

OAH Docket No. 21-2500-40445
MPUC Docket No. ET2/TL-24-132

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

In the Matter of the Application for a Route
Permit Application for the Laketown
115-kV Transmission Line in Carver
County, Minnesota

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

STATE OF MINNESOTA
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In the Matter of the Application of Great
River Energy for a Route Permit
Application for the Laketown 115-kV
Transmission Line in Carver County,
Minnesota

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STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS
FOR PUBLIC UTILITIES COMMISSION

In the Matter of the Application of Great River Energy for a Route Permit Application for the Laketown 115-kV Transmission Line in Carver County, Minnesota **FINDINGS OF FACT, CONCLUSIONS OF LAW, AND RECOMMENDATIONS**

This matter was assigned to Administrative Law Judge Kimberly Middendorf to conduct a public hearing on the Route Permit Application (MPUC Docket No. ET2/TL-24-132) (Application) of Great River Energy and Minnesota Valley Electric Cooperative (MVEC) (together, the Applicants). The Applicants propose to build a new 115-kilovolt (kV) double-circuit high voltage transmission line (HVTL) (Transmission Line) in Laketown and Dahlgren Townships in Carver County, Minnesota, referred to as the Laketown 115-kV Transmission Line Project (Project). The Project will be approximately 4.3 miles long and includes construction of a new MVEC substation (the Laketown Substation). The Project will connect Great River Energy's existing 115-kV MV-VTT transmission line to the proposed Laketown Substation. The Minnesota Public Utilities Commission (Commission) also requested that the Administrative Law Judge prepare findings of fact and conclusions of law and provide recommendations, if any, on conditions and provisions of the proposed route permit.

Public hearings on the Application were held on May 21, 2025 (in-person) and May 22, 2025 (remote-access). The factual record remained open until June 2, 2025, for the receipt of written public comments.

Haley Waller Pitts, Fredrikson & Byron, P.A., appeared on behalf of the Applicants. Michael Swenson, Great River Energy, appeared on behalf of the Applicants.

Sam Lobby, Planner, Director – Energy Facilities Permitting Unit, appeared on behalf of Commission Staff.

Logan Hicks, Environmental Review Manager, appeared on behalf of the Minnesota Department of Commerce, Energy Environmental Analysis Review unit (EERA).

STATEMENT OF ISSUE

Have the Applicants satisfied the criteria established in Minn. Stat. ch. 216E and Minn. R. ch. 7850 a route permit for the Project?

SUMMARY OF RECOMMENDATION

The Applicants have not satisfied all applicable legal requirements, because notice required by Minn. Stat. §§ 216E.03, .04 was not provided to the City of Carver. Route Alternative B, proposed by the public and determined to have fewer human and environmental impacts by EERA than the Applicants' Proposed Route and other alternatives studied, may be permitted so long as the prejudice to the City of Carver is mitigated. If the Commission issues a permit for Route Alternative B, the permit should include special conditions requiring the Applicants to work closely with Carver County, the City of Victoria, the City of Carver, and affected landowners to minimize and mitigate the Project's impact on planned development and maximize future development options. In the alternative, the Commission should **DENY** a route permit for the Project.

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

FINDINGS OF FACT

I. APPLICANTS

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

2. MVEC is the distribution cooperative serving the area in which the Project will be located. It is one of Great River Energy's transmission customers, and it will be the owner of the proposed Laketown Substation. MVEC provides electric service to a 968-square-mile service area which includes all or parts of nine Minnesota counties: Blue Earth, Carver, Dakota, Hennepin, Le Sueur, Rice, Scott, Sibley, and Waseca. MVEC does not generate power; rather, MVEC delivers electric energy supplied and transmitted by Great River Energy to their substations. MVEC then distributes that energy to homes and businesses through their distribution system.²

II. PROCEDURAL HISTORY

3. The Minnesota Power Plant Siting Act (PPSA) provides that no person may construct a HVTL without a route permit from the Commission.³ Under the PPSA, an HVTL includes a transmission line that is 100-kV or more and is greater than 1,500 feet in length.⁴ The proposed 115-kV Transmission Line is an HVTL greater than 1,500 feet

¹ Exhibit (Ex.) APP-2 at 1-1 (Application).

² Ex. APP-2 at 1-1 (Application).

³ Minn. Stat. § 216E.03, subd. 2.

⁴ Minn. Stat. § 216E.01, subd. 4.

in length and, therefore, the Applicants must obtain a route permit from the Commission prior to construction.⁵

4. The Commission's rules establish two tracks for the permitting of an HVTL. The "full permitting process" includes preparing an environmental impact statement (EIS) and holding a contested case hearing.^{5F6} The "alternative permitting process" is available to HVTLs that operate at a voltage between 100- and 200-kV. This process requires an environmental assessment (EA) instead of an EIS and a public hearing instead of a contested case hearing.⁷

5. Because Applicants' proposed transmission line would operate at a voltage between 100 and 200-kV, it is eligible for the alternative permitting process authorized by Minn. Stat. § 216E.04, subd. 2(3) and Minn. R. 7850.2800, subp. 1(C).⁸

6. On July 10, 2024, Great River Energy filed with the Commission a notice that the Applicants intended to apply for a Route Permit for the Project and intended to use the Alternative Permitting Process set forth in Minn. R. 7850.2800 - .3900.⁹

7. On August 19, 2024, the Applicants submitted the Application for the Project.¹⁰ Applicants also submitted the Notice of Filing of the Application to persons interested in the Project, the Commission's Energy Facilities General List, Local Officials, Tribes, and Property Owners in accordance with Minnesota Rule 7850.2100.¹¹

8. On August 23, 2024, the Commission filed a Notice of Comment Period regarding the completeness of the Application, requesting initial comments by September 6, 2024, reply comments by September 13, 2024, and supplemental comments by September 18, 2024. The notice requested comments on whether the Application was complete within the meaning of the Commission's rules; whether there were contested issues of fact with respect to the representations made in the Application; whether the Commission should appoint an advisory task force; whether any additional procedural requirements should be considered; and whether the Commission should direct the Executive Secretary to issue an authorization to the Applicants to initiate a State Historic Preservation Office (SHPO) Consultation.¹²

9. On September 4, 2024, EERA filed its Completeness Comments and Recommendations. EERA recommended that the Commission accept the Application as substantially complete, take no action on an advisory task force, and request a full Administrative Law Judge report with recommendations for the Project's public hearing.¹³

⁵ Ex. APP-2 at 1-1 (Application).

⁶ See Minn. R. 7850.1700-.2700 (full permitting procedures).

⁷ See Minn. R. 7850.2800-.3900 (alternative permitting procedures).

⁸ Minn. R. 7850.2800, subp. 1(C).

⁹ Ex. APP-1 (Notice of Intent to File Route Permit Application under the Alternative Permitting Process).

¹⁰ Exs. APP-2-APP-12 (Application and Appendices).

¹¹ Ex. APP-13 (Route Permit Application – Notice of Filing Application).

¹² Ex. PUC-1 (Notice of Comment Period on Application Completeness).

¹³ Ex. EERA-1 (Comments on Application Completeness).

10. On September 11, 2024, Applicants submitted reply comments concerning Application completeness.¹⁴

11. On September 20, 2024, Applicants submitted the Notice Filing for the Application.¹⁵

12. On September 26, 2024, the Commission issued proposed consent items.¹⁶

13. On October 1, 2024, the Commission issued an order finding the Application complete, declining to appoint an advisory task force, and requesting an Administrative Law Judge full report with recommendations for the Project's public hearing.¹⁷

14. On October 2, 2024, the Commission issued minutes from the October 1 consent calendar subcommittee meeting.¹⁸

15. On October 10, 2024, the Commission published Notice of Public Information and EA Scoping Meetings scheduling meetings for October 23, 2024 (remote-access) and October 28, 2024 (in-person), opening up a public comment period until November 12, 2024, and requesting responses to three questions regarding the Project: (1) What potential human and environmental impacts of the proposed Project should be studied 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?; and (3) Are there any unique characteristics of the proposed Project that should be considered in the EA?¹⁹

16. On November 12, 2024, Minnesota Department of Natural Resources (MDNR) filed comments regarding potential environmental impacts that should be considered in the EA for the Project.²⁰

17. On November 20, 2024, the Judge issued a Notice of and Order for Prehearing Conference, setting a prehearing conference for December 2, 2024.²¹

18. On November 25, 2024, EERA filed written public comments received on the scope of the EA.²² EERA also filed oral public comments received on the scope of the EA.²³

¹⁴ Ex. APP-14 (Reply Comments regarding Application Completeness).

¹⁵ Ex. APP-15 (Compliance Filing – Notice of Filing Route Permit Application).

¹⁶ Consent Items (Sept. 26, 2024) (eDocket No. [20249-210500-04](#)).

¹⁷ Ex. PUC-2 (Order Accepting Application as Complete).

¹⁸ Minutes – October 1, 2024 Consent (Oct. 2, 2024) (eDocket No. [202410-210653-03](#)).

¹⁹ Ex. PUC-3 (Notice of Public Information and EA Scoping Meeting).

²⁰ MDNR Comments (Nov. 12, 2024) (eDocket Nos. [202411-211858-01](#) and [202411-211858-02](#)).

²¹ Notice of and Order for Prehearing Conference (Nov. 20, 2024) (eDocket No. [202411-212190-01](#)).

²² Ex. EERA-4 (Written Comments on Scope of EA).

²³ Ex. EERA-3 (Oral Comments on Scope of EA).

19. On November 26, 2024, the Applicants filed a proposed procedural schedule which was prepared in coordination with EERA and Commission staff.²⁴

20. On November 27, 2024, the Commission filed the presentations prepared for the Public Information and Scoping Meeting.²⁵

21. On December 3, 2024, the Judge issued the First Prehearing Order establishing a schedule for the proceedings.²⁶

22. On December 4, 2024, Applicants filed reply comments in response to public comments received on the scope of the EA.²⁷

23. On December 12, 2024, EERA staff filed its EA Scoping Summary and Recommendations for the Project.²⁸

24. On December 17, 2024, Applicants filed comments in response to EERA's Scoping Summary and Recommendations.²⁹

25. On January 30, 2025, the Commission issued proposed consent items.³⁰

26. On January 31, 2025, the Commission issued minutes from the October 1 consent calendar subcommittee meeting.³¹

27. On February 4, 2025, the Commission issued an order requiring that the EA evaluate Applicants' Proposed Route, and the routing and alignment alternatives recommended by EERA.³²

28. Also on February 4, 2025, the Judge issued a Second Prehearing Order establishing an updated schedule for the proceedings.³³

29. On February 5, 2025, EERA filed the EA scoping decision for the Project.³⁴

30. Also on February 5, 2025, EERA filed a letter sent to newly affected landowners regarding the EA scoping decision.³⁵

²⁴ Ex. APP-16 (Proposed Procedural Schedule).

²⁵ Handout – Scoping Meeting Presentation (Nov. 27, 2024) (eDocket No. [202411-212494-01](#)).

²⁶ First Prehearing Order (Dec. 3, 2024) (eDocket No. [202412-212631-01](#)).

²⁷ Ex. APP-17 (Response to Scoping Comments).

²⁸ Ex. EERA-5 (Scoping Summary and Recommendation).

²⁹ Ex. APP-18 (Response to EERA Proposed Scope of EA).

³⁰ Consent Items (Jan. 30, 2025 (eDocket No. [20251-214676-01](#))).

³¹ Minutes – Jan. 30, 2025 Consent (Jan. 31, 2025) (eDocket No. [20251-214814-01](#)).

³² Ex. PUC-5 (Order-Approving Scoping Decision).

³³ Second Prehearing Order (Feb. 5, 2025) (eDocket No. [20252-214900-01](#)).

³⁴ Ex. EERA-6 (EA Scoping Decision).

³⁵ Ex. EERA-9 (Letter to Newly Affected Landowners).

31. On February 7, 2025, EERA filed a notice of EA scoping decision.³⁶
32. On February 20, 2025, EERA filed a notification of EA scoping decision in the EQB Monitor.³⁷
33. Also on February 20, 2025, EERA filed a public comment received outside of the comment period.³⁸
34. On March 19, 2025, the Commission filed a letter authorizing the Applicants to initiate consultation with SHPO pursuant to Minn. Stat. § 138.665.³⁹
35. On April 8, 2025, EERA filed the EA for the Project, with a Draft Route Permit attached thereto.⁴⁰
36. Also on April 8, 2025, EERA filed a notification of EA availability to agencies and Tribal Historic Preservation Officers.⁴¹
37. On April 15, 2025, EERA filed a notification of EA availability at public libraries.⁴²
38. On April 22, 2025, the Applicants filed the direct testimonies of Michael Swenson and Nick Goater.⁴³
39. On April 29, 2025, the Minnesota Pollution Control Agency (MPCA) filed comments on the EA.⁴⁴
40. On May 1, 2025, the Commission filed Notice of Public Hearings and Availability of Environmental Assessment providing for an in-person hearing on May 21, 2025, in Chaska, Minnesota and a remote hearing on May 22, 2025, via WebEx. The Commission also requested comments from the public on (1) whether the Commission should grant a route permit for the Project, and (2) if granted, what additional conditions or requirements, if any, should be included in the route permit. The Commission stated that it would accept written comments through June 2, 2025.⁴⁵
41. On May 5, 2025, the Commission filed a scoping meeting notice in the EQB.⁴⁶

³⁶ Ex. EERA-7 (Notice of EA Scoping Decision).

³⁷ Ex. EERA-8 (Notice of EA Scoping Decision in EQB Monitor).

³⁸ Ex. EERA-10 (Public Comment Outside of Comment Period).

³⁹ Ex. PUC-6 (Letter-Authorization to Initiate Consultation with SHPO).

⁴⁰ Ex. EERA-11 (EA).

⁴¹ Ex. EERA-12 (Notice of EA to Agencies and Tribal Historic Preservation Officers).

⁴² Ex. EERA-13 (Notification of EA Availability at Public Library).

⁴³ Ex. APP-19 (Direct Testimony of Michael Swenson and Schedule A); APP-20 (Direct Testimony of Nick Goater).

⁴⁴ MPCA Comments (Apr. 29, 2025) (eDocket No. [20254-218277-01](#)).

⁴⁵ Ex. PUC-7 (Notice of Public Hearings and Availability of EA).

⁴⁶ Ex. PUC-8 (EQB-Scoping Meeting Notice).

42. On May 7, 2025, public comment was filed from Brian McCann, representing the City of Victoria.⁴⁷

43. On May 13, 2025, the Commission filed a public hearing notice in the EQB.⁴⁸

44. Also on May 13, 2025, the Applicants filed comments and related attachments on the EA.⁴⁹

45. On May 16, 2025, Drew Pflaumer filed comments on behalf of Carver County Public Works.⁵⁰

46. On May 21, 2025, the Commission filed an affidavit of publication of the Notice of Public Hearings and Availability of EA.⁵¹

47. On May 21, 2025, Judge Middendorf presided over a public hearing at Outpost 212 in Chaska, Minnesota. Ten members of the public provided oral comments at this public hearing.⁵²

48. A remote public hearing was held via Webex on May 22, 2025. Three members of the public provided oral comments at this public hearing.⁵³ The written public comment period remained open through June 2, 2025. Two written comments were submitted by members of the public before the close of the comment period.

49. On May 21, 2025, the City of Carver provided written comment.⁵⁴

50. On May 22, 2025, the City of Carver provided additional written comment.⁵⁵

51. On May 22, 2025, the City of Victoria provided written comment.⁵⁶

52. On May 27, 2025, the Commission filed the presentations prepared for the public hearings.⁵⁷

53. On May 31, 2025, Tim and Patty Eiden provided written comment.⁵⁸

⁴⁷ Brian McCann Public Comment (May 7, 2025) (eDocket No. [20255-218669-01](#)).

⁴⁸ Ex. PUC-9 (EQB-Public Hearing Notice).

⁴⁹ Ex. APP-21 (Comments regarding EA, with Attachments 1-4).

⁵⁰ Drew Pflaumer, on behalf of Carver County Public Works Public Comment (May 16, 2025) (eDocket No. [20255-218997-01](#)).

⁵¹ Affidavit of Publication of Notice of Public Hearings and Availability of EA (May 21, 2025) (eDocket No. [20255-219160-01](#)).

⁵² See Chaska Public Hearing Transcript (Chaska 6:00 p.m. Tr.) (May 21, 2025).

⁵³ See WebEx 6:00 p.m. Public Hearing Transcript (WebEx 6:00 p.m. Tr.) (May 22, 2025).

⁵⁴ City of Carver Public Comment (May 21, 2025) (eDocket No. [20255-219148-01](#)).

⁵⁵ City of Carver Public Comment (May 22, 2025) (eDocket No. [20255-219194-02](#)).

⁵⁶ City of Victoria Public Comment (May 22, 2025) (eDocket No. [20255-219194-01](#)).

⁵⁷ Handout – Commission (May 27, 2024) (eDocket No. [20255-219254-01](#)).

⁵⁸ Tim and Patty Eiden Written Comment (May 31, 2025) (eDocket No. [20256-219581-01](#)).

54. On June 2, 2025, MDNR filed written comments.⁵⁹

55. Also on June 2, 2025, EERA, on behalf of the interagency Vegetation Management Planning Working Group, submitted comments on the Vegetation Management Plan proposed by Great River Energy.⁶⁰

56. Also on June 2, 2025, EERA filed post-hearing comments.⁶¹

57. Also on June 2, 2025, Cathy Brunkow on behalf of Pierson Lake, LLC filed written comments.⁶²

58. Also on June 2, 2025, Mayor Courtney Johnson provided written comment on behalf of the City of Carver.⁶³

59. The public comment period closed on June 2, 2025.⁶⁴

60. On June 9, 2025, the Applicants filed their post-hearing response to comments (Post-Hearing Comments). In the Post-Hearing Comments, the Applicants provided further responses to comments submitted during the public hearing comment period.⁶⁵ On the same day, the Applicants filed their proposed findings of fact, conclusions of law, and recommendations.

61. EERA filed its reply to Applicants' Post-Hearing Comments and its revised proposed findings of fact, conclusions of law, and recommendations on June 16, 2025.

III. DESCRIPTION OF THE PROJECT

62. The proposed Project consists of a new 4.3-mile 115-kV double-circuit HVTL in Laketown and Dahlgren Townships in Carver County, Minnesota. The Project also includes construction of a new MVEC substation (the Laketown Substation).⁶⁶

63. The Project will connect Great River Energy's existing 115-kV MV-VTT transmission line to the proposed Laketown Substation. This Project will enable Great River Energy to provide 115-kV service to the Laketown Substation to meet long-term electricity planning needs. The transmission line will be constructed and owned by Great River Energy; the Laketown Substation will be constructed and owned by MVEC.⁶⁷

⁵⁹ MDNR Comment (June 2, 2025) (eDocket Nos. [20256-219508-01](#); [20256-219508-02](#)).

⁶⁰ Minnesota Interagency Vegetation Management Planning Working Group Public Comment (June 2, 2025) (eDocket No. [20256-219479-01](#)).

⁶¹ EERA Post-Hearing Comments (June 2, 2025) (eDocket No. [20256-219470-01](#)).

⁶² Pierson Lake, LLC Written Comment (June 2, 2025) (eDocket No. [20256-219463-01](#)).

⁶³ Mayor Courtney Johnson Written Comment (June 2, 2025) (eDocket No. 20256-219581-01).

⁶⁴ Ex. PUC-7 (Notice of Public Hearings and Availability of EA).

