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

In the Matter of the Application of Great River Energy for a Route Permit for the 115-kV Cedar Lake Transmission Line Reroute Project in Scott and Rice Counties OAH Docket No. 5-2500-39476 MPUC Docket No. ET2/TL-23-170

GREAT RIVER ENERGY'S PROPOSED FINDINGS OF FACT, CONCLUSIONS OF LAW, AND RECOMMENDATIONS

STATEMENT	OF ISSUES	5
SUMMARY (OF RECOMMENDATIONS	5
FINDINGS O	F FACT	5
I.	APPLICANT	
II.	PROCEDURAL HISTORY	
III.	DESCRIPTION OF THE PROJECT	
IV.	NEED OVERVIEW	
V.	ROUTES EVALUATED	
• •	A. Applicant's Proposed Route	
	B. Other Routes Evaluated by Applicant	
	C. Alternatives Analyzed in the Environmental Assessment	
VI.	TRANSMISSION LINE STRUCTURE TYPES AND SPANS	
VII.	TRANSMISSION LINE CONDUCTORS	
VIII.	TRANSMISSION LINE ROUTE WIDTHS	
IX.	TRANSMISSION LINE RIGHT-OF-WAY	
X.	PROJECT SCHEDULE	
XI.	PROJECT COSTS	
XII.	PERMITTEE	
XIII.	PUBLIC AND LOCAL GOVERNMENT PARTICIPATION	
XIV.	FACTORS FOR A ROUTE PERMIT	
XV.	APPLICATION OF ROUTING FACTORS TO THE PROPOSED	10
21 .	ROUTE	21
	A. Effects on Human Settlement	
	B. Effects on Public Health and Safety	
	C. Effects on Land-Based Economies.	
	D. Effects on Archaeological and Historic Resources	
	E. Effect on Natural Environment.	
	F. Effects on Rare and Unique Natural Resources	
	G. Application of Various Design Considerations	
	H. Use of or Paralleling of Existing Rights-of-Way, Survey Lines,	50
	Natural Division Lines, and Agricultural Field Boundaries	37
	I. Use of Existing Transportation, Pipeline, and Electrical	57
	Transmission System Rights-of-Way	37
	J. Electrical System Reliability.	
	K. Costs of Constructing, Operating, and Maintaining the Facility	
	L. Adverse Human and Natural Environmental Effects that Cannot be	50
	Avoided.	38
	M. Irreversible and Irretrievable Commitments of Resources	
	N. Summary of Factors Analysis	
XVI.	ROUTE PERMIT CONDITIONS	
	NOTICE	
	COMPLETENESS OF EA	
AVIII.	COMPLETENESS OF EA	40
CONCLUSIO	NS OF LAW	40

RECOMMENDATIONS4

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 for the 115-kV Cedar Lake Transmission Line Reroute Project in Scott and Rice Counties OAH Docket No. 5-2500-39476 MPUC Docket No. ET2/TL-23-170

GREAT RIVER ENERGY'S PROPOSED FINDINGS OF FACT, CONCLUSIONS OF LAW, AND RECOMMENDATIONS

This matter was assigned to Administrative Law Judge Jim Mortenson to conduct a public hearing on the Route Permit Application (MPUC Docket No. ET2/TL-23-170) ("Application") of Great River Energy ("Applicant") for the construction and rebuild of approximately 6.3 miles of 115 kilovolt ("kV") high voltage transmission line ("Project"). The Project will begin at the existing Cedar Lake Substation and connect to Great River Energy's existing 115-kV transmission line near the intersection of 280th St E / State Highway 19 and Panama Avenue / County Road 23. The Project is a reroute of approximately 4.5 miles of the existing 115-kV transmission line. The proposed Project occurs in Helena and Cedar Lake Townships, east of the City of New Prague, in Scott County, and in Wheatland Township, in Rice County, Minnesota; an expanded route width analyzed in the Environmental Assessment ("EA") is also within Lanesburgh Township, Le Sueur County. The Minnesota Public Utilities Commission ("MPUC" or "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 January 24, 2024 (in person) and January 25, 2024 (remote access – telephone and internet). The factual record remained open until February 7, 2024, for the receipt of written public comments.

Haley Waller Pitts, Fredrikson & Byron, P.A., 60 South Sixth Street, Suite 1500, Minneapolis, Minnesota 55402, and Mark Strohfus, Project Manager of Transmission Permitting for Great River Energy, appeared on behalf of Great River Energy.

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

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

STATEMENT OF ISSUES

Has Great River Energy satisfied the criteria established in Minn. Stat. Ch. 216E and Minn. R. Ch. 7850 for granting a Route Permit for the Project?

SUMMARY OF RECOMMENDATIONS

The Administrative Law Judge concludes that Great River Energy has satisfied the applicable legal requirements and, accordingly, recommends that the Commission GRANT a Route Permit for the Project, subject to the conditions discussed below.

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

FINDINGS OF FACT

I. APPLICANT

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

II. PROCEDURAL HISTORY

- 2. The Minnesota Power Plant Siting Act ("PPSA") provides that no person may construct a high voltage transmission line ("HVTL") without a route permit from the Commission. Under the PPSA, an HVTL includes a transmission line that is 100 kV or more and is greater than 1,500 feet in length. The proposed 115-kV transmission line is an HVTL greater than 1,500 feet in length and, therefore, a route permit is required from the Commission prior to construction.
- 3. The Commission's rules establish two tracks for the permitting of a HVTL. The "full permitting process" includes preparing an environmental impact statement ("EIS") and holding a contested case hearing. The "alternative permitting process" is available to, among other HVTLs, HVTLs which operate at a voltage between 100 and 200 kV; this process requires an EA instead of an EIS and a public hearing instead of a contested case hearing.

¹ Ex. GRE-2 at 1-1 (Application).

² Minn. Stat. § 216E.03, subd. 2.

³ Minn. Stat. § 216E.01, subd. 4.

⁴ Ex. GRE-2 at 1-1 (Application).

⁵ See Minn. R. 7850.1700–.2700 (full permitting procedures).

⁶ See Minn. R. 7850.2900–.3900 (alternative permitting procedures).

- 4. Because the Applicant's 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).
- 5. On May 3, 2023, Applicant filed with the Commission a notice that Applicant intended to apply for a Route Permit for the Project and intended to use the Alternative Permitting Process within Minn. R. 7850.2800 .3900.8
- 6. On June 6, 2023, Applicant submitted the Route Permit Application for the Project. The Application included requested route widths (the "Proposed Route") and identified a proposed right-of-way and alignment (the "Application Alignment").
- 7. On June 12, 2023, the Commission issued a Notice of Comment Period regarding the completeness of the Application, requesting initial comments by June 26, 2023, reply comments by July 3, 2023, and supplemental comments by July 10, 2023. 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; and whether there were any additional procedural requirements that should be considered.¹⁰
- 8. On June 15, 2023, EERA filed its Completeness Comments and Recommendations. EERA recommended that the Commission accept the Application as complete, recommended that the Commission take no action on an advisory task force, and recommended that the Commission request a full Administrative Law Judge report for the Project. 11
- 9. On July 5, 2023, the Commission issued an Order accepting the Application as substantially complete, authorized review under the alternative permitting process defined in Minn. Stat. § 216.04 and Minn. R.7850.2800 to 7850.3900, took no action on an advisory task force, and requested a full Administrative Law Judge report for the Project. The Commission also agreed, adopted, and incorporated the recommendations of EERA.¹²
- 10. On July 10, 2023, Applicant filed a Confirmation of Notice compliance filing for the Route Permit Application.¹³
- 11. On July 14, 2023, the Commission and EERA issued a Notice of Public Information Meeting and EA Scoping Meeting, requesting responses to four questions regarding the Project: (1) What potential human and environmental impacts should be studied?; (2) What are possible methods to minimize, mitigate, or avoid potential impacts that should be studied?; (3) Are there

⁷ Minn. R. 7850.2800, subp. 1(C).

⁸ Ex. GRE-1 (Notice of Intent by Great River Energy to Submit a Route Permit Application under the Alternative Permitting Process).

⁹ Exs. GRE-2 – GRE-7 (Application, Figures, and Appendices).

¹⁰ Notice of comment Period (June 12, 2023) (eDocket Number 20236-196494-01).

¹¹ Ex. EERA-1 (Comments and Recommendations on Application Completeness).

¹² Ex. PUC-1 (Order).

¹³ Ex. GRE-8 (Compliance Filing – Notice of Filing Application).

any alternative routes or route segments that should be studied to address potential impacts?; and (4) Are there any unique characteristics of the Project area that should be considered? ¹⁴

- 12. On August 1, 2023, a public information and scoping meeting was held in person in New Prague, Minnesota.
- 13. On August 2, 2023, a public information and scoping meeting was held virtually via Webex conference software.
- 14. On August 2, 2023, the Commission filed the presentations prepared for the Public Information and Scoping Meeting. 15
 - 15. A comment period was open through August 15, 2023. 16
- 16. On August 8, 2023, the Minnesota Department of Natural Resources ("MDNR") filed comments regarding potential environmental impacts that should be considered in the EA.¹⁷
 - 17. On August 10, 2023, Applicant filed its Vegetation Management Plan ("VMP"). 18
 - 18. Also on August 10, 2023, the Commission filed a sample HVTL permit template. 19
- 19. On August 14, 2023, the Minnesota Department of Transportation ("MnDOT") filed comments regarding EERA's scoping review.²⁰
- 20. On August 15, 2023, the Minnesota Department of Health filed comments regarding EERA's scoping review.²¹
- 21. On August 15, 2023, EERA filed the transcripts from the Public Information and Scoping Meetings occurring on August 1 and August 2, 2023.²²
- 22. On August 24, 2023, Applicant filed its replies to comments received during the scoping comment period.²³

¹⁴ Ex. PUC-2 (Notice of Public Information and Environmental Assessment Scoping Meeting).

¹⁵ Handout – Commission Public Information Meeting Presentation (August 2, 2023) (eDocket No. <u>20238-</u>197951-01).

¹⁶ See EERA-5 (containing public written comments of Dale Creed Francis (August 7, 2023) (eDocket No. 20238-198270-02); Heather Meyers (eDocket No. 20238-198270-03); Jeffrey Krocak (August 14, 2023) (eDocket No. 20238-198270-04); Joe Lambrecht (August 14, 2023) (eDocket No. 20238-198270-05); John Franck (eDocket No. 20238-198270-06); John Magnussen (eDocket No. 20238-198270-07); Rob and Ashley Solheid (August 13, 2023) (eDocket No. 20238-198270-08); Tasia Balk (August 14, 2023) (eDocket No. 20238-198270-09)).

¹⁷ See EERA-3 (Public Agency Comments).

¹⁸ Ex. GRE-9 (Vegetation Management Plan).

