with the Bald and Golden Eagle Protection Act and Migratory Bird Treaty Act and coordinate with the USFWS as required.”²⁷⁹

H. Threatened / Endangered / Rare and Unique Natural Resources

245. Minnesota’s HVTL routing factors require consideration of the Project’s effect on rare and unique natural resources.²⁸⁰

246. The Applicant’s consultant submitted a formal Minnesota Natural Heritage Review Request (2023-00935) on December 13, 2023, through the MDNR’s MCE, and provided an update on December 14, 2023. The MDNR’s December 18, 2023, early coordination letter confirmed this submittal and noted that a manual Natural Heritage review was required by the MDNR due to the presence of rare features and state-listed species within the vicinity of the APR. A third request was submitted on October 18, 2024, for areas crossed by the RSAs developed as part of project scoping. As with the initial review, a manual review was required due to the presence of rare features and state-protected species in these areas. In addition, the USFWS Information for Planning and Consultation (IPaC) website was used to obtain a list of federally threatened and endangered species, candidate species, and designated critical habitat that have been previously documented within the vicinity of the APR and all other alternative routes.²⁸¹

247. The MBS identified two ecologically significant areas close to the assessment area: McCarthy Lake and Snake Creek Bluffs South. McCarthy Lake is located north of the ROW near MP 11.0. The Snake Creek Bluffs South contains a Red Oak-White Oak Forest (MHs37a) native plant community within RSA-GAA-2’s path.²⁸²

248. Ecological Significant Areas could be affected by clearing, grubbing,

²⁷⁶ Ex. EERA-29 at 104 (EA).

²⁷⁷ Ex. EERA-29 at 104 (EA).

²⁷⁸ Ex. EERA-29 at 105 (EA).

²⁷⁹ Dairyland EA and Draft Route Permit Comments at 3 (March 3, 2025) (eDocket No. 20253-215995-01).

²⁸⁰ Minn. Stat. § 216E.03, subd. 7(b)(1) (2023); Minn. R. 7850.4100(F).

²⁸¹ Ex. EERA-29 at 105 (EA).

²⁸² EA at 105 (EA).

grading, excavation, and other earth-moving activities that could result in fragmentation and disruption of community functioning, including changes to surface water flow and groundwater hydrology.²⁸³

249. The Project has the potential to impact state-protected turtle species through direct fatalities and habitat disturbance and destruction due to excavation, fill, and other associated construction activities.²⁸⁴

250. Timber rattlesnake mortality is most commonly caused by poaching, vehicle encounters, and habitat destruction and disturbance.²⁸⁵

251. Seaside three-awn, clasp milkweed, and beach heather could be impacted during clearing, excavation, and other construction-related activities.²⁸⁶

252. Based on the USFWS Determination Key (DKey) for the northern long-eared bat (NLEB), the Project “may affect, but is not likely to adversely affect” the species. As the Applicant has committed to the minimization and BMPs, no impacts are anticipated.²⁸⁷

253. Potential impacts to individual tricolored bats may occur if clearing or construction takes place when the species is roosting in its summer habitat, in trees outside of hibernacula. Bats may be injured or killed if occupied trees are cleared during this active window. Tree clearing activities conducted when the species is in hibernation and not present on the landscape will not result in direct impacts to individual bats but could result in indirect impacts due to removal of suitable roosting habitat.²⁸⁸

254. Suitable habitat for monarch butterflies and rusty patched bumble bees (RPBB) may be present within the Project area.²⁸⁹ Dairyland noted in its EA and DRP comments that the monarch butterfly has now been proposed for listing as threatened by the USFWS.²⁹⁰ The Applicant will review Project activities for potential impacts to the species and develop appropriate avoidance and mitigation measures.²⁹¹

255. Bald eagles can experience loss of habitat and potentially nesting disturbance during construction and maintenance activities, during the operational life of the transmission line there is also the potential for collisions and electrocution. Constructing within and/or adjacent to an existing utility ROW minimizes impacts to habitat in this area.²⁹²

²⁸³ EA at 116 (EA).

²⁸⁴ EA at 116 (EA).

²⁸⁵ EA at 116 (EA).

²⁸⁶ EA at 116 (EA).

²⁸⁷ EA at 116 (EA).

²⁸⁸ EA at 116 (EA).

²⁸⁹ Ex. EERA-29 at 116 (EA).

²⁹⁰ Dairyland EA and Draft Route Permit Comments at 3 (March 3, 2025) (eDocket No. 20253-215995-01).

²⁹¹ Ex. EERA-29 at 116 (EA).

²⁹² Ex. EERA-29 at 116-117 (EA).

