CAH 23-2500-40748
MPUC ET-2, E-017, ET-6135, E-100/
CN-24-263 and ET-2, E-017, ET-6135,
E-100/TL-24-264

STATE OF MINNESOTA
COURT OF ADMINISTRATIVE HEARINGS

FOR THE PUBLIC UTILITIES COMMISSION

In the Matter of the Application of Great River Energy, Otter Tail Power Co., Western Minnesota Municipal Power Agency, Agralite Electric Coop., and the City of Benson (Applicants) for a Certificate of Need and Route Permit for the Appleton to Benson 115 Kilovolt Transmission Line Project.

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND RECOMMENDATIONS

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FINDINGS OF FACT, CONCLUSIONS OF LAW, AND RECOMMENDATIONS

This matter was assigned to Administrative Law Judge Suzanne Todnem to conduct public hearings on the Joint Application for a Certificate of Need and a Route Permit (Application) (MPUC Docket Nos. CN-24-263; TL-24-264) of Great River Energy, Otter Tail Power Company (Otter Tail Power), Western Minnesota Municipal Power Agency (Western Minnesota), Agralite Electric Cooperative (Agralite), and the City of Benson (collectively, Applicants) to construct the Appleton to Benson 115-kilovolt Transmission Line Project (Project). The Minnesota Public Utilities Commission (Commission) also requested that the Administrative Law Judge prepare findings of fact and conclusions of law and provide recommendations, if any, on conditions and provisions of the proposed route permit (Route Permit).

Two public hearings on the Application were held on September 3, 2025 (in-person in Appleton, Minnesota, and in Benson, Minnesota) and September 4, 2025 (remote access - telephone and internet). The factual record remained open until September 30, 2025, to receive written public comments.

Cody Bauer, Fredrikson & Byron, P.A., and Mark Strohfus, Project Manager of Transmission Permitting for Great River Energy, appeared on behalf of Applicants.

Sam Lobby, Minnesota Public Utilities Commission Staff (Commission Staff), appeared on behalf of the Commission.

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

STATEMENT OF ISSUES

Certificate of Need

Have Applicants satisfied the criteria established in Minn. Stat. § 216B.243 and Minn. R. Ch. 7849 for a Certificate of Need (CN) for the Project?

Route Permit

Have Applicants satisfied the criteria established in Minn. Stat. Ch. 216E and Minn. R. Ch. 7850 for a Route Permit for the Project?

SUMMARY OF RECOMMENDATIONS

The Commission should issue to Applicants a Certificate of Need for the Project. Applicants have satisfied all relevant criteria set forth in Minnesota law for a Certificate of Need for the Project and that there are no statutory or other requirements that preclude granting a Certificate of Need on the record.

Applicants have satisfied all relevant criteria set forth in Minnesota law for a Route Permit for the Project and recommends that the Commission grant a Route Permit for Applicants' Proposed Route.

Based on information in the Application, the testimony at the public hearings, the written comments received, exhibits received in this proceeding, and other evidence in the record, the Administrative Law Judge makes the following:

FINDINGS OF FACT

I. THE APPLICANTS

1. Great River Energy is a not-for-profit wholesale electric power cooperative based in Maple Grove, Minnesota. Great River Energy is a member of the Midwest Reliability Organization and Midcontinent Independent System Operator (MISO).[1]

2. Otter Tail Power is an investor-owned electric utility headquartered in Fergus Falls, Minnesota, and also a MISO member.[2]

3. Western Minnesota is a municipal corporation and political subdivision of the State of Minnesota, headquartered in Ortonville, Minnesota. Western Minnesota owns generation and transmission facilities and sells the capacity and output to Missouri River Energy Services (MRES).[3]

[1] Exhibit (Ex.) APP-5 at 1-3 (Application).
[2] Ex. APP-5 at 2 (Application).
[3] Ex. APP-5 at 2 (Application).

4. Agralite is an electric utility headquartered in Benson, Minnesota and serves customers in west central Minnesota.[4]

5. The City of Benson is located in Swift County, Minnesota, with a population of 3,562. The City of Benson operates an electric utility that services 1,867 customers.[5]

II. PROCEDURAL HISTORY

6. On July 29, 2024, Applicants filed a Notice Plan Petition for the CN portion of the Application (Notice Plan). Applicants also submitted a Request for Exemptions from certain Certificate of Need Application Requirements (Request for Exemptions). [6]

7. On August 8, 2024, the Commission issued a Notice of Comment Period regarding the Request for Exemptions, requesting initial comments by August 28, 2024, reply comments by September 9, 2024, and supplemental comments by September 13, 2024.[7]

8. On August 19, 2024, the Minnesota Department of Commerce, Division of Energy Resources (DER) submitted comments recommending the notice area be expanded to 2,800 feet to be consistent with the substation buffer zone, and the *Star Tribune* be added to the list of newspapers used for notice of the CN Application. DER's comments additionally requested a discussion of Applicants' intention to coordinate its efforts with tribal governments, and recommended Applicants work with the Department's EERA unit to include language in the notices to reflect the EERA transition from the Department to the Commission.[8]