¹⁹ Sample HVTL Route Permit Template (August 10, 2023) (eDocket No. 20238-198146-01).

²⁰ See EERA-3 (Public Agency Comments).

²¹ See EERA-3 (Public Agency Comments).

²² Ex. EERA-4 (Public Comments – Oral Comments).

²³ Ex. GRE-10 (Reply Comments Regarding Scoping).

- 23. On August 30, 2023, the Administrative Law Judge filed a Notice of Prehearing Conference for September 19, 2023, and requiring the parties to file a proposed schedule for this proceeding by September 12, 2023.²⁴
- 24. On September 12, 2023, Applicant filed a letter proposing a procedural schedule which was prepared in coordination with EERA and Commission staff.²⁵
- 25. On September 13, 2023, EERA filed its comments regarding a scoping assessment. EERA recommended that Applicant's Proposed Route be the sole routing alternative included in the scoping decision for the EA.²⁶
- 26. On September 19, 2023, a prehearing conference was held before Administrative Law Judge Suzanne Todnem, and on September 26, 2023, the Administrative Law Judge issued a Scheduling Order establishing a schedule for the proceedings. ²⁷ The transcript from the prehearing conference was filed on October 3, 2023. ²⁸
- 27. On October 10, 2023, EERA filed amended comments and recommendations supplementing its scoping process, indicating that it recommends Applicant's Proposed Route be include in the scope of the EA for the Project, as well as one alignment modification be included in the scope of the EA the Country Hollows Lane Alignment Alternative.²⁹
- 28. On October 12, 2023, Applicant filed a letter indicating that it does not object to EERA's recommendation that the EA include Applicant's Proposed Route as well as the Country Hollows Lane Alternative Alignment.³⁰
- 29. On October 17, 2023, Applicant filed a letter providing an update regarding route alternative 3 ("RA3"). Applicant stated that RA3 parallels an existing pipeline, but as part of its ongoing diligence, Applicant had a virtual meeting with the owner of the MinnCan pipeline on October 16, 2023. MinnCan indicated that, if the Project were to follow RA3, the Project should be offset 50 feet from the pipeline, a study would be needed, and mitigation (additional grounding) would need to be installed. Applicant further noted that the available GIS data regarding the specific centerline of the pipeline is not precise, and if RA3 is studied further, Applicant would need to coordinate with MinnCan to determine the precise pipeline centerline.³¹
- 30. On October 18, 2023, revised Commission decision options were filed that included two proposals for the scope of the EA. Proposal one stated the EA shall provide an assessment of potential impacts a quarter mile south and west of the proposed alignment from the substation to Highway 19 and a quarter mile to the east of the proposed alignment from the intersection of 270th St. W. and Baseline Road to Highway 19. Proposal two stated that the EA must include an analysis

²⁴ Notice of Prehearing Conference (August 30, 2023) (eDocket No. 20238-198619-01).

²⁵ Ex. GRE-11 (Proposed Schedule).

²⁶ Ex. EERA-6 (Scoping Summary Comments).

²⁷ First Scheduling Order (September 26, 2023) (eDocket No. 20239-199166-01).

²⁸ Transcript from Prehearing Conference (eDocket No. 202310-199350-01).

²⁹ Ex. EERA-7 (Amended Comments).

³⁰ Ex. GRE-12 (Reply Comments regarding EA Scope).

³¹ Ex. GRE-13 (Comments regarding Update Concerning Route Alternative 3).

of a complete under build for the full length of the Proposed Route paralleling Highway 19 of the existing distribution line that is now located South of Highway 19.³²

- 31. The Commission met to consider the scope of the Project's EA on October 19, 2023, and, on October 26, 2023, the Commission issued an order requiring that the EA evaluate Applicant's Proposed Route, the Country Hollows Lane Alignment Alternative, and the two proposals included in the October 18, 2023, revised decision options.³³
- 32. On November 16, 2023, EERA filed a decision on the scope of the EA to be prepared for the Project.³⁴
- 33. On December 15, 2023, a member of the public submitted a comment regarding eagle activity in the vicinity of the Project.³⁵
 - 34. On December 28, 2023, EERA filed the EA and appendices thereto.³⁶
 - 35. Also on December 28, 2023, EERA filed a draft route permit.³⁷
- 36. On January 3, 2024, the Commission issued a Notice of Public Hearing scheduling hearings for January 24, 2024 (in person) and January 25, 2024 (remote-access). The notice also opened a public comment period until February 7, 2024.³⁸
- 37. On January 10, 2024, Applicant filed the direct testimony of Mark Strohfus and schedules thereto.³⁹ No other pre-filed testimony was submitted.
- 38. On January 24, 2024, Administrative Law Judge Suzanne Todnem presided over a public hearing at the New Prague Fire Department in New Prague, Minnesota. The transcript from that hearing was filed on February 6, 2024.⁴⁰ Three hearing exhibits from a member of the introduced and received during the January 24 public hearing were filed on January 29, 2024.⁴¹ The primary topics commented upon included the following: the Country Hollows Lane Alignment Alternative; concerns about the impact of the Project on signage/monuments associated with housing developments along Highway 19; the land acquisition process; potential impacts to agricultural operations; the impact of electromagnetic fields ("EMF"); and land use more generally. Great River Energy responded to questions at the public hearing, as applicable.
- 39. On January 25, 2024, the Commission held a virtual public hearing via WebEx conferencing software. The transcript from that hearing was filed on February 6, 2024. 42 One

³² Commission Briefing (Oct. 18, 2023) (eDocket No. <u>202310-199682-01</u>).

³³ Ex. PUC-3 (Order on Scope of EA).

³⁴ Ex. EERA-8 (Scoping Decision for EA).

³⁵ See Lisa Duoos Smrekar Comment (December 15, 2023) (eDocket No. 202312-201252-01).

³⁶ Ex. EERA-9 (EA).

³⁷ Ex. EERA-9 (Draft Route Permit – attached as Appendix B to EA).

³⁸ Ex. PUC-4 (Notice of Public Hearing).

³⁹ Ex. GRE-14 (Direct Testimony of Mark Strohfus and Schedules A-C).

⁴⁰ In Person Public Hearing Transcript (eDocket No. 20242-203117-01).

⁴¹ Hearing Exhibits 1-3 (eDocket No. 20241-202772-01).

⁴² Remote Public Hearing Transcript (eDocket No. 20242-203117-02).

member of the public made a comment regarding the Country Hollows Lane Alignment Alternative.

- 40. On January 29, 2024, comments from John Hendricks were filed in the docket. 43 Mr. Hendricks proposed two modifications to the Application Alignment. Great River Energy evaluated these modifications, as discussed in its Post-Hearing Comments.
- 41. On February 5, 2024, MDNR submitted comments containing two requested special conditions for inclusion in the route permit regarding dust control and wildlife friendly erosion control.⁴⁴
- 42. On February 6, 2024, United States Fish and Wildlife ("USFWS") submitted comments regarding easement use.⁴⁵ USFWS stated that the Project aerially crosses a USFWS easement and, thus, is subject to the National Environmental Protection Act ("NEPA").
- 43. On February 7, 2024, MnDOT filed comments regarding the Project and Minnesota Valley Electric Cooperative's ("MVEC") distribution lines and Project facilities with MnDOT rights-of-way.⁴⁶
- 44. Also on February 7, 2024, Metropolitan Council ("Met Council") submitted comments. ⁴⁷ Met Council stated that it reviewed the EA and found that the EA was complete and accurate. Met Council offered comments concerning permits/approvals, construction, land use, agriculture, and airports.
- 45. Also on February 7, 2024, Marvin and Kim Deutsch submitted written comments. 48 Mr. and Mrs. Deutsch attached a modification to the Application Alignment.
- 46. On February 14, 2024, this matter was reassigned to Administrate Law Judge Jim Mortenson.
- 47. On February 16, 2024, Great River Energy filed its Post-Hearing Response to Comments ("Post-Hearing Comments"). In those comments, Great River Energy provided further responses to comments submitted during the public hearing comment period. Among other things, Great River Energy's comments discussed the Country Hollows Lane Alignment Alternative, the compatibility of the Project with current and foreseeable future land uses, and alignment modifications submitted during the public hearing comment period. With respect to the alignment modifications, Great River Energy explained that the suggested modifications would result in greater environmental or residential impacts and, accordingly, Great River Energy did not support those modifications. Great River Energy also included responses to agency comments, including to clarify that Great River Energy has been engaged in ongoing coordination with USFWS regarding the Project and has developed an alignment and right-of-way that avoids the USFWS Waterfowl Production Area ("WPA") easement interests (meaning that federal environmental

⁴³ See John Hendricks Comment (January 18, 2024) (eDocket No. 20241-202815-01).

⁴⁴ MDNR Comments (February 5, 2024) (eDocket No. 20242-203111-01).

⁴⁵ USFWS Comments (February 6, 2024) (eDocket No. <u>20242-203143-01</u>).

⁴⁶ MnDOT Comments (February 7, 2024) (eDocket No. 20242-203171-01).

⁴⁷ Met Council Comments (February 7, 2024) (eDocket No. 20242-203420-01).

⁴⁸ Marvin and Kim Deutsch Comments (February 7, 2024) (eDocket No. 20242-203213-01).

review would not be required). With its comments, Great River Energy also submitted its proposed Route Permit and Proposed Findings of Fact, Conclusions of Law, and Recommendations.

III. DESCRIPTION OF THE PROJECT

- 48. The Project would be approximately 6.3 miles of 115- kV HVTL, referred to as the Cedar Lake Reroute Project (or "Project"). 49
- 49. Applicant's existing MV-CDT 115-kV circuit supplying power to the Cedar Lake Substation is currently located on the structures that were built for the CapX2020 Brookings County Hampton 345 kV Project ("Brookings Project") along County Road 2, which is north of the Cedar Lake Substation. This 115-kV circuit must be decommissioned and removed in accordance with the contractual conditions that Applicant has with the CapX2020 owners to make room for a new, second 345-kV circuit on the existing CapX2020 structures. Description Pursuant to those contractual conditions, the Project must be removed and in-service by September 2025.
- 50. The Proposed Route begin at the existing Cedar Lake Substation and connect to Applicant's existing MV-EVX 115-kV transmission line near the intersection of 280th St E / State Highway 19 and Panama Avenue / County Highway 23. The Project, as proposed, occurs in Helena and Cedar Lake Townships, east of the City of New Prague, in Scott County, and in Wheatland Township, in Rice County, Minnesota. The expanded route width studied in the EA is also within Lanesburgh Township, Le Sueur County.