256. The Applicant will continue to coordinate with the MDNR and USFWS to avoid and minimize Project impacts on sensitive species by implementing the following general measures during and after the completion of the proposed transmission line:

- BMPs will be used to prevent erosion of the soil in the areas of impact.
- Sound water and soil conservation practices will be implemented during construction and operation of the Project to protect topsoil and adjacent water resources and minimize soil erosion. Practices may include containing excavated material, protecting exposed soil, and stabilizing restored soil.
- Disturbed areas will be re-vegetated with native species and wildlife conservation species, where applicable if the landowner agrees.
- Raptor protection measures will be implemented, including following APLIC Avian Safe Design recommendations and placement of bird flight diverters on the line after consultation with the MDNR and/or USFWS.²⁹³

257. The EA recommends that the following specific measures be used to help avoid or minimize impacts to rare and unique natural resources during and after the completion of the proposed transmission line:

- BMPs will be used to prevent erosion of the soils in the areas of impact.
- Sound water and soil conservation practices will be implemented during construction and operation of the Project to protect topsoil and adjacent water resources and minimize soil erosion. Practices may include containing excavated material, protecting exposed soil, and stabilizing restored soil.
- Disturbed areas will be re-vegetated with native species and wildlife conservation species, where applicable if the landowner agrees.²⁹⁴

258. MDNR staff recommended that the Project be designed to avoid impacts to the native plant communities by confining construction activities to the opposite side of the road. MDNR recommend the following actions to minimize disturbance:

- To the extent practicable, operate within previously disturbed areas.
- Retain a buffer between the proposed activities and both MBS sites.
- Confine construction activities to the opposite side of the road for MBS

²⁹³ Ex. EERA-29 at 117 (EA).

²⁹⁴ Ex. EERA-29 at 117 (EA).

Sites and rare community. If not feasible, confine construction activities to existing road ROWs.

- Minimize vehicular disturbance in these areas by allowing only vehicles necessary for the proposed work.
- Do not stage or store vehicles, equipment, or material (including fill material) in these areas.
- If possible, conduct work in these areas when the ground is frozen.
- Inspect and clean equipment prior to operation to avoid spread of invasive species.
- Use effective erosion prevention and sediment control measures.
- Revegetate disturbed soil with a suitable native seed mix as soon as construction as possible.
- Use only weed-free mulches, topsoil, and seed mixes. Mixes with birdsfoot trefoil (*Lotus corniculatus*) and crown vetch (*Coronilla varia*) are prohibited.²⁹⁵

259. Suitable habitat for the following state-listed threatened and endangered species is not present within the APR or all other RSAs so impacts are not anticipated. Consequently, no mitigation measures are proposed:

- butterfly mussel
- crystal darter
- ebonyshell mussel
- fawnsfoot mussel
- monkeyface mussel
- mucket mussel
- pallid shiner
- pistolgrip mussel
- spike mussel.²⁹⁶

260. Suitable habitat for the following state-listed threatened and endangered species is present within the APR and Alternative G:

- Blanding's turtle
- clasping milkweed

²⁹⁵ Ex. EERA-29 at 118 (EA).

²⁹⁶ Ex. EERA-29 at 118 (EA).

- Davis' sedge
- seaside three-awn
- timber rattlesnake; and
- wood turtle.²⁹⁷

261. MDNR staff requested that – if feasible – initial disturbance to grasslands and tree and shrub removal be from May 15 through August 15 to avoid disturbing nests for the Bell's vireo and lark sparrow; species of special concern.²⁹⁸

262. MDNR staff recommended surveying for the Kentucky coffeetree, a species of special concern, prior to construction so that any such trees found could be avoided.²⁹⁹

263. Suitable habitat for the following federally listed, candidate, and species proposed for listing is present within the vicinity of all proposed alternatives routes analyzed in the EA:

- NLEB
- RPBB
- tricolored bat
- monarch butterfly; and
- bald eagle.³⁰⁰

264. Dairyland agreed with MDNR's comment from December 16, 2024,³⁰¹ requiring the Permittee to re-consult with MDNR for further Natural Heritage Review for the final route selected by the Commission. As stated by MDNR in its March 4, 2025 comments, the Natural Heritage Review letters are based on the Applicant's proposed routes and are valid for one year.³⁰² Because it is likely that listed species and associated recommendations could be updated between now and construction, Dairyland has recommended revisions to Special Condition 6.6 of the DRP that would require the Permittee to resubmit a Natural Heritage Review and continue to consult with the MDNR regarding implementation of BMPs for state-protected threatened and endangered species prior to the start of construction of the Project.³⁰³

265. In general, direct impacts to any rare and unique natural resources are not anticipated for much of the APR and RSA-A through RSA-F, and any indirect impacts should be minimal with the use of design (spanning sensitive resources, co-locating the ROW) and construction techniques (BMPs associated with the MDNR License to Cross Public Waters) and the general conditions in the DRP. The McCarthy Lake MBS along

²⁹⁷ Ex. EERA-29 at 118 (EA).

²⁹⁸ Ex. EERA-29 at 119 (EA).

²⁹⁹ Ex. EERA-29 at 119 (EA).

³⁰⁰ Ex. EERA-29 at 121 (EA).

³⁰¹ Ex. EERA-29 at 231 (EA).

³⁰² Comment by MDNR at 2 (March 4, 2025) (eDocket No. 20253-216053-01).