9. On August 28, 2024, DER submitted comments recommending the Commission approve Applicants' request for exemption with modifications.[9]

10. On September 9, 2024, Applicants filed reply comments.[10]

11. On September 12, 2024, DER submitted supplemental comments concerning Applicants' Request for Exemptions, recommending the Commission approve the Request for Exemptions with DER's modifications.[11]

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[4] Ex. APP-5 at 3 (Application).
[5] Ex. APP-5 at 3 (Application).
[6] Ex. APP-1 (Notice Plan Petition and Request for Exemption).
[7] Notice of Comment Period on Request for exemption from Certain Certificate of Need Application Content Requirements (August 8, 2024) (eDocket No. 20248-209339-01).
[8] DER Comments (August 19, 2024) (eDocket No. 20248-209600-01).
[9] DER Comments (August 28, 2024) (eDocket No. 20248-209831-01).
[10] Ex. APP-2 (Reply Comments regarding Notice Plan Petition and Request for Exemption).
[11] DER Supplemental Comments (September 12, 2024) (eDocket No. 20249-210172-01).

12. On September 13, 2024, Applicants filed reply comments requesting the Commission approve the Notice Plan Petition and Request for Exemptions, with DER's supplemental recommendations.[12]

13. On September 26, 2024, the Commission filed proposed consent items regarding Applicants' requested CN exemptions.[13]

14. On October 1, 2024, the Commission issued an order approving the modified Notice Plan and approving exemptions from certain certificate of need application data requirements conditioned on Applicants providing alternative data.[14]

15. On October 2, 2024, the Commission filed minutes of the September 26, 2024, consent calendar subcommittee meeting.[15]

16. On October 30, 2024, Applicants filed a notice of intent to submit a Route Permit Application under the alternative permitting procedures of Minn. R. 7850.2800 to 7850.3900 for the Project.[16]

17. On December 27, 2024, Applicants filed the Application.[17]

18. Also on December 27, 2024, Applicants filed a notice of filing the Application.[18]

19. On January 3, 2025, the Commission issued a Notice of Comment Period regarding the completeness of the Application, requesting initial comments by January 14, 2025, reply comments by January 21, 2025, and supplemental comments by January 27, 2025.[19]

20. On January 7, 2025, Applicants filed the Notice Plan Compliance Filing demonstrating Applicants completed all pre-Application notices required by the Notice Plan approved by the Commission on October 1, 2024.[20] On January 8, 2025, Applicants filed a corrected Attachment F to its January 7, 2025, Notice Plan Compliance Filing.[21]

21. On January 14, 2025, EERA submitted comments recommending the Commission accept the Application as substantially complete.[22]

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[12] Ex. APP-3 (Response to Reply Comments regarding Notice Plan Petition and Request for Exemption).
[13] Proposed Consent Items (September 26, 2024) (eDocket No. 20249-210500-02).
[14] Commission Order (October 1, 2024) (eDocket No. 202410-210618-01).
[15] Consent Items (October 2, 2024) (eDocket No. 202410-210653-04).
[16] Ex. APP-4 (Notice of Intent to File Route Permit Application under Alternative Process).
[17] Ex. APP-5 (Application).
[18] Ex. APP-25 (Notice of Filing Joint Application).
[19] Notice of Comment Period (January 3, 2025) (eDocket No. 20251-213500-01).
[20] Ex. APP-26 (Compliance Filing – Notice Plan).
[21] Ex. APP-27 (Compliance Filing – Notice Plan – Corrected Attachment F).
[22] Ex. EERA-1 (Comments on Application Completeness).

22. Also on January 14, 2025, DER submitted comments recommending the Commission accept the Application as complete upon the submission of additional data relating to system monthly peak demand, historical load data for local substations, and a discussion of the coordination of historical and forecasted substation data.[23]

23. On January 17, 2025, Applicants submitted a Compliance Filing, demonstrating all notices required in connection with the Application were made.[24]

24. On January 21, 2025, Applicants filed Reply Comments regarding the completeness of the Application.[25]

25. On January 24, 2025, DER submitted comments recommending that the Commission find the Application complete.[26]

26. On February 5, 2025, the Commission filed a comment it received from the Minnesota Indian Affairs Council.[27]

27. On February 11, 2025, the Commission issued a Notice of Public Information and Environmental Assessment (EA) Scoping Meetings, requesting written comments by March 28, 2025.[28]

28. On February 27, 2025, the Commission filed a sample Route Permit for the Project.[29]

29. On March 6, 2025, the Commission filed proposed consent items regarding the completeness of the Application.[30]

30. On March 7, 2025, the Commission filed minutes of the consent calendar subcommittee meeting.[31]

31. On March 10, 2025, the Commission issued its Order accepting the Application as complete.[32]

32. On March 12, 2025, the Commission held in-person public information and EA scoping meetings on the Application in the cities of Appleton, Minnesota, and Benson, Minnesota. A virtual public information and EA scoping meeting on the Application was