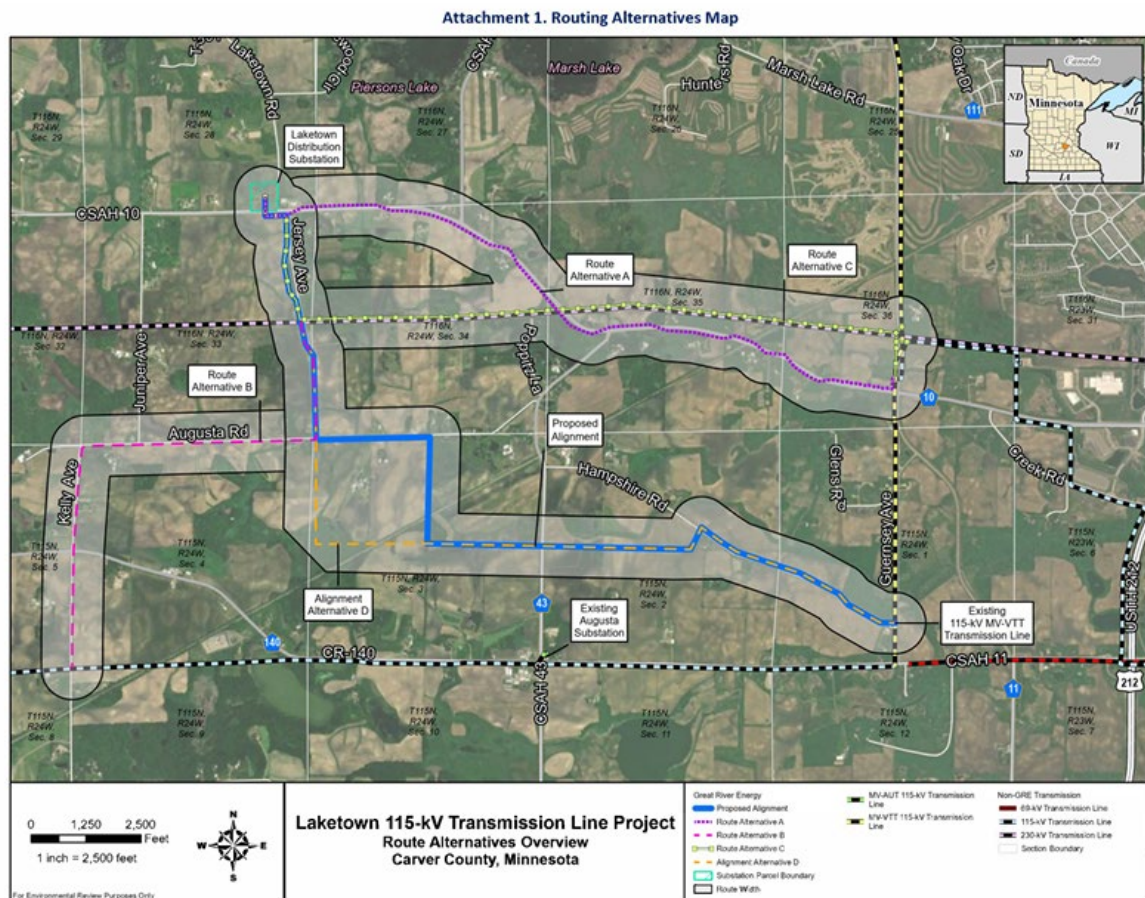
⁶⁵ Applicants' Post-Hearing Comments (June 9, 2025) (eDocket No. _____).

⁶⁶ Ex. APP-2 at 1-2 (Application).

⁶⁷ Ex. APP-2 at 1-1 (Application).

64. Laketown Substation is proposed to be built on approximately 1.5 acres of an approximately 8.9-acre property at the corner of CSAH 10 and Laketown Road. The land is owned by MVEC.⁶⁸

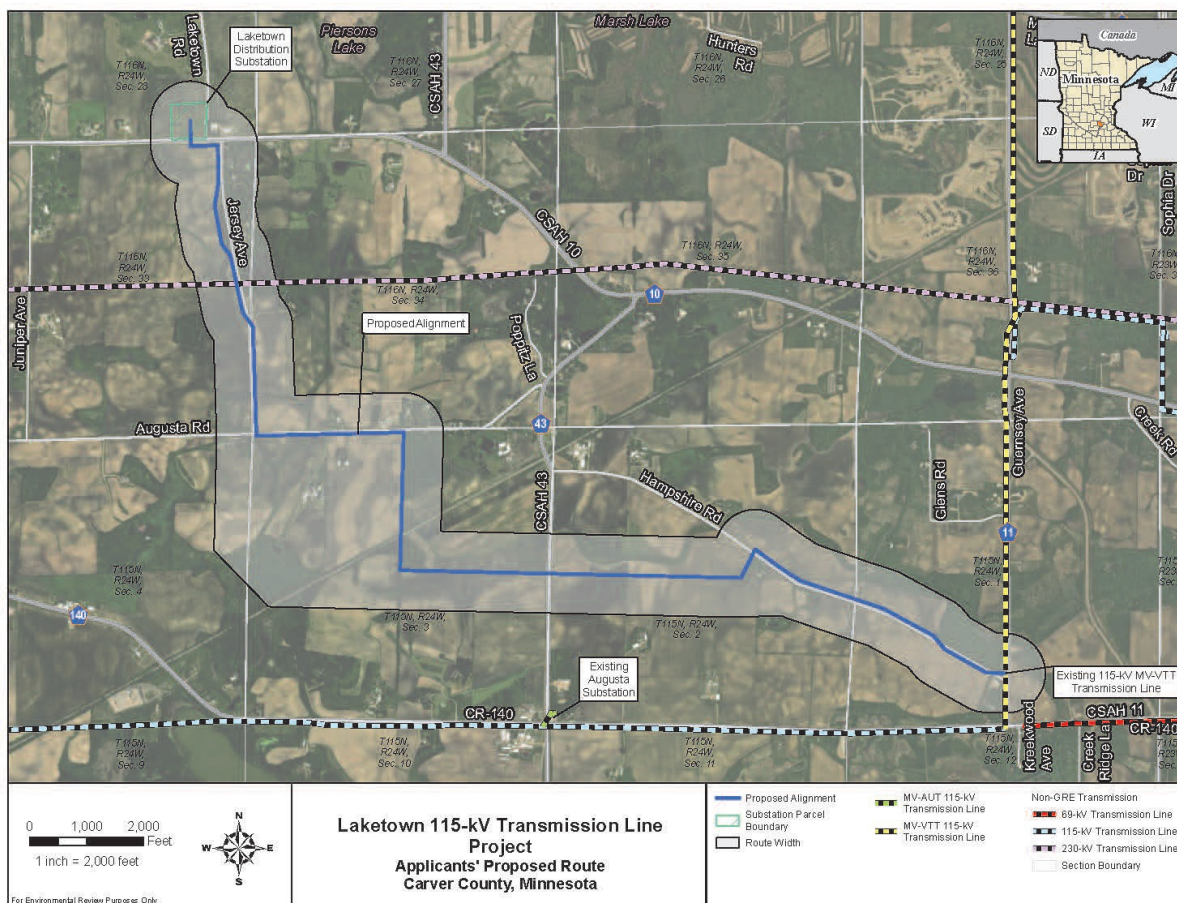
65. Four routes and one alignment alternative have been studied in these proceedings. The Applicants' Proposed Route; Route Alternatives A, B, and C; and, Alignment Alternative D. The following provides an overview:



66. The Applicants' Proposed Route is the route requested in the permit application. It begins at the Laketown Substation and connects to the grid at a GRE-owned 115 kV transmission line along Guernsey Avenue. The Applicants' Proposed Route begins at the Laketown Substation. It then crosses County Highway 10, runs slightly east, and then continues south along Jersey Avenue, crossing from west to east side of the road more than halfway down the length of the road. It then turns east at Augusta Road, on the opposite side of the road from local MVEC distribution lines. The proposed route then travels south through private property, before turning east along private property as well. Just before Hampshire Road, the proposed route then cuts back northeast, perpendicular to Hampshire Road, then turns southeast and runs along

⁶⁸ Ex. APP-2 at 1-3 (Application).

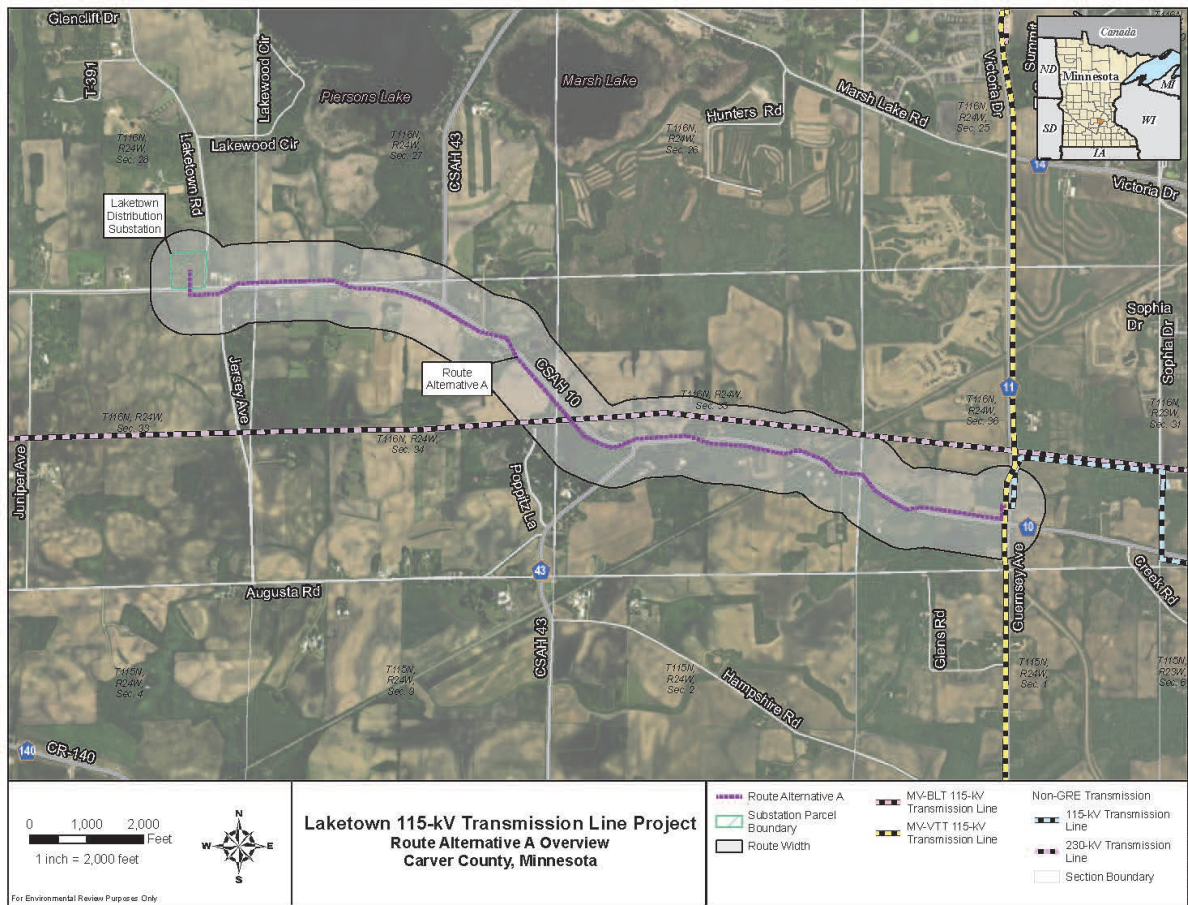
Hampshire Road. The proposed route follows Hampshire Road until it reaches the connection point along a GRE-owned 115 kV transmission line on the west side of Guernsey Avenue. The route width for this proposed route ranges from 1,400 feet to 4,500 feet wide depending on the location.⁶⁹ A map depicts the Proposed Route:



67. Route Alternative A was proposed by the public through the scoping process. The route begins at the Laketown Substation and travels along CSAH 10, connecting to the grid at a GRE-owned 115 kV transmission line along Guernsey Avenue. Traveling north to south, Route Alternative A begins at the Laketown Substation then follows the applicant's proposed route across CSAH 10 and then east. The proposed route then continues east and south along CSAH 10, crossing the road several times at various locations. It reaches a connection point along a GRE-owned 115 kV transmission line on the west side of Guernsey Avenue. The route width for this route alternative is approximately 1,400 feet wide.⁷⁰ Route Alternative A is depicted on the following map:

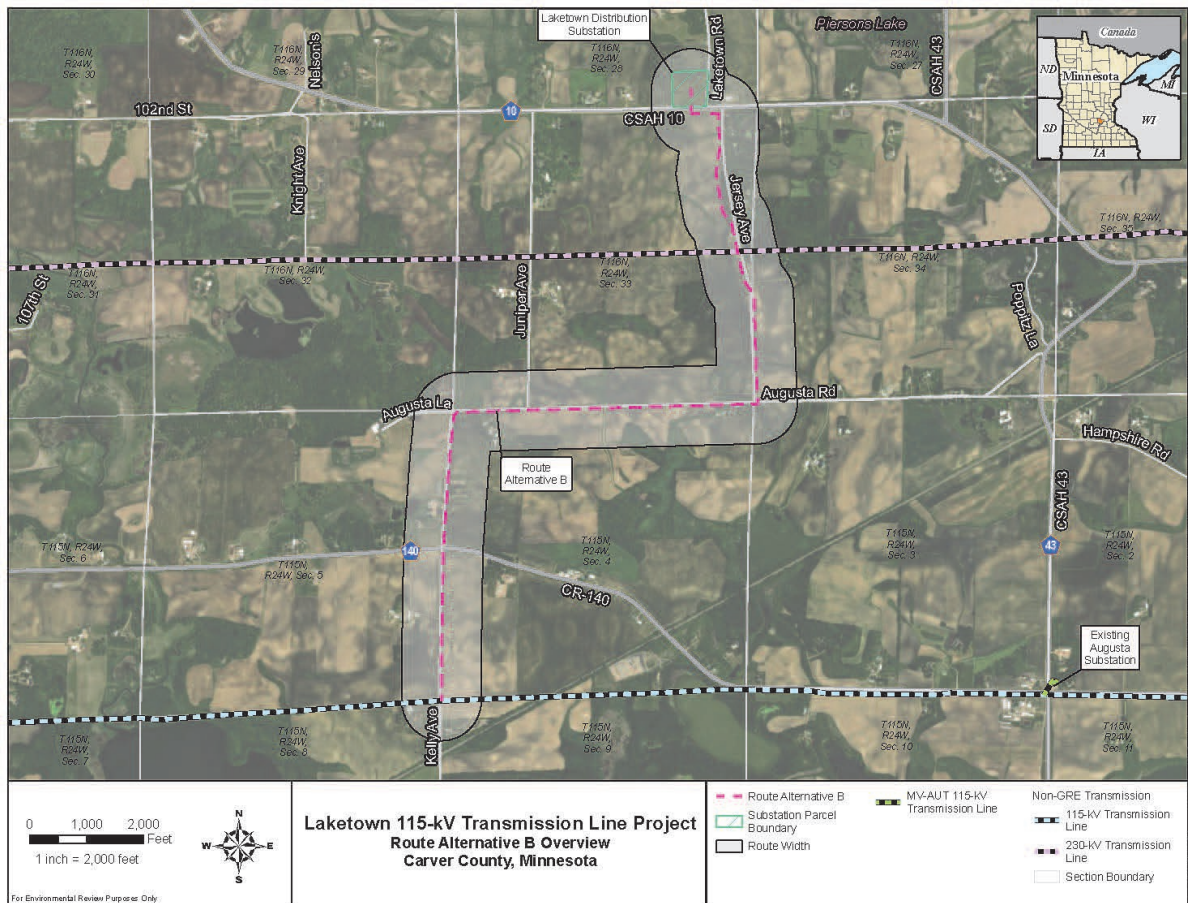
⁶⁹ Ex. APP-2 at 3-1 (Application); Ex. EERA-11 at 13.

⁷⁰ Ex. EERA-11 at 13, Appendix D.



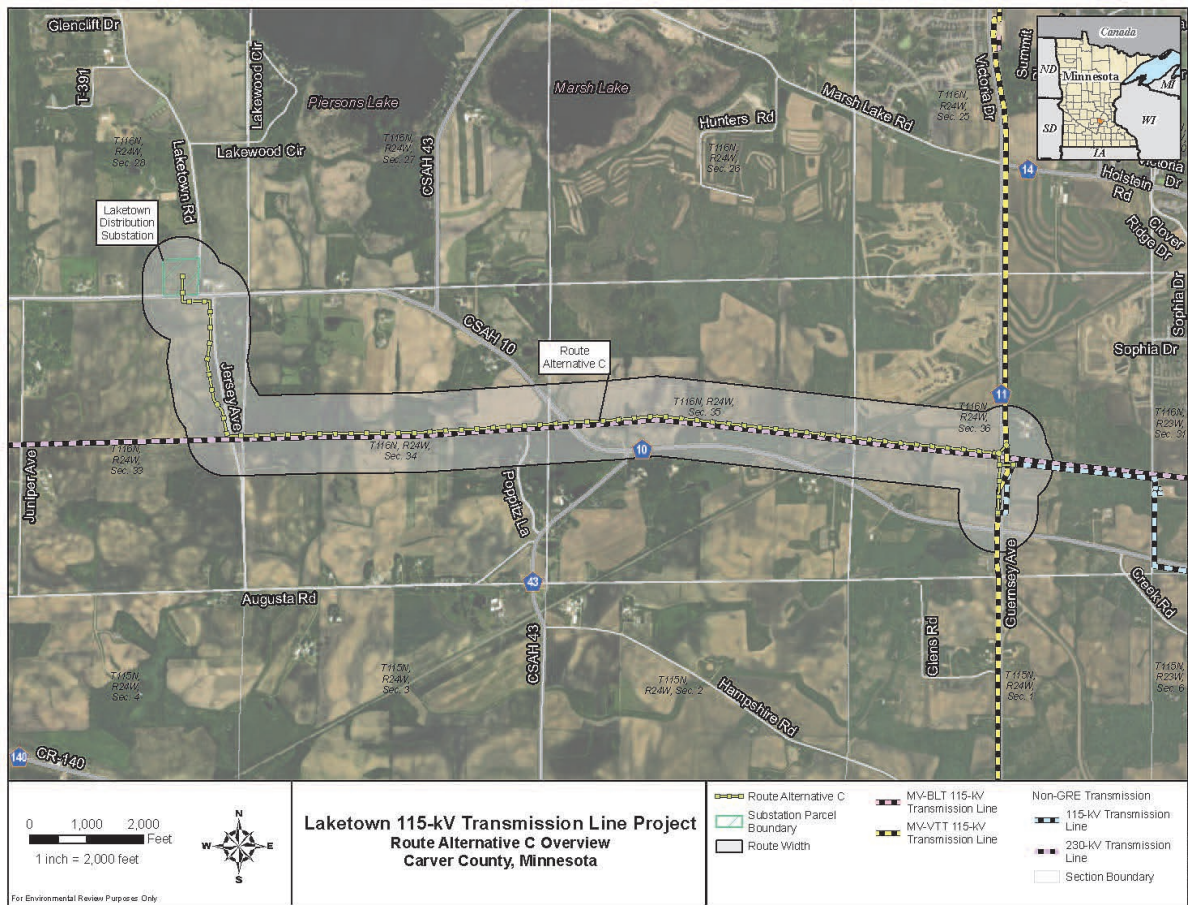
68. Route Alternative B was also proposed by the public through the scoping process. This route alternative begins at the Laketown Substation and connects to an Xcel-owned 115 kV transmission line along County Road 140. Traveling north to south, Route Alternative B begins at the Laketown Substation then follows the Applicant's Proposed Route until it reaches Augusta Avenue. Rather than turning east, this route alternative would turn west until it reaches Kelly Avenue. It will then travel south until it connects to the grid via an Xcel-owned 115 kV transmission line running east to west along County Road 140. The route width for this route alternative is approximately 1,400 feet wide. The following map illustrates Route Alternative B:⁷¹

⁷¹ Ex. EERA-11 at 13-14, see Appendix D.