³⁰³ Dairyland EA and Draft Route Permit Comments at 7 (March 3, 2025) (eDocket No. 20253-215995-01).

the APR will be spanned and avoided by construction. In the RSA-G comparison area, if RSA-GAA-2 were utilized for the Project, the transmission would impact the White Oak-Red Oak Forest in this area. These impacts could be avoided by using the APR or RSA-GAA-1.³⁰⁴

I. Cumulative Impacts

266. The current and reasonably foreseeable projects occurring within or near the Project area are primarily maintenance of existing infrastructure, Xcel Energy and Peoples burial of existing distribution lines, and County Road 84 modernization projects. Given the relatively small size of the Project, its anticipated minimal human and/or environmental impact, and the anticipated impacts of reasonably foreseeable projects, cumulative impacts are anticipated to be minimal.³⁰⁵

267. Cumulative potential effects on public health and safety are anticipated to be minimal to slightly positive. Most of the projects foreseen in the project area are road and highway related. Installation of the buried Xcel Energy and Peoples distribution lines will be minimal and reflect the need to maintain and improve local roads to ensure their safe operation and the public's health and safety. Based on past studies and existing transmission infrastructure in the area, little to no effects have been found from EMF and stray voltage to humans and livestock. Although the increase of other transmission and distribution lines in the area may raise further concerns by residents on exposure to these, the Applicant and others proposing/constructing this infrastructure will still be required to meet the standards as established by the Commission as well as those set by NESC.³⁰⁶

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

268. Minnesota's HVTL routing factors require consideration of the Project's use of or paralleling of existing ROWs, survey lines, natural division lines, and agricultural field boundaries.³⁰⁷

269. The APR has been developed to parallel adjacent to State Highway 42, section lines or property boundaries wherever possible. Because this is a complete route segment, the following summarizes the differences between the APR and the RSAs in the same location:

- RSA-AAA-1 and RSA-AAA-2: In comparison to the APR, there is little difference between the amount of parallel vs. not parallel.
- RSA-B through RSA-F: In comparison to the APR, which in its entirety for this segment parallels State Highway 42, all RSAs have a portion that do not parallel existing linear features. RSA-F does parallel linear features

³⁰⁴ Ex. EERA-29 at 138 (EA).

³⁰⁵ Ex. EERA-29 at 125 (EA).

³⁰⁶ Ex. EERA-29 at 126 (EA).

³⁰⁷ Minn. Stat. § 216E.03, subd. 7(b)(9) (2023); Minn. R. 7850.4100(H).

and boundaries, following N. Wabasha County Road 14 and a section line for the majority of its alignment, the next greatest distance.

- RSA-GAA-1 and RSA-GAA-2: In comparison to the APR, which in its entirety parallels State Highway 42, RSA-GAA-1 and RSA-GAA-2 do not parallel any linear features.³⁰⁸

270. In conclusion, the APR parallels linear features better than RSA-B through RSA-G. RSA-AAA-1 and RSA-AAA-2 do not have distinguishing differences for paralleling linear features.³⁰⁹

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

271. Minnesota HVTL routing factors require consideration of the Project's use of existing transportation, pipeline, and electrical transmission system ROWs.³¹⁰

272. The APR has been developed to parallel adjacent to State Highway 42 and other utilities wherever possible. As this is a complete route segment, the following summarizes the differences between the APR and the RSAs in the same location:

- APR: In comparison to all other routes, the APR overall does the best at paralleling existing transportation, and transmission system routes.
- RSA-AAA-1 and RSA-AAA-2: In comparison to the APR, which parallels the existing transmission system (also 215th Street) between MP 1.0 and MP 1.5, this route does not parallel any existing transmission system and has less of the route parallel to an existing roadway.
- RSA-B through RSA-F: In comparison to the APR, which in its entirety for this segment parallels State Highway 42, all these routes have a portion that do not parallel existing transportation or transmission system routes.³¹¹
- RSA-GAA-1 and RSA-GAA-2: In comparison to the APR, which in its entirety for this segment parallels State Highway 42, RSA-GAA-1 and RSA-GAA-2 do not parallel existing transportation or transmission system routes.³¹²

273. The APR parallels existing transportation or transmission system routes

³⁰⁸ Ex. EERA-29 at 138-39 (EA).

³⁰⁹ Ex. EERA-29 at 139 (EA).

³¹⁰ Minn. Stat. § 216E.03, subd. 7(b)(8); Minn. R. 7850.4100(J).

³¹¹ Ex. EERA-29 at 139 (EA).

³¹² Ex. EERA-29 at 139 (EA).

better than any other proposed route.³¹³

L. Electrical System Reliability

274. Minnesota's HVTL routing factors require consideration of the Project's impact on electrical system reliability.³¹⁴

275. Impacts on electrical system reliability are anticipated to be minimal across all routing alternatives with the use of standard construction techniques and the general conditions in the DRP. The Project is intended to continue and improve electrical service in the area.³¹⁵

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

276. Minnesota's HVTL routing factors require consideration of the Project's cost of construction, operation, and maintenance.³¹⁶

277. Costs and tasks are divided into six phases: permitting, land acquisition and ROW, design/engineering, procurement of materials, construction costs, and contingency. If the Commission selects a route other than the APR or imposes non-standard construction conditions, the Project cost estimates may change.³¹⁷

278. Estimated costs for the APR are approximately \$32.4 million (2023 dollars). Additional cost associated with constructing the RSAs range from an estimated \$3.7 million for RSA-F to \$1.5 million for RSA-GAA-1. These cost estimates assume that the Applicant will pay prevailing wages for applicable positions for the construction of the Project. All capital costs for the Project will be borne by the Applicant.³¹⁸

N. Unavoidable and Irreversible Impacts

279. Minnesota's HVTL routing factors require consideration of the adverse human and natural environmental effects that cannot be avoided.³¹⁹

i. Unavoidable Impacts

280. Unavoidable adverse impacts associated with construction of the proposed Project include:

- Possible traffic delays and fugitive dust on roadways.