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[23] DER Comments (January 14, 2025) (eDocket No. 20251-213897-01).
[24] Ex. APP-28 (Compliance Filing - Notice of Filing Joint Application).
[25] Ex. APP-29 (Reply Comments regarding Application Completeness).
[26] DER Comments (January 27, 2025) (eDocket No. 20251-214361-01).
[27] Public Comment (I. Weston) (February 5, 2025) (eDocket No. 20252-214980-01).
[28] Ex. PUC-1 (Notice of Public Information and EA Scoping Meetings).
[29] Ex. PUC-2 (Sample Permit).
[30] Proposed Consent Items (March 6, 2025) (eDocket No. 20253-216117-01).
[31] Consent Minutes (April 25, 2025) (eDocket No. 20253-216162-01).
[32] Ex. PUC-3 (Order Accepting Application as Complete).

held on March 13, 2025, via WebEx. No members of the public offered oral comments or questions during the information and scoping meetings.[33]

33. On March 18, 2025, the Commission filed documentation confirming it had provided the Notice of Public Information and EA Scoping Meeting for the Project to the Swift County Monitor News newspaper.[34]

34. On March 19, 2025, the Commission filed the public meeting presentation.[35]

35. On March 20, 2025, the Commission filed a letter authorizing consultation with the Minnesota State Historic Preservation Office (SHPO) pursuant to Minn. Stat. § 138.665.[36]

36. On March 27, 2025, the Minnesota Department of Transportation (MnDOT) submitted comments.[37]

37. On March 28, 2025, the Minnesota Department of Natural Resources (MDNR) submitted comments and recommendations[38] with attachments related to review of ecologically significant areas and protected species within the Project area.[39]

38. On March 31, 2025, the Court of Administrative Hearings[40] issued an Order for Prehearing Conference.[41]

39. On April 8, 2025, Applicants filed comments in response to scoping comments submitted.[42]

40. On April 8, 2025, EERA filed transcripts of the March 12-13, 2025, public information and EA scoping meetings.[43]

41. On April 11, 2025, EERA filed written comments received on the scope of the EA.[44]

42. On April 15, 2025, EERA submitted comments regarding the scope of the EA.[45]

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[33] *See* Ex. EERA-2 (Oral Comments on Scope of EA).
[34] Ex. PUC-4 (Newspaper Notice).
[35] Meeting Presentation (March 19, 2025) (eDocket No. 20253-216609-01).
[36] Ex. PUC-5 (SHPO Authorization).
[37] MnDOT Comments (March 27, 2025) (eDocket No. 20253-216894-01).
[38] MDNR Comments (March 28, 2025) (eDocket No. 20253-216974-01).
[39] MDNR Comments – Attachment (March 28, 2025) (eDocket No. 20253-216974-02).
[40] The Court of Administrative Hearings was previously known as the Office of Administrative Hearings. See 2025 Minn. Laws ch. 39, art. 2, §§ 17 and 68.
[41] Order for Prehearing Conference (March 31, 2025) (eDocket No. 20253-217030-01).
[42] Ex. APP-30 (Response to Scoping Comments).
[43] Ex. EERA-2 (Oral Comments on Scope of EA).
[44] Ex. EERA-3 (Written Comments on Scope of EA).
[45] Ex. EERA-4 (Scoping Summary and Recommendation).

43. On April 17, 2025, the Court of Administrative Hearings issued the First Prehearing Order.[46]

44. On April 24, 2025, the Commission filed proposed consent items regarding the scope of the EA.[47]

45. On April 25, 2025, the Commission filed minutes of the consent calendar subcommittee meeting.[48]

46. On April 29, 2025, the Commission issued its Order regarding the scoping decision.[49]

47. On May 13, 2025, EERA filed the EA scoping decision[50] and notice of scoping decision for the Project.[51]

48. On July 9, 2025, the Commission filed a notice of legislative changes informing parties, participants and others interested in this docket that the EERA staff moved to the Commission's Energy Infrastructure Permitting unit.[52]

49. On July 31, 2025, the Commission filed the EA for the Project, along with Appendix A through Appendix F to the EA.[53]

50. On August 8, 2025, the Commission filed the Notice of Public Hearings and Availability of Environmental Assessment. In-person public hearings were scheduled for September 3, 2025, in Appleton, Minnesota, and Benson, Minnesota. A virtual and telephonic public hearing was scheduled for September 4, 2025, via WebEx. A public comment period was opened through September 19, 2025.[54]

51. On August 14, 2025, Applicants filed direct testimony of witnesses Mark Strohfus, Nicholas Goater, George Vinson, and Brian Zavesky.[55]