IV. NEED OVERVIEW

- 51. The Project is needed so the CapX2020 owners can install a second 345-kV circuit on the existing CapX2020 structures and to maintain a reliable transmission system in the vicinity of the Project. Over the last decade, Applicant has completed upgrades in the larger Cedar Lake area to a 115-kV transmission system to improve reliability and resiliency. The existing 115-kV line serving the Cedar Lake Substation is a radial feed. To remove the circuit from the CapX2020 structures, a new 115-kV transmission line circuit must be built and connected to the Cedar Lake Substation.⁵³
- 52. The Project, along with the CapX2020 second 345-kV circuit, will ensure that Applicant maintains reliable and resilient service to electric customers. The Project will address reliability concerns and, because it facilitates the CapX2020 second circuit, the Project will facilitate increased deliverability of renewable resources from southern Minnesota to the southwest metropolitan area. ⁵⁴
- 53. The Project does not require a certificate of need because it is not a "large energy facility," as defined by Minn. Stat. § 216B.2421, subd. 2.

⁴⁹ Ex. GRE-2 at 1-1 (Application).

⁵⁰ Ex. GRE-2 at 1-1 (Application).

⁵¹ Ex. GRE-2 at 1-1 (Application).

⁵² Ex. GRE-2 at 1-1 (Application).

⁵³ Ex. GRE-2 at 1-4–1-5 (Application).

⁵⁴ Ex. GRE-2 at 1-4–1-5 (Application).

V. ROUTES EVALUATED

A. Applicant's Proposed Route.

54. The Project will begin at Applicant's existing Cedar Lake Substation located approximately 1,000 feet south of 260th St W in Helena Township in Scott County. The Project Route will extend east from the Cedar Lake Substation through agricultural fields and forested areas to Baseline Avenue. From there, it will continue to follow Baseline Avenue until 270th St W to Baseline Avenue's termination point. The Project Route will continue south for approximately 1,300 feet to a landowner property boundary, where it will turn east for approximately 600 feet to the eastern edge of the landowner property boundary. The Project Route will then continue south for approximately 2,650 feet to 280th St E / State Highway 19 and then turn east. It will continue along 280th St E / State Highway 19 for approximately 4 miles until it intersects with Applicant's existing MV-EVX 115-kV line near Panama Ave / County Highway 23.55

B. Other Routes Evaluated by Applicant.

- 55. Review under the alternative permitting process does not require the Applicant to propose alternative routes in the Application. However, if the Applicant has evaluated and rejected alternative routes, they must include these and the reasons for rejecting them in the route permit Application. ⁵⁶
- 56. Applicant first considered whether connection to the Xcel Energy 69-kV 0744 transmission line was a viable option. This alternative was rejected because the Xcel Energy 69-kV 0744 connection point is an older transmission system that is less reliable than other 115-kV connection points available in the area. This 69-kV transmission line has an exposure length of 22 miles in comparison to about 13 miles of exposure on the preferred 115-kV connection point. In addition, interconnecting the Cedar Lake Substation to Xcel Energy's 69-kV 0744 line would cause post-contingent transmission line loading and low voltage concerns to the system that would make this option inferior to connecting to Applicant's 115-kV MV-EVX line. No actual routes under this alternative were evaluated in detail.⁵⁷
- 57. Applicant also evaluated following the existing CapX2020 Brookings to Hampton transmission line alignment. This option was rejected for several reasons, including necessitation the construction of triple circuit structures, which would likely require shorter spans than the existing structures; requiring larger right-of-way, further impacting residences already impacted by the existing line; and impacting properties that were originally intentionally avoided by the CapX2020 alignment. Due to the direct impact to landowners, the constructability issues, and construction timelines, following the CapX2020 line was eliminated from further consideration. ⁵⁸

⁵⁵ Ex. GRE-2 at 3-1–3-2 (Application).

⁵⁶ Ex. EERA-9 at 14 (EA).

⁵⁷ Ex. GRE-2 at 4-1 (Application).

⁵⁸ Ex. GRE-2 at 4-2 (Application).

- 58. With the above alternatives deemed infeasible, Applicant evaluated three route alternatives that would include the installation of a 115-kV transmission line from the Cedar Lake Substation and have a connection point east of that substation, at the MV-EVX 115-kV line.⁵⁹
- 59. The three route alternatives considered and rejected by Great River Energy are depicted in Figure 4-1 of the Application.⁶⁰ Because the Proposed Route and the route alternatives evaluated traverse relatively the same geography and terrain, potential human and environmental impacts are similar across the route alternatives. The three Route Alternatives are compared in Tables 4.4-1, 4.4-2, and 4.4-3 of the Application.⁶¹
- 60. As stated in the Application, Applicant concluded that the Proposed Route is the most beneficial with the least impact to the public, and best balances the Commission's routing criteria. The Proposed Route is collocated for 47.3% of its length with utilities (i.e., electric transmission and distribution lines, and / or oil pipelines) and roads, more than any of the other Route Alternatives, and it has the least number of homes within 200 feet of the proposed centerline. The Proposed Route also does not cross any Minnesota Board of Water and Soil Resources Reinvest in Minnesota conservation easements, and has fewer public watercourse crossings relative to the other alignments associated with the route alternatives. Similarly, the Proposed Alignment crosses approximately 0.4 mile of natural land use, including both upland and wetland forested areas, relative to the alignments associated with the other Route Alternatives that cross between 0.4 and 0.9 mile. All remaining mileage crossed is developed/disturbed or agricultural. All and 0.9 mile. All remaining mileage crossed is developed/disturbed or agricultural.

C. Alternatives Analyzed in the Environmental Assessment.

- 61. During the EA scoping comment period, several members of the public suggested alternative routes, alternative route segments, or modifications to the alignment proposed by Applicant in the Application.⁶⁴
- 62. In its Scoping Decision, EERA determined that the EA would evaluate the Applicant's Proposed Route and the Country Hollows Lane Alignment Alternative. The EA would also evaluate an expanded route width between the Cedar Lake Substation and Highway 19 and provide an assessment of potential impacts a quarter mile South and West of the Application Alignment from the substation to Highway 19 and a quarter mile to the east of the Application Alignment from the intersection of 270th Street West and Baseline Road to Highway 19. Finally, the EA would also evaluate under-building, for the length of the Applicant's route paralleling Highway 19, of the existing distribution line that is now located South of Highway 19 and other modifications that co-locate or remove the distribution infrastructure from the Applicant's Proposed Route.⁶⁵

⁵⁹ Ex. GRE-2 at 4-2 (Application).

⁶⁰ Ex. GRE-2 at 4-2 (Application); Ex. GRE-3 at Figure 4-1 (Figures).

⁶¹ Ex. GRE-2 at 4-3-4-6 (Application).

⁶² Ex. GRE-2 at 4-3 (Application).

⁶³ Ex. GRE-2 at 4-3–4-5 (Application).

⁶⁴ Ex. EERA-9 at 17 (EA).

⁶⁵ Ex. EERA-8 at 5 (EA Scoping Decision).

- 63. In the Scoping Summary, EERA identified other route alternatives proposed by members of the public and determined not to study those alternatives because those alternatives would have human and environmental impacts that are relatively greater than Great River Energy's Proposed Route. EERA also noted that it was also unclear what significant impacts the commenters were attempting to avoid (mitigate).⁶⁶
- 64. The Country Hollows Lane Alignment Alternative involves following the alignment of the Proposed Route, but moving the line to the south side of Highway 19 to avoid crossing the entrance road to the Country Hollows development. With respect to the Country Hollows Alternative Alignment, the EA states, "The proposed alignment would pass directly over the landscaping at the entrance and more than likely require some tree removal to remain compliant with the [NESC] code...". The EA further states, "[a]n appropriate mitigation for the identified impacts to the landscaping at the entrance to the Country Hollow Development would be avoidance. This could be accomplished by modification of the proposed alignment, moving the proposed alignment to the south side of State Highway 19 just west of Country Hollow Lane while staying in the requested route width avoiding the land scaping at the entrance to the development." In its Post-Hearing Comments, Great River Energy confirmed that it is continuing to work with all landowners directly impacted by the alignments in this area in hopes of coming to an agreeable resolution for the final alignment.
- 65. At the Commission's request, the EA also analyzed an expanded route width between the Cedar Lake Substation and Highway 19.⁶⁹ The EA determined that an alternative alignment within this expanded route width would likely increase Project impacts to agricultural land, forested land, forested wetland, and emergent wetlands, as well as increase habitat fragmentation.⁷⁰
- 66. Also at the Commission's request, the EA included an analysis of a complete under build for the full length of the Proposed Route paralleling Highway 19 of the existing distribution line that is now located South of Highway 19 or other modifications that co-locate or remove the distribution infrastructure from the route corridor in coordination with the electric distribution provider, MVEC. At the present, MVEC is planning to bury its distribution lines for the entire length of the new 115-kV line; Great River Energy is generally aware of MVEC's plans in this area, but Great River Energy is not undertaking or directing this work. The EA concluded that if the distribution lines were to be attached to the 115-kV structures as underbuild, there would likewise not need to be a separate right-of-way. However, the structures would need to be five to 10 feet taller to accommodate the underbuild. The distance between poles would also be less than the typical 300- to 400-foot spans or inset distribution poles would be required; either case would result in more and taller structures. Aesthetic impacts would be greater with underbuild than with burial. 71

⁶⁶ Ex. EERA-6 at 13-14 (Scoping Summary Documents).

⁶⁷ Ex. EERA-9 at 17 (EA).

⁶⁸ Ex. EERA-9 at 43-44 (EA).

⁶⁹ Ex. EERA-9 at 109 (EA).

⁷⁰ Ex. EERA-9 at 110-114 (EA).

⁷¹ Ex. EERA-9 at 115 (EA).

VI. TRANSMISSION LINE STRUCTURE TYPES AND SPANS

- 67. The majority of the Project will consist of single circuit, horizontal post, or braced post monopole wood structures spaced approximately 300 to 400 feet apart. Transmission structures will typically range in height from 60 to 90 feet above ground, depending upon the terrain and environmental constraints. The average diameter of the wood structures at ground level is 20 inches.⁷²
- 68. Laminated wood structures or steel structures may be needed for switches and angled structures; the size of these structures is dependent on the weight of the switch material, the tension on the line, and/or the angle of deflection the pole 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.⁷³
- 69. Multi-pole (e.g., 3-pole dead end) 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 HVTLs. The horizontal configuration allows the Project 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. Applicant does not currently anticipate the Proposed Route will require H-frame or 3-pole structures.⁷⁴
- 70. NESC sets minimum clearances of the conductors from structures adjacent to or within the right-of-way. 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. In addition, Applicant 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 eight feet with 94 mph winds. The final line design evaluates blowout based on actual span distances and the type of conductor being used.⁷⁵
- 71. The Cedar Lake Substation is already equipped with breakers and relays. This equipment is designed to protect human health, as well as all of the equipment on the transmission system, by de-energizing the transmission line should any unsafe line faults occur. No modifications are anticipated other than to connect the new transmission line to the substation.⁷⁶

⁷² Ex. GRE-2 at 3-4 (Application).