³¹³ Ex. EERA-29 at 139 (EA).

³¹⁴ Minn. Stat. § 216E.03, subd. 7(b)(5),(6) (2023); Minn. R. 7850.4100(K).

³¹⁵ Ex. EERA-29 at 139 (EA).

³¹⁶ Minn. R. 7850.4100(L).

³¹⁷ Ex. EERA-29 at 29 (EA).

³¹⁸ Ex. EERA-29 at 29 (EA).

³¹⁹ Minn. Stat. § 216E.03, subd. 7(b)(6) (2023); Minn. R. 7850.4100(M).

- Visual and noise disturbances.
- Soil compaction and erosion.
- Vegetative clearing; removal or changes to wetland type and function to be confirmed after delineation is completed.
- Disturbance and temporary displacement of wildlife, as well as direct impacts to wildlife due to inadvertent injury during structure placement or other construction activities.
- Minor amounts of habitat loss or fragmentation.
- Converting the underlying land use to an industrial use.
- Criteria pollutant and greenhouse gas (GHG) emissions.³²⁰

281. Unavoidable adverse impacts associated with the operation of the proposed Project include:

- Visual impact of structures, conductors, and the new Kellogg Substation.
- Change in landscape character and any subsequent impact to cultural values.
- Loss of land use for other purposes where structures are placed.
- Injury or death of avian species that collide with, or are electrocuted by, new transmission lines or conductors.
- Interference with AM radio signals.
- Continued maintenance of tall-growing vegetation.
- Criteria *pollutant and GHG emissions*.
- Increased EMFs on the landscape (potential impacts from EMFs are minimal and are not expected to impact human health).³²¹

ii. Irreversible Impacts

282. Irreversible impacts include the land required to construct the transmission line. It is possible that the structures, conductors, and buildings could be removed, and

³²⁰ Ex. EERA-29 at 130 (EA).

³²¹ Ex. EERA-29 at 130 (EA).

the ROW restored to previous conditions. This is unlikely to happen in the reasonably foreseeable future (approximately 50 years). The loss of wetlands would be considered irreversible, because replacing these wetlands could take a significant amount of time. Certain land uses within the ROW will no longer be able to occur, especially at the Kellogg Substation.³²²

O. Summary of Factors Analysis

283. Both the EA's and Dairyland's alternative analysis consider the relative impacts that the Commission must consider when designating a route.³²³

284. Dairyland's alternative analysis compared the corresponding segment of the APR, as described in the Application, to the RSAs in three groups, based on where the RSAs and AAs generally share common start and end points:

- Group 1 (RSA-AAA-1 and RSA-AAA-2);
- Group 2 (RSA-B, RSA-C, RSA-D, RSA-EAA-1, RSA-EAA-2, and RSA-F); and
- Group 3 (RSA-GAA-1 and RSA-GAA-2).³²⁴

285. Dairyland developed a new AA, referred to "RSA-AAA-2 As Modified" for consideration by the Commission. This represents improvements to RSA-AAA-2 to minimize impacts on landowners along RSA- AAA-2.³²⁵

286. Regarding the Group 1 Alternatives, the APR offers advantages including that it balances the Commission's routing criteria by minimizing length, cost, and number of landowners impacted, and maximizing co-location with existing ROWs.³²⁶

287. Many landowners in the area expressed a preference for RSA-AAA-2 because it increases the distance between the line and farmsteads and places poles along property lines, minimizing impacts to agricultural operations. As aforementioned, Dairyland's proposed RSA-AAA-2, as modified, further improves RSA-AAA-2, by minimizing impacts to agricultural operations by reducing the number of structures needing to be placed in open fields. Given the public comments supporting construction of the line in this area, the landowner support for this alternative weighs in favor of adopting the change, despite the longer length and departure from the public ROW.³²⁷

288. Regarding the Group 2 Alternatives, Dairyland requests the Commission's

³²² Ex. EERA-29 at 131 (EA).

³²³ See Exs. EERA-29 at 132-140 (EA) and DPC-12 at Schedule B (Direct Testimony of Sage Williams with Schedules A and B).

³²⁴ Ex. DPC-12 at Schedule B (Direct Testimony of Sage Williams with Schedules A and B).

³²⁵ Ex. DPC-12 at Schedule B (Direct Testimony of Sage Williams with Schedules A and B).

³²⁶ Ex. DPC-12 at Schedule B (Direct Testimony of Sage Williams with Schedules A and B).

³²⁷ Dairyland Response to Public Comments at 10 (March 10, 2025) (eDocket No. 20253-216220-01).

acceptance of alternative RSA-B as compared to the other alternatives in Group 2, as it has the support of affected landowners, is the shortest alternative under consideration, crosses the fewest waterbodies, and crosses fewer parcels than the other alternatives, while achieving the stated goal on minimizing impacts to dairy operations and residences along Highway 42.³²⁸

289. Regarding the Group 3 Alternatives, both alternatives would result in new greenfield corridors through heavily wooded areas, and some within a MDNR State Forest along RSA-GAA-2. In addition, these alternatives are located partially within a MDNR Site of Biodiversity Significance. The APR offers advantages over the Group 3 alternatives because it maximizes collocation with existing ROWs, avoids creation of new utility corridors in greenfield areas, and avoids clearing in forested areas, including those on state lands.³²⁹

290. Dairyland supports the adoption of the APR including RSA-AAA-2, As Modified and RSA-B as the route for the Project.³³⁰

291. When considering all the Commission's routing criteria, the Judge finds that the APR including RSA-AAA-2, as modified, and RSA-B is the best route for the Project.