52. On August 15, 2025, the Court of Administrative Hearings issued a Second Order for a Prehearing Conference.[56]

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[46] First Prehearing Order (April 17, 2025) (eDocket No. 20254-217816-01).
[47] Proposed Consent Items (April 24, 2025) (eDocket No. 20254-218069-01).
[48] Consent Minutes (April 25, 2025) (eDocket No. 20254-218123-01).
[49] Ex. PUC-6 (Order (EA Scope)).
[50] Ex. EERA-6 (EA Scoping Decision).
[51] Ex. EERA-5 (Notice of Scoping Decision).
[52] Ex. PUC-7 (Notice of Legislative Changes).
[53] Ex. PUC-8 (EA). The Environmental Assessment was prepared by former EERA staff. On July 1, 2025, the Minnesota Energy Infrastructure Permitting Act, Minn. Stat. Ch. 216I, took effect and consolidated EERA staff and the Commission's Energy Facilities Permitting staff into one unit, the Energy Infrastructure Permitting unit, under the oversight of the Commission. Due to the continuity of staff and function, for readability this Report will refer to this unit as EERA throughout.
[54] Ex. PUC-9 (Notice of Hearings and Availability of the Environmental Assessment).
[55] Ex. APP-31 through Ex. APP-34.
[56] Second Order for Prehearing Conference (August 15, 2025) (eDocket No. 20258-222134-01).

53. On August 25, 2025, the Court of Administrative Hearings held a prehearing conference and issued a Second Prehearing Order, which modified deadlines set forth in the First Prehearing Order.[57]

54. On August 27, 2025, the Commission issued an Amended Notice of Public Hearings and Availability of EA. The amended notice extended the public comment period until September 30, 2025.[58]

55. On September 3, 2025, in-person public hearings were held in Appleton, Minnesota, and Benson, Minnesota. Three members of the public asked questions during the Appleton public hearing related to routing, impact on irrigation, land acquisition, and potential impacts on wildlife, particularly concerns regarding impacts to bald eagles and their nests. One commenter asked a question during the Benson public hearing related to the duration of potential outages during Project construction.

56. On September 4, 2025, a virtual public hearing was held via WebEx. One member of the public asked questions regarding the Project's right-of-way (ROW), maintenance of the ROW, and construction procedures.

57. On September 4, 2025, the Commission filed the presentation given during the public hearings.[59]

58. On September 11, 2025, the Commission filed a comment received from the United States Fish and Wildlife Service (USFWS).[60]

59. On September 12, 2025, Applicants filed comments on the EA.[61]

60. On September 19, 2025, MDNR filed comments and an attachment in response to the EA.[62]

61. On September 23, 2025, Commission staff filed affidavits of publication regarding the Notice of Public Harings and Availability of Environmental Assessment, published on August 20, 2025, in the *Swift County Monitor*[63] and in the *Appleton Press*.[64]

62. Also on September 23, 2025, Commission staff filed proofs of publication in the *EQB Monitor* for the "Notice of Public Information and Environmental Assessment Scoping Meetings" and the "Notice of Public Hearings and EA availability."[65]

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[57] Second Prehearing Order (August 25, 2025) (eDocket No. 20258-222393-01).
[58] Ex. PUC-10 (Amended Notice of Public Hearings and Availability of the EA).
[59] Meeting Presentation (September 4, 2025) (eDocket No. 20259-222718-01).
[60] USFWS Comment (September 11, 2025) (eDocket No. 20259-222913-01).
[61] Ex. APP-35 (Comments Regarding EA, with Attachments).
[62] MDNR Comments and Attachment (September 19, 2025) (eDocket Nos. 20259-223187-01; 20259-223187-02).
[63] Affidavit of Publication (September 23, 2025) (eDocket No. 20259-223237-01).
[64] Affidavit of Publication (September 23, 2025) (eDocket No. 20259-223233-01).
[65] Notice of Publication (September 23, 2025) (eDocket No. 20259-223230-01).

63. On September 30, 2025, DER filed comments related to the merits of the Certificate of Need.[66]

64. Also on September 30, 2025, the interagency Vegetation Management Planning Working Group (VMPWG) filed comments related to Applicants' draft vegetation management plan (VMP).[67]

65. On October 8, 2025, Applicants filed reply comments to DER.[68]

III. THE PROPOSED PROJECT

A. Project Summary

66. The proposed Project consists of an upgrade to approximately 18.3 miles of existing 41.6-kV transmission lines, a rebuild or reconstruction of approximately 1.0 mile of existing 115-kV transmission line, and new construction of 8.0 miles of new 115-kV transmission line and associated facilities connecting to substations in Appleton, Shible Lake, Moyer, Danvers, and Benson, Minnesota. In addition, an approximately 1.7-mile 115-kV transmission line will be installed from Great River Energy's existing 115-kV line southwest of the City of Benson, Minnesota, to the Benson Municipal Substation.[69]

67. Project transmission components would include:

a. A new approximately .2- to .7-mile 115-kV transmission line from the new Appleton Transmission Substation to the Shible Lake Substation, along State Highway 7.

b. Upgrades to approximately 2.1 miles of 41.6-kV transmission line to 115-kV between the Appleton and Shible Lake Substations.