⁷³ Ex. GRE-2 at 3-4-3-5 (Application).

⁷⁴ Ex. GRE-2 at 3-5 (Application).

⁷⁵ Ex. GRE-2 at 3-5 (Application).

⁷⁶ Ex. GRE-2 at 3-6 (Application).

VII. TRANSMISSION LINE CONDUCTORS

- 72. The single circuit structures will have three single-conductor-phase-wires and one shield wire. It is anticipated that the phase wires will be 795 thousand circular mil aluminum conductor steel reinforced (795 ASCR) or a conductor with similar capacity.⁷⁷
 - 73. The shield wire will be 0.528 optical ground wire.⁷⁸

VIII. TRANSMISSION LINE ROUTE WIDTHS

- 74. Applicant is generally requesting approval of a route width of 400 feet, with modified route widths requested for the following areas for the Project:
 - The entire parcel upon which the Cedar Lake Substation is located (approximately 73 acres).
 - A 250-foot-wide route south of Baseline Avenue for approximately 500 feet to avoid a residence to the southwest of Baseline Avenue.
 - A 565-foot-wide route at the intersection of 280th St E / State Highway 19 and Langford Ave / State Highway 13, which extends approximately 1,000 feet. This route width is requested to accommodate the intersection of State Highway 19 and State Highway 13.
 - A 435-foot-wide route at the intersection of 280th St E / State Highway 19 and Panama Ave / County Highway 23, which extends approximately 850 feet until the connection with Applicant's existing MV-EVX 115-kV transmission line. This route width is requested to accommodate the intersection of State Highway 19 and County Highway 23.⁷⁹
- 75. The EA also analyzed an expanded route width between the Cedar Lake Substation and Highway 19.80

IX. TRANSMISSION LINE RIGHT-OF-WAY

76. Applicant is generally requesting a 100-foot right-of-way for the Project, consistent with other 115-kV lines. The right-of-way will be 50 feet perpendicular from both sides of the transmission centerline for the Project. Where the transmission line parallels roads, Applicant will typically seek 50 feet of right-of-way plus the distance from the transmission centerline to the road right-of-way from landowners. The landowner will be compensated for the right-of-way as part of the easement acquisition process. This right-of-way is needed to maintain proper clearances from objects within the right-of-way, and to ensure that the conductor will not blow out past the right-

⁷⁷ Ex. GRE-2 at 3-6 (Application).

⁷⁸ Ex. GRE-2 at 3-6 (Application).

⁷⁹ Ex. GRE-2 at 3-2 (Application).

⁸⁰ Ex. EERA-9 at 109 (EA).

of-way during high wind events and that vegetation is sufficiently cleared to safely operate and maintain the line.⁸¹

77. Where the Project abuts existing USFWS WPA easements, the Project right-of-way may be narrower so as to entirely avoid the WPA easements. Great River Energy stated that coordination with USFWS regarding the WPA is ongoing, but that an alignment and right-of-way is possible that would avoid the WPA easements and remain within the route width studied in the EA. With its Post-Hearing Comments, Great River Energy submitted a map depicting this alignment and right-of-way. Further as noted in its Post-Hearing Comments, Great River Energy is exploring alternatives with USFWS regarding an aerial crossing and/or overhang of the USFWS easement in this area that would nonetheless allow for timely construction of the Project.

X. PROJECT SCHEDULE

78. Applicant plans to commence construction of the Project in fall of 2024 once required permits and approvals are obtained. Applicant anticipates construction will take approximately seven to eight months and the Project will be energized in summer 2025.82 This schedule continues to be critical so that the Project can be in service in time for CapX2020 to install the second circuit.83

XI. PROJECT COSTS

- 79. Applicant estimates that the Project, if constructed on the Proposed Route, will cost approximately \$10.4 million dollars. All capital costs for the Project will be borne by Applicant.⁸⁴
- 80. The estimated annual cost of right-of-way maintenance and operation of Applicant's transmission lines (69 kV to 500 kV) in Minnesota currently averages about \$2,000 per mile. Storm restoration, annual inspections, and ordinary replacement costs are included in these annual operating and maintenance costs.⁸⁵

XII. PERMITTEE

81. The permittee for the Project is Great River Energy.

XIII. PUBLIC AND LOCAL GOVERNMENT PARTICIPATION

82. Prior to submitting the Application, Great River 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 meeting.⁸⁶

⁸¹ Ex. GRE-2 at 1-3 (Application).

⁸² Ex. GRE-2 at 3-8 (Application).

⁸³ Ex. GRE-14 at 3 (Strohfus Direct Testimony).

⁸⁴ Ex. GRE-2 at 3-7 (Application).

⁸⁵ Ex. GRE-2 at 3-8 (Application).

⁸⁶ Ex. GRE-2 at 3-7 (Application).

- 83. Applicant held an Open House at the American Legion Park Ballroom in New Prague, Minnesota, on March 29, 2023. Applicant's staff were available to provide information to members of the public and answer questions concerning the Project. Large posters showing the existing/proposed transmission line alignment and pictures of what the pole structures would look like were also available for review.⁸⁷
- 84. Public Information Meetings and EA Scoping Meetings were held on August 1 and August 2, 2023, which multiple members of the public spoke. 88 Written comments from members of the public were received until the written comment period on EA scoping closed on August 14, 2023.89
- 85. Various members of the public provided comments at the in person portion of the public hearing on January 24, 2024, in New Prague, 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. One member of the public spoke at the virtual public hearing held on January 25, 2024. That individual made comments regarding the route alignment along Highway 19 and the Country Hollows Alignment Alternative. 90

XIV. FACTORS FOR A ROUTE PERMIT

- 86. 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 energy security through efficient, cost-effective power supply and electric transmission infrastructure."⁹¹
- 87. 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;

⁸⁷ Ex. GRE-2 at 1-5 (Application).

⁸⁸ Ex. EERA-4 (Public Comments – Oral Comments).

⁸⁹ Ex. EERA-5 (Public Comments – Written Comments).

⁹⁰ In Person Public Hearing Transcript (eDocket No. 20242-203117-01); Remote Public Hearing Transcript (eDocket No. 20242-203117-02).

⁹¹ Minn. Stat. § 216E.03, subd. 7.

- (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;
- evaluation of the potential for beneficial uses of waste energy from proposed large electric power generating plants;⁹²
- (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;
- (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;

⁹² Factor 4 is not applicable because Applicant is not proposing to site a large electric generating plant in this docket.

- 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;⁹³
- (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.
- 88. In addition, 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]omission must state the reasons."
- 89. In addition to the PPSA, the Commission is governed by Minn. R. 7850.4100, which mandates consideration of the following factors when determining whether to issue a route permit for a HVTL:
 - A. effects on human settlement, including, but not limited to, displacement, noise, aesthetics, cultural values, recreation, and public services;
 - B. effects on public health and safety;
 - C. effects on land-based economies, including, but not limited to, agriculture, forestry, tourism, and mining;
 - D. effects on archaeological and historic resources;
 - E. effects on the natural environment, including effects on air and water quality resources and flora and fauna;

20

⁹³ Factors 13, 14, and 15 were added to Minn. Stat. § 216E.03 in 2023 as part of H.F. No. 7 and became effective on February 8, 2023, after the Application was filed.

- 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;⁹⁴
- 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.
- 90. There is sufficient evidence in this record to assess the Project using the criteria and factors set forth above.

XV. APPLICATION OF ROUTING FACTORS TO THE PROPOSED ROUTE

A. Effects on Human Settlement.

91. Minnesota law requires consideration of the Project's effects on human settlement, including displacement of residences and businesses, noise created during construction and by operation of the Project, and impacts to aesthetics, cultural values, recreation, and public services.⁹⁵

1. Displacement.

92. There are no residences, businesses, or sensitive receptors such as hospitals or nursing homes located within the anticipated right-of-way of the Project. The nearest residences are located along Baseline Avenue and 280th Street East/State Highway 19. The closest home is approximately 176 feet from the Application Alignment.⁹⁶

21

⁹⁴ This factor is not applicable because it applies only to power plant siting.

⁹⁵ Minn. Stat. § 216E.03, subd. 7(b); Minn. R. 7850.4100, subp. A.

⁹⁶ Ex. EERA-9 at 46; 64 (EA).

93. Because no displacement impacts are anticipated, no mitigation is necessary.⁹⁷

2. Noise.

- 94. The Minnesota Pollution Control Agency ("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. 98
- 95. Potential noise impacts due to the new transmission line can be grouped into two categories: (1) noise from construction of the transmission line, and (2) noise from operation of the transmission line.⁹⁹
- 96. During the construction of the Project, temporary, localized noise from heavy equipment and increased vehicle traffic is expected to occur along the right-of-way during daytime hours. Construction noise is not anticipated to exceed state noise standards; however, this does not mean that direct noise impacts will not occur from construction related activities. These minimal impacts will be short-term and sporadic. Applicant would be expected to restrict construction activities to daytime hours, limiting the impact of construction noise on local residences. 100
- 97. Applicant estimated that noise levels for the Project would be approximately 14.2 to 17.7 dBA at the edge of the transmission line right-of-way and 15.3 to 18.8 dBA directly under the line. These noise levels are within Minnesota noise standards (i.e., < 50 dBA). 101
- 98. Operational noise from the transmission line is not anticipated to significantly contribute to exceedances of the MPCA's total noise standards; therefore, no mitigation is proposed after construction is completed. Construction noise can be mitigated to minimize the impact of any exceedances of the standard that may occur. 102

3. Aesthetics.

- 99. The proposed transmission line will be visible along the Proposed Route, like the Applicant's 115-kV MV-EVX transmission lines in the area. Portions of the area already have overhead MVEC distribution lines. Most of the new structures will be wood poles approximately 60 to 90 feet above ground with spans between poles ranging from 300 to 400 feet. 103
- 100. The visual impact of the Project is expected to be most noticeable for residents and businesses in the immediate vicinity of the transmission line along the roadways. The nearest residences are located along Baseline Avenue and 280th St East/State Highway 19. The closest home is approximately 176 feet from the Application Alignment. There are a total of one

⁹⁷ Ex. EERA-9 at 47 (EA).

⁹⁸ Minn. R. 7030.0040.

⁹⁹ Ex. EERA-9 at 51 (EA).

¹⁰⁰ Ex. EERA-9 at 51 (EA).

¹⁰¹ Ex. EERA-9 at 52 (EA); Ex. GRE-2 at 6-13 (Application).

¹⁰² Ex. EERA-9 at 52 (EA).