VIII. CONSIDERATION OF ISSUES PRESENTED BY STATE AGENCIES AND LOCAL UNITS OF GOVERNMENT

292. Minnesota Statute § 216E.03, subd. 7(b)(12) (2024) requires the Commission to examine, when appropriate, issues presented by federal and state agencies and local entities. The issues presented by federal, state, and local units of government are addressed in the findings above as part of the analysis of the Commission's routing factors.

IX. DRAFT ROUTE PERMIT SPECIAL CONDITIONS

293. The EA and DRP prepared by EERA includes a number of proposed permit conditions. In its DRP, EERA recommended certain special conditions.³³¹ The Applicant provided revisions to the DRP, including special conditions.³³²

294. Sections 2 and 2.1 of DRP contain different information regarding typical span lengths and pole heights. As stated in the Application and in Sage Williams' Direct Testimony, typical pole heights for the Project will range from 75 to 140 feet above ground and spans between poles will range from 250 to 1,000 feet. Construction will occur within a 100-foot-wide ROW easement that Dairyland will obtain to operate the transmission line.³³³ Dairyland proposes the following revisions (in blue and red) to Section 2 of the

³²⁸ Ex. DPC-12 at Schedule B (Direct Testimony of Sage Williams with Schedules A and B).

³²⁹ Ex. DPC-12 at Schedule B (Direct Testimony of Sage Williams with Schedules A and B).

³³⁰ Ex. DPC-12 at Schedule B (Direct Testimony of Sage Williams with Schedules A and B).

³³¹ Ex. EERA-29 at Appendix D (EA).

³³² See Dairyland EA and Draft Route Permit Comments (March 3, 2025) (eDocket No. 20253-215995-01) and Dairyland Response to Public Comments (March 10, 2025) (eDocket No. 20253-216220-01).

³³³ Ex. DPC-4 at 1-4 (Application); Ex. DPC-12 at 3:16-18, 6:2, and Schedule B (Direct Testimony of Sage

DRP:

2 Transmission Facility Description

The Project would involve installation of ~~705-~~ to ~~140-~~ foot- high steel monopoles placed ~~400~~250 to ~~800~~1,000 feet apart within a 100-foot-wide right-of-way and construction of a new 4.0-acre substation located on a 10.8 acre site off of County Road 84, southeast of Kellogg.³³⁴

295. Dairyland proposes the following revisions to Section 2.1:

2.1 Structures

The majority of the new 161-kV transmission line will consist of single circuit steel structures spaced approximately ~~300~~ 250 to 1,000 feet apart. Transmission structures will typically range in height from 75 to 140 feet above ground, depending upon the terrain and environmental constraints. The average diameter of the steel structures at ground level is 37 inches. Poles will be oriented in a delta configuration (one overhead ground wire at the top, two phases on one side and a single phase on the other) supported by suspension insulators at tangent structures and strain insulators at tension structures. All tangent poles with a line angle of 2 degrees or less will be directly embedded in the soil. Any structure with a line angle of greater than 2 degrees will be supported on a drilled shaft concrete foundation. Special horizontally configured structures (H-frame or 3 pole structures) may be required to cross under any higher voltage circuits in the corridor.³³⁵

296. Dairyland proposed three changes to Section 2.3 of the DRP to better reflect the current planned design of the proposed Kellogg Substation. These changes include (1) updating the description of the stormwater management system to instead refer to the stormwater management system, (2) modifying the description of the secondary containment method for the transformer, and (3) changing the reference to the security wall to security fencing.³³⁶ Dairyland proposes the following edits (in blue and red) to Section 2.3 of the DRP:

2.3 Substations and Associated Facilities

The Kellogg Substation facilities are proposed to be sited on 4 acres within a larger 10.8-acre parcel of land. Approximately 4 acres of the site will be used for the substation, access road, and stormwater ~~drainage features~~

Williams with Schedules A and B).

³³⁴ Dairyland EA and Draft Route Permit Comments at 4 (March 3, 2025) (eDocket No. 20253-215995-01).

³³⁵ Dairyland EA and Draft Route Permit Comments at 4-5 (March 3, 2025) (eDocket No. 20253-215995-01).

³³⁶ Dairyland EA and Draft Route Permit Comments at 5-6 (March 3, 2025) (eDocket No. 20253-215995-01).