c. A new approximately 6.8-mile 115-kV transmission line between the Shible Lake and Moyer Substations.

d. Upgrades to approximately 10.0 miles of 41.6-kV transmission line to 115-kV, from Moyer Substation to Danvers Substation.

e. Upgrades to approximately 6.2 miles of 41.6-kV transmission line to 115-kV, between the Danvers Substation and the intersection of 30th Avenue and 10th Street NW.

f. A new approximately .5-mile 115-kV transmission line, and a rebuild or reconductoring of approximately 1.0 mile of 115-kV transmission

[66] DER Comments (September 30, 2025) (eDocket No. 20259-223398-01).
[67] VMPWG Comments (September 30, 2025) (eDocket No. 20259-223416-01).
[68] Applicants' Reply Comments to DER (October 8, 2025) (eDocket No. 202510-223699-01).
[69] Ex. APP-5 at 19 (Application).

line between the intersection of 30th Avenue and 10th Street NW and the Benson Transmission Substation.

g. A new 1.7-mile 115-kV transmission line from Great River Energy's existing 115-kV line (AG-BK line) southwest of the City of Benson, Minnesota to the Benson Municipal Substation. [70]

68. The Project would also include construction of and improvements to substations:

a. Appleton Transmission Substation: the existing site will be decommissioned. Applicants have identified three potential approximately 10-acre parcels within the Proposed Route for the new substation. A stormwater pond will be constructed for the site. Applicants indicated their intention to expand the proposed Route Width to construct the substation. No new landowners would be impacted by this expansion.

b. Appleton Distribution Substation: the existing Appleton Distribution Substation, currently co-located with the transmission substation, will be decommissioned. The new distribution substation will be located adjacent to the new transmission substation within the Proposed Route on an approximately 5-acre parcel. The new Appleton Distribution substation will connect to the new Appleton Transmission Substation.

c. Shible Lake Substation: connection to the 115-kV transmission line; this substation will be expanded to accommodate the new service.

d. Moyer Substation: connection to the 115-kV transmission line; Agralite is considering either expanding or relocating the substation to a new location adjacent to the 115-kV line.

e. Danvers Substation: connection to 115-kV transmission line; to be converted to a 115-kV substation. Otter Tail Power is considering either expanding or relocating the substation to a new location within the Proposed Route to accommodate the new service.

f. Benson Substation: connection to 115-kV transmission line.

g. Benson Municipal Substation: connection to 115-kV transmission line; fence line to be expanded on City of Benson's existing parcel.[71]

[70] Ex. APP-5 at 5-6, 20-23 (Application).
[71] Ex. APP-5 at 24-26 (Application).

B. Overview of Project Need

69. The Project is needed to meet load serving needs in the Project area and avoid low voltage issues under certain contingency scenarios driven by the retirement of the 55-Megawatt (MW) FibroMinn Energy Center near the City of Benson. The system is currently experiencing low voltages resulting in insufficient capacity to reliably serve all load under contingency conditions.[72]

70. In 2020, Great River Energy, Otter Tail Power, MRES, and Xcel Energy completed the Benson Area Load Study (BAL Study) to evaluate the shutdown of the 55-MW FibroMinn Energy Center near Benson, Minnesota.[73] The FibroMinn plant had played a significant role in supplying power and regulating the reactive power need in the local area. The retirement created near-term load-serving reliability concerns. In addition, future load growth forecasting determined a deficit in the area. The Project will provide needed capacity increases and system improvements to service forecasted load for decades to come.[74]

71. Since the 2020 BAL Study, several system modifications have been completed and updated forecasts have been made available. This planning study update (Update) reanalyzed the load serving need in the area based on the topology changes as updated from the MISO Transmission Expansion Plan (MTEP) 2018 data series to the MTEP 2023 data series. The Update analysis also incorporated the most recent load forecasts for the distribution substations. The Update analyzed 29 distribution substations, a subset of the original 68 distribution substations analyzed in the BAL Study. The BAL Study encompassed a wider area involving a larger transmission area but concluded that the key area to be addressed was the 29 distribution substations interconnected to the 115-kV system around Benson. The Update confirms the need for additional load-serving support.[75]

72. The Update also reaffirms the Project will be the best performing option to meet the identified needs, determines that updated load forecasts predict higher growth rates, reinforcing the need for the Project, affirms that the existing load cannot be reliably served without the Project, and demonstrates the Project will provide an additional 47 MW of system capacity under the worst single (N-1) contingency and an additional 77 MW of capacity under the worst double (N-2) contingency.[76]

73. The Update results show that the existing transmission system cannot serve current or forecasted load within the planning criteria. The proposed Project addresses North American Electric Reliability Corporation (NERC) standard reliability violations including contingency low voltage and thermal concerns on the 115-kV system, addresses existing N-2 contingency voltage collapse on the 115-kV system, accommodates future load growth in the 41.6-kV and 115-kV transmission systems which