¹⁰³ Ex. EERA-9 at 42 (EA).

residence, two commercial buildings, and seven outbuildings within 200 hundred feet of the Application Alignment.¹⁰⁴

- 101. Because the Project will utilize existing MVEC distribution line right-of-way along portions of Baseline Avenue, and 280th Street East/State Highway 19, and will largely be collocated with existing utilities and parallel existing road right-of-way, the aesthetic impacts are anticipated to be minimal. The existing MVEC distribution lines have been in place for at least a decade and thus the visual impacts might be perceived by a viewer as less because it is anticipated that the existing distribution will be buried by MVEC resulting in fewer, albeit taller (20-30 feet taller) structures on the landscape. ¹⁰⁵
- 102. Aesthetic impacts cannot be fully avoided. Applicant is committed to working with landowners on pole placement and alignment adjustments. Applicant will also coordinate with landowners to identify concerns related to the transmission line and aesthetics. ¹⁰⁶

4. Cultural Values.

- 103. Scott County is an agriculturally based community; however, it has diversified with commercial, industrial, and housing developments. The Shakopee Mdewakanton Sioux Community is a federally recognized Indian Tribe that holds land in north-central Scott County, owns and operates the Mystic Lake Casino, and is one of the largest employers in Scott County. The County is home to several historical, scenic, and entertainment destinations including Canterbury Park, Murphy's Landing, Elko Speedway, Renaissance Festival, Valleyfair, and the aforementioned Mystic Lake Casino. Scott County has been working to expand outdoor recreational opportunities for its residents by preserving land to steward and conserve natural resources and wildlife habitat, and increasing funding and therefore services (e.g., new parks, trails, improved accessibility, infrastructure maintenance) associated with the regional park system. ¹⁰⁷
- 104. Rice County is home to the Minnesota State Academies, St. Olaf College, and Carleton College. It boasts 13 parks within the park system totaling over 1,100 acres, in addition to open space such as Rossez Wildlife Area, Cannon River, Wildlife Management Areas, State Scientific and Natural Areas, conservation lands, farmed lands, and forest lands. 108
- 105. Both Rice and Scott Counties support the use of renewable and alternative energy sources and has taken steps to become a more sustainable place for residents and visitors. 109
- 106. Construction of the proposed Project is not expected to conflict with the cultural values of the area; therefore, no mitigation is proposed. 110

¹⁰⁴ Ex. EERA-9 at 42-43 (EA).

¹⁰⁵ Ex. EERA-9 at 43-44 (EA).

¹⁰⁶ Ex. EERA-9 at 44 (EA).

¹⁰⁷ Ex. EERA-9 at 45 (EA).

¹⁰⁸ Ex. EERA-9 at 46 (EA).

¹⁰⁹ Ex. EERA-9 at 45-46 (EA).

¹¹⁰ Ex. EERA-9 at 46 (EA).

5. Recreation.

- 107. Tourist destinations near the Proposed Route include the Cedar Lake Farm Regional Park, Creeksbend Golf Course, rivers, and lakes. Popular activities include fishing, boating, swimming, biking, hiking, camping, hunting, snowmobiling, and golfing.¹¹¹
- 108. Impacts to tourism and recreational opportunities from the Project are anticipated to be minimal. The Proposed Route avoids areas that would be considered tourist destinations, and the Project would not preclude tourism activities or appreciably diminish the use or experience at tourist destinations. Although some tree clearing will be required, it will be adjacent to existing rights-of-way and should not affect wildlife viewing opportunities. Noise impacts from Project construction are anticipated to be short-term and intermittent, and operational noise will be below ambient noise levels. The Proposed Route generally parallels existing infrastructure (roadways and electric transmission/distribution lines) so new impacts to recreation areas would be minimal. 112
- 109. No impacts to recreational opportunities are anticipated and, therefore, no mitigation measures are proposed. 113

6. Socioeconomics.

- 110. Approximately 15-25 daily contract workers will be employed during construction of the Project, in addition to a construction supervisor. Great River Energy typically hires contractors who pay their employees at or better than prevailing wages. 114 Applicant expects construction to take approximately seven to eight months. There will be minor short-term positive economic impacts as a result of construction activity and an influx of contractor employees during construction of the Project. Applicant will use contractors for nearly all construction activities. Local businesses will likely experience short-term positive economic impacts through the use of the hotels, restaurants and other services used by contractors during construction. In addition, construction materials, such as concrete, may be purchased from local vendors where feasible. There will be no permanent positions created as a result of the Project. 115
- 111. 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. The benefits apply to the local community regardless of economic status, race, and personal identification. Because impacts to socioeconomics will be generally short-term and beneficial, no mitigation is proposed. 116

¹¹¹ Ex. EERA-9 at 77 (EA).

¹¹² Ex. EERA-9 at 77 (EA).

¹¹³ Ex. EERA-9 at 77 (EA).

¹¹⁴ Ex. GRE-2 at 3-8 (Application).

¹¹⁵ Ex. EERA-9 at 58 (EA); Ex. GRE-2 at 3-8 (Application).

¹¹⁶ Ex. EERA-9 at 58 (EA).

7. Environmental Justice.

- 112. Environmental justice is the "fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies." ¹¹⁷
- 113. 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 \leq 200 percent of the poverty level; (3) 40 percent or more residents with limited English proficiency; or (4) Indian country. ¹¹⁸
- 114. The Project area was evaluated on a regional basis, comparing data for the Scott County, Rice County, and the State of Minnesota. Census tracts that intersect with the Proposed Route were analyzed by Applicant for environment justice areas; census tracts are the best approximation of a geographic area where adverse impacts can occur from the Project. Applicant also conducted an environmental justice analysis in accordance with the U.S. Environmental Protection Agency ("USEPA") Federal Interagency Working Group on Environmental Justice ("EJ") and National Environmental Policy Act ("NEPA") Committee's publication, Promising Practices for EJ Methodologies in NEPA Reviews ("Promising Practices"). Using this methodology, the USEPA's Environmental Justice Screening Tool (EJScreen) was used as an initial step to gather information regarding minority and/or low-income populations; potential environmental quality issues; environmental and demographic indicators; and other important factors. 119
- 115. There are no environmental justice communities impacted by the Project, so no environmental justice impacts are anticipated; therefore, no further mitigation is proposed. 120

8. Public Service and Infrastructure.

- 116. 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. Public services and facilities in the Project area generally include emergency services provided by government entities, including hospitals, fire departments, and police departments, water supply or wastewater disposal systems, and gas and electricity services, and existing and future transportation corridors and projects. ¹²¹
- 117. Several existing overhead transmission lines are located in the area. There is an existing natural gas pipeline which will be crossed by the Project. Other existing utilities, such as

¹¹⁷ Ex. EERA-9 at 55 (EA).

¹¹⁸ Ex. EERA-9 at 56 (EA).

¹¹⁹ Ex. EERA-9 at 56-57 (EA).

¹²⁰ Ex. EERA-9 at 58 (EA).

¹²¹ Ex. EERA-9 at 67 (EA).

gas/oil pipelines and electric distribution lines, and site improvements, such as septic systems and wells, will be identified during survey activities. 122

- 118. The Mayo Clinic Health System New Prague, located on 301 2nd Street NE, New Prague, MN is identified as an airport by MnDOT Enterprise Mapping Application; however, it is approximately 2.6 miles west of the Project area and no associated airport influence area overlaps with Project area. There are no other airports in Scott and Rice Counties within 5 miles of the Project area. No impacts to airports will occur as a result of the construction of the new transmission line; therefore, no mitigation is proposed. 123
- 119. The Project will have minor impacts to roadways during construction and operation. Other public services and infrastructure will not be impacted. 124

B. Effects on Public Health and Safety.

120. Minnesota's HVTL routing factors require consideration of the Project's potential effect on health and safety. 125

1. **EMF.**

- 121. 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"). 126
- 122. The calculated magnetic field from a transmission line is dependent upon line design, but also depends upon the current passing through the line. The field generated by the expected peak load using the monopole transmission configuration is 9.85 mG (69 kV) and 6.17 mG (115 kV) at the transmission centerline. Under average load conditions, the calculated field would be 5.52 mG (69 kV) and 3.41 mG (115 kV) at the transmission centerline. 127
- 123. Given the distance from homes, the voltage of the line and the permittee's obligations for safe operation and proper maintenance of the line, no adverse health impacts from electric or magnetic fields are expected for persons living or working near the Project. 128

2. Stray Voltage.

124. Impacts to residences, businesses, or farming operations resulting from neutral to earth voltage are not anticipated. Stray voltage is generally associated with distribution lines. The

¹²² Ex. GRE-2 at 6-21 (Application).

¹²³ Ex. EERA-9 at 67-68 (EA).

¹²⁴ Ex. EERA-9 at 67 (EA).

¹²⁵ Minn. Stat. § 216E.03, subd. 7(b)(1); Minn. R. 7850.4100, subp. B.

¹²⁶ Ex. EERA-9 at 60-61 (EA).

¹²⁷ Ex. EERA-9 at 62 (EA).

¹²⁸ Ex. EERA-9 at 60-61 (EA).

Project – a transmission line – does not create stray voltage as it does not directly connect to businesses, residences, or farms. 129

3. Induced Voltage.

125. Impacts due to induced voltage are not anticipated to occur because of the operation of the new transmission line. The new transmission line may induce a voltage on metal objects near the transmission line right-of-way; however, the Commission 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. 130

C. Effects on Land-Based Economies.

- 126. Minnesota's HVTL routing factors require consideration of the Project's impacts to land-based economies—specifically, agriculture, forestry, tourism, and mining. 131
- 127. Impacts to agriculture are anticipated to be minimal. Impacts to forested lands and to forestry operations are also anticipated to be minimal. No impact to mining activities is anticipated, as there are no identified gravel pits or mines within the anticipated alignment for the Project. 132

1. Agriculture.

- 128. The Project will have a minimal impact on agricultural lands. Agricultural lands within the Proposed Route consist primarily of pasture, hay, and cultivated lands. The Application Alignment will cross about 3.2 miles of agricultural land, which conservatively equates to approximately 39.6 acres (within the 100-foot right-of-way). 133
- 129. 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. ¹³⁴
- 130. Temporary impacts, such as soil compaction, crop damage, and disruption to drainage systems may occur during construction of the Project. Construction vehicles are

¹²⁹ Ex. EERA-9 at 65 (EA).

¹³⁰ Ex. EERA-9 at 66 (EA).

¹³¹ Minn. Stat. § 216E.03, subd. 7(b)(5); Minn. R. 7850.4100, subp. C.

¹³² Ex. EERA-9 at 73 (EA).

¹³³ Ex. EERA-9 at 74 (EA).