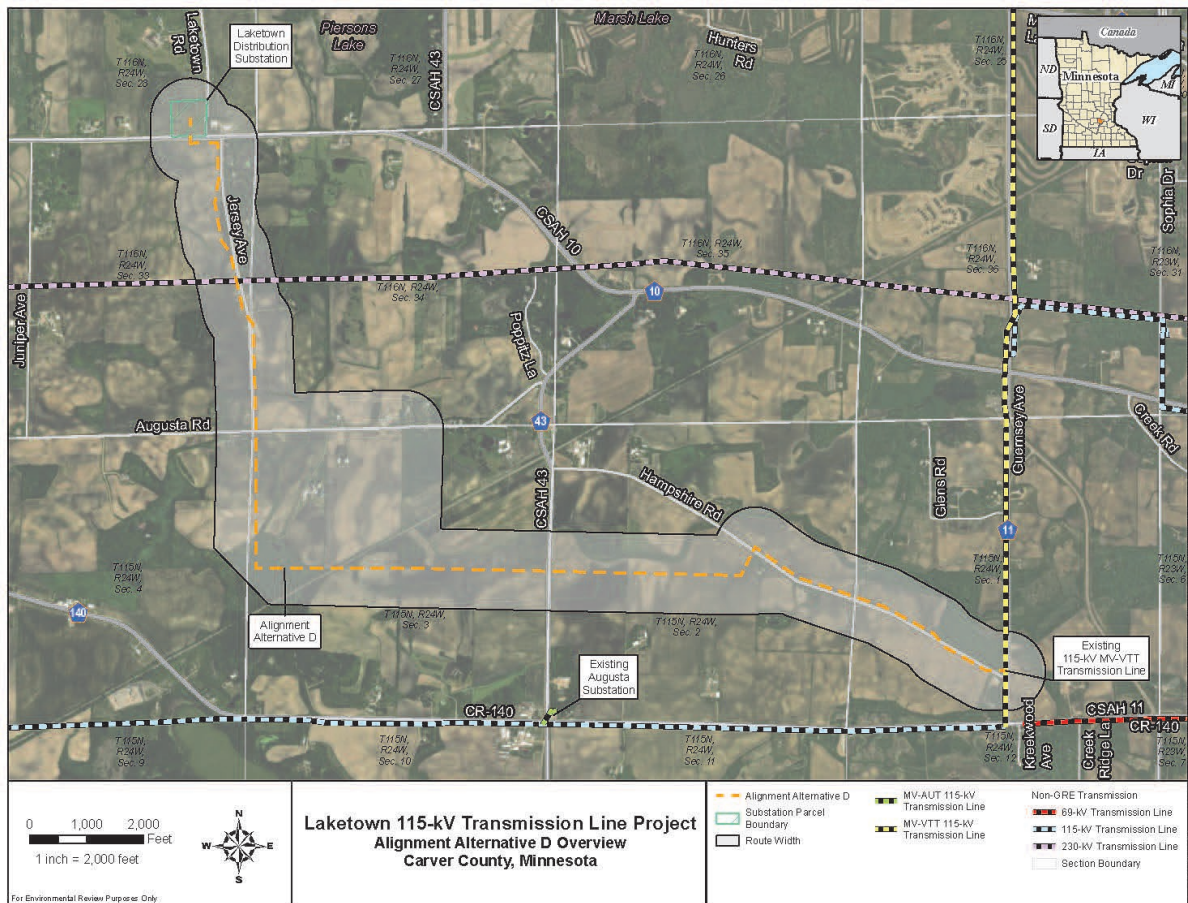
69. Route Alternative C was proposed by the public through the scoping process. The route begins at the Laketown Substation and travels south then east, connecting at a GRE-owned 115 kV transmission line along Guernsey Avenue. Traveling north to south, Route Alternative C begins at the Laketown Substation then follows the Applicant's Proposed Route until it reaches an Xcel-owned 230 kV transmission line that crosses Jersey Avenue. It will then collocate with the 230 kV transmission line, traveling east until it connects with the GRE-owned 115 kV transmission line along Guernsey Avenue. This route alternative would require a switch modification and a connection to the transmission line on the eastern side of Guernsey Avenue. The route width for this route alternative is approximately 1,400 feet wide. The map depicting an overview of Route Alternative C follows:⁷²

⁷² Ex. EERA-11 at 14, see Appendix D.



70. Alignment Alternative D was proposed by the public through the scoping process. The route follows the Applicants' Proposed Route, differing only at a portion south of August Road and west of CSAH 43. Alignment Alternative D separates from the Applicants' Proposed Route at Augusta Avenue. Rather than traveling east along Augusta Road, it would bypass the road and travel south into private property, before turning east and meeting again with the original Applicant's Proposed Route. This alignment alternative remains in the original route width of the Applicants' Propose Route width. Below is the overview of this alternative.⁷³

⁷³ Ex. EERA-11 at 14, see Appendix D.



IV. NEED OVERVIEW

71. The proposed transmission line will provide electric energy to the new Laketown Substation. The Laketown Substation will provide service to end users within MVEC's service territory. The Project is needed to provide electrical service to current and future end-use customers in the rapidly growing area near the Project. The ability to operate at the 115-kV voltage will ensure there is sufficient electrical capability to serve increased electrical demand in the future.⁷⁴

72. Because of the voltage (115-kV) and length (less than ten miles) of the Project, a Certificate of Need is not required for the Project.⁷⁵

⁷⁴ Ex. APP-2 at 1-4 (Application).

⁷⁵ Minn. Stat. § 216B.2421; Minn. Stat. § 216B.243.

V. ROUTES EVALUATED

A. Route Evaluated by Applicants.

73. In developing the Proposed Route, prior to filing the Application, Great River Energy conducted public outreach consisting of landowner coordination, open houses, and agency coordination.⁷⁶ This included presentation of three potential routes to stakeholders, including the Proposed Route (presented as “Option 1 – Preferred”), Route Alternative A (presented as “Option 3”), and Route Alternative C (presented as “Option 2”), all of which were analyzed in the EA.⁷⁷ Although clearly an important stakeholder, the City of Carver was not afforded this opportunity to provide input into the Applicants’ determination of their Proposed Route.

74. Great River Energy contends the Proposed Route better avoids and minimizes potential human and environmental impacts, consistent with the Commission’s routing criteria.

1. Applicants’ Proposed Route.

75. The Applicants’ Proposed Route begins at the Laketown Substation. It then crosses CSAH 10, runs slightly east, and then continues south along Jersey Avenue, crossing from west to east side of the road more than halfway down the length of the road. It then turns east at Augusta Road, on the opposite side of the road from local MVEC distribution lines. The Proposed Route then travels south through private property, before turning east along private property as well. Just before Hampshire Road, the Proposed Route then cuts back northeast, perpendicular to Hampshire Road, then turns southeast and runs along Hampshire Road. The Proposed Route follows Hampshire Road until it reaches the connection point along a Great River Energy-owned 115-kV transmission line on the west side of Guernsey Avenue.⁷⁸

2. Other Routes Considered and Rejected by Applicants.

76. Review under the alternative permitting process does not require the Applicants to propose alternative routes in the Application. However, if the Applicants have evaluated and rejected alternative routes, they must include these and the reasons for rejecting them in the route permit under Minn. Stat. § 216E.04, subd. 3, and Minn. R. 7850.3100.⁷⁹

77. Great River Energy considered and rejected two route alternatives that originate at the MV-VTT 115-kV transmission line along Victoria Drive/Guernsey Avenue

⁷⁶ Ex. APP-19 at 4-5 (Direct Testimony of M. Swenson); Ex. APP-21 at 4 (Comments regarding EA).

⁷⁷ Ex. APP-2 at 4-3 (Application).

⁷⁸ Ex. EERA-11 at II (EA).

⁷⁹ See Minn. Stat. § 216E.04, subd. 3; Minn. R. 7850.3100.

and connect to the Laketown Substation: the CSAH 10 Alternative (Route Alternative A) and the Xcel Energy Powerline Alternative.⁸⁰

78. Route Alternative A would run from Great River Energy's MV-VTT line on the west side of Guernsey Avenue near structure MV-VTT-34, this route alternative would parallel Guernsey Avenue south for 300 feet to CSAH 10, then follow CSAH 10 for 3.0 miles to the northwest, making multiple crossings to avoid homes, and then crossing CSAH 10 to the Laketown Substation site.⁸¹

79. Route Alternative A was initially designed to maximize collocation with an existing right-of way, Great River Energy rejected it in the Application. Great River Energy posits it would need to make 12 crossovers of CSAH 10 because of the density of structures that are close to the highway right-of-way. In addition, Carver County has imminent plans for major reconstruction/realignment of CSAH 10 planned within five to ten years, which would be after the anticipated installation of the Project. This would require Great River Energy to conduct additional planning with Carver County to minimize disruptions to the highway project and the operating transmission line when the roadway is expanded, and then moved in some locations.⁸²

80. The Xcel Energy Powerline Alternative (Route Alternative C) would run from Great River Energy's MV-VTT line on the west side of Guernsey Avenue near structure MV-VTT-34, this route alternative would follow Guernsey Avenue north for 0.2 mile until meeting with the existing Xcel Energy 230-kV transmission line. The Route Alternative would then be collocated with the existing Xcel Energy 230-kV transmission line for 2.6 miles to Jersey Avenue. The Route Alternative would then follow Jersey Avenue for 0.5 mile north to CSAH 10 and then cross CSAH 10 to the Laketown Substation site. This Route Alternative would also involve modifications to a southerly switch near CSAH 10 and alternate connection points to MV-VTT on the east side of Guernsey Avenue near structure MV-VTT-30.⁸³

81. The City of Victoria notified Great River Energy that the Xcel Energy Powerline Alternative is located within land that, at the time, would eventually become part of the City of Victoria through an annexation agreement with Laketown Township, and that the City would like to develop this property for commercial and industrial use in the near future; during the pendency of this proceeding, annexation occurred, and this alternative would now cross the City of Victoria. The City of Victoria stated that properties crossed by the Xcel Energy Powerline Alternative are "within the future commercial and flex-employment growth areas for the city. These properties have been highly anticipated for the last few decades to become the commercial hub for the city. An additional power line and easement adjacent to the existing Xcel Energy power line and easement would severely prohibit development of this highly anticipated growth area."⁸⁴

⁸⁰ Ex. APP-2 at 4-3 (Application).

⁸¹ Ex. APP-2 at 4-3 (Application).

⁸² Ex. APP-2 at 4-8 – 4-9 (Application).

⁸³ Ex. APP-2 at 4-3 (Application).

⁸⁴ Ex. APP-2 at 4-9 (Application).

82. Great River Energy selected the Proposed Route for the Application, contending this route compared favorably when considering human and environmental impacts, as it avoided areas prioritized by Carver County and the City of Victoria for improvements and development; is collocated with existing right-of-way or within agricultural areas; and minimized wetland impacts, including forested wetlands.⁸⁵

83. The significant human and environmental impacts this route avoids for the City of Victoria would be imposed instead on the City of Carver if this route were selected.

B. Routes Analyzed in the Environmental Assessment.

84. Route Alternative A was first identified by Great River Energy during Project development, prior to submitting its Application, and was included in early public outreach regarding the Project.⁸⁶ The route begins at the Laketown Substation and travels along CSAH 10, connecting to the grid at a Great River Energy-owned 115-kV transmission line along Guernsey Avenue. Traveling north to south, Route Alternative A begins at the Laketown Substation then follows the Applicants' Proposed Route across CSAH 10 and then east. The Proposed Route then continues east and south along CSAH 10, crossing the road several times at various locations. It reaches a connection point along a Great River Energy-owned 115-kV transmission line on the west side of Guernsey Avenue. The route width for this route alternative is approximately 1,400 feet wide.⁸⁷ Route Alternative A crosses a recently annexed portion of the City of Victoria.⁸⁸

85. Route Alternative B was identified by the public during the public comment period. It begins at the Laketown Substation and connects to an Xcel-owned 115-kV transmission line along County Road 140. Traveling north to south, Route Alternative B begins at the Laketown Substation then follows the Applicants' Proposed Route until it reaches Augusta Avenue. Rather than turning east, this route alternative would turn west until it reaches Kelly Avenue. It would then travel south until it connects to the grid via an Xcel-owned 115-kV transmission line running east to west along County Road 140. The route width for this route alternative is approximately 1,400 feet wide.⁸⁹

86. Route Alternative C was first identified by Great River Energy during project development, prior to submitting its Application, and was included in early public outreach regarding the Project.⁹⁰ The route begins at the Laketown Substation and travels south then east, connecting at a Great River Energy-owned 115-kV transmission line along Guernsey Avenue. Traveling north to south, Route Alternative C begins at the Laketown Substation then follows the Applicants' Proposed Route until it reaches an Xcel Energy-owned 230-kV transmission line that crosses Jersey Avenue. It would then collocate with the 230-kV transmission line, traveling east until it connects with the Great River Energy-owned 115-kV transmission line along Guernsey Avenue. This route

⁸⁵ Ex. APP-2 at 4-3 (Application).

⁸⁶ Ex. APP-2 at 4-3 (Application); Ex. APP-21 at 3 (Comments regarding EA).

⁸⁷ Ex. EERA-11 at II (EA).

⁸⁸ Ex. APP-21 at 6-7 (Comments regarding EA).

⁸⁹ Ex. EERA-11 at II (EA).

⁹⁰ Ex. APP-2 at 4-w (Application); Ex. APP-21 at 3 (Comments regarding EA).

alternative would require a switch modification and a connection to the transmission line on the eastern side of Guernsey Avenue. The route width for this route alternative is approximately 1,400 feet wide.⁹¹ Route Alternative C crosses a recently annexed portion of the City of Victoria.⁹²

87. Alignment Alternative D was proposed by the public through the scoping process. The route follows the Applicants' Proposed Route, differing only at a portion south of Augusta Road and west of CSAH 43. Alignment Alternative D separates from the Applicants' Proposed Route at Augusta Road. Rather than traveling east along Augusta Road, it would bypass the road and travel south into private property, before turning east and meeting again with the original Applicants' Proposed Route. This alignment alternative remains in the original route width of the Applicants' Proposed Route width.⁹³

VI. TRANSMISSION LINE STRUCTURE TYPES AND SPANS

88. If the Project is approved, Great River Energy will construct it primarily with direct-embedded steel monopoles, 70 to 95 feet above ground and placed 300 to 450 feet apart. Direct-embed steel structures or steel structures on concrete foundations will be required at highway crossings and specialty structures may be required in some locations (e.g., to cross under an existing line, for angle locations, or in areas where soil conditions are poor, and guying is not practical). The average diameter of the direct-embedded steel structures at ground level would be approximately 30 inches.⁹⁴

89. Steel structures on concrete foundations may be needed for angled structures; the size of these structures is dependent on the tension on the line, and/or the angle of deflection the structure location causes on the Transmission Line. Specific sizing of these structures will be determined after a route permit is issued and detailed engineering design is initiated.⁹⁵

90. Multi-pole (e.g., 3-pole deadend) and/or H-frame structures are designed in a horizontal configuration, which maintains the Transmission Line conductors parallel to the ground. Horizontal configuration is sometimes desirable where the proposed Transmission Line crosses under other existing high voltage transmission lines. The horizontal configuration allows the 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. In some cases where overhead clearances require the use of H-frame structures, it may be necessary to also bury the optical ground shield/communication wire. In such a situation, the optical ground wire would be directionally bored underground between the two structures adjacent to the

⁹¹ Ex. EERA-11 at II (EA).

⁹² Ex. APP-21 at 6-7 (Comments regarding EA).

⁹³ Ex. EERA-11 at II (EA).

⁹⁴ Ex. APP-2 at 3-4 (Application).

⁹⁵ Ex. APP-2 at 3-4 (Application).

H-frame structure. Great River Energy does not currently anticipate the Proposed Route will require H-frame or 3-pole structures.⁹⁶

91. NESC sets minimum clearances of the conductors from structures adjacent to or within the right-of-way. NESC clearance requirements are summarized in Table 3.1.5-1 of the Application. For a 115-kV transmission line like the Project, the NESC minimum clearance under a 48 mile per hour (mph) wind is 8.6 feet. When there is no wind, the conductors must have a clearance of 9.1 to 11.6 feet from various structures as listed in Table 3.1.5-1. In addition, Great River Energy typically requires the blowout to remain within the right-of-way under a more extreme wind condition of 94 mph. The amount of blowout is dependent on a number of factors including the span length and conductor type. On a typical 115-kV transmission line with a 300-foot span, blowout is approximately five feet with 48 mph winds and approximately eight feet with 94 mph winds. The final line design evaluates blowout based on actual span distances and the type of conductor being used.⁹⁷

92. A deadend structure is used to change direction and/or wire tension on a transmission line. Deadend structures are also used as a “storm structure” 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. Deadend structures can use wood, wood laminate, direct steel embedded, or steel on concrete foundation structures and can have a larger cross section than the typical structures. The location of deadend structures will be determined after a route permit is issued and detailed engineering design is initiated.⁹⁸

93. The Laketown Substation fence line footprint will be approximately 1.5 acres. Distribution level components within the fence line will include a transformer, switch gear, and bus work. The transmission level equipment will include a 24-by 24-foot electrical equipment enclosure, bus work, circuit breaker, high side structures, and switches on approximately one third of an acre in a fenced in, secured, rocked pad. A stormwater treatment pond will also be constructed on the Laketown Substation property. All the work at the Laketown Substation will be completed on the 8.9-acre existing parcel that MVEC owns.⁹⁹

VII. TRANSMISSION LINE CONDUCTORS

94. The double circuit structures will have six single-conductor phase wires (three conductors per circuit) and one shield wire. It is anticipated that the phase wires will be 795 thousand circular mil aluminum-clad steel supported (795 ACSS) or a conductor with similar capacity.¹⁰⁰

⁹⁶ Ex. APP-2 at 3-4 – 3-5 (Application).

⁹⁷ Ex. APP-2 at 3-5 (Application).

⁹⁸ Ex. APP-2 at 3-5 (Application).

⁹⁹ Ex. APP-2 at 3-6 – 3-7 (Application).

¹⁰⁰ Ex. APP-2 at 3-6 (Application).

95. The shield wire will be 0.528 optical ground wire.¹⁰¹

VIII. TRANSMISSION LINE ROUTE WIDTHS

96. The route widths will generally be 1,400 feet in most locations. Great River Energy also requests varied route widths for specific portions of the route to account for existing infrastructure, mitigate potential engineering challenges, and/or to facilitate any necessary realignments to accommodate agency and/or landowner requests. The requested route widths include:

- Approximately 1,900 feet wide where the Proposed Route crosses Hampshire Road;
- Approximately 4,500 feet wide in the area south of Augusta Road and west of County Road 43; and
- Approximately 1,700 feet wide to encompass the 8.9-acre Laketown Substation parcel. Great River Energy will require a new 100-foot-wide right-of-way for construction and maintenance of the Transmission Line.¹⁰²

IX. TRANSMISSION LINE RIGHT-OF-WAY

97. Great River Energy will require a new 100-foot-wide right-of-way for construction and maintenance of the Transmission Line. Great River Energy representatives will work directly with individual landowners to acquire the necessary easements and other land rights for the construction, operation, and maintenance of the Project once the final route and alignment are determined. MVEC owns the land on which the Laketown Substation will be located.¹⁰³

X. PROJECT SCHEDULE

98. The Applicants anticipate starting construction on the Laketown Substation in spring 2027 and on the Transmission Line in fall 2027 and energizing the Project in the summer of 2028.¹⁰⁴

XI. PROJECT COSTS

99. Applicants estimate that the Project, if constructed on the Proposed Route, will cost approximately \$17,965,000. Of that cost, the Transmission Line will cost approximately \$11,043,500; the Great River Energy transmission substation

¹⁰¹ Ex. APP-2 at 3-6 (Application).