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[72] Ex. APP-5 at 7 (Application); Ex. APP-32 at 3-5 (Direct Testimony of N. Goater); Ex. PUC-8 at 1 (EA).
[73] *See* Ex. APP-5 at Appendix I (Application, BAL Study).
[74] Ex. APP-5 at 35 (Application); Ex. APP-32 at 3 (Direct Testimony of N. Goater).
[75] Ex. APP-5 at 35-47 (Application); Ex. APP-32 at 5 (Direct Testimony of N. Goater).
[76] Ex. APP-5 at 7, 35 (Application); Ex. APP-32 at 4 (Direct Testimony of N. Goater).

is expected to reach a peak demand of 101.61 MW in 2028 and 106.87 MW in 2033, and reduces losses in the Project area. Additionally, the Project will provide increased load serving capability to areas outside the immediate Project area, such as 115-kV lines west out of Appleton towards Ortonville and the Morris to Canby 115-kV transmission system.[77]

C. Transmission Line Structures and Conductors

74. The majority of the new 115-kV transmission line will consist of single circuit, horizontal post, or braced post direct-imbedded monopole wood or steel structures spaced approximately 300 to 500 feet apart.[78] A short segment of the transmission line in the City of Benson and south of Great River Energy's Benson substation will be double circuited.[79] Transmission structures will typically range in height from 50 to 100 feet above ground, depending upon the terrain and environmental constraints. Laminated wood structures or steel structures on concrete foundations may be needed for switches and angled structures. Deadend structures can use wood, wood laminate, direct steel embedded, or steel on concrete foundation structures and can have a larger cross section than the typical structures. The location of deadend structures will be determined after a Route Permit is issued and detailed engineering design is initiated.[80]

75. The single circuit structures will have three single conductor phase wires and one shield wire. The phase wires proposed will be twisted pair conductor with 266 Aluminum Conductor Steel Reinforced (ACSR) or 366 ACSR wire sizes or a conductor with similar capacity. The shield wire will be 0.528 optical ground wire.[81] The double circuit structures will have six single conductor phase wires and one or two shield wires. Additional wires may also be attached if mitigation is required along the double-circuited section in the City of Benson.[82]

76. The existing structure heights along the 41.6-kV system range between 35 to 80 feet above ground, and between 55 and 75 along Great River Energy's existing 115-kV system. Typical structure heights for the new 115-kV line will range from 50 to 100 feet above ground and spans between structures will generally range from 300 to 500 feet.[83]

D. Substations and Associated Facilities

77. The Project will include the construction of new transmission and distribution substations in Appleton, Minnesota. Two other existing substations (Moyer and Danvers) may also be relocated if there is insufficient space for expansion in their current locations. The final location of these substations will depend on the Project's route and further coordination with stakeholders. To accommodate this further coordination and

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[77] Ex. APP-5 at 35-47 (Application); Ex. APP-32 at 3-4 (Direct Testimony of N. Goater).
[78] Ex. APP-5 at 29 (Application).
[79] Ex. APP-35 at 8 (EA Comments).
[80] Ex. APP-5 at 29 (Application).
[81] Ex. APP-5 at 30 (Application).
[82] Ex. APP-35 at 8 (EA Comments).
[83] Ex. APP-5 at 6, 29, 71 (Application).

design, Applicants have identified substation siting areas as part of the Project's route width.[84]

78. For the Appleton Substations, Applicants will purchase approximately 20 acres for the transmission and distribution substations. The parcels will allow for future modifications and provide a buffer between the adjacent landowners. Applicants are currently working with landowners to determine the final location for the new substations that best reduces impacts to local residents and natural resources.[85]

79. For the Danvers and Moyer Substations, Applicants are seeking up to a five-acre parcel for each potential new substation location. Similar to the Appleton substations, Applicants are currently coordinating with landowners to determine locations for these substations and minimize impacts to residents and natural resources.[86]

80. Three other substations – Shible Lake Substation, Benson Substation, and Benson Municipal Substation – will be expanded to accommodate connection to the 115-kV line.[87]

E. Route Width and Right-of-Way

81. Applicants are generally requesting a 400-foot route width for the Project; however, Applicants are requesting varied route widths for specific portions of the route to account for existing infrastructure, to facilitate any necessary interconnections, to facilitate substation expansions or upgrades, to accommodate requests by landowners or to comply with or accommodate agency requirements. The route width variations include:

a. Approximately 220 acres in the vicinity of the existing Appleton Substation to accommodate the siting of the new Appleton substations. Applicants indicated their intention to expand the proposed Route Width at this location to construct the substation. No new landowners would be impacted by this expansion.

b. An approximate 9-acre Route Width around the Shible Lake Substation to accommodate potential modifications to the existing substation.

c. A 450-foot-wide Route Width near the existing Moyer Substation to accommodate potential modifications to the substation.

d. An 800-foot-wide Route Width along the Proposed Route between 60th Street SW and 40th Street SW for potential siting of a new Moyer Substation.