¹³⁴ Ex. EERA-9 at 74 (EA).

relatively large and can cause rutting and compaction of soils at structure locations and along the transmission line right-of-way. 135

- 131. The Metropolitan Council submitted comments encouraging minimization of impacts on agricultural operations—specifically, parcels enrolled in the Metropolitan Agricultural Preserve Program. ¹³⁶ Great River Energy noted that the Proposed Route and Applicant Alignment were designed to minimize agricultural impacts by locating near parcel lines where possible, and that a transmission line like the Project is generally consistent with agricultural uses.
- 132. Applicant will work with landowners to minimize impacts to agricultural activities along the Proposed Route and will compensate landowners for any crop damage/loss and soil compaction that may occur during construction.¹³⁷

2. Forestry.

- 133. There are no commercially operated forestlands with the Project area. 138
- 134. There will be no impacts to commercial forest lands and no mitigation is proposed. 139

3. Mining.

- 135. There is an active gravel mine located at 12668 New Prague Boulevard (280th Street East/Highway 19) approximately 500 feet east of where the Application Alignment crosses over 280th Street East/Highway 19. There are three gravel pits in the vicinity of the Project; an active mine is not listed in the MnDOT data. Two gravel pits are located approximately 1,800 and 3,000 feet west of the Proposed Route. One gravel pit is located approximately 4,600 feet north of the west side of the Proposed Route. Based on Great River Energy's review of current aerial imagery and historical aerial imagery, no active gravel pits appear to be present at these three locations. 140
- 136. No other mining activity is present in the vicinity of the Project. The Project would not inhibit mining activities at the mine located on New Prague Boulevard.¹⁴¹

4. Tourism.

137. Tourist destinations near the Proposed Route include the Cedar Lake Farm Regional Park, Creeksbend Golf Course, rivers, and lakes. Popular activities include fishing, boating, swimming, biking, hiking, camping, hunting, snowmobiling, and golfing.¹⁴²

¹³⁵ Ex. EERA-9 at 74 (EA).

¹³⁶ Met Council Comments (February 7, 2024) (eDocket No. 20242-203420-01).

¹³⁷ Ex. EERA-9 at 75 (EA); GRE-2 at 6-30 (Application).

¹³⁸ Ex. EERA-9 at 76 (EA).

¹³⁹ Ex. EERA-9 at 76 (EA).

¹⁴⁰ Ex. EERA-9 at 76-77 (EA).

¹⁴¹ Ex. EERA-9 at 77 (EA).

¹⁴² Ex. EERA-9 at 77 (EA).

138. The Proposed Route avoids areas that would be considered tourist destinations, and the Project would not preclude tourism activities or appreciably diminish the use or experience at tourist destinations. Although some tree clearing will be required, it will be adjacent to existing rights-of-way and should not affect wildlife viewing opportunities.¹⁴³

D. Effects on Archaeological and Historic Resources.

- 139. Minnesota Rule 7850.4100, subparagraph D, requires consideration of the effects of the Project on historic and archaeological resources.
- 140. A cultural resource literature review of the proposed transmission line and a one-mile buffer was conducted online through cultural resources site (archaeological sites and historic structures) and survey files from the State Historic Preservation Office ("SHPO"), archaeological site files on the Office of the State Archaeologist ("OSA") online portal, as well as the General Land Office ("GLO") maps and available historical aerial photography accessed online through the OSA Portal. The cultural review report included a recommendation to complete a Phase 1 Archaeological Reconnaissance field survey. 145
- 141. SHPO indicated that it agreed with Applicant's report and recommendation to proceed with the Phase 1 field survey. Once engineering design determines structure locations, the Phase 1 field survey will be completed to confirm there will be no cultural impacts due to installation of the structures. 146
- 142. Applicant requested feedback on the Project from the 11 federally recognized Tribes geographically located within Minnesota and the Minnesota Indian Affairs Council. Currently, no traditional cultural properties or cultural resources that reflect cultural or religious importance have been identified. 147

E. Effect on Natural Environment.

143. 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. 148

1. Air Quality.

144. Air quality in the project area is relatively better than more populated areas of the state such as the Twin Cities metro region. Potential air quality impacts due to the Project are of two types: (1) emissions of ozone and nitrous oxide during operation, and (2) fugitive dust caused by construction activities. 149

¹⁴³ Ex. EERA-9 at 77 (EA).

¹⁴⁴ Ex. EERA-9 at 78 (EA); Ex. GRE-14 at 3 (Strohfus Direct Testimony).

¹⁴⁵ Ex. GRE-14 at 3 (Strohfus Direct Testimony).

¹⁴⁶ Ex. EERA-9 at 79 (EA); Ex. GRE-14 at 3 (Strohfus Direct Testimony).

¹⁴⁷ Ex. EERA-9 at 78 (EA).

¹⁴⁸ Minn. Stat. § 216E.03, subd. 7(b)(1)–(2); Minn. R. 7850.4100, subp. E.

¹⁴⁹ Ex. EERA-9 at 80-81 (EA).

- 145. Ozone and nitrous oxide emissions from the new 115-kV line are anticipated to be well below the applicable state and federal standards. ¹⁵⁰ Impacts are unavoidable and do not affect a unique resource. ¹⁵¹
- 146. Dust from construction activities, or fugitive dust, is a particulate air pollutant. Construction activities along the Proposed Route, such as clearing vegetation and driving utility poles, may create exposed areas susceptible to wind erosion. Construction of the project will create dust the magnitude of which is dependent on weather conditions and the specific construction activity taking place. Products containing calcium chloride or magnesium chloride are often used for dust control. Chloride products that are released into the environment do not break down, and instead accumulate to levels that are toxic to plants and wildlife. Any adverse impacts are anticipated to be localized, minimal, and temporary. 152

2. Greenhouse Gas.

- 147. Construction of the Project will result in temporary minor greenhouse gas emissions from fuel combustion in construction equipment, commuter vehicles, and delivery trucks. 153
- 148. The Project does not include expanded services or increased system capacity. As such, there will be no changes to upstream or downstream greenhouse gas emissions during operation of the transmission line.¹⁵⁴
- 149. EPA's Greenhouse Gas Reporting Tool shows emissions within Minnesota totaled 34,929,605 metric tons of carbon dioxide equivalent ("CO2e") (38,502,906 tons) in 2020. Accordingly, the preliminary estimate of Project greenhouse gas emissions identified here would be negligible. 155

3. Climate Change.

150. A warming climate is expected to cause increased flooding, storms, and heat wave events. These events, especially an increased number and intensity of storms, could increase risks to the Project through high winds or flooding could impact the substation, transmission line poles. Heavy rainfall events could also lead to increased soil erosion. The Project as proposed will be designed to withstand these changes and will increase reliability in the Project area. 156

¹⁵⁰ Minn. R. 7009.0800; The Clean Air Act, 40 CFR part 50.

¹⁵¹ Ex. EERA-9 at 80-81 (EA).

¹⁵² Ex. EERA-9 at 81 (EA).

¹⁵³ Ex. EERA-9 at 82 (EA).

¹⁵⁴ Ex. EERA-9 at 83 (EA).

¹⁵⁵ Ex. EERA-9 at 83 (EA).

¹⁵⁶ Ex. EERA-9 at 84 (EA).

4. Geology and Topography.

- 151. Transmission structures will generally be direct embedded in the soil approximately 13 feet below grade. The proposed project will not impact topography or geology. 157
- 152. No impacts to topographic or geologic resources will occur, therefore, no mitigation is proposed. 158

5. Soils.

- 153. Construction activities have the potential to compact the soil as the result of the movement of heavy construction equipment. Vegetation will be cleared to facilitate construction of the project. This clearing will temporarily expose soils to the elements, which could cause soil erosion. Loss of soils during construction could adversely impact water resources in the area. 159
- 154. Ground disturbance and soil exposure would be primarily limited to the pole locations, which would typically consist of a 10- to 15-foot-deep hole between 2 to 4 feet in diameter. Impacts to physiographic features should be minimal during and after installation of the transmission line structures, and these impacts will be short term. There should be no long-term impacts resulting from this Project. During final design geotechnical analysis will ensure that placement of poles is compatible with local soil conditions. 160
- 155. 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. 161

6. Water Quality and Resources.

- 156. There are a variety of water resources in the vicinity of the Project but few within the Proposed Route. The Project lies within the Minnesota River Shakopee watershed, in the northeast portion of the Minnesota River Basin. 162
- 157. Impacts from construction may include sedimentation resulting from ground disturbed by excavating, grading, and construction traffic. Similarly, short term water quality impacts could be experienced at wetlands along the route due to sedimentation. Long term impacts, however, are not expected as the poles will be placed outside of wetlands. 163

¹⁵⁷ Ex. EERA-9 at 84 (EA).

¹⁵⁸ Ex. EERA-9 at 84 (EA).

¹⁵⁹ Ex. EERA-9 at 92 (EA).

¹⁶⁰ Ex. EERA-9 at 92 (EA).

¹⁶¹ Ex. EERA-9 at 92 (EA).

¹⁶² Ex. EERA-9 at 84 (EA).

¹⁶³ Ex. EERA-9 at 87 (EA).

1) Groundwater.

158. No impacts to groundwater in the Project area are anticipated. Dewatering activities are not anticipated for this Project, and any effects on water tables would be localized and short term.¹⁶⁴

2) Surface Water.

- 159. Four rivers and streams intersect the Application Alignment, and two additional stream segments are located within the Proposed Route but are not crossed by the Application Alignment. All streams are unnamed tributaries to Sand Creek which is approximately 4,500 feet to the west at its closest point from the Proposed Route. 165
- 160. During construction of the project, there is potential for adverse impacts to watercourses due to vegetation clearing, ground disturbances, and construction traffic. These activities can speed water flow and expose previously undisturbed soils, increasing erosion and the potential for sediment to reach surface waters. Disturbed soils will generally be limited to pole locations; however, areas outside these locations may be disturbed by construction traffic and by removal of vegetation. The MDNR Public Waters Watercourses crossed by the Proposed Route are spaced such that construction activities will avoid impacts within the Ordinary High-Water Level of the Public Waters. ¹⁶⁶
- 161. Construction of the Project will require several permits from state and federal agencies, beyond a route permit from the Commission, (NPDES/SDS stormwater construction permit, DNR license to cross, etc.). Many of these permits and approvals are directed at the prevention and mitigation of water resource impacts. 167
- 162. There are no lakes or ponds crossed by the Application Alignment; however, two ponds are located within the Proposed Route. One pond is 165 feet south of the Application Alignment and south side of 280th Street East/State Highway 19, just east of Kanabec Avenue. The second pond is located 65 feet north of the Application Alignment, north of 280th Street East/State Highway 19 and between Panama Avenue County Highway 23 and GRE's MV-EVX 115-kV transmission line. 168
- 163. Several lakes and ponds are also near the Proposed Route. The next closest pond is located on the southern edge of the Proposed Route, south of 280th Street East/State Highway 19, approximately 1,500 feet west of Kanabec Avenue. The closest lake is Cedar Lake which is located approximately 1,200 feet north of the western end of the Proposed Route. In addition, a large shallow, open water wetland community is located at the northern edge of the Proposed Route, north of 280th Street East/State Highway 19 and situated between Jackson Avenue/Balsa

¹⁶⁴ Ex. EERA-9 at 88 (EA).