¹⁰² Ex. APP-2 at 3-2 (Application).

¹⁰³ Ex. APP-2 at 3-2 (Application).

¹⁰⁴ Ex. APP-2 at 3-8 (Application); Ex. APP-19 at 8 (Direct Testimony of M. Swenson).

infrastructure will cost approximately \$2,861,500; and the Laketown Substation will cost approximately \$4,060,000.¹⁰⁵

100. Project costs do not vary significantly for any of the route alternatives.

101. All capital costs for the Transmission Line infrastructure, including Great River Energy's equipment in MVEC's substation, will be borne by Great River Energy. All capital costs for the Laketown Substation facilities will be borne by MVEC.¹⁰⁶

XII. PERMITTEE

102. The Permittees for the Project are Great River Energy and MVEC.

XIII. PUBLIC AND LOCAL GOVERNMENT PARTICIPATION

103. Preapplication coordination with all local government units located where a route "may be located" is mandatory.¹⁰⁷ Minn. Stat. § 216E.03, subd. 3a, requires prior notice of at least 90 days.

104. Upon determining that an application is complete, the Commission must provide notice to any town or municipality in which any part of a route is proposed.¹⁰⁸

105. Prior to submission of the Application, Great River Energy initiated landowner outreach by providing information on the Project via letters mailed to potentially impacted landowners, interested parties, and federal, state, and local governmental officials; publishing notices in area newspapers; and holding an open house.¹⁰⁹

106. The Applicants held two open house sessions at the Chaska Event Center in Chaska, Minnesota, on January 23, 2024. Great River Energy and MVEC staff were available to provide information to members of the public and answer questions concerning the Project. Large posters showing the Project and route options, pictures of what the pole structures would look like, and a conceptual design of the Laketown Substation were also available for review.¹¹⁰

107. The Applicants' Project Introduction Notification Letter, dated April 19, 2024, was mailed to stakeholders that included, among others, Carver County and the City of Victoria. The City of Carver was not afforded this early notice, despite having a recorded orderly annexation agreement with Dahlgren Township.¹¹¹

¹⁰⁵ Ex. APP-2 at 3-8 (Application).

¹⁰⁶ Ex. APP-2 at 3-8 (Application).

¹⁰⁷ Minn. Stat. § 216B.03, .04.

¹⁰⁸ *Id.*

¹⁰⁹ Ex. APP-2 at 3-7 (Application).

¹¹⁰ Ex. APP-2 at 1-4 (Application).

¹¹¹ Ex. App-8 at Table E-1. *See also* City of Carver Public Comment (May 22, 2025) (eDocket No. 20255-219194-02).

108. Great River Energy developed and analyzed a route that would largely follow CSAH 10; this route is Route Alternative A studied in the EA. Great River Energy rejected Route Alternative A during early Project planning, and as outlined in the Application, due to long-standing plans for the reconstruction/realignment and expansion of CSAH 10, as detailed by Carver County, as well as the proximity of existing residences along CSAH 10. Great River Energy coordinated with Carver County officials, where Great River Energy provided detailed Project information and Carver County officials communicated plans for CSAH 10. The Applicants gave significant weight to the County's interests in route development. Carver County stated that it did not recommend routing along CSAH 10 because it would interfere with the County's published plans to realign and widen that road in the next 5-10 years.¹¹²

109. Likewise, during early coordination with Laketown Township, township officials notified Great River Energy of an annexation agreement with the City of Victoria. Further correspondence with the City of Victoria informed Great River Energy that the Project, if constructed along Route Alternative C, would "severely prohibit development" of an area that has been "highly anticipated for the last few decades to become the commercial hub for the city."¹¹³

110. Public Information Meetings and EA Scoping Meetings were held on October 23 and October 28, 2024.¹¹⁴ Written comments from members of the public were received until the written comment period on EA scoping closed on November 12, 2024.¹¹⁵

111. The City of Carver was not notified of, aware of, or engaged in the process until a Dahlgren Township resident alerted the City to the Project on October 29, 2024, after the EA scoping meetings were held.¹¹⁶

112. The City of Carver has identified a portion of the Proposed Route that crosses an area subject to an orderly annexation agreement with the City, with subsequent development.¹¹⁷ According to an August 2018 map provided by the City of Carver, the Project would cross 1.7 miles of land that is presently outside the city but within the City of Carver's "ultimate growth boundary," 1.5 miles of which is identified with the future land use type of "low density residential" and 0.2 mile of which is along Hampshire Road, identified with the future land use type of "commercial/industrial."¹¹⁸ This land has been part of the City of Carver's comprehensive planning for future development for years. The Applicants failed to offer any solution to their oversight that does not interfere with the City of Carver's development plans.¹¹⁹

¹¹² Ex. APP-21 at 4 (Comments regarding EA).

¹¹³ Ex. APP-2 at 4-9 (Application); Ex. APP-21 at 7 (Comments regarding EA).

¹¹⁴ Ex. EERA-3 (Oral Comments on Scope of EA).

¹¹⁵ Ex. EERA-4 (Written Comments on Scope of EA).

¹¹⁶ City of Carver Public Comment (May 22, 2025) (eDocket No. 20255-219194-02).

¹¹⁷ City of Carver Public Comment (May 22, 2025) (eDocket No. 20255-219194-02).

¹¹⁸ Ex. APP-17 at 3-6 (Response to Scoping Comments).

¹¹⁹ Ex. APP-21 at 12-13 (Comments regarding EA).

113. The City of Victoria noted in written comments dated May 22, 2025, that many properties within Route Alternative C are in the City's future commercial and flex-employment growth areas for the city, and that development of these properties is in its current comprehensive plan and has been highly anticipated for the last few decades. Moreover, the area impacted by Route Alternative C is planned and expected to become the commercial hub for Victoria with the City's first commercial project currently underway.¹²⁰

114. Carver County noted in written comments dated May 13, 2025, that the County supports the Proposed Route, and does not support the adoption of Route Alternative A due to the potential to complicate the future realignment and reconstruction of CSAH 10.¹²¹

115. Great River Energy has continued coordination with Carver County throughout the route permit process and met with Carver County Public Works on June 5, 2025. At the meeting, Carver County stated that they anticipate constructing the CSAH 10 project in 2029, although no specific plans have been finalized.¹²² T Because Carver County's CSAH 10 project remains in the planning stage, members of the public and the City of Carver argue that the Applicants could coordinate with Carver County to address the County's concerns while maximizing the co-location advantages of Route Alternative A.¹²³

116. Various members of the public provided comments at the in-person portion of the public hearing on May 21, 2025, in Chaska, Minnesota. Citizens made comments and asked questions concerning the EA, route alignment, and land acquisition process for the Project. Representatives from the Applicant, the Commission, and EERA provided responses.¹²⁴ Three members of the public spoke at the virtual public hearing on May 22, 2025. Those individuals made comments regarding the Proposed Route and route alternatives.¹²⁵ The majority of public commenters favor a route that maximizes co-location along CSAH 10.¹²⁶

XIV. FACTORS FOR A ROUTE PERMIT

117. The PPSA, Minn. Stat. ch. 216E, 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

¹²⁰ City of Victoria Public Comment (May 22, 2025) (eDocket No. [20255-219194-01](#)).

¹²¹ Drew Pflaumer, on behalf of Carver County Public Works Public Comment (May 16, 2025) (eDocket No. [20255-218997-01](#)).

¹²² Applicants' Post-Hearing Comments (June 9, 2025) (eDocket No. _____).

¹²³ See Chaska Public Hearing Transcript (Chaska 6:00 p.m. Tr.) (May 21, 2025). The record is unclear on the planning and efforts that would be required to realize this option. Should the Commission deny the Application, this option should be further studied.

¹²⁴ See Chaska 6:00 p.m. Tr.

¹²⁵ See WebEx 6:00 p.m. Public Hearing Transcript (WebEx 6:00 p.m. Tr.) (May 22, 2025).

¹²⁶ See, e.g., Chaska 6:00 p.m. Tr., WebEx 6:00 p.m. Tr.

energy security through efficient, cost-effective power supply and electric transmission infrastructure.”¹²⁷

118. 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;¹²⁸
- (5) analysis of the direct and indirect economic impact of proposed sites and routes including, but not limited to, productive agricultural land lost or impaired;
- (6) evaluation of adverse direct and indirect environmental effects that cannot be avoided should the proposed site and route be accepted;
- (7) evaluation of alternatives to the applicant’s proposed site or route proposed pursuant to subdivisions 1 and 2;
- (8) evaluation of potential routes that would use or parallel existing railroad and highway rights-of-way;

¹²⁷ Minn. Stat. § 216E.03, subd. 7. Minn. Stat. ch. 216I becomes effective on July 1, 2025. Because the Application was filed prior to July 1, 2025, Minn. Stat. ch. 216E applies to the Application.

¹²⁸ Factor 4 is not applicable because the Applicants are not proposing to site a large electric generating plant in this docket.

- (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.

119. Minn. Stat. § 216E.03, subd. 7(e), provides that the Commission “must make specific findings that it has considered locating a route for a high-voltage transmission line on an existing high-voltage transmission line route and the use of parallel existing highway right-of-way and, to the extent those are not used for the route, the [C]ommission must state the reasons.”¹²⁹

120. 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:

¹²⁹ See Minn. Stat. § 216E.03, subd. 7(e).

- 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;¹³⁰
- 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.¹³¹

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

¹³⁰ This factor is not applicable because it applies only to power plant siting.

¹³¹ See Minn. R. 7850.4100.

XV. APPLICATION OF ROUTING FACTORS TO THE ROUTES STUDIED

A. Effects on Human Settlement.

122. Minnesota law requires consideration of the Project's effects on human settlement, including displacement of residences and businesses, noise created by construction and operation of the Project, and impacts to aesthetics, cultural values, recreation, and public services.¹³²

1. Displacement.

123. No existing residences or businesses are anticipated to be permanently displaced by the Project on the Proposed Route, Route Alternative B, or Route Alternative C.¹³³

124. For all routing options, the proposed alignments are not within 50 feet of any existing residence.¹³⁴ The Project will be designed in compliance with local, state, NESC, and Great River Energy/MVEC standards regarding clearance to ground, clearance to crossing utilities, clearance to buildings, strength of materials, and right-of-way widths.¹³⁵

125. The Proposed Route would impact land on which the City of Carver plans to host future commercial, industrial, and residential developments, consistent with its 2040 Comprehensive Plan and anticipated population growth to 17,000 residents by 2050.¹³⁶

126. If Route Alternative A were constructed without regard to Carver County's realignment plans, there would be greater impact on existing residences and businesses, which are located on either side of CSAH 10.¹³⁷ The Applicants do not support Route Alternative A because, as discussed in the fact below, it is more complicated for them. According to the Applicants, Route Alternative A would also cause disruptions to the Carver County CSAH 10 highway project and its preliminary, conceptual redesign—of which the Applicants are aware that the final highway design is not yet available—and the operating transmission line when the roadway is expanded.¹³⁸

127. The Applicants oppose Route Alternative A as follows: (1) If Route Alternative A were to be approved and constructed along the existing CSAH 10, it would be in proximity to more homes and would be required to be relocated and constructed in the future based on Carver County's final plans for CSAH 10 redesign, also resulting in increased costs; or, (2) If Route Alternative A were to be modified such that it would follow the potential future expansion and realignment of CSAH 10, the Project would be placed

¹³² Minn. Stat. § 216E.03, subd. 7(b); Minn. R. 7850.4100(A).

¹³³ Ex. EERA-11 at 23 (EA).

¹³⁴ Ex. EERA-11 at 23 (EA).

¹³⁵ Ex. APP-2 at 6-2 (Application).

¹³⁶ Ex. EERA-11 at 32; City of Carver Public Comment (June 3, 2025) (eDocket No. 20256-219554-01).

¹³⁷ Ex. APP-2 at 4-8 (Application).

¹³⁸ Ex. APP-21 at 5 (Comments regarding EA).

farther into fields, possibly closer to homes because of future highway plans that are, as of yet, still subject to change. In addition, during the pendency of these proceedings, a portion of Route Alternative A has been annexed into the City of Victoria.¹³⁹

128. Route Alternative C would impact land on which the City of Victoria plans to host future commercial, industrial, and residential developments.¹⁴⁰ For example, the City of Victoria has indicated that it already has commercial development underway on property that would be impacted by Route Alternative C.¹⁴¹

129. During the pendency of these proceedings, a portion of Route Alternative C has been annexed into the City of Victoria, and there is currently a Kwik Trip gas station being constructed directly within Route Alternative C. If Route Alternative C were approved as studied in the EA, the Applicants could coordinate with land developers and design the Project as to not interfere with ongoing development. In addition, a residential development (West Creek Village) is proposed to the northwest of the Kwik Trip parcels, and is bisected by Route Alternative C. The initial plan for the residential development accommodates the existing 230-kV line by planning homes to the north of that line and maintaining wetlands and stormwater ponds under the line. Just north of the existing line, however, the plans show a series of residential lots. Route Alternative C crosses directly over the southernmost planned lots.¹⁴²

130. Impacts to local planning of the Cities of Carver and Victoria are likely to occur should the Applicants' Proposed Route or Route Alternative C be permitted by the Commission. Route Alternative B will have no known impacts to planning in terms of the County or local cities. Coordination with the cities would reduce any potential unanticipated impact.¹⁴³

2. Noise.

131. MPCA has established standards for the regulation of noise levels. The most restrictive MPCA noise limits are 60–65 A-weighted decibels (dBA) during the daytime and 50–55 dBA during the nighttime.¹⁴⁴

132. The primary noise receptors within the local vicinity are residences and farmsteads.¹⁴⁵

133. Potential noise impacts due to the Project can be grouped into three categories: (1) noise from construction of the Transmission Line, and (2) noise from operation of the Transmission Line, and (3) noise from operation of the substation.¹⁴⁶

¹³⁹ Applicants' Post-Hearing Comments (June 9, 2025) (eDocket No. _____).

¹⁴⁰ Ex. APP-2 at 4-11 (Application).

¹⁴¹ City of Victoria Public Comment (May 22, 2025) (eDocket No. [20255-219194-01](#)).

¹⁴² Applicants' Post-Hearing Comments (June 9, 2025) (eDocket No. _____).

¹⁴³ Ex. EERA-11 at 32.

¹⁴⁴ Minn. R. 7030.0040.

¹⁴⁵ Ex. EERA-11 at 34 (EA).

¹⁴⁶ Ex. EERA-11 at 33-35 (EA).

134. Construction crews and activity would be present at a particular location during daytime hours for a few days at a time but on multiple occasions throughout the period between initial right-of-way clearing and final restoration. Intermittent construction noise will occur and is dependent upon the activity. Major noise producing activities are associated with clearing and grading, material delivery, auguring foundation holes, setting structures, and stringing conductors.¹⁴⁷ Noise from heavy equipment and increased vehicle traffic will be intermittent and occur during daytime hours. Noise associated with heavy equipment can range between 80 and 90 dBA at full power 50 feet from the source.¹⁴⁸ Construction noise might exceed state noise standards for short intervals at select times and locations. Upon completion of construction activities, noise associated with construction equipment will cease.¹⁴⁹

135. Audible noise from power lines is created by small electrical discharges at specific locations along the surface of the conductor that ionize surrounding air molecules. This phenomenon—common to all power lines—is known as corona and sounds like a crackling sound. In general, any imperfection on the surface of the conductor might be a source for corona. Examples include dust and dirt, or nicks and burrs from construction. Resulting noise levels are dependent upon voltage level (corona noise increases as voltage increases) and weather conditions.¹⁵⁰

136. Based on results from the Bonneville Power Administration Corona and Field Effects Program, a 115-kV transmission line in heavy rain conditions (one inch per hour) is anticipated to produce L5 and L50 noise levels of 17.7 dBA and 14.2 dBA at the edge of the right-of-way, respectively.¹⁵¹ Operational noise levels produced by a 115-kV transmission line are generally less than outdoor background levels and are therefore not usually perceivable. As such, appreciable operational noise impacts are not anticipated. Further, proper design and construction of the Transmission Line in accordance with industry standards will help to ensure that noise impacts are not problematic.¹⁵²

137. Sound control devices on vehicles and equipment, for example, mufflers; conducting construction activities during daylight hours, and, to the greatest extent possible, during normal business hours; and running vehicles and equipment only when necessary are common ways to mitigate noise impacts. Impacts to state noise standards can be mitigated by timing restrictions. During operation, permittees are required to adhere to noise standards and all appropriate locations.¹⁵³

138. Substation noise is associated with the transformer and cooling fans. Transformers produce a consistent humming sound, resulting from magnetic forces within the transformer core. This sound does not vary with transformer load and are expected to be constant throughout the night and day. Noise levels will meet day and nighttime

¹⁴⁷ Ex. EERA-11 at 34 (EA); Ex. APP-2 at 6-3 – 6-4 (Application).

¹⁴⁸ Ex. EERA-11 at 34 (EA).

¹⁴⁹ Ex. APP-2 at 6-4 (Application).

¹⁵⁰ Ex. EERA-11 at 34-35 (EA).

¹⁵¹ Ex. EERA-11 at 35 (EA).

¹⁵² Ex. APP-2 at 6-4 (Application).

¹⁵³ Ex. EERA-11 at 35 (EA).

noise standards at 50 feet from the transformer (50 dBA). The substation will have the potential for a second transformer, which will increase the noise level to 50 dBA at a distance of 75 feet. The closest residence is approximately 200 feet from the edge of the property on which the substation is planned to be built. With this distance, the noise level will be within state standards.¹⁵⁴

139. Section 5.3.5 in the Draft Route Permit addresses noise from the Project.¹⁵⁵

3. Aesthetics.

140. The Project will introduce new built features—structures, conductors, and a substation—on the landscape.¹⁵⁶

141. The proposed Transmission Line will be visible, similar to the other distribution and transmission lines in the Project Area. Portions of the routes already have overhead MVEC distribution lines.¹⁵⁷

142. Where the Project utilizes existing MVEC distribution line right-of-way, aesthetic impacts are anticipated to be minimal. The existing MVEC distribution lines have been in place for a decade or more, as the area has developed.¹⁵⁸

143. The Routes cross limited areas where trees are present, which minimizes the amount of tree clearing and the aesthetic impact. While the evaluation of aesthetics can vary among observers, the presence of transmission and distribution lines are a common occurrence in rural residential areas and are compatible with rural residential aesthetics; however, where there are new lines, there will be new permanent aesthetic impacts.¹⁵⁹

144. The Laketown Substation will have a new permanent visual impact as compared to present conditions. Presently, this land is maintained as a grassy, cleared area with sparse trees. MVEC's final design of the Laketown Substation will include design features to lessen visual impacts.¹⁶⁰

145. The EA concludes there are eight residences within 200 feet of the Proposed Route, 13 residences within 200 feet of Route Alternative A,¹⁶¹ five residences within 200 feet of Route Alternative B, and three residences within 200 feet of Route Alternative C.¹⁶² In addition, Carver County's proposed expansion project of CSAH 10 would likely push the route closer to existing residences and possibly impact additional

¹⁵⁴ Ex. EERA-11 at 35 (EA).

¹⁵⁵ Ex. EERA-11 Appendix B at § 5.3.5 (Draft Route Permit).

¹⁵⁶ Ex. EERA-11 at 25 (EA).

¹⁵⁷ Ex. APP-2 at 6-6 (Application).

¹⁵⁸ Ex. APP-2 at 6-7 (Application).

¹⁵⁹ Ex. APP-2 at 6-7 (Application).

¹⁶⁰ Ex. APP-2 at 6-7 (Application).

¹⁶¹ The record suggests that these properties may be disturbed in any case as a result of the CSAH 10 realignment project.