[84] Ex. APP-5 at 1, 19, 25 (Application).
[85] Ex. APP-5 at 26 (Application); Ex. APP-35 at 2 (EA Comments).
[86] Ex. APP-5 at 26 (Application).
[87] Ex. APP-5 at 1, 5, 19 (Application).

e. An approximately 78-acre Route Width near the Danvers Substation to accommodate modifications to the existing substation or a potential new substation.

f. Approximately 28.5 acres around the Benson Substation.

g. A 250-foot-wide Route Width along BWSR Reinvest in Minnesota (RIM) easements located southwest of the City of Benson

h. A route width up to 1,800 feet wide is requested within the City of Benson to accommodate the new 115-kV circuit and modifications at the Benson Municipal Substation.[88]

82. For ROW, Applicants anticipate that an approximately 100-foot-wide ROW will be obtained for the Project. Great River Energy and Otter Tail Power currently hold ROWs with respect to their existing facilities. In some instances, these ROWs will be sufficient for the Project, and in other instances, Applicants anticipate that renewed, amended, and written easement agreements will be obtained. New easements will be required for new ROW acquired for the Project. Some new easements may be obtained along existing ROW where additional space is needed or if the Project shifts from the existing alignment. Applicants' representatives intend to work directly with individual landowners to acquire the necessary easements for the Project.[89]

83. Temporary construction workspace beyond the 100-foot-wide ROW may be required at certain locations, such as road or railroad intersections, utility crossings, along steep slopes, and at stringing locations. In addition, there will be temporary staging of materials such as structures and hardware in the Project area prior to construction installation. Temporary workspace will also be required adjacent to some structures where the direction of the line changes to allow for the pulling and stringing of the wires. Applicants intend to avoid the placement of temporary construction workspace in wetlands and near waterbodies as practicable.[90]

84. Applicants intend to purchase property for new or expanded substations associated with the Project, to the extent that the substations are constructed or expanded on property not already owned by Applicants.[91]

F. Project Schedule

85. Applicants anticipate starting construction in 2028 and energizing the Project by early 2030. The Project is expected to be constructed in separate phases to avoid extended outages on the distribution systems. The final construction schedule is dependent on multiple factors, including the receipt of all required permits. Construction

[88] Ex. APP-5 at 23-24 (Application); Meeting Presentation (September 4, 2025) (eDocket No. 20259-222718-01).
[89] Ex. APP-5 at 23 (Application).
[90] Ex. APP-5 at 23 (Application).
[91] Ex. APP-5 at 23 (Application).

may commence earlier to the extent all required approvals and land rights are obtained. Delays due to weather, material delivery, and natural resource time of year restrictions may extend the construction timeline.[92]

G. Project Costs

86. Estimated costs for the Project based on the Proposed Route are approximately $62 million (2024), which includes approximately $23 million for substation work and $40 million for transmission line work.[93]

87. The estimated annual cost of ROW maintenance and operation of Applicants' transmission lines (41.6-kV to 500-kV) in Minnesota currently averages up to $6,000 per mile. Storm restoration, annual inspections, and ordinary replacement costs are included in these annual operating and maintenance costs.[94]

H. Permittees

88. Great River Energy, Otter Tail Power, Western Minnesota, Agralite, and the City of Benson are the permittees for the Project.[95]

IV. ROUTES EVALUATED FOR PROJECT

A. Applicants' Route Development

89. Applicants used a multi-stage, interactive routing process to identify the Proposed Route that focused on the use of existing transmission/distribution lines or other utility and transportation ROWs. This process was intended to identify a proposed route that meets the objectives of the Project along with minimizing impacts to the environment in conformance with Minnesota's routing considerations and connects the several substations in the area.[96]

90. This initial review resulted in a more detailed study of five potential routing options – one of which ultimately became the Proposed Route, and four of which were considered but ultimately rejected. All options benefitted from the presence of existing transmission lines, distribution lines, and road ROWs with which a potential route could co-locate.[97]

91. Applicants then presented an initial route at open houses held on November 1 and 2, 2023, and during meetings with agency stakeholders. Some additional refinements to the initial route were made following these meetings and consultations with stakeholders. Applicants also hosted open houses before the public

[92] Ex. APP-5 at 32-33 (Application); Ex. APP-31 at 5 (Direct Testimony of M. Strohfus).
[93] Ex. APP-5 at 31 (Application).
[94] Ex. APP-5 at 31 (Application).
[95] Ex. APP-5 at 1-3 (Application).
[96] Ex. APP-5 at 56 (Application); Ex. APP-31 at 6 (Direct Testimony of M. Strohfus).
[97] Ex. APP-5 at 56 (Application); Ex. APP-31 at 6 (Direct Testimony of M. Strohfus).

information and scoping meetings in March 2025, where stakeholders and community members could ask questions of Applicants regarding the Project.[98]