[management systems](#). Site preparation would include installing erosion and sediment control BMPs, stripping topsoil, and hauling in structural fill to build up the subgrade for the substation pad. Once the substation pad is built to the subgrade, all areas will be restored, and the site will be ready for use. This work will occur the year prior to transmission line and substation construction to allow for one winter to allow the ground to settle. Construction within the newly prepared substation pad will consist of drilled pier foundations ranging in size from three to 7.0 feet in diameter and 10 to 35 feet deep. The foundations will be installed to support transmission line dead-end structures, static masts, and bus and equipment support structures. Slabs-on-grade 8.0-feet square by 2.0 feet thick will be used for 161-kV circuit breakers, and 6.0-foot square by 2.0 feet thick will be used for 69-kV circuit breakers. The control building will be on a 20-foot by 40-foot- by 1-foot-thick concrete slab. Transformer and reactor secondary oil containment will be installed ~~concrete-lined pot filled with stone~~. Conduit for control and communication cables and grounding conductor will be installed prior to the placement of the final layer of crushed rock surfacing. The ground grid will be installed 18 inches below the subgrade surface throughout the substation pad and extend 4.0 feet outside the substation security ~~wall~~[fencing](#).³³⁷

297. Section 4 of the DRP provides that the permittee is authorized to obtain a new permanent ROW for the transmission line up to 100 feet in width. Dairyland requested that this language be revised to allow for limited scenarios in which a ROW larger than 100 feet may be needed.³³⁸ Dairyland proposed the following edit to Section 4 of the DRP:

4 Right-of-Way

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

The anticipated alignment is intended to minimize potential impacts relative to the criteria identified in Minn. R. 7850.4100. The final alignment must generally conform to the anticipated alignment identified on the route maps unless changes are requested by individual landowners and agreed to by the Permittee or for unforeseen conditions that are encountered or as otherwise provided for by this route permit.

Any right-of-way or alignment modifications within the Designated Route shall be located so as to have comparable overall impacts relative to the

³³⁷ Dairyland EA and Draft Route Permit Comments at 5-6 (March 3, 2025) (eDocket No. 20253-215995-01).

³³⁸ Dairyland EA and Draft Route Permit Comments at 6-7 (March 3, 2025) (eDocket No. 20253-215995-01).

factors in Minn. R. 7850.4100, as does the right-of-way and alignment identified in this route permit and shall be specifically identified and documented in and approved as part of the plan and profile submitted pursuant to Section 9.1 of this route permit.

Where the transmission line parallels existing highway and other road rights-of-way, the transmission line right-of-way shall occupy and utilize the existing right-of-way to the maximum extent possible; consistent with the criteria in Minn. R. 7850.4100, and the other requirements of this route permit; and for highways under the jurisdiction of the Minnesota Department of Transportation (MnDOT), the procedures for accommodating utilities in trunk highway rights- of-way.³³⁹

298. Based on its Tribal coordination efforts, Dairyland does not anticipate that all Tribal Historic Preservation Offices (THPOs) are interested in receiving the Phase I Archaeological Survey Report.³⁴⁰ Dairyland proposed the following edits (in blue and red) to Special Condition 6.5 of the DRP:

6.5 Cultural and Archaeological Resources

The Permittee shall conduct a Phase I archaeological survey of the permitted route and substation location ~~be conducted~~. A technical report containing the survey results must be submitted to the relevant Minnesota Tribal and State Historic Preservation Offices for review and comments. Survey results, comments on results, and any mitigation measures shall be filled at least 14 days prior to the pre- construction meeting.³⁴¹

299. Regarding Special Condition 6.6 of the DRP, Dairyland agreed with MDNR's comment from December 16, 2024, requiring the Permittee to re-consult with MDNR for further Natural Heritage Review for the final route selected by the Commission.³⁴² Because it is likely that listed species and associated recommendations could be updated between now and construction, Dairyland suggested revisions (in blue and red) to Special Condition 6.6 of the DRP. EERA agreed with Dairyland's proposed changes and offered some of its own (in green) to bring language used into conformity with MDNR and Commission practice, and to widen the scope of protected species:

6.6 State-protected Species

Prior to the start of construction, the Permittee shall resubmit a Natural Heritage Review and continue to consult with the MDNR regarding implementation of BMPs avoidance measures for ~~the following~~ state-protected threatened and endangered species. The Permittee shall comply

³³⁹ Dairyland EA and Draft Route Permit Comments at 6-7 (March 3, 2025) (eDocket No. 20253-215995-01).

³⁴⁰ Dairyland EA and Draft Route Permit Comments at 7 (March 3, 2025) (eDocket No. 20253-215995-01).

³⁴¹ Dairyland EA and Draft Route Permit Comments at 7 (March 3, 2025) (eDocket No. 20253-215995-01).

³⁴² Ex. EERA-29 at 231 (EA).

with applicable Department of Natural Resources requirements related to state-listed endangered and threatened species in accordance with Minnesota's Endangered Species statute (Minn. Stat. § 84.0895) and associated rules (Minn. R. 6212.1800 - .2300 and part 6134). The Permittee shall keep records of compliance with this section and provide them upon the request of Department of Commerce or Commission staff.

- ~~Bell's Vireo~~
- ~~Lark Sparrow~~
- ~~Kentucky Coffeetree~~
- ~~Blanding's Turtle and Wood Turtle~~
- ~~Seaside Three awn, Clasping Milkweed, and Beach Heather~~³⁴³

300. Dairyland proposed the following revisions (in blue and red) to Special Condition 6.1 in the DRP. EERA agreed with Dairyland's proposed changes and offered a sentence of its own (in green) to address concerns raised by members of the public with property near the proposed transmission line:

6.1 Stray Voltage

The Permittee shall coordinate with the owners of all dairy farms, and any other ~~animal agriculture~~ confined animal farms (i.e., dairy, goats and swine) adjacent to the route, for the purpose of explaining the energy and electrical standard effects addressed in sections 5.4.1 and 5.4.2. The Permittee shall demonstrate compliance with the consultation obligation in its pre-construction filing. The Permittee shall conduct pre- and post-construction neutral-to-earth voltage measurements on the distribution neutral at service connection point for dairy and confined animal operations adjacent to the Designated Route.³⁴⁴ The Permittee shall file the protocol used for these measurements and the resulting measurements with the Commission upon completion of the post-construction measurements.³⁴⁵

301. The revisions proposed by the Applicant and EERA are reasonable and should be incorporated into the Route Permit. The Commission should also consider whether the Permittee must have a contingency plan in place to address harm to property in the unlikely event voltage measurements indicate an unreasonable risk to livestock operations.