¹⁶² Ex. EERA-11 at 26 (EA).

residences. Route Alternative B has one home 50-100 feet from the route, which is closer than any residence along the Proposed Route. Finally, the number of residences near Route Alternative C noted in the EA does not reflect the West Creek Village planned development west of the City of Victoria, which is bisected by Route Alternative C.¹⁶³

146. There are no scenic overlooks or scenic byways near the Project. While impacts to these byways will not occur, there is potential that recreationalists engaged in a scenic drive might be in the local vicinity of the Project.¹⁶⁴

147. For the substation, any lighting at the substation should be downlit to eliminate impacts to night sky and nearby residents.¹⁶⁵

148. EERA concluded within the EA that Route Alternatives B and C would best minimize aesthetic impacts¹⁶⁶

149. Route Alternative B has one residence closer than any residence along all other routing options but contains only five residences within 200 feet of the proposed alignment, second fewest among all options. Route Alternative B would also require a new approximately 20-acre greenfield breaker station site. The specific location of the breaker station has not been studied.¹⁶⁷

150. While Route Alternative C may be near the fewest residences at the present, the EA does not reflect the residential development proposed for the community of West Creek Village, a residential development proposal that presently includes 56 row townhomes, 18 twin homes; and 36 single-family homes. Route Alternative C would presently cross the southern portion of this planned development where multiple residential lots have been proposed.¹⁶⁸

151. The Proposed Route utilizes existing right-of-way far less (55 percent) than any of the Route Alternatives (greater than 90 percent).¹⁶⁹

152. The Applicants must be required to work with affected communities and landowners to identify concerns related to Project aesthetics. In general, mitigation includes enhancing positive effects as well as minimizing or eliminating negative effects. Potential mitigation measures include:

- Locating structures, right-of-way, and other disturbed areas by considering input from landowners to minimize visual impacts.

¹⁶³ Ex. APP-21 at 18 (Comments regarding EA).

¹⁶⁴ Ex. EERA-11 at 26 (EA).

¹⁶⁵ Ex. EERA-11 at 27 (EA).

¹⁶⁶ Ex. APP-21 at 18 (Comments regarding EA).

¹⁶⁷ Ex. APP-21 at 18 (Comments regarding EA).

¹⁶⁸ Ex. APP-21 at 18 (Comments regarding EA).

¹⁶⁹ Ex. EERA-11 at 96 (EA).

- Care shall be used to preserve the natural landscape. Construction and operation shall be conducted to prevent any unnecessary destruction, scarring, or defacing of the natural surroundings in the vicinity of the work.

153. Landowners must be compensated for the removal of trees and vegetation based on easement negotiations.¹⁷⁰

4. Land Use and Zoning.

154. The Proposed Route will result in impacts to the City of Carver's annexation of Dahlgren Township and long-planned development identified in the City's 2040 Comprehensive Plan. Short term agricultural impacts might occur during construction, which will be mitigated through restoration and compensatory payments. There will be permanent structures within agricultural fields. Additionally, the Project is a 115-kV transmission line – a common feature in communities and operating in conjunction with homes, businesses, and industry and is not inconsistent with the rural character of the Project Area.¹⁷¹ The EA recognizes that "impacts are anticipated to be minimal, if it all, since HVTL does not have a large potential to change underlying land use," and also that "[i]nterference with county zoning ordinances is not expected."¹⁷²

155. With respect to the Proposed Route, the City of Carver has identified a portion of the route for potential future annexation into the City, with subsequent development. The Applicants have not adequately addressed this avoidable impact on the City of Carver. According to an August 2018 map provided by the City of Carver, the Project would cross 1.7 miles of land that is outside the city but within the City of Carver's "ultimate growth boundary," 1.5 miles of which is identified with the future land use type of "low density residential" and 0.2 mile of which is along Hampshire Road, identified with the future land use type of "commercial/industrial." This land is subject to an Orderly Annexation Agreement, is part of the City's 2040 Comprehensive Plan, and is primarily in agricultural use at present.¹⁷³

156. The Applicants met with the City of Carver initially on November 1, 2024, and again on May 7, 2025. During these meetings the Applicants discussed the Project routing process along with the state permitting process and claimed the City of Carver it would be kept informed of the Project moving forward.¹⁷⁴

157. Despite the meeting between the Applicants and the City of Carver in November 2024, the Applicants made no adjustments to the Proposed Route to address

¹⁷⁰ Ex. APP-2 at 6-7 (Application).

¹⁷¹ Ex. APP-21 at 12 (Comments regarding EA).

¹⁷² Ex. EERA-11 at IV (EA).

¹⁷³ Ex. APP-21 at 13 (Comments regarding EA).

¹⁷⁴ Applicants' Post-Hearing Comments (June 9, 2025) (eDocket No. _____).

the City's concerns. City officials observed that Applicants' staff have displayed "hostility, negativity and dismissiveness" toward the City's efforts to see its concerns addressed.¹⁷⁵

147. The City of Carver has stressed that the Proposed Route is not compatible with the City's future lands use plans and would severely limit development in the area. The City provided its Future Land Use Map illustrating its plans to zone the area east of County Road 43 and north of County Road 140 as residential, commercial and industrial.¹⁷⁶

158. Despite failing to provide required notice to the City of Carver and to involve the City as it did with Carver County and the City of Victoria, Great River Energy claims that, in its experience, residential and commercial development can and will proceed around the transmission line.¹⁷⁷

159. Route Alternative A may result in "some interference with planning of future development along CSAH 10."¹⁷⁸ Specifically, Carver County plans to expand the roadway to a four-lane divided highway, realign, and relocate portions of CSAH 10 in the five to ten years. Final highway plans are still under development. As such, nothing prevents the Applicants from minimizing disruption to Carver County in placing a new transmission line along CSAH 10.¹⁷⁹

160. The City of Victoria has stated that Route Alternative C would impact land that has "been highly anticipated for the last few decades to become the commercial hub for the city. An additional power line and easement adjacent to the existing Xcel Energy power line and easement would severely prohibit development of this highly anticipated growth area."¹⁸⁰ The City of Victoria has continued to proceed with development in this area, and these development plans did not contemplate the presence of an additional transmission line right-of-way intersecting development properties. Development plans have progressed to the point where commercial structures, such as the Kwik Trip gas station, have been approved by the City of Victoria, are presently under construction, and will be directly impacted by the Route Alternative C.¹⁸¹

161. The record demonstrates that the Proposed Route will significantly impede future development by the City of Carver consistent with its well-documented and long-planned future development, Route Alternative A will result in significant complications for Carver County, and Route Alternative C will interfere with the City of

¹⁷⁵ City of Carver Public Comment (June 3, 2025) (eDocket No. 20256-219554-01).

¹⁷⁶ City of Carver Public Comment (June 3, 2025) (Docket No. [20256-219554-01](#)); see Ex. EERA-11 at 31-32.

¹⁷⁷ Ex. APP-2 at 1-3, 4-11; Ex. APP-21 at 13 (Comments regarding EA).

¹⁷⁸ Ex. EERA-11 at 32 (EA).

¹⁷⁹ Ex. APP-21 at 14 (Comments regarding EA).

¹⁸⁰ Ex. APP-2 at 4-9 (Application).

¹⁸¹ Ex. APP-21 at 13 (Comments regarding EA).

Victoria's land use plans. Route Alternative B has the greatest potential to minimize overall conflict with existing and planned land use.¹⁸²

5. Cultural Values.

162. According to the Carver County 2040 Comprehensive Plan, Carver County's population is expected to grow 50 percent by 2040. By this time, 27 percent of the land within the county will be part of a city. Growth will especially affect Dahlgren and Laketown Townships – where the Project is located – as the cities of Waconia, Victoria, and Carver are planning to annex large portions of these townships. Carver County has committed to carefully considering where and how growth will take place. As the County grows, the transportation, parks and trails networks will need to be expanded, upgraded, and maintained to meet increased demand. Carver County plans to grow while preserving the viability of the agricultural economy for future generations and maintain the County's unique and rural agricultural character.¹⁸³

163. The majority of Carver County supports agriculturally based industries; however, it has diversified with commercial, industrial, and housing developments in 11 separate communities. Within the county, there are 4,000 acres of managed parks and 115 lakes in addition to the 1,200-acre Minnesota Landscape Arboretum, managed by the University of Minnesota. Other attractions include the Chaska Curling Center, Chanhassen Dinner Theater, Hazeltine Golf Course, and Prince's Paisley Park. The county is known for its combination of urban amenities and a small-town atmosphere, rolling farmland, natural prairies, woodlands, and lakes.¹⁸⁴

164. For all routes, cultural values are expected to have a minimal to negative impact.¹⁸⁵

165. The construction and operation of the Project is not anticipated to impact or alter the work and leisure pursuits of residents in the Project Area or land use in such a way as to impact the underlying culture of the area, and no mitigation is proposed.¹⁸⁶

6. Recreation.

166. Multiple recreational opportunities exist in the local vicinity including sports, fishing, swimming, biking, hunting, and snowmobiling. There is a snowmobile trail that generally runs west to east through the Project Area. Pierson Lake Public Water Access Site is located 0.8 miles northeast of the proposed Laketown Substation. Marsh Lake Hunting Preserve is located just northeast of the route width of Route Alternative A.

¹⁸² See Ex. EERA-11; City of Victoria Comments (May 22, 2025) (eDocket No. [20255-219194-01](#)); Carver County Public Works Comments (May 13, 2025) (eDocket No. [20255-218997-01](#)); City of Carver Public Comment (June 3, 2025) (Docket No. 20256-219554-01).

¹⁸³ Ex. APP-2 at 6-10 – 6-11 (Application).

¹⁸⁴ Ex. APP-2 at 6-11 (Application).

¹⁸⁵ Ex. EERA-11 at 96 (EA).

¹⁸⁶ Ex. EERA-11 at 28 (EA).

Augusta Ballfield is located along Hampshire Road just outside of the route width of the Applicants' Proposed Route.¹⁸⁷

167. Potential impacts to recreational opportunities are anticipated to be minimal for all routing options.¹⁸⁸

7. Socioeconomics.

168. Economic factors related to construction and operation of the Project are anticipated to be short-term and positive, but minimal, for all routing options. Positive impacts come from increased expenditures at local businesses during construction, the potential for some materials to be purchased locally, and the use of local labor.¹⁸⁹

169. 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 utility personnel and contractors. Long term benefits of the Project include the ongoing reliable electrical services and the ability to serve existing and new local load growth.¹⁹⁰ The Applicants anticipate the Project to employ between 22 and 35 daily contract workers. The Applicants indicate that Great River Energy has a "buy local" policy that will give preference to local (Minnesota, Wisconsin and North Dakota) suppliers and contractors for materials and labor for the Project.¹⁹¹ Because economic impact is expected to be positive, no mitigation is proposed.¹⁹²

8. Environmental Justice.

170. Environmental justice is the "fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income in the development, implementation, and enforcement of environmental laws, regulations, and policies, and is intended to ensure that all people benefit from equal levels of environmental protection and have the same opportunities to participate in decisions that might affect their environment or health."¹⁹³

171. Minnesota Statute § 216B.1691, subdivision 1(e) was recently updated to reflect the definition of an environmental justice area. The data does not define the Project Area as an environmental justice area based on the population residing in surrounding census tracts. This means that none of the census tracts contain: (1) 40 percent or more nonwhite populations; (2) 35 percent or more households with income ≤ 200 percent of

¹⁸⁷ Ex. EERA-11] at 39 (EA).

¹⁸⁸ Ex. EERA-11 at V (EA).

¹⁸⁹ Ex. EERA-11 at 40 (EA).

¹⁹⁰ Ex. APP-2 at 6-10 (Application).

¹⁹¹ Ex. EERA-11 at 40 (EA).

¹⁹² Ex. APP-2 at 6-10 (Application); Ex. EERA-11 at 40 (EA).

¹⁹³ Ex. EERA-11 at 29 (EA).

the poverty level; (3) 40 percent or more residents with limited English proficiency; or (4) Indian country.¹⁹⁴

172. There are no environmental justice areas impacted by the Project. The Project Area is not within any census tracts which Minnesota statute deems an environmental justice area; therefore, disproportionate and adverse impacts to these populations are not expected, and mitigation is not proposed.¹⁹⁵

9. Public Service and Infrastructure.

173. The Project is in a principally agricultural and rural residential area. Private landowners in the Project Area have their own private wells and individual sewage treatment systems. The residents also have access to other utility services by various providers, including waste collection, natural gas, cable television, electricity, and telephone.¹⁹⁶

174. There are several existing overhead transmission and distribution lines in the Project Area. The Proposed Route would follow existing distribution lines maintained by MVEC for a short distance along Hampshire Road, along Augusta Road, and along CSAH 10. The Proposed Route is collocated with existing distribution lines for about 2.4 miles.¹⁹⁷

175. Construction of the Project will require planned power outages to the existing MVEC customers. These electrical outages will be intermittent and short-term. Outages are generally not necessary when crossing perpendicular to local distribution lines—using temporary protective guards or clearance structures alleviates electrical clearance concerns. No customer is expected to lose electrical service for an extended period. All outages will be coordinated with MVEC. Impacts are unavoidable. No negative long-term impacts are anticipated. Long-term positive impacts associated with operation of the Project include a more reliable electrical grid.¹⁹⁸

176. The Project Area includes County Highways 10, 43, and 140.¹⁹⁹ During construction short-term localized traffic delays and re-routes might occur. These delays, should they occur, would most likely be associated with material delivery and worker transportation. Road crossings might also necessitate short-term impacts to traffic when stringing conductors. Great River Energy does not intend to locate structures within road right-of-way, though the Project right-of-way will overlap with road right-of-way. Because NESC clearances must be met, this will not affect the safety of the traveling public or road and highway operations. Additional costs to maintain road right-of-way will not be incurred because of the Project.²⁰⁰

¹⁹⁴ Ex. EERA-11 at 29 (EA).

¹⁹⁵ Ex. APP-2 at 6-10 (Application); Ex. EERA-11 at 29–30 (EA).

¹⁹⁶ Ex. APP-2 at 6-12 (Application).

¹⁹⁷ Ex. APP-2 at 6-13 (Application); Ex. EERA-11 at 41 (EA).

¹⁹⁸ Ex. EERA-11 at 42 (EA).

¹⁹⁹ Ex. EERA-11 at 41 (EA).

²⁰⁰ Ex. EERA-11 at 42 (EA).

177. Carver County's preliminary plans to expand and widen CSAH 10 could result in additional, significant impacts for Route Alternative A. Aligning the Project along the existing CSAH 10 would result in more impacts to residential landowners along CSAH 10 as compared to the Proposed Route. The density of residential homes and businesses on either side of the highway would require that Great River Energy make several crossings of the road, approximately 12, to avoid impacts to existing structures and provide proper setbacks.²⁰¹ The Applicants claim that attempting to design the Project around future plans for CSAH 10 is not only speculative because those plans have not been finalized, but would also move the Project farther into farm fields and could potentially require the displacement of homes.²⁰²

178. Transmission pipelines are not located in the Project Area. Impacts will not occur. No long-term impacts are anticipated.²⁰³

179. The Project may cross the railway and may require a crossing permit from Twin Cities & Western Railroad (TCWR). Given the Applicants must follow the terms and conditions established in the crossing permit developed by TCWR, and will coordinate any potential power outages with them, no impacts are expected.²⁰⁴

180. The nearest airport is over nine miles away, and the Applicants do not anticipate any impact to aviation services. Great River Energy utilized the FAA's Notice Criteria Tool33 to determine if it would be required to file notice to the FAA prior to construction. The Project does not exceed Notice Criteria based on location, elevation, and maximum pole height. Therefore, there will be no impacts to airports.²⁰⁵

181. Sections 5.3.4 and 5.3.14 of the Draft Route Permit address utilities and infrastructure.²⁰⁶

182. Potential impacts can be avoided by marking underground utilities prior to construction and avoiding these areas during construction. The Applicants would coordinate with landowners to identify the location of wells and septic systems to avoid potential impacts.²⁰⁷

10. Electronic Interference.

183. Interference associated with electrical infrastructure is related with a phenomenon known as corona. Corona is the result of small electrical discharges at discrete locations along the surface of a conductor that ionize surrounding air molecules. These discharges generate radio frequency noise. If the radio frequency noise is

²⁰¹ Ex. APP-21 at 13 (Comments regarding EA).

²⁰² Applicants' Post-Hearing Comments (June 9, 2025) (eDocket No. _____).

²⁰³ Ex. EERA-11 at 42 (EA).

²⁰⁴ Ex. EERA-11 at 42 (EA).

²⁰⁵ Ex. APP-2 at 6-14 (Application).

²⁰⁶ Ex. EERA-11, Appendix B at §§ 5.3.4; 5.3.14 (Draft Route Permit).

²⁰⁷ Ex. EERA-11 at 43 (EA).

excessive relative to the strength of the broadcast signal it can interfere with signal reception. Additionally, structures might block line-of-sight communication signals.²⁰⁸

184. Because the likelihood of significant corona formation on the Project is minimal, the likelihood of radio and television interference due to corona discharges associated with the Project is also minimal. Great River Energy is unaware of any complaints related to radio or television interference resulting from the operation of any of its existing 115-kV facilities and does not expect radio and television interference to be an issue along the Proposed Route.²⁰⁹

185. Section 5.4.3 of the Draft Route Permit requires that any “interference with radio or television, satellite, wireless internet, GPS-based agriculture navigation systems or other communication devices is caused by the presence or operation of the Transmission Facility, the Permittee shall take whatever action is necessary to restore or provide reception equivalent to reception levels in the immediate area just prior to the construction of the Transmission Facility.”²¹⁰

B. Effects on Public Health and Safety.

186. Minnesota’s HVTL routing factors require consideration of the Project’s potential effect on health and safety.²¹¹

187. Impacts to human health and safety are assessed by looking at three main issues: electric and magnetic fields, stray voltage, and induced voltage.²¹²

1. Electromagnetic Fields (EMF).

188. There are no federal regulations regarding allowable electric or magnetic fields produced by transmission lines in the United States. The Commission has imposed a maximum electric field limit of 8 kV per meter (kV/m).²¹³

189. In the Application, the Applicants calculated electric fields associated with the Project. These calculations are based on the maximum operating voltage of the Transmission Line (121-kV). The Applicants indicate that “because the magnitude of the voltage on a transmission line is near-constant (ideally within +/- five percent of design voltage), the magnitude of the electric field will be near-constant regardless of the power flowing on the line.” The maximum electric field is approximately 1.7 kV/m. This field strength is well below the Commission permit standard of 8.0 kV/m.²¹⁴

190. The Project will be constructed to maintain proper safety clearances, etc. The substation site will not be accessible to the public. EMF diminishes with distance;

²⁰⁸ Ex. EERA-11 at 23 (EA).

²⁰⁹ Ex. APP-2 at 5-7 (Application).

²¹⁰ Ex. EERA-11, Appendix B at § 5.4.3 (Draft Route Permit).

²¹¹ Minn. Stat. § 216E.03, subd. 7(b)(1); Minn. R. 7850.4100(B).

²¹² Ex. EERA-11 at 43-48, 50-52 (EA).

²¹³ Ex. EERA-11 at 51-52 (EA).