¹⁶⁵ Ex. EERA-9 at 85 (EA).

¹⁶⁶ Ex. EERA-9 at 85 (EA).

¹⁶⁷ Ex. EERA-9 at 85-86 (EA).

¹⁶⁸ Ex. EERA-9 at 86 (EA).

Avenue and Panama Avenue/County Highway 23. This wetland community falls within the Scott County WPA. 169

- 164. The MDNR holds a flowage easement across portions of Township 113, Section 25, Range 23 south of Cedar Lake and west of Baseline Avenue in Scott County. In 1936, the MDNR Division of Waters purchased a flowage easement across these properties. MDNR has the right to flow waters on these properties but has no other management or ownership interest. ¹⁷⁰
- 165. There are no lakes crossed by the Proposed Route and the Proposed Route will not impact the MDNR's existing flowage easement south of Cedar Lake. Ponds crossed by the Proposed Route are spaced such that construction activities will avoid impacts to those water resources.¹⁷¹

3) Wetlands.

- 166. The Project route crosses several discrete wetland communities and wetland complexes. Wetland Cowardin classifications crossed include Palustrine Forested ("PFO"), Palustrine Scrub Shrub ("PSS"), and Palustrine Emergent ("PEM"). The Application Alignment cumulatively crosses 1,530 feet (0.29 mile) of PFO wetland, 637 feet (0.12 mile) of PSS wetland, and 5,742 feet (1.09 miles) of PEM wetland. ¹⁷²
- 167. Applicant plans to span wetlands, where practicable, to avoid impacts and will implement established best management practices, such as silt fencing and erosion control during construction to prevent sedimentation. The maximum distance that can be spanned is approximately 400 feet. The Application Alignment crosses six wetland areas where the wetland distance exceeds 400 feet, which will require that a transmission pole be placed within the wetland. ¹⁷³ Impacts can be mitigated by a variety of strategies including: use of construction mats, constructing during winter months when the ground is frozen, assembling structures on upland areas prior to site installation, and transporting crews and equipment, to the extent possible, over improved roads and via routes which minimize transit over wetlands. ¹⁷⁴
- 168. Once construction of the Project is completed, there will be no significant impacts to wetlands because disturbed soil will be restored to previous conditions and the amount of land area converted to an impervious surface will only be associated with the cross-sectional area of the structures, which will be on the order of 200 square feet total for the Project. ¹⁷⁵

¹⁶⁹ Ex. EERA-9 at 86 (EA).

¹⁷⁰ Ex. EERA-9 at 86 (EA).

¹⁷¹ Ex. EERA-9 at 87 (EA).

¹⁷² Ex. EERA-9 at 88-89 (EA).

¹⁷³ Ex. EERA-9 at 89 (EA).

¹⁷⁴ Ex. EERA-9 at 90 (EA).

¹⁷⁵ Ex. EERA-9 at 89 (EA).

4) Impaired Waters.

169. The Project will not impact impaired waters and will not cause a water to be newly listed as impaired. 176

5) Floodplains.

- 170. According to the Federal Emergency Management Agency ("FEMA") Flood Insurance Rate Map ("FIRM") for the Project area, the Proposed route would cross two "Zone X" floodplain areas described as areas of 500-year flood and areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood. These two areas consist of 1) the large freshwater emergent wetland located south of Baseline Ave and north of State Highway 19 with associated waterbody running from northwest to southeast through the wetland; and 2) the large freshwater emergent wetland that is the USFWS Scott County Waterfowl Production Area ("WPA") toward the eastern end of the Proposed Route along State Highway 19. 177
- 171. No impacts to floodplains are anticipated from the Project, therefore no mitigation measures are proposed. 178

7. Flora.

- 172. Construction and operation of the Project may cause short-term and/or long-term impacts on vegetation. Pre-settlement vegetation of the Project area was comprised of oak woodland and maple-basswood forests with aspen dominated forest located along the western margin of the Big Woods subsection. The current vegetation and land use is primarily made up of cropland (75%) and pasture (5-10%). The remaining areas of the subsection are comprised of upland forest or wetland.¹⁷⁹
- 173. Construction activities would cause long-term impacts on vegetation by permanently removing vegetation at each structure footprint (2 to 4 feet diameter per structure) and within portions of the right-of-way that are currently dominated by forest or other woody vegetation. The Applicant would permanently convert forested areas and shrub lands to low-stature vegetation by clearing woody vegetation throughout the entire right-of-way. Applicant will clear approximately 16.7 acres of trees within the 100-foot-wide right-of-way associated with the Application Alignment. 180
- 174. The Proposed Route follows existing infrastructure (road and distribution line right-of-way) for much of its length. By so doing, the Proposed Route places new HVTL where there is already existing linear infrastructure, this tends to minimize the impacts of vegetation loss, the

¹⁷⁶ Ex. EERA-9 at 85 (EA).

¹⁷⁷ Ex. EERA-9 at 91 (EA).

¹⁷⁸ Ex. EERA-9 at 91 (EA).

¹⁷⁹ Ex. EERA-9 at 93 (EA).

¹⁸⁰ Ex. EERA-9 at 94 (EA).

creation of fragmented areas, the clearing of trees to facilitate access to the transmission line right-of-way, and conversion of forested areas to low-stature ground cover. ¹⁸¹

175. Great River Energy filed a Vegetation Management Plan ("VMP") on August 10, 2023. No party, agency, or member the public commented on the VMP.

8. Fauna.

- 176. Construction and operation of the Project may cause short-term and long-term impacts on wildlife resources. Impacts on wildlife are assessed by evaluating the vegetation cover/habitat in the right-of-way, the proximity of the right-of-way to sensitive wildlife habitats, and known occurrences of sensitive wildlife species. In this case, displacement of fauna is anticipated to be minor and temporary in nature, and no long-term population-level impacts are anticipated from the proposed project. 183
- 177. In its Post-Hearing Comments, Great River Energy stated that has been coordinating with USFWS regarding the WPA easements in the vicinity of the Project, and an alignment and right-of-way that avoids these easements is possible. Great River Energy further indicated that it will continue coordination with USFWS, including potentially an Avian Impact Mitigation Plan.
- 178. The primary risk to wildlife in the Project area is the potential risk of avian collisions with transmission conductors and equipment. Applicant will work with MDNR and USFWS to identify any areas that may require marking transmission line shield wires and/or to use alternate structures to reduce the likelihood of avian collisions once design of the transmission line is complete. Project design and construction will be done in accordance with Avian Power Line Interaction Committee guidelines. Any eagle or other migratory bird nests discovered during survey of the line or in the land acquisition process will be reported to the USFWS and Applicant will adhere to guidance provided. ¹⁸⁴

F. Effects on Rare and Unique Natural Resources.

- 179. Minnesota's HVTL routing factors require consideration of the Project's effect on rare and unique natural resources. 185
- 180. MDNR confirmed that the Project will not negatively affect any known occurrences of rare features. 186
- 181. At the MDNR's request, the EA evaluated possible impact on the loggerhead shrike. It The EA state that is possible that there is suitable habitat for the species in the Project area; however, the element occurrence for this species is approximately 1.7 miles from the Proposed Route and was documented in 1990. Based on the Breeding Bird Survey, there are no

¹⁸¹ Ex. EERA-9 at 95 (EA).

¹⁸² Ex. GRE-9 (Draft VMP).

¹⁸³ Ex. EERA-9 at 100 (EA).

¹⁸⁴ Ex. GRE-2 at 2-4; 6-44 (Application).

¹⁸⁵ Minn. Stat. § 216E.03, subd. 7(b)(1); Minn. R. 7850.4100, subp. F.

¹⁸⁶ Ex. EERA-9 at 101-102 (EA).

recent observations within either Scott or Rice Counties. The Project would not result in a loss of grassland habitat except in the very limited area associated with pole placement, and tree and shrub clearing would be minimized to the extent practicable and almost exclusively occur in locations collocated with existing infrastructure. Furthermore, loggerhead shrikes are known to use transmission lines as a perch for scouting and hunting prey. The EA concluded that in the event that loggerhead shrikes are present within the Project area, Applicant would anticipate that impacts to loggerhead shrike potentially suitable habitat would be temporary. Applicant will coordinate with the MDNR on this species. ¹⁸⁷

- 182. The EA identified no federally designated critical habitat is present within the project area and identified three federally protected species within the Project Area: the northern long-eared bat (endangered), the tricolored bat (proposed endangered), and the monarch butterfly (candidate). ¹⁸⁸
- 183. Regarding the northern long-eared bat, the Project "may affect, but is not likely to adversely affect" the species, and the Applicant will commit to the minimization and avoidance measures outlined in the USFWS Determination Key. 189
- 184. Regarding the tricolored bat, potential impacts may occur if clearing or construction takes place when the species is roosting in its summer habitat, in trees outside of hibernacula tree clearing activities conducted when the species is in hibernation and not present on the landscape will not result in direct impacts to individual bats but could result in indirect impacts due to removal of suitable roosting habitat. ¹⁹⁰
- 185. Regarding the monarch butterfly, suitable habitat for monarchs may be present within the Project area. If the USFWS determines the species should be listed and protections for the species coincide with Project planning, permitting, and/or construction, the Applicant will review Project activities for potential impacts to the species and develop appropriate avoidance and mitigation measures.¹⁹¹
- 186. The Applicant has also committed to completing a bald eagle nest survey prior to beginning construction. The Applicant will continue to coordinate with the MDNR and USFWS to avoid and minimize Project impacts on sensitive species. 192

G. Application of Various Design Considerations.

187. 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. 193

¹⁸⁷ Ex. EERA-9 at 103 (EA).

¹⁸⁸ Ex. EERA-9 at 102 (EA).

¹⁸⁹ Ex. EERA-9 at 104 (EA).

¹⁹⁰ Ex. EERA-9 at 105 (EA).

¹⁹¹ Ex. EERA-9 at 105 (EA).

¹⁹² Ex. EERA-9 at 104-105 (EA).

¹⁹³ Minn. Stat. § 216E.03, subd. 7(b)(2); Minn. R. 7850.4100, subp. G.