302. The MDNR recommended several topics for special conditions requiring: (1) a Karst Survey Plan, (2) conditions listed in Natural Heritage Reviews via the MCE (MCE 2023- 00935 and MCE 2024-000881); (3) coordination with the MDNR regarding impacts to calcareous fens (4) facility lighting; (5) dust control; (6) wildlife- friendly erosion

³⁴³ Dairyland EA and Draft Route Permit Comments at 7 (March 3, 2025) (eDocket No. 20253-215995-01); EERA Reply Comments at 4-5 (April 1, 2025) (eDocket No. 20254-217097-01).

³⁴⁴ Dairyland Response to Public Comments at 5-6 (March 10, 2025) (eDocket No. 20253-216220-01).

³⁴⁵ EERA Reply Comments at 4 (April 1, 2025) (eDocket No. 20254-217097-01).

control; and (7) water appropriation permits.³⁴⁶

303. Dairyland agreed with most of MDNR's recommendations, with the following modifications:

- Regarding item (1), Special Condition 6.4 of the DRP already includes a requirement to develop a Karst Survey Plan and coordinate with MDNR.
- Regarding items (2) and (3), Ms. Britta Bergland's Direct Testimony noted Dairyland's commitment to MDNR Natural Heritage staff's recommended avoidance measures for the Blanding's turtle, wood turtle, timber rattlesnake and four state-listed plant species under MCE 2023-00935.³⁴⁷ Dairyland did not agree with MDNR's recommended special conditions related to other recommendations that could become outdated upon a resubmittal of Natural Heritage Review and continued consultation with MDNR. Dairyland instead recommended a general requirement to submit a new Natural Heritage Review closer to construction to address state-listed species as well as calcareous fens.³⁴⁸
- Regarding items (4), (5), (6) and (7), Dairyland stated no objection to MDNR's recommendations regarding facility lighting, dust control, wildlife-friendly erosion control or water appropriation permits.³⁴⁹

304. It is reasonable to incorporate MDNR's proposed special conditions into the DRP, with Dairyland's proposed modifications noted above.

X. NOTICE

305. Minnesota statutes and rules require an applicant for a Route Permit to provide certain notice to the public as well as to local governments before and during the Application for a Route Permit process.³⁵⁰

306. The Applicant provided notice to the public and to local governments in satisfaction of Minnesota statutory and rule requirements.³⁵¹

³⁴⁶ Comment by MDNR (March 4, 2025) (eDocket Nos. 20253-216053-01, 20253-216053-02, 20253-216053-03, 20253-216053-04).

³⁴⁷ Ex. DPC-13 at 6:2-8 (Direct Testimony of Britta Bergland with Schedules A-F); Comment by MDNR at 2 (March 4, 2025) (eDocket No. 20253-216053-01).

³⁴⁸ Dairyland Response to Public Comments at 8 (March 10, 2025) (eDocket No. 20253-216220-01). Upon review, Dairyland notes that the numbering on page 9 of its March 10 response to public hearing comments contained an error. This finding correctly reflects Dairyland's intended response to MDNR's recommendations.

³⁴⁹ Dairyland Response to Public Comments at 9 (March 10, 2025) (eDocket No. 20253-216220-01).

³⁵⁰ Minn. Stat. § 216E.03, subd. 3a and 4 (2023); Minn. R. 7850.2100, subp. 2 and 4.

³⁵¹ Minn. Stat. § 216E.03, subd. 4 (2023); Minn. R. 7850.2100, subps. 2 and 4.

307. Minnesota statutes and rules also require the EERA and the Commission to provide certain notice to the public throughout the Route Permit process. The EERA and the Commission provided the notice in satisfaction of Minnesota statutes and rules.³⁵²

XI. COMPLETENESS OF EA

308. The EA process is the alternative environmental review approved by the EQB for HVTLS. The Commission is required to determine the completeness of the EA. An EA is complete if it and the record address the issues and alternatives identified in the Scoping Decision.³⁵³

309. The evidence in 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.³⁵⁴

Based on the foregoing findings of fact and the record in this proceeding, the Judge makes the following:

CONCLUSIONS OF LAW

1. Any of the forgoing findings of fact more properly designated as conclusions of law are hereby adopted as such.

2. The Commission and the Administrative Law Judge have jurisdiction to consider Dairyland's Application.

3. The Commission determined that the Application was substantially complete and accepted the Application on May 7, 2024.

4. EERA prepared an appropriate EA of the Project for purposes of this proceeding, and it satisfies Minn. R. 7850.3700 and 7850.3900. Specifically, the EA and the record address the issues identified in the Scoping Decision to a reasonable extent, considering the availability of information, and the EA includes the items required by Minn. R. 7850.3700, subp. 4. It was prepared in compliance with the procedures in Minn. R. 7850.3700.