²¹⁴ Ex. APP-2 at 6-15 – 6-16 (Application); Ex. EERA-11 at 46 (EA).

therefore, EMF exposure can be minimized by routing HVTLS away from residences and other locations where people congregate to the extent practicable. No health impacts due to EMF are anticipated; therefore, no mitigation is proposed.²¹⁵

2. Stray Voltage.

191. Impacts to residences, businesses, or farming operations resulting from stray voltage are not anticipated. Stray voltage is most associated with local distribution lines and electrical wiring within the affected building. The Project – a transmission line – does not create stray voltage as it does not directly connect to businesses, residences, or farms.²¹⁶

3. Induced Voltage.

192. The electric field from a transmission line can extend to nearby conductive objects, for example, farm equipment, and induce a voltage upon them.²¹⁷

193. The primary concern with induced voltage is not the voltage, but rather the current that flows through a person to the ground when touching the object. To ensure safety in the proximity of transmission lines, the NESC requires that any discharge be less than five milliamperes. In addition, the Commission's electric field limit of 8 kV/m is designed to prevent serious shock hazards due to induced voltage. Proper grounding of metal objects under and adjacent to HVTLS is the best method of avoiding these shocks.²¹⁸

194. The Project might induce a voltage on insulated metal objects within the final right-of-way; however, Section 5.4.2 of the Draft Route Permit requires that transmission lines be constructed and operated to meet NESC standards as well as the Commission's own electric field limit of 8 kV/m reducing these impacts. As a result, impacts due to induced voltage are not anticipated to occur.²¹⁹

C. Effects on Land-Based Economies.

195. Minnesota's HVTL routing factors require consideration of the Project's impacts to land-based economies—specifically, agriculture, forestry, tourism, and mining.²²⁰

²¹⁵ Ex. EERA-11 at 48 (EA).

²¹⁶ Ex. EERA-11 at 51 (EA).

²¹⁷ Ex. EERA-11 at 51 (EA).

²¹⁸ Ex. EERA-11 at 51–52 (EA).

²¹⁹ Ex. EERA-11 at 52 (EA).

²²⁰ Minn. Stat. § 216E.03, subd. 7(b)(5); Minn. R. 7850.4100(C).

1. Agriculture.

196. Farming occurs in Carver County; however, it constitutes a small percentage of overall state agriculture sales at approximately one percent.²²¹

197. The proposed right-of-way will cross about 2.5 miles of cultivated cropland. The Project right-of-way is consistent for use as pasture, hay, or other crop cultivation. No organic farms will be impacted by the Project.²²²

198. Some agricultural land may be temporarily removed from production during Transmission Line construction. Determination of temporary agricultural impacts that will result from construction is dependent upon final engineering design. The acreage anticipated to be included in temporary construction access points includes some cultivated lands. Construction of the proposed transmission structures will require repeated access to structure locations to install the structures and to string conductors. Equipment used in the construction process will include backhoes, cranes, boom trucks and assorted small vehicles. Operation of these vehicles on adjoining farm fields can cause rutting and soil compaction, particularly during springtime and otherwise wet conditions.²²³

199. Overall, impacts to agriculture are expected to be minimal for all routing options.²²⁴

200. The Application noted that portions of the Proposed Route cross land enrolled in the Metropolitan Agricultural Preserves Program (MAPP) and subject to Minn. Stat. Ch. 473H.217F²²⁵ The parcels are primarily concentrated in Dahlgren Township in the area subject to an orderly annexation agreement with the City of Carver. EERA's June 2, 2025, comments also discuss MAPP. The purpose of the statute is to encourage the use and improvement of the metropolitan area's agricultural lands for producing food and other agricultural commodities. It establishes a local planning process to designate agricultural areas as a long-term land use and provides benefits to maintain viable, productive farm operations. Moreover, Minn. Stat. § 473H.11 puts limitations on certain public projects that are inconsistent with agricultural uses. Great River Energy stated that transmission lines, such as the Project, are generally compatible with continued agricultural uses, and the Laketown Substation is not sited on property subject to MAPP.³ As such, the Applicants stated that they do not anticipate that any restrictions included in MAPP will apply to the Project, and, as discussed above, the EA concluded that impacts to agriculture are anticipated be minimal.²²⁶

201. . The Applicants' Proposed Route and Alignment Alternative D would require the acquisition of over 35 acres of easements from MAPP land for their proposed

²²¹ Ex. EERA-11 at 52 (EA).

²²² Ex. APP-2 at 6-22 (Application).

²²³ Ex. APP-2 at 6-23 (Application).

²²⁴ Ex. EERA-11 at 97 (EA).

²²⁵ Ex. APP-2 at 6-21 (Application).

²²⁶ Ex. EERA-11 at 52 (EA).

alignments. Conversely, Route Alternatives A, B, and C would require acquisition of less than ten acres of easements from MAPP land.²²⁷

2. Forestry.

202. Desktop research indicates that active forestry operations, such as commercial timber harvest, do not occur in the route width.²²⁸

203. Because the Project will not cross commercial forestry operations, no mitigation is proposed.²²⁹

3. Mining.

204. The *Aggregate Source Information System*, maintained by MnDOT, shows no aggregate sources within the route width of all alternative routing segments. Impacts to mining resources are not anticipated; mitigation is not proposed.²³⁰

4. Tourism.

205. Popular activities near the Project Area include sports, fishing, swimming, biking, hunting, and snowmobiling. There is a snowmobile trail that generally runs west to east through the Project Area. Pierson Lake Public Water Access Site is located 0.8 miles northeast of the proposed Laketown Substation. Marsh Lake Hunting Preserve is located just northeast of the route width of Route Alternative A. Augusta Ballfield is located along Hampshire Road just outside of the route width of the Applicants' Proposed Route.²³¹

206. The Augusta Ball Field is not located within the Proposed Route. The Transmission Line would be visible from the Augusta Ball Field as it is approximately 0.3 mile away; however, existing distribution lines are already in the viewshed. The Marsh Lake Hunting Preserve and city parks are located at such a distance that construction and operation of the Project will not be visible. The proposed right-of-way parallels the local snowmobile trail around CR 43 for about 0.6 mile. Transmission line rights-of-way are compatible with snowmobile trails, but the Transmission Line will be a new visual impact and the presence of poles will also be a new impact. Great River Energy currently plans to construct the Transmission Line from fall 2027 to summer of 2028. If construction activities overlap the seasonal use of this trail system, Great River Energy will coordinate with the trail association regarding any trail closures to mitigate impacts by assisting in finding alternate routes. Where the trail system crosses the Laketown Substation parcel, MVEC will work with the trail organization to determine the need for alternate routes.

²²⁷ EERA Public Comments (June 2, 2025) (eDocket No. [20256-219470-01](#)).

²²⁸ Ex. EERA-11 at 23 (EA).

²²⁹ Ex. APP-2 at 6-24 (Application).

²³⁰ Ex. APP-2 at 6-24 (Application); Ex. EERA-11 at 24 (EA).

²³¹ Ex. EERA-11 at 39; 55 (EA).

Depending on the ultimate final location of the Laketown Substation components and fence line, the trail location may need to be permanently modified.²³²

207. Impacts to tourism from the Project are expected to be long-term, but localized, for all route options as they avoid public lands and places designated as tourist areas.²³³

D. Effects on Archaeological and Historic Resources.

208. Minnesota Rule 7850.4100, subparagraph D, requires consideration of the effects of the Project on historic and archaeological resources.²³⁴

209. The Applicants retained a consultant which retrieved cultural resources site information (archaeological sites and historic structures) and retrieved previous survey files from the SHPO. The consultant's Cultural Resource Specialists reviewed archaeological site files on the Office of the State Archaeologist (OSA) online portal, as well as the General Land Office maps and available historical aerial photography accessed online through the OSA Portal.²³⁵

210. Three previously documented archeological sites were identified in the study area. Two of these sites are considered alpha sites, which means they were identified by historic documentation, but were not verified in the field. For all routes, the transmission lines are projected to run along existing right-of-way or cultivated fields. As such, impacts to these resources are not anticipated. Fifteen historic buildings and structures were identified within the study area. None of the routes examined in this EA will displace any of these buildings and given the collocation of the Proposed Route, the viewshed is not expected to change for these sites.²³⁶

211. Fifteen historic buildings and structures were identified within the review area. There is potential for Historic-period sites within the Project Area because the area has been inhabited at least since the 1930s; however, given that the Project is an overhead transmission line proposed partially within already disturbed rights-of-way, there is a low potential for intact historic sites.²³⁷

212. If any archaeological sites are identified during placement of the poles along the permitted Route, construction work will be stopped and SHPO staff consulted as to how to proceed. If human remains are encountered during construction activities, all ground disturbing activity will cease, and local law enforcement will be notified per Minn. Stat. § 307.08.²³⁸

²³² Ex. APP-2 at 6-12 (Application).

²³³ Ex. EERA-11 at 55 (EA).

²³⁴ See Minn. R. 7850.4100(D).

²³⁵ Ex. APP-2 at 6-25 (Application).

²³⁶ Ex. EERA-11 at 56 (EA).

²³⁷ Ex. APP-2 at 6-26 (Application).

²³⁸ Ex. APP-2 at 6-26 (Application).

213. A cultural resource literature review was conducted for the Project and provided to SHPO in a letter dated March 13, 2024. SHPO responded on May 14, 2024. In its correspondence, SHPO recommended a Phase 1 archaeological survey for the Project due to the lack of prior survey in the area. Prior to construction, Great River Energy will complete the survey recommended by SHPO on the route selected by the Commission and at the Laketown Substation location.²³⁹

E. Effect on Natural Environment.

214. Minnesota's HVTL routing factors require consideration of the Project's effect on the natural environment, including effects on air and water quality resources and flora and fauna.²⁴⁰

1. Air Quality.

215. Air emissions associated with construction are highly dependent upon weather conditions and the specific activity occurring. For example, traveling to a construction site on a dry gravel road will result in more fugitive dust than traveling the same road when wet.²⁴¹

216. Watering exposed surfaces, covering disturbed areas, and reducing speed limits are all standard construction practices and can mitigate fugitive dust from construction. The Applicants indicate they will use appropriate measures to minimize fugitive dust emissions during construction. When applying these mitigation measures, potential impacts are anticipated to be similar for all routing options.²⁴²

217. At the completion of construction activities, all construction-related air impacts would cease.²⁴³

218. During operation, power lines produce ozone and nitrous oxide through the corona effect—the ionization of air molecules surrounding the conductor. Ozone production from a conductor is proportional to temperature and sunlight and inversely proportional to humidity. These compounds contribute to smog and adverse health effects. Minnesota has an ozone standard of 70 parts per billion measured over a daily eight-hour average of the three-year average of the annual fourth-highest daily maximum. The national ozone standard is 0.070 parts per million over a 3-year average of the annual fourth-highest daily maximum eight-hour average concentration. Ozone and nitrous oxide emissions are anticipated to be well below these limits.²⁴⁴

²³⁹ Ex. APP-2 at 6-25 (Application); Ex. APP-19 (Direct Testimony of M. Swenson).

²⁴⁰ Minn. Stat. § 216E.03, subd. 7(b)(1)–(2); Minn. R. 7850.4100.

²⁴¹ Ex. EERA-11 at 58 (EA).

²⁴² Ex. EERA-11 at 59-60 (EA).

²⁴³ Ex. APP-2 at 6-28 (Application).

²⁴⁴ Ex. EERA-11 at 59 (EA).

2. Greenhouse Gas Emissions (GHG).

219. Greenhouse gases (GHG) are gaseous emissions that trap heat in the atmosphere. These emissions occur from natural processes and human activities. The most common GHGs emitted from human activities include carbon dioxide, methane, and nitrous oxide.²⁴⁵

220. Construction of the Transmission Line and Laketown Substation will result in temporary minor GHG emissions from fuel combustion in construction equipment, commuter vehicles, and delivery trucks.²⁴⁶

221. The USEPA's GHG Reporting Tool shows emissions within Minnesota totaled 34,929,605 metric tons of carbon dioxide equivalent (CO_{2e}) (38,502,906 tons) in 2020. Accordingly, the preliminary estimate of Project GHG emissions identified here would be negligible.²⁴⁷

222. The Applicants will mitigate vehicle emissions by limiting vehicle idling to only times when necessary. The Applicants will also monitor the sulfur hexafluoride (SF₆), a greenhouse gas used as an insulating material in substation breakers, gas levels in the breakers as part of routine monitoring of substation equipment. When gas losses are detected, the SF₆ is extracted to a separate tank to allow the breaker to be repaired. Any gas collected from decommissioned breakers is shipped offsite for recycling.²⁴⁸

3. Climate Change.

223. Climate change could result in an increased risk of flooding in the Project Area, increased temperatures, extreme weather events such as high winds, and excessive rainfall. The Project as proposed will be designed to withstand these changes and will increase reliability in the Project Area.²⁴⁹

224. Heat wave events could change demands on the electrical transmission and generation systems, especially as more indoor space is equipped with cooling systems. Because this is a reliability project, it will improve the electrical transmission system making it more resilient and reducing potential for peak overloads during heat wave events.²⁵⁰

²⁴⁵ Ex. EERA-11 at 58 (EA).

²⁴⁶ Ex. APP-2 at 6-29 (Application).

²⁴⁷ Ex. APP-2 at 6-30 (Application).

²⁴⁸ Ex. APP-2 at 6-29 (Application).

²⁴⁹ Ex. APP-2 at 6-30 (Application).

²⁵⁰ Ex. EERA-11 at 60 (EA).

4. Geology and Topography.

225. Bedrock depth in this subregion varies from 100 to 400 feet. Neither the substation foundations nor the Project structures/foundations will reach bedrock; therefore, impacts will not occur.²⁵¹

226. Topography of the area is characteristically gently to moderately rolling. Construction of the Project will not alter the topography along the proposed right-of-way; therefore, no mitigation is proposed.²⁵²

5. Soils.

227. Potential impacts of construction are soil compaction and rutting which may occur from movement of construction vehicles along the right-of-way and near the substation. Installing structures requires removing and handling soils, which, along with vegetation clearing and grading, will expose soils to wind and water erosion.²⁵³

228. Ground disturbance and soil exposure would be primarily limited to the pole locations, which would typically consist of a hole 10 to 20 feet deep and 36 to 60 inches in diameter for each pole. Impacts to physiographic features should be minimal during and after installation of the Transmission Line structures, and these impacts will be short term. Long-term impacts to soils are not anticipated, and no impact from Project operations are expected.²⁵⁴

229. Potential impacts to soils can be mitigated by using BMPs and standard construction practices. A variety of methods can be employed to minimize soil erosion, including the prompt revegetation of disturbed soils. Additionally, Section 5.3.8 of the Draft Route Permit has requirements that the permittee must follow to mitigate impacts to soil.²⁵⁵

6. Water Quality and Resources.

230. The Application and EA analyzed impacts to water quality and resources, including groundwater, surface water, wetlands, impaired waters, and floodplains.²⁵⁶

(1) Groundwater.

231. The Project is within the Central Groundwater Province, which is “characterized by buried sand aquifers and relatively extensive surficial sand plains, part of a thick layer of sediment deposited by glaciers overlying the bedrock,” because of this, the province is “underlain by sedimentary bedrock with good aquifer properties.” Springs

²⁵¹ Ex. APP-2 at 6-46 (Application); Ex. EERA-11 at 24 (EA).

²⁵² Ex. APP-2 at 6-45 – 6-46 (Application); Ex. EERA-11 at 21 (EA).

²⁵³ Ex. EERA-11 at 64 (EA).

²⁵⁴ Ex. APP-2 at 6-47 (Application).

²⁵⁵ Ex. EERA-11 at 65 (EA).

²⁵⁶ See Ex. APP-2 at 6-30 – 6-36 (Application); Ex. EERA-11 at 61-64, 65-68, 70-75 (EA).

and karst are not present in the Project area. The water table is high along portions of the Project.²⁵⁷

232. Potential impacts to domestic water supplies are not expected, because the Chaska Wellhead Protection Area and Drinking Water Supply Management Area are outside any of the studied route widths and are in a location that has low vulnerability to human caused contaminants.²⁵⁸

233. Moreover, no impacts to groundwater are anticipated because of construction or operation of the Transmission Line or Laketown Substation. Dewatering activities are not expected for this Project, and any effects on water tables would be localized and short term and would not affect hydrologic resources.²⁵⁹ Should dewatering be used it should be directed away from wetlands and done in a manner to prevent erosion, that is, using an appropriately sized dewatering containment system that is carefully monitored. As directed by the Minnesota Department of Health (MDH), the Applicants stated that they will coordinate with landowners regarding well locations and access, should it be necessary, if a route is permitted.²⁶⁰

(2) *Wells.*

234. Domestic wells exist throughout the Project Area.²⁶¹

235. Fourteen wells are within the route width of the Applicants' Proposed Route segment and vary in depth from 130 to 525 feet deep; twenty-four wells are within the Alternative A route width and range from 127 to 525 feet deep; Alternative B also has 14 wells within the route width ranging from 130 to 525 feet; and Alternative C route width contains 15 wells ranging from 127 to 525 feet. None of the studied routes have any wells within their right-of-way.²⁶²

236. As directed by the MDH, the Applicants will coordinate with landowners regarding well locations and access, should it be necessary.²⁶³

(3) *Surface Water.*

237. The majority of all routes are within the Lower Minnesota River watershed, which is part of the Minnesota River Basin. A small portion of Route Alternative A is located in the Twin Cities Mississippi River watershed, located in the Mississippi River Basin. "The Lower Minnesota River watershed includes the lowest reach of the Minnesota River and flows into the Mississippi at Fort Snelling. The second-largest watershed in the

²⁵⁷ Ex. EERA-11 at 61 (EA).

²⁵⁸ Ex. EERA-11 at 61 (EA).

²⁵⁹ Ex. APP-2 at 6-34 (Application).

²⁶⁰ Ex. EERA-11 at 64 (EA).

²⁶¹ Ex. EERA-11 at 62 (EA).

²⁶² Ex. EERA-11 at 62 (EA).

²⁶³ Ex. EERA-11 at 63 (EA).

Minnesota River Basin, it covers 1,760 square miles, divided by the Minnesota River itself.”²⁶⁴

238. Potential impacts to surface waters are anticipated to be minimal for all routing options. The Project does not cross any impaired waters; therefore, impacts to these resources will not occur.²⁶⁵

239. The alignment for the Applicants’ Proposed Route would cross an unnamed creek delineated as a public watercourse. The route widths of Route Alternatives A and C, as well as the alignment for Route Alternative C, cross an unnamed public water wetland along the eastern portion of the routes, bisected by the railroad.²⁶⁶

240. All the studied routes have a lake within their route width near the proposed Laketown Substation, at the southeast corner of the CSAH 10 and Jersey Avenue intersection. None of the alignments are currently planned to span that lake. Route Alternatives A and C have each an additional public water basin within their route widths, but the alignments do not span the water bodies.²⁶⁷

241. The Applicants’ Proposed Route would cross an intermittent stream once, a perennial stream three times, and a wetland connector once. Route Alternative A crosses three different intermittent streams. Route Alternative B crosses an intermittent stream once and a perennial stream twice. Route Alternative C crosses six separate intermittent streams seven times and has an additional intermittent stream within its proposed alignment’s right-of-way.²⁶⁸

242. Potential impacts to surface waters can be avoided by selecting routes, alignments, and structure placements outside of surface waters. Additionally, spanning waterbodies avoids direct impacts to surface waters within the selected route. Other mitigation measures include using BMPs to reduce the potential for erosion and sedimentation.²⁶⁹

243. There is greater potential for indirect impacts to surface waters along the Route Alternative C and Alignment Alternative D.²⁷⁰

(4) *Wetlands.*

244. There are no public water wetlands or basins located within the Proposed Route or crossed by the proposed right-of-way.²⁷¹

²⁶⁴ Ex. EERA-11 at 65 (EA).

²⁶⁵ Ex. EERA-11 at VII (EA).

²⁶⁶ Ex. EERA-11 at 66 (EA).

²⁶⁷ Ex. EERA-11 at 66 (EA).

²⁶⁸ Ex. EERA-11 at 66 (EA).

²⁶⁹ Ex. EERA-11 at 67 (EA).

²⁷⁰ Ex. EERA-11 at 97 (EA).

²⁷¹ Ex. APP-2 at 6-33 (Application).