188. The Project will be built to provide 115-kV service to the Cedar Lake Substation to meet long-term planning needs in the Project area but will initially operate at 69-kV. Designing to 115-kV standards will simplify operation of the regional transmission system at 115-kV as electrification and load development increase in the area. ¹⁹⁴ The Project is designed to maintain necessary reliability requirements in the area and is designed maximize energy efficiencies and accommodate expansion capacity. ¹⁹⁵

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

- 189. Minnesota's HVTL routing factors require consideration of the Project's use of or paralleling of existing rights-of-way, survey lines, natural division lines, and agricultural field boundaries. 196
- 190. The Proposed Route will utilize existing MVEC distribution line right-of-way along portions of Baseline Avenue, and 280th Street East/State Highway 19, and will largely be collocated with existing utilities and parallel existing road right-of-way. 197 The Proposed Route was designed to maximize the paralleling of existing roads, survey boundaries, field lines, natural division lines, and existing distribution lines. 198

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

- 191. Minnesota HVTL routing factors require consideration of the Project's use of existing transportation, pipeline, and electrical transmission system rights-of-way. 199
- 192. The Proposed Route was designed to maximize the paralleling of existing roads, survey boundaries, field lines, natural division lines, and existing distribution lines.²⁰⁰

J. Electrical System Reliability.

- 193. Minnesota's HVTL routing factors require consideration of the Project's impact on electrical system reliability. ²⁰¹
- 194. The Project, along with the CapX2020 second 345-kV circuit, will ensure that Applicant maintains reliable and resilient service to electric customers. The Project will address reliability concerns and, because it facilitates the CapX2020 second circuit, the Project will

¹⁹⁴ Ex. GRE-2 at 1-1 (Application).

¹⁹⁵ Ex. EERA-9 at 118 (EA).

¹⁹⁶ Minn. Stat. § 216E.03, subd. 7(b)(9); Minn. R. 7850.4100, subp. H.

¹⁹⁷ Ex. EERA-9 at 43-44 (EA).

¹⁹⁸ Ex. EERA-9 at 121 (EA).

¹⁹⁹ Minn. Stat. 216E.03, subd. 7(b)(8); Minn. R. 7850.4100, subp. J.

²⁰⁰ Ex. EERA-9 at 121 (EA).

²⁰¹ Minn. Stat. § 216E.03, subd. 7(b)(5)–(6); Minn. R. 7850.4100, subp. K.

facilitate increased deliverability of renewable resources from southern Minnesota to the southwest metropolitan area. ²⁰²

195. The Project is designed to maintain reliability requirements in the area. ²⁰³

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

- 196. Minnesota's HVTL routing factors require consideration of the Project's cost of construction, operation, and maintenance.²⁰⁴
 - 197. Applicant estimates that the Project will cost approximately \$10.4 million. ²⁰⁵
- 198. Applicant estimates the annual operation and maintenance costs for the Project to be approximately \$2,000 per mile. 206

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

- 199. Minnesota's HVTL routing factors require consideration of the adverse human and natural environmental effects that cannot be avoided.²⁰⁷
- 200. 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, Applicant will employ avoidance, minimization, and mitigation measures to limit Project impacts.²⁰⁸

M. Irreversible and Irretrievable Commitments of Resources.

- 201. Minnesota's HVTL routing factors require consideration of the irreversible and irretrievable commitments of resources that are necessary for the Project. ²⁰⁹
- 202. 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 include aggregate resources, concrete, steel, and hydrocarbon fuel. During construction, vehicles necessary for these activities would be deployed on site and would need to travel to and from the construction area, consuming hydrocarbon fuels. Other resources would be used in pole construction, pole placement, and other construction activities.²¹⁰

²⁰² Ex. EERA-9 at 121 (EA).

²⁰³ Ex. GRE-2 at 5-1 (Application).

²⁰⁴ Minn. R. 7850.4100, subp. L.

²⁰⁵ Ex. GRE-2 at 3-7 (Application); Ex. EERA-9 at 36 (EA).

²⁰⁶ Ex. GRE-2 at 3-8 (Application).

²⁰⁷ Minn. Stat. § 216E.03, subd. 7(b)(6); Minn. R. 7850.4100, subp. M.

²⁰⁸ Ex. GRE-2 at 6-50 (Application); Ex. EERA-9 at 104-106 (EA).

²⁰⁹ Minn. Stat. § 216E.03, subd. 7(b)(11); Minn. R. 7850.4100, subp. N.

²¹⁰ Ex. GRE-2 at 6-50 (Application); Ex. EERA-9 at 116 (EA).

203. The Proposed Route was designed to maximize the paralleling of existing roads, survey boundaries, field lines, natural division lines, and existing distribution lines.²¹¹

N. Summary of Factors Analysis.

- 204. The Proposed Route (including the Application Alignment) and the Country Hollows Lane Alternative Alignment would have similar and minimal effects on displacement, noise, cultural values, public service and infrastructure, public health and safety, land-based economies, air quality, geology and topography, groundwater, surface water, and rare and unique natural resources.
- 205. The Proposed Route (including the Application Alignment) and the Country Hollows Lane Alternative Alignment both follow existing transmission or transportation rights-of-way for a majority of their lengths.²¹²
- 206. Compared to the Application Alignment, the Expanded Route Width Alternative Alignment has greater potential for environmental impact, including impacts to agricultural land, forested land, forested wetland, and emergent wetlands, as well as increase habitat fragmentation.²¹³

XVI. ROUTE PERMIT CONDITIONS

- 207. The EA and draft route permit prepared by EERA included various recommendations and potential route permit conditions related to the Project, to which the Applicant responded in direct testimony.²¹⁴
- 208. With the above-referenced response to the draft route permit, the record in this matter supports the inclusion of the conditions identified in Schedule C to the Direct Testimony of Mark Strohfus.²¹⁵
- 209. Great River Energy filed its Vegetation Management Plan in the record on August 10, 2023.²¹⁶ No party or commenter provided comments on the VMP, and the record supports a condition requiring Great River Energy to implement its VMP.
- 210. The record also supports the inclusion of the special conditions identified in comments filed by MDNR regarding dust control and wildlife friendly erosion control:
 - The Permittee shall utilize non-chloride products for dust control during construction.

²¹¹ Ex. EERA-9 at 121 (EA).

²¹² Ex. EERA-9 at 121 (EA).

²¹³ Ex. EERA-9 at 110-114 (EA).

²¹⁴ Ex. GRE-14 at 7-10 (Supplemental Testimony of Mark Strohfus and Schedule C).

²¹⁵ Ex. GRE-14 (Supplemental Testimony of Mark Strohfus and Schedule C).

²¹⁶ Ex. GRE-9 (Vegetation Management Plan).

• The Permittee shall use only "bio-netting" or "natural netting" types and mulch products without synthetic (plastic) fiber additives.²¹⁷

XVII. NOTICE

- 211. Minnesota statutes and rules require and Applicant to provide certain notice to the public and local governments before and during the Application for a Route Permit process.²¹⁸
- 212. Applicant provided notice to the public and local governments in satisfaction of Minnesota statutory and rule requirements.²¹⁹
- 213. EERA and the Commission likewise provided notices in satisfaction of Minnesota statutes and rules.²²⁰

XVIII. COMPLETENESS OF EA

- 214. 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.²²¹
- 215. 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.²²²

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.
- 3. The Commission determined that the Application was substantially completed and accepted the Application on July 5, 2023.
- 4. EERA has conducted an appropriate Environmental Analysis of the Project for purposes of this Route Permit proceeding, and the EA 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

²¹⁷ MDNR Comments (February 5, 2024) (eDocket No. <u>20242-203111-01</u>).

²¹⁸ Minn. Stat. § 216E.03, subds. 3a, 4; Minn. R. 7850.2100, subps. 2, 4.

²¹⁹ Exs. GRE-1 (Notice of Intent by Great River Energy to Submit a Route Permit Application under the Alternative Permitting Process); GRE-7 (Rule 7850.2100 Notice of Filing Route Permit); and GRE-8 (Compliance Filing – Notice of Filing Application).

²²⁰ Exs. PUC-2 (Notice of Public Information and Scoping Meeting); PUC-4 (Notice of Availability and Public Hearing).

²²¹ Minn. R. 4410.4400, subp. 6; Minn. R. 7850.3900, subp. 2.

²²² Ex. EERA-8 (Scoping Decision for EA).

the items required by Minn. R. 7850.3700, subp. 4, and was prepared in compliance with the procedures in Minn. R. 7850.3700.

- 5. Applicant gave notice as required by Minn. Stat. § 216E.04, subd. 4; Minn. R. 7850.2100, subp. 2; and Minn. R. 7850.2100, subp. 4.
- 6. Notice was provided as required by Minn. Stat. § 216E.04, subd. 6; Minn. R. 7850.3500, subp. 1; Minn. R. 7850.3700, subps. 2, 3, and 6; and Minn. R. 7850.3800.
- 7. A public hearing was conducted near the Proposed Route. Proper notice of the public hearing was provided, and the public was given the opportunity to speak at the hearing and to submit written comments. All procedural requirements for the Route Permit were met.
- 8. The evidence in the record demonstrates that the Proposed Route satisfies 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.
- 9. There is no feasible and prudent alternative to the construction of the Project, and the Project is consistent with and reasonably required for the promotion of public health and welfare in 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.
- 10. The evidence in the record demonstrates that the Proposed Route is the best route for the Project.
- 11. The evidence in the record demonstrates that the general Route Permit conditions are appropriate for the Project, with the addition of the following special conditions:
 - 6.1 Independent Third Party Monitor: Prior to any construction, the Permittee shall propose a scope of work and identify an independent third party monitor to conduct Project construction monitoring on behalf of Commerce. The scope of work shall be developed in consultation with and approved by Commerce. This third party monitor will report directly to and will be under the control of Commerce with costs borne by the Permittee.
 - 6.2 Coordination with U.S. Fish and Wildlife Service ("USFWS"): The permittee shall coordinate with USFWS regarding the timing of tree-clearing and any other construction or restoration actions that may impact Northern Long-Eared Bat in the vicinity of the Project.
 - 6.3 Vegetation Management Plan: The Permittee shall follow its Vegetation Management Plan, as filed on August 10, 2023
 - 6.3 Dust Control: The Permittee shall utilize non-chloride products for dust control during construction.

- 6.4 Bio-Netting: The Permittee shall use only "bio-netting" or "natural netting" types and mulch products without synthetic (plastic) fiber additives.
- 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 Administrative Law Judge makes the following:

RECOMMENDATIONS

Based upon these Conclusions, the Administrative Law Judge recommends that the Commission issue a Route Permit for the Applicant's Proposed Route to Great River Energy to construct and operate the Project and associated facilities in Scott and Rice Counties, and that the permit include the draft permit conditions as set forth in the Conclusions above.

THIS REPORT IS NOT AN ORDER AND NO AUTHORITY IS GRANTED HEREIN. THE MINNESOTA PUBLIC UTILITIES COMMISSION WILL ISSUE THE ORDER THAT MAY ADOPT OR DIFFER FROM THE PRECEDING RECOMMENDATION.

Dated on	
	Judge Jim Mortenson