5. Dairyland gave notice as required by Minn. Stat. § 216E.03, subds. 3a, 4; Minn. Stat. § 216E.04, subd. 4; and Minn. R. 7850.2100, subps. 2, 4.³⁵⁵

³⁵² Minn. R. 4410.4400, subp. 6; Minn. R. 7850.3900, subp. 2; Exs. PUC-4 (Notice of Public Information and Environmental Assessment Scoping Meetings); PUC-10 (Revised Notice of Public Hearings and Availability of Environmental Assessment); PUC-11 (Affidavit of Publication, Notice of Public Information and Environmental Assessment Scoping Meetings); PUC-12 (Affidavit of Publication, Notice of Public Hearings and Availability of Environmental Assessment); EERA-26 (EERA Scoping Decision Notice); and EERA-27 (EERA Affidavit of Publication – Dairyland Scoping Decision Notice).

³⁵³ Minn. R. 7850.3900, subp. 2 (2023).

³⁵⁴ Ex. EERA-26 (EERA Scoping Decision Notice).

³⁵⁵ Exs. DPC-1 (Notice of Intent to Submit a Route Permit Application); DPC-5 (Project Notice under 7850.2100 for the Project); and DPC-6 (Confirmation of Notice).

6. A public hearing was conducted near the APR. Proper notice of the public hearing was provided, as required by Minn. Stat. § 216E.04, subd. 6, and the public was given the opportunity to speak at the hearing and to submit written comments. All procedural requirements for the Route Permit were met.

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

8. The evidence in the record demonstrates that the APR, with the inclusion of RSA-AAA-2, as modified, and RSA-B is the best route for the Project.

9. The evidence in the record demonstrates that the general Route Permit conditions are appropriate for the Project, with the revisions and clarifications as recommended herein.

10. The evidence in the record demonstrates that the special conditions identified in Section IX, above, as edited by Dairyland and EERA, are appropriate for the Project.

11. Any of the foregoing conclusions of law which are more properly designated findings of fact are hereby adopted as such.

Based upon these conclusions, the Judge makes the following:

RECOMMENDATION

The Commission should issue to Dairyland a Route Permit for the APR including the incorporation of alternates RSA-AAA-2, as modified, and RSA-B, for the construction and operation of the Project and associated facilities in Wabasha County, Minnesota. The Commission should also include in the permit the DRP conditions as set forth in Section IX.

THIS REPORT IS NOT A FINAL ORDER OF THE COMMISSION AND NO AUTHORITY IS GRANTED HEREIN. THE MINNESOTA PUBLIC UTILITIES COMMISSION WILL ISSUE THE FINAL ORDER WHICH MAY ADOPT OR DIFFER FROM THIS REPORT AND RECOMMENDATION.

Dated: April 21, 2025

A handwritten signature in black ink, appearing to read 'Jim Mortenson', is written over a horizontal line.

Jim Mortenson
Administrative Law Judge

April 21, 2025

See Attached Service List

**Re: *In the Matter of the Application of Dairyland Power Cooperative for a
Route Permit for the Wabash Relocation 161 kV Transmission Line
Project in Wabasha County***
OAH 5-2500-40184
MPUC ET-3/TL-23-388

To All Persons on the Attached Service List:

Enclosed and served upon you is the Administrative Law Judge's **FINDINGS OF
FACT, CONCLUSIONS OF LAW, AND RECOMMENDATIONS** in the above-entitled
matter.

If you have any questions, please contact me at (651) 361-7857,
nichole.sletten@state.mn.us, or via facsimile at (651) 539-0310.

Sincerely,



NICHOLE SLETTEN
Legal Assistant

Enclosure
cc: Docket Coordinator

STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS
PO BOX 64620
600 NORTH ROBERT STREET
ST. PAUL, MINNESOTA 55164

CERTIFICATE OF SERVICE

In the Matter of the Application of Dairyland Power Cooperative for a Route Permit for the Wabash Relocation 161 kV Transmission Line Project in Wabasha County	OAH Docket No.: 5-2500-40184 MPUC ET-3/TL-23-388
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On April 21, 2025, a true and correct copy of the **FINDINGS OF FACT, CONCLUSIONS OF LAW, AND RECOMMENDATIONS** was served by eService, and United States mail, (in the manner indicated below) to the following individuals:

First Name	Last Name	Email	Company Name
Christina	Brusven	cbrusven@fredlaw.com	Fredrikson Byron
Generic Notice	Commerce Attorneys	commerce.attorneys@ag.state.mn.us	Office of the Attorney General-DOC
Adam	Duininck	aduininck@ncsrcc.org	North Central States Regional Council of Carpenters
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce
Stacy	Kotch Egstad	Stacy.Kotch@state.mn.us	MINNESOTA DEPARTMENT OF TRANSPORTATION
James	Mortenson	james.mortenson@state.mn.us	Office of Administrative Hearings
Generic Notice	Residential Utilities Division	residential.utilities@ag.state.mn.us	Office of the Attorney General-RUD
Nathaniel	Runke	nrunke@local49.org	International Union of Operating Engineers Local 49
Will	Seuffert	Will.Seuffert@state.mn.us	Public Utilities Commission
Janet	Shaddix Elling	jshaddix@janetshaddix.com	Shaddix And Associates