245. Overall, potential impacts to wetlands are anticipated to be greater along Route Alternatives A and C and Alignment Alternative D. These are predominantly emergent wetlands, so the potential impacts are anticipated to be minimal. Potential impacts will be short- and long-term and of a relatively small size when compared to total wetland acres in Carver County.²⁷²

246. In addition, Route Alternatives A and C cross more acres of forested wetlands than other options.²⁷³

247. The Applicants' Proposed Route has 0.03 acres of non-delineated wetland within the right-of-way, and 38.5 acres of non-delineated wetland within the route width. Route Alternative A contains 3.5 acres of non-delineated wetland within the right-of-way, and 78.95 acres of non-delineated wetland within the route width. Route Alternative B contains 0.0 acres of non-delineated wetland within the right-of-way, and 21.53 acres of non-delineated wetland within the route width. Route Alternative C contains 5.19 acres of non-delineated wetland within the right-of-way, and 81.17 acres of non-delineated wetland within the route width.²⁷⁴

248. Route Alternative C crosses a Public Water Basin where it also crosses the Twin Cities and Western Railroad. The crossing of the public water is approximately 475 feet long, but the National Wetlands Inventory (NWI) wetlands surrounding the public water shape is 603 feet. Depending upon ultimate span widths, a pole may need to be placed within the Public Water Basin, necessitating the need for additional MDNR permitting and permanent impacts to wetlands.²⁷⁵

249. Based on NWI data, the Proposed Route crosses the least mileage of wetlands (less than 0.01 mile), which consists of a small "lotic river throughflow" within a drained/farmed wetland which could be easily avoided during pole placement. Route Alternative A and Route Alternative C cross 0.3 mile and 0.4 mile of wetlands, respectively, with only Route Alternative A having impacts to forested wetlands (0.1 mile).²⁷⁶

250. Overall, potential impacts to wetlands are anticipated to be short- and/or long-term and of a relatively small size when compared to total wetland acres in Carver County. Impacts will affect a unique, but common, resource.²⁷⁷

251. Construction of the Project largely avoids wetlands, with the exception of the crossing at MP 1.5. There are no wetlands within the Laketown Substation site. Wetland impact avoidance measures that will be implemented during design and construction of the Transmission Line includes spacing and placing the pole structures at variable distances to span and avoid all wetlands. Based on the Proposed Alignment,

²⁷² Ex. EERA-11 at VII (EA).

²⁷³ Ex. EERA-11 at 70 (EA).

²⁷⁴ Ex. EERA-11 at 72-73 (EA).

²⁷⁵ Ex. APP-2 at 4-6 (Application); Ex. EERA-11 at 74 (EA).

²⁷⁶ Ex. APP-2 at 4-7 (Application).

²⁷⁷ Ex. EERA-11 at 70 (EA).

Great River Energy does not anticipate pole placement within wetlands. If the final Transmission Line route design cannot enable the Project to span discrete wetland segments, permanent impacts to wetlands will occur where a structure is in the wetland (approximately five to seven feet in diameter of permanent impact per structure).²⁷⁸

252. In addition, Section 5.3.9 of the Draft Route Permit requires the Permittee to construct within wetlands in frozen ground conditions when possible and to use wooden or composite mats when frozen construction conditions are not possible. The Applicants also committed to the following in section 6.7.2 of the Application, in reference to crossing a wetland:

When possible, construction will be scheduled during frozen ground conditions. When construction during frozen ground conditions is not possible, construction mats (wooden or composite) will be used to protect wetland vegetation. Additionally, low ground pressure construction vehicles may be used, which are designed to minimize impact to soils in damp areas. Construction crews will attempt to access wetlands with the least amount of physical impact to the wetlands. Staging or stringing setup areas will not be placed within or adjacent to water resources to the extent practicable. Once construction of the Project is completed, Great River Energy will restore disturbed areas within wetlands to pre-construction conditions.²⁷⁹

(5) *Impaired Waters.*

253. The Project will not impact impaired waters and will not cause a water to be newly listed as impaired. Potential impacts along all routes are expected to be minimal.²⁸⁰

(6) *Floodplains.*

254. The Project lies within the Lower Minnesota River watershed, in the northeast portion of the Minnesota River Basin.²⁸¹

255. The Project area has only one area identified as having a flooding potential. FEMA has identified an area along Guernsey Avenue as a flood zone A, which has a one percent chance of flooding in a calendar year. The proposed connection points of all routing alternatives and alignments are not located in this area. Even so, if they were to be built, the structures of the poles do not create enough impermeable surfaces, or

²⁷⁸ Ex. APP-2 at 6-35 (Application).

²⁷⁹ Ex. EERA-11, Appendix B at §§ 5.3.9; 6.7.2 (Draft Route Permit).

²⁸⁰ Ex. APP-2 at 6-35 (Application); Ex. EERA-11 at 65–66 (EA).

²⁸¹ Ex. APP-2 at 6-31 (Application).

change the topography of the area, such that it will affect the floodplain in any significant way.²⁸²

256. No impacts to floodplains are anticipated from the Project, therefore no mitigation measures are proposed.²⁸³

7. Flora.

257. Construction and operation of the Project may cause short-term and/or long-term impacts on vegetation. The Applicants will clear approximately five acres of trees within the 100-foot-wide right-of-way. Tree clearing will be largely limited to forest edge along Hampshire Road at MP 0.0 to avoid impacts to a residential property across the road, and then near MP 2.2 where the proposed right-of-way heads north and crosses the Twin Cities and Western Railroad, to stay along a property edge and away from the MDNR public water and wetland to the northeast of the forested area. The Applicants designed the Project to avoid clearing the trees near MP 3.8 on the west side of Jersey Avenue, and some minor clearing will be needed within the Laketown Substation site. All trees are located on private property.²⁸⁴

258. The Project falls in the Eastern Broadleaf Forest Province, Minnesota and Northeast Iowa Morainal Section, and Big Woods subsection. Pre-settlement vegetation was comprised of oak woodland and maple-basswood forests with aspen dominated forest located along the western margin of the subsection.²⁸⁵ The current vegetation and land use is primarily made up of cropland (75 percent) and pasture (5–10 percent). The remaining areas of the subsection are comprised of upland forest or wetland. The proposed right-of-way will cross about 0.2 mile of forested land, which consists of North-Central Interior Dry-Mesic Oak Forest and Woodland, North-Central Interior Maple-Basswood Forest, and Boreal Jack Pine-Black Spruce Forest.²⁸⁶

259. Short-term impacts will result from grading and other physical disturbances. Long-term impacts include removal of woody vegetation within the right-of-way, which will result in conversion to low-stature vegetation (shrubs and grasses) throughout its length. The Applicants would routinely clear woody vegetation from the right-of-way to ensure it does not interfere with the safe operation of the Project.²⁸⁷

260. The Applicants' Proposed Route will primarily follow existing road and distribution line corridors or be in agricultural fields, which will minimize impacts to previously undisturbed vegetation in that area.²⁸⁸ The Applicants will further mitigate potential impacts to forest resources by implement its Vegetation Management Plan during construction and operation of the Transmission Line; compensating individual

²⁸² Ex. EERA-11 at 23 (EA).

²⁸³ Ex. EERA-11 at 23 (EA).

²⁸⁴ Ex. APP-2 at 6-37 (Application).

²⁸⁵ Ex. APP-2 at 6-37 (Application); Ex. EERA-11 at 68 (EA).

²⁸⁶ Ex. APP-2 at 6-37 (Application).

²⁸⁷ Ex. EERA-11 at 69 (EA).

²⁸⁸ Ex. APP-2 at 6-38 (Application).

landowners through negotiated easement agreements for the removal of vegetation in the right-of-way, and providing individual landowners with the option to keep any portions of the trees (e.g., timber, branches, chips, shreds) cut within the easement area.²⁸⁹

261. Section 5.3.10 of the Draft Route Permit requires the Permittees to minimize the number of trees to be removed in selecting the right-of-way, and to leave undisturbed, to the extent possible, existing low growing species in the right-of-way or replant such species in the right-of-way.²⁹⁰

8. Fauna.

262. There are no MDNR Wildlife Management Areas (WMAs) crossed by the Proposed Route. The closest MDNR WMA is the Raguet WMA, which is located approximately 4.75 miles to the east of the Proposed Route. The Minnesota Valley National Wildlife Refuge is located over two miles to the southeast along the Minnesota River.²⁹¹

263. There are no mapped Wildlife Action Network areas or Reinvest in Minnesota Reserve program (RIM Reserve) easements within the local vicinity or the Project area.²⁹² Further, there are no DNR Wildlife Management Areas, Scientific and Natural Areas, or Migratory Waterfowl Feeding and Resting Areas or National Audubon Society Important Bird Areas within the local vicinity of any routing option.²⁹³

264. Wildlife using the route width are expected to be displaced during construction due to increased human activity or other disturbance of habitat. The distance animals are displaced depends on the species and the tolerance level of each animal. Most wildlife would likely return to the area after construction; however, others might be permanently displaced. Because other suitable habitat is available in and near the Project Area, potential temporary impacts to wildlife are not expected to cause permanent changes to local populations. Should Route Alternative C be permitted, structures built within a wetland could directly impact fish or fish habitat.²⁹⁴ Potential long-term impacts to terrestrial and aquatic species are anticipated to be minimal along all route segments.²⁹⁵

265. Potential impacts to wildlife can be avoided by routing power lines away from quality habitat or migratory corridors.²⁹⁶ Impacts can be minimized by spanning habitats and minimizing the number of structures to the extent practicable.²⁹⁷ Impacts to avian species can be mitigated by winter construction (nesting activities would not be

²⁸⁹ Ex. APP-2 at 6-38 and Appendix H (Application; Vegetation Management Plan).

²⁹⁰ Ex. EERA-11, Appendix B at § 5.3.10 (Draft Route Permit).

²⁹¹ Ex. APP-2 at 6-38 (Application); Ex. EERA-11 at 75 (EA).

²⁹² Ex. EERA-11 at 75-76 (EA). One RIM Reserve easement is intersected by the Project Area, slightly less than one mile west of Route Alternative B. Ex. EERA-11 at 76 (EA).

²⁹³ Ex. EERA-11 at 75 (EA).

²⁹⁴ Ex. EERA-11 at 76 (EA).

²⁹⁵ Ex. EERA-11 at 77 (EA).

²⁹⁶ Ex. EERA-11 at 77 (EA).

²⁹⁷ Ex. EERA-11 at 77 (EA).

occurring, and most species would have migrated out of the local vicinity) and by diverting birds away from transmission lines using bird diverters placed on shield wires.²⁹⁸

266. In addition, section 5.3.16 of the Draft Route Permit requires that permittees “incorporate adequate spacing of conductors and grounding devices in accordance with Avian Power Line Interaction Committee standards to eliminate the risk of electrocution to raptors with larger wingspans that may simultaneously come in contact with a conductor and grounding devices.” The Applicants stated they will use Avian Safe Design recommendations and bird diverters, if needed.²⁹⁹

F. Rare and Unique Natural Resources.

267. Minnesota’s HVTL routing factors require consideration of the Project’s effect on rare and unique natural resources.³⁰⁰

268. To determine if a Project will impact a state listed threatened or endangered species, the Applicants consulted with the Minnesota Department of Natural Resources (MDNR) Natural Heritage and Nongame Research Program, which collects, manages, and interprets information about nongame species, through the Minnesota Conservation Explorer (MCE) system.³⁰¹

269. No state-listed endangered or threatened species have been documented in the vicinity of the Project.³⁰² One state-listed species of special concern, the least darter, a small vertebrate fish species, is noted to have occurred in the Project vicinity.³⁰³ Its habitat is the littoral zone of lakes, small rivers, and streams, and the MCE review recommended avoidance of suitable habitat.³⁰⁴ The Project will avoid suitable habitat; therefore, no impacts are expected.³⁰⁵

270. Five federally protected species were identified as having a potential of being within the Project area: the northern long-eared bat, the tricolored bat, the whooping crane, the monarch butterfly, and the rusty patch bumblebee.³⁰⁶ No federally designated critical habitat is present within the Project area.³⁰⁷

271. The EA identified Minnesota Biological Survey (MBS) Native Plant Communities and MBS Sites of Biodiversity Significance in the Project area.³⁰⁸

²⁹⁸ Ex. EERA-11 at 77–78 (EA).

²⁹⁹ Ex. EERA-11 at 87 (EA); Ex. EERA-11, Appendix B at § 5.3.16 (Draft Route Permit).

³⁰⁰ Minn. Stat. § 216E.03, subd. 7(b)(1); Minn. R. 7850.4100(F).

³⁰¹ Ex. APP-2 at 2-5 (Application).

³⁰² Ex. APP-2 at 6-40 (Application); Ex. EERA-11 at VI (EA).

³⁰³ Ex. APP-2 at 6-40 (Application); Ex. EERA-11 at 80 (EA).

³⁰⁴ Ex. APP-2 at 6-44 (Application).

³⁰⁵ Ex. APP-2 at 6-44 (Application).

³⁰⁶ Ex. EERA-11 at 80 (EA).

³⁰⁷ Ex. APP-2 at 6-41 (Application).

³⁰⁸ Ex. EERA-11 at 78 (EA).

272. Four MBS Sites of Biodiversity Significance are within the Project area: Marsh Lake, Marsh Lake Hunting Club, Laketown 32 and Dahlgren 9.³⁰⁹ While none of these sites are within the anticipated right-of-way of any routing option, the Laketown 32 site, has a biodiversity rank of “moderate,” is within the route width of the Route Alternative B. Sites ranked moderate “contain occurrences of rare species, moderately disturbed native plant communities, and/or landscapes that have strong potential for recovery of native plant communities and characteristic ecological processes.”³¹⁰

273. The Project area intersects ten MBS Native Plant Communities. Only one of these intersects the route width of Route Alternative B.³¹¹ Based on the Applicants’ review of the MDNR’s Calcareous Fen geospatial dataset, the Seminary Fen is located within five miles of the easternmost portion of the Project, and seven miles from the Laketown Substation.³¹² Fens are protected under Minn. Stat. § 103G.223, which provides that calcareous fens may not be filled, drained, or otherwise degraded, wholly or partially, by an activity, unless approved by the MDNR through a fen management plan.

274. The Applicants will continue to coordinate with the MDNR and USFWS to avoid and minimize Project impacts on sensitive species, including state-designated calcareous fens.³¹³

G. Application of Various Design Considerations.

275. Minnesota’s HVTL routing factors require consideration of the Project’s applied design options that maximize energy efficiencies, mitigate adverse environmental effects, and could accommodate expansion of the transmission system in the area.³¹⁴

276. The Project enables Great River Energy to provide 115-kV service to the Laketown Substation to meet long-term electricity planning needs.³¹⁵ The Project is designed to maintain necessary reliability requirements in the area and is designed maximize energy efficiencies and accommodate expansion capacity.³¹⁶

277. The City of Carver opposes the Proposed Route because it will hinder its development plans. Route Alternative A is opposed by Carver County because it would interfere with Carver County’s planned highway expansion and relocation; this alternative also impacts the greatest number of residences and crosses a recently annexed area of the City of Victoria. The Applicants oppose Route Alternative B based upon their design choices, arguing Route Alternative B does not enhance system reliability, as further discussed in section J, as would the Proposed Route. Route Alternative C is opposed by the City of Victoria because it conflicts with current development.³¹⁷ The record does not

³⁰⁹ Ex. EERA-11 at 78 (EA).

³¹⁰ Ex. EERA-11 at 78 (EA).

³¹¹ Ex. EERA-11 at 79 (EA).

³¹² Ex. APP-2 at 6-34 (Application); Ex. EERA-11 at 79 (EA).

³¹³ Ex. APP-2 at 6-44 (Application).

³¹⁴ Minn. Stat. § 216E.03, subd. 7(b)(2); Minn. R. 7850.4100(G).

³¹⁵ Ex. APP-2 at 1-1 (Application).

³¹⁶ Ex. APP-2 at 3-6 (Application).

³¹⁷ Ex. APP-21 at 1-2 (Comments regarding EA).

establish that modifications cannot be made to address any design challenges Applicants perceive regarding Route Alternative B.

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

278. Minnesota's HVTL routing factors require consideration of the Project's use of or paralleling of existing right-of-way, survey lines, natural division lines, and agricultural field boundaries.³¹⁸

279. Approximately 2.4 miles, or 53.5 percent of the Project will be collocated with existing right-of-way.³¹⁹ In some of these areas, the road rights-of-way are also adjacent to existing aboveground MVEC distribution lines.³²⁰ During the public hearing, a member of the public noted a concern about the Project passing through farm fields.³²¹ Great River Energy responded during the public hearing that the construction of the Project would generally follow property lines where not already following a roadway.³²²

280. Although Great River Energy initially considered routing along Hampshire Road until its intersection with Augusta Road to maximize collocation with existing infrastructure, there are existing residences on that portion of the road and in close proximity to the road. Great River Energy sought to distance the project from this concentrated development. Thus, instead, the Proposed Route follows property lines between Hampshire Road and Augusta Road to limit residential impacts. Given agricultural activities in this area, Great River Energy specifically designed the Proposed Route to follow these property lines (rather than traversing through fields) to avoid and limit potential impacts to agricultural operations.³²³

281. Route Alternatives A, B and C utilize more existing right-of-way than the Proposed Route³²⁴ Alignment Alternative D does utilize any existing right-of-way.³²⁵

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

282. Minnesota HVTL routing factors require consideration of the Project's use of existing transportation, pipeline, and electrical transmission system rights-of-way.³²⁶

283. The Project could potentially cross the TCWR railway in the central or northeastern portion of the Project Area, depending on which route may be selected.³²⁷

³¹⁸ Minn. Stat. § 216E.03, subd. 7(b)(9); Minn. R. 7850.4100(H).

³¹⁹ Ex. APP-2 at 3-2 (Application).

³²⁰ Ex. APP-2 at 3-2 (Application).

³²¹ Public Hearing Transcript at 40-43 (May 21, 2025).

³²² Public Hearing Transcript at 15 (May 21, 2025).

³²³ Applicants' Post-Hearing Comments (June 9, 2025) (eDocket No. _____).

³²⁴ Ex. APP-21 at 1-2 (Comments regarding EA).

³²⁵ Ex. EERA-11 at 85; 97 (EA).

³²⁶ Minn. Stat. § 216E.03, subd. 7(b)(8); Minn. R. 7850.4100(J).

³²⁷ Ex. EERA-11 at 41 (EA).

There are no natural gas transmission pipelines or hazardous liquid (oil) pipelines near the Project Area.³²⁸

284. While Route Alternative C would collocate the Project with an existing Xcel Energy 230-kV transmission line, the City of Victoria notified Great River Energy that this Route Alternative is located within land that would eventually become part of the City of Victoria through an annexation agreement with Laketown Township, and that the City would like to develop this property for commercial and industrial use in the near future.³²⁹ Indeed, since the filing of the Application, a portion of the subject annexation has been annexed into the City of Victoria municipal boundaries and a developer is proceeding with a commercial development there.³³⁰ For example, Route Alternative C as proposed would cross directly over the southern portion of a to-be-developed Kwik Trip gas station recently approved by the City of Victoria, including two new roads: Crossings Parkway [the access point to the Kwik Trip off of County Road 11] and Ridgeview Boulevard, associated tree plantings along the road, and near the gas pumps.³³¹ Adjustment of Route Alternative C to avoid the planned Kwik Trip could interfere with other future development plans, including building collector roadways (with a possible connection to CSAH 10), utilities, and potential future commercial/retail, dining, and high-density residential and senior living facilities.³³²

J. Electrical System Reliability.

285. Minnesota's HVTL routing factors require consideration of the Project's impact on electrical system reliability.³³³

286. The Applicants have designed the Project to accommodate availability and reliability requirements in the area and, because it is proposed at 115-kV, it is sized to accommodate future expansion when electric loads increase.³³⁴ Accordingly, the Project is anticipated to have a positive impact on electrical system reliability.³³⁵

287. Because all routing alternatives will be constructed and operated to the same standards, the reliability of each individual alternative is anticipated to be the same. Analysis of the reliability of the local electrical grid as a result of the Project, conducted by the Applicants, concludes that local reliability is roughly the same for the Applicants' Proposed Route and Route Alternatives A and C.³³⁶

³²⁸ Ex. EERA-11 at 41 (EA).

³²⁹ Ex. APP-2 at 4-9 (Application); Ex. APP-19 at 7 (Direct Testimony of M. Swenson).

³³⁰ Ex. APP-21 at 7 (Comments regarding EA).

³³¹ Ex. APP-21 at 7-8 (Comments regarding EA).

³³² Ex. APP-21 at 8 (Comments regarding EA).

³³³ Minn. R. 7850.4100(K).

³³⁴ Ex. APP-2 at 5-1 (Application).

³³⁵ Ex. APP-2 at 6-30 (Application); see Ex. EERA-11 at 41 and Appendix C (EA; Great River Energy Reliability Review).

³³⁶ Ex. APP-21 at 10-12 (Comments regarding EA).

288. The Applicants argue that use of Route Alternative B would make the local electrical grid less reliable than their Proposed Route.³³⁷ Great River Energy initially analyzed a similar route option as Route Alternative B during Project development and in the Application, but did not consider or study the configuration further because this configuration would result in an uneven distribution of loading on the electrical system in the area and thus would not meet the identified need as well as the Project's Proposed Route. Route Alternative B would also result in multiple substations, including the proposed new Laketown Substation, to be co-dependent on a single 115-kV circuit, resulting in a higher level of exposure to outages resulting in less reliability.³³⁸ Route Alternative B would require a new breaker station on the existing line between Augusta and Victoria. Reasonable design modification can likely address the Applicants' reliability claims.³³⁹

289. All routing options, other than Route Alternative B under the proposed Project design, would provide improved reliability by reducing transmission exposure to the existing substations in the area and providing redundant service to the new Laketown Substation.³⁴⁰

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

290. Minnesota's HVTL routing factors require consideration of the Project's cost of construction, operation, and maintenance.³⁴¹

291. The Applicants estimate that the total cost of the Project will be approximately \$18 million using the Proposed Route.³⁴²

292. Route Alternative A is estimated to cost approximately \$18,331,214; Route Alternative B is estimated to cost approximately \$15,549,987; Route Alternative C is estimated to cost approximately \$16,708,249; and Alignment Alternative D is estimated to cost approximately \$17,696,444.³⁴³

293. To achieve the same level of reliability, Route Alternative B would require a new breaker station on the existing line between Augusta and Victoria. This would require a new approximately 20-acre greenfield breaker station site that would need to be purchased from a private landowner and would cost approximately \$8-10 million.³⁴⁴

294. The Applicants estimate the annual operation and maintenance costs for the Transmission Line to be approximately \$2,000 per mile.³⁴⁵

³³⁷ Ex. EERA-11 at 97 (EA).

³³⁸ Ex. APP-2 at 4-1 (Application); Ex. APP-21 at 6 (Comments regarding EA).

³³⁹ Ex. APP-21 at 11 (Comments regarding EA).

³⁴⁰ Ex. APP-20 at 4 (Direct Testimony of N. Goater).

³⁴¹ Minn. R. 7850.4100(L).

³⁴² Ex. APP-2 at 1-3 (Application); Ex. EERA-11 at 18 and 97 (EA).

³⁴³ Ex. EERA-11 at 18 (EA).

³⁴⁴ Ex. APP-21 at 11 (Comments regarding EA).

³⁴⁵ Ex. APP-2 at 3-8 (Application).

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

295. Minnesota's HVTL routing factors require consideration of the adverse human and natural environmental effects that cannot be avoided.³⁴⁶

296. Unavoidable adverse impacts include the physical impacts to the land due to construction of the Project. However, as detailed in the Application and the EA, the Applicants will employ avoidance, minimization, and mitigation measures to limit Project impacts.³⁴⁷

M. Irreversible and Irretrievable Commitments of Resources.

297. Minnesota's HVTL routing factors require consideration of the irreversible and irretrievable commitments of resources that are necessary for the Project.³⁴⁸

298. The Project will require only minimal commitments of resources that are irreversible and irretrievable. Irreversible commitments of resources are those that result from the use or destruction of a specific resource that cannot be replaced within a reasonable timeframe. Irretrievable resource commitments are those that result from the loss in value of a resource that cannot be restored after the action. For the Project, those commitments that do exist are primarily related to construction. Construction resources will include the use of water, aggregate resources, hydrocarbons, steel, concrete, wood, and other consumable resources.³⁴⁹

N. Summary of Factors Analysis.

299. The review of the various human and environmental data sets indicates that Route Alternative B is the least problematic for the affected communities (Carver County, the City of Victoria, the City of Carver, and Laketown and Dahlgren Townships) as a whole. Route Alternative B also somewhat mitigates the Applicants' failure to provide statutorily required notice to the City of Carver in the early planning stage as a municipality likely to be affected by the Project.³⁵⁰

300. The Proposed Route is longer and less collocated than the Route Alternatives and will interfere with the City of Carver's planned development. Route Alternative A would interfere with Carver County's published plans to realign and widen CSAH 10 in the next 5-10 years.³⁵¹ Likewise, the City of Victoria noted that Route Alternative C would "severely prohibit development" of an area that has been "highly

³⁴⁶ Minn. Stat. § 216E.03, subd. 7(b)(6); Minn. R. 7850.4100(M).

³⁴⁷ Ex. APP-2 at 6-47 to 6-48 (Application); Ex. EERA-11 at 89-90 (EA).

³⁴⁸ Minn. Stat. § 216E.03, subd. 7(b)(11); Minn. R. 7850.4100(N).

³⁴⁹ Ex. APP-2 at 6-48 (Application); Ex. EERA-11 at 90 (EA).

³⁵⁰ Ex. APP-2 at 4-11 (Application).

³⁵¹ Ex. APP-2 at 4-8 – 4-9 (Application); Ex. APP-21 at 4 (Comments regarding EA).

anticipated for the last few decades to become the commercial hub for the city,” including residential and commercial development.³⁵²

301. Route Alternative B would result an uneven distribution of loading on the electrical system in the area and thus would not meet the identified need as well as the Project’s Proposed Route. Route B would result in the proposed new Laketown Substation to be co-dependent on a single 115-kV circuit. This could cause a higher level of exposure to outages resulting in less reliability. However, Applicants acknowledge that comparable reliability is feasible, although it will cost them approximately \$5 million more than their preferred route.³⁵³

302. Route Alternatives A and C cross both the most acres of emergent wetlands, and the most acres of forested wetlands.³⁵⁴ Based on the Applicants’ review, these routes would require the placement of structures within wetlands. The Applicants’ Proposed Alignment would impact the least area of wetlands.³⁵⁵ Based on the Proposed Alignment, Great River Energy does not anticipate pole placement within wetlands.³⁵⁶

303. The Proposed Route will span the most farmland.³⁵⁷ The Proposed Route is anticipated to clear less than two acres of vegetation, as compared to less than one acre for other alternatives.³⁵⁸

304. Alignment Alternative D is less co-located than the Proposed Route Alignment, it has a greater potential for indirect impacts to surface waters, it crosses the most acres of emergent wetlands, and it does not utilize any existing infrastructure.³⁵⁹ This alignment would result in structures within a wetland—both temporary and permanent wetland impacts.

305. Evidence in the record suggests that the Route Alternative B best balances the Commission’s routing criteria.³⁶⁰

XVI. ROUTE PERMIT CONDITIONS

306. The EA and Draft Route Permit included various recommendations and potential route permit conditions related to the Project, to which Great River Energy responded in Direct Testimony.³⁶¹

³⁵² Ex. APP-2 at 4-9 – 4-11 (Application); Ex. APP-21 at 6-7 (Comments regarding EA).

³⁵³ Ex. APP-2 at 4-1 (Application); Ex. APP-21 at 6 (Comments regarding EA).

³⁵⁴ Ex. EERA-11 at 70 (EA).

³⁵⁵ Ex. EERA-11 at 68 (EA).

³⁵⁶ Ex. APP-2 at 6-35 (Application).

³⁵⁷ Ex. EERA-11 at 97 (EA).

³⁵⁸ Ex. EERA-11 at 97 (EA).

³⁵⁹ Ex. EERA-11 at 85; 87; 97 (EA).

³⁶⁰ Ex. APP-2 at 4-11 (Application).

³⁶¹ Ex. EERA-11 at Appendix B (Draft Route Permit); Ex. APP-19 at 9-10 (Direct Testimony of M. Swenson).

307. With the above-referenced response to the Draft Route Permit, the record in this matter supports the inclusion of the special condition identified in the paragraph that follows.³⁶²

308. The record also supports the inclusion of the following special permit condition, which EERA proposed in the Draft Route Permit and Great River Energy stated it had no objection to inclusion of this special condition:³⁶³

6.1 Phase 1 Archaeological Survey

The Permittee shall conduct a Phase 1 archeological survey of the permitted route. The Permittee shall share the results of the survey with the State Historic Preservation Office (SHPO). The Permittee shall implement any recommendations received from SHPO resulting from the survey. The Permittee shall keep records of compliance with this section and provide them upon the request of Commission staff.

309. In its June 2, 2025, comments, MDNR also recommended special conditions related to listed species, calcareous fens, vegetation removal, avian flight diverters, facility lighting, dust control, and wildlife-friendly erosion control. The Applicants do not object to the recommended special conditions regarding calcareous fens, avian flight diverters, facility lighting, dust control, and wildlife-friendly erosion control, noting that these have been required in prior permits issued by the Commission. With respect to listed species, Applicants stated that they will comply with all required laws regarding listed species.³⁶⁴

310. With respect to vegetation removal, MDNR recommends and EERA supports a special condition that Applicants conduct only winter tree-clearing for the Project. Applicants stated that they will comply with applicable regulations and USFWS requirements related to tree-clearing, and will continue to coordinate with USFWS prior to construction of the Project. Although the Applicants do not support this condition, there is no demonstrated harm to Applicants by following MDNR's recommendation.³⁶⁵

311. Overall, the record supports inclusion of MDNR's recommendation requiring winter tree-clearing.³⁶⁶

³⁶² Ex. EERA-11 at Appendix B (Draft Route Permit); Ex. APP-19 at 9-10 (Direct Testimony of M. Swenson).

³⁶³ Ex. EERA-11 at Appendix B (Draft Route Permit); Ex. APP-19 at 9-10 (Direct Testimony of M. Swenson).

³⁶⁴ Applicants' Post-Hearing Comments (June 9, 2025) (eDocket No. _____).

³⁶⁵ Ex. APP-2 at 6-44, Appendix E (Application); Applicants' Post-Hearing Comments (June 9, 2025) (eDocket No. _____).

³⁶⁶ See Applicants' Post-Hearing Comments (June 9, 2025) (eDocket No. _____).

XVII. NOTICE

312. Minnesota statutes and rules require an Applicant to provide certain notice to the public and local governments before and during the Application for a Route Permit process.³⁶⁷

313. The Applicants provided notice to some of the public and local governments in satisfaction of Minnesota statutory and rule requirements. The Applicants failed to provide mandatory notice to the City of Carver.³⁶⁸

314. EERA and the Commission likewise provided notices in satisfaction of Minnesota statutes and rules, except as to the City of Carver.³⁶⁹

XVIII. COMPLETENESS OF EA

315. The EA process is the alternative environmental review approved by the Environmental Quality Board 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.³⁷⁰

316. The Applicants proposed amending the EA to support their opinion that Route Alternatives A, B, and C and Alignment Alternative D are more impactful and less beneficial than the Applicants' Proposed Route. Those amendments are not supported by the record.³⁷¹

317. 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.³⁷²

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

CONCLUSIONS OF LAW

1. Any of the forgoing Findings of Fact more properly designated as Conclusions of Law are hereby adopted as such.
2. The Commission has jurisdiction to consider the Application.

³⁶⁷ Minn. Stat. § 216E.03, subd. 4 (2023); Minn. R. 7850.2100, subps. 2 and 4.

³⁶⁸ Exs. APP-1 (Notice of Intent to File Route Permit Application under the Alternative Permitting Process); APP-13 (Notice of Filing Route Permit); and APP-15 (Notice of Filing Route Permit Application).

³⁶⁹ Exs. PUC-3 (Notice of Public Information and EA Scoping Meeting); PUC-7 (Notice of Availability and Public Hearing).

³⁷⁰ Minn. R. 4410.4400, subp. 6; Minn. R. 7850.3900, subp. 2.

³⁷¹ See Ex. APP-21 (Comments regarding EA); *compare* Ex. EERA-11.

³⁷² Ex. EERA-6 (EA Scoping Decision).

3. The Commission determined that the Application was substantially complete and accepted the Application on October 1, 2024.³⁷³

4. EERA has conducted an appropriate EA of the Project for purposes of this proceeding, and which 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, and was prepared in compliance with the procedures in Minn. R. 7850.3700.

5. Applicants failed to give notice as required by Minn. Stat. § 216E.04, subd. 4; Minn. R. 7850.2100, subp. 2; and Minn. R. 7850.2100, subp. 4 when they failed to provide notice to the City of Carver. This failure fundamentally undermines the legislative mandate that all communities be notified of and afforded meaningful opportunity to participate in the planning of transmission line projects likely to affect them. This failing is grounds for denial of the Application or for an order requiring additional proceedings to cure Applicants' error.

6. A public hearing was conducted near the Proposed Route. 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. These procedural requirements for the Route Permit were met.

7. The evidence in the record demonstrates that the Proposed Route does not satisfy the Route Permit factors set forth in Minn. Stat. § 216E.04, subd. 8 (referencing Minn. Stat. § 216E.03, subd. 7) and Minn. R. 7850.4100 as to the City of Carver and to the maximization of existing infrastructure.

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

9. The evidence in the record is sufficient to demonstrate only Route Alternative B potentially satisfies all requirements for the Project.

10. The evidence in the record demonstrates that the general Route Permit conditions are appropriate for the Project, with the revisions and clarifications proposed by the Applicants.³⁷⁴

11. The evidence in the record demonstrates that the special condition identified in Section XVI, above, is appropriate for the Project.

³⁷³ Ex. PUC-2 (Order Accepting Application as Complete).

³⁷⁴ See Ex. APP-21 (Comments regarding EA); Ex. APP-19 (Direct Testimony of M. Swenson); Ex. APP-20 (Direct Testimony of N. Goater).

12. 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

Based upon these Conclusions, the Commission may issue a Route Permit for Route Alternative B, conditioned upon additional planning and coordination with the City of Carver sufficient to cure Applicants' failure to provide notice. In the alternative, the Commission should **DENY** the Application.

Dated: July 17, 2025



KIMBERLY MIDDENDORF
Administrative Law Judge

NOTICE

Notice is hereby given that exceptions to this Report, if any, by any party adversely affected must be filed under the time frames established in the Commission's rules of practice and procedure, Minn. R. 7829.1275, .2700 (2023), unless otherwise directed by the Commission. Exceptions should be specific and stated and numbered separately. Oral argument before a majority of the Commission will be permitted pursuant to Minn. R. 7829.2700, subp. 3. The Commission will make the final determination of the matter after the expiration of the period for filing exceptions, or after oral argument, if an oral argument is held.

The Commission may, at its own discretion, accept, modify, or reject the Administrative Law Judge's recommendations. The recommendations of the Administrative Law Judge have no legal effect unless expressly adopted by the Commission as its final order.

July 17, 2025

See Attached Service List

Re: *In the Matter of the Application of Great River Energy for a Route Permit Application for the Laketown 115-kV Transmission Line in Carver County, Minnesota*

**OAH 21-2500-40445
MPUC TL-24-132**

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 RECOMMENDATION** in the above-entitled matter.

If you have any questions, please contact me at (651) 361-7845, samantha.cosgriff@state.mn.us, or via facsimile at (651) 539-0310.

Sincerely,


SAMANTHA COSGRIFF
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 Great River Energy for a Route Permit Application for the Laketown 115-kV Transmission Line in Carver County, Minnesota	OAH Docket No.: 21-2500-40445 MPUC TL-24-132
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On July 17, 2025, a true and correct copy of the **FINDINGS OF FACT, CONCLUSIONS OF LAW, AND RECOMMENDATION** was served by eService, and United States mail, (in the manner indicated on the attached service list) to the following individuals:

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
1	Katherine	Arnold	katherine.arnold@ag.state.mn.us		Office of the Attorney General - Department of Commerce	445 Minnesota Street Suite 1400 St. Paul MN, 55101 United States	Electronic Service		No	Official CC Service List OAH
2	Mike	Bull	mike.bull@state.mn.us		Public Utilities Commission	121 7th Place East, Suite 350 St. Paul MN, 55101 United States	Electronic Service		No	Official CC Service List OAH
3	Generic	Commerce Attorneys	commerce.attorneys@ag.state.mn.us		Office of the Attorney General - Department of Commerce	445 Minnesota Street Suite 1400 St. Paul MN, 55101 United States	Electronic Service		No	Official CC Service List OAH
4	Sharon	Ferguson	sharon.ferguson@state.mn.us		Department of Commerce	85 7th Place E Ste 280 Saint Paul MN, 55101-2198 United States	Electronic Service		No	Official CC Service List OAH
5	Jacques	Harvieux	jacques.harvieux@state.mn.us		Public Utilities Commission	121 7th Place East Suite 350 Saint Paul MN, 55101-2147 United States	Electronic Service		No	Official CC Service List OAH
6	Logan	Hicks	logan.m.hicks@state.mn.us		Department of Commerce	85 7th Place East Suite 280 Saint Paul MN, 55101 United States	Electronic Service		No	Official CC Service List OAH
7	Spencer	Howe	spencerh@mvec.net	Minnesota Valley Electric Cooperative		125 Minnesota Valley Electric Dr Jordan MN, 55352 United States	Electronic Service		No	Official CC Service List OAH
8	Breann	Jurek	bjurek@fredlaw.com	Fredrikson & Byron PA		60 S Sixth St Ste 1500 Minneapolis MN, 55402 United States	Electronic Service		No	Official CC Service List OAH
9	Molly	Leisen	mleisen@fredlaw.com	Fredrikson & Byron P.A.		60 South Sixth Street Suite 1500 Minneapolis MN, 55402 United States	Electronic Service		No	Official CC Service List OAH
10	Sam	Lobby	sam.lobby@state.mn.us		Public Utilities Commission	350 Metro Square Building 121 7th Place East St. Paul MN, 55101 United States	Electronic Service		No	Official CC Service List OAH
11	Kimberly	Middendorf	kimberly.middendorf@state.mn.us		Office of Administrative Hearings	PO Box 64620 600 Robert St N Saint Paul MN, 55164-0620 United States	Electronic Service		Yes	Official CC Service List OAH
12	Generic Notice	Residential Utilities Division	residential.utilities@ag.state.mn.us		Office of the Attorney General - Residential Utilities Division	1400 BRM Tower 445 Minnesota St St. Paul MN,	Electronic Service		No	Official CC Service List OAH

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
						55101-2131 United States				
13	Janet	Shaddix Elling	jshaddix@janetshaddix.com	Shaddix And Associates		7400 Lyndale Ave S Ste 190 Richfield MN, 55423 United States	Electronic Service		Yes	Official CC Service List OAH
14	Michael	Swenson	mswenson@greenergy.com	Great River Energy		12300 Elm Creek Boulevard Maple Grove MN, 55369-4718 United States	Electronic Service		No	Official CC Service List OAH
15	Haley	Waller Pitts	hwallerpitts@fredlaw.com	Fredrikson & Byron, P.A.		60 S Sixth St Ste 1500 Minneapolis MN, 55402-4400 United States	Electronic Service		No	Official CC Service List OAH