B. Proposed Route

92. As a result of Applicants' routing development process, Applicants designed the Proposed Route, which includes two route segments. The first Proposed Route segment will follow an approximately 27-mile route starting near the Appleton Substation in the City of Appleton and extend northeast connecting to the Benson Substation, near the City of Benson. This route segment will involve upgrading approximately 18.3 miles of existing 41.6-kV transmission lines to 115-kV, rebuilding or reconductoring of 1.0 mile of an existing 115-kV transmission line, and constructing 7.8 miles of new 115-kV line, as follows:

a. Constructing approximately 0.2 to 0.7 mile of new 115-kV transmission line from the new Appleton Transmission Substation along State Highway 7.

b. Upgrading approximately 2.1 miles of the Great River Energy 41.6-kV AG-SLT transmission line to 115-kV between the Appleton Substation and Shible Lake Substation.

c. Constructing approximately 6.8 miles of new 115-kV from Shible Lake Substation to the Moyer Substation.

d. Upgrading approximately 10.0 miles of Otter Tail Power Company-owned Moyer to Danvers 41.6-kV transmission line to 115-kV.

e. Upgrading approximately 6.2 miles of Otter Tail Power Company-owned Danvers to Benson 41.6-kV transmission line to 115-kV between the Danvers Substation and the intersection of 30th Avenue and 10th Street NW.

f. Constructing approximately 0.5 mile of new 115-kV transmission line and rebuilding or reconductoring approximately 1.0 mile of Great River Energy 115-kV AG-BK transmission line between the intersection of 30th Avenue and 10th Street NW and the Great River Energy Benson Transmission Substation.[99]

93. The second Proposed Route segment will be a new approximately 1.7-mile 115-kV transmission line. It will extend westerly from the Benson Municipal Utilities-owned Benson Substation in the City of Benson bounding both sides of the Burlington Northern and Santa Fe Railway (BNSF) tracks including the City of Benson's existing 115-kV line. The Proposed Route will then turn south on 22nd Street for

[98] Ex. APP-5 at 56, 138 (Application); Ex. APP-31 at 6-7 (Direct Testimony of M. Strohfus).
[99] Ex. APP-5 at 4-6 (Application).

approximately 0.2 mile before turning west for approximately 0.1 mile. The Proposed Route will then extend approximately 0.5 mile on the back side of some industrial lots. Finally, the Proposed Route will extend approximately 0.25 mile west where it will interconnect with Great River Energy's existing AG-BK 115-kV transmission line.[100]

94. The Proposed Route best balances the Commission's routing criteria by using existing transmission line corridors for 67 percent of the route and co-locating with road ROWs for 68 percent of the route, while minimizing environmental impacts where possible. The Proposed Route will also result in fewer National Wetlands Inventory (NWI) wetland impacts and avoid impacts to MDNR-managed public lands.[101]

95. In addition, the Proposed Route incorporates MDNR guidance. MDNR indicated their preference that Applicants select a Proposed Route that follows the existing 41.6-kV transmission line to the extent possible, particularly between the Cities of Danvers and Benson to avoid the Danvers WMA and reduce potential natural resource impacts and tree clearing within the WMA. Applicants' Proposed Route satisfies these recommendations.[102]

C. Route Alignment Alternatives

96. In developing the Proposed Route, Applicants evaluated three alignments within the City of Benson along Pacific Avenue and the BNSF Railway to the Benson Municipal Substation. All three alignments are located within the Route Width.[103]

97. Alignment 1 would be located along the southside of Pacific Avenue for 0.4 mile. Alignment 2 follows Pacific Avenue for approximately 0.4 mile on the northeast side of Pacific Avenue where it would be double-circuited with an existing 115-kV transmission line owned by the City of Benson. Alignment 3 would occur on the northeast side of the BNSF Railway for approximately 0.4 mile within City of Benson property before crossing the BNSF Railway and Pacific Avenue into the Benson Municipal Substation.[104]

98. Applicants incorporated Alignment 2 into the Proposed Route because it balances impacts to residences and limits tree-clearing. Applicants are coordinating with the BNSF Railway to discuss the licensing process for this alignment. Specifically, Applicants have contracted with a consulting engineer to complete a study to determine if the proposed transmission line will cause interference with BNSF's control systems. If the study determines there are unacceptable impacts on BNSF's control systems, mitigation will be proposed and submitted to BNSF for review and approval. Applicants remain optimistic that Alignment 2 will ultimately be feasible.[105]

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[100] Ex. APP-5 at 4-5 (Application).
[101] Ex. APP-5 at 61 (Application).
[102] Ex. APP-5 at 61, Appendix K (Application, Agency Correspondence).
[103] Ex. APP-5 at 58-59 (Application).
[104] Ex. APP-5 at 59 (Application).
[105] Ex. APP-5 at 61 (Application); Ex. APP-35 at 2 (Comments Regarding EA).

99. To the extent that the licensing process is ultimately not consistent with the Project schedule and cost, Alignments 1 and 3 are feasible and also located within the Proposed Route.[106]

D. Route Alternatives Considered but Rejected

100. Because the Project is needed to address low voltage concerns and enhance transmission reliability in the Project area, a Route Alternative (RA) was not considered viable if it did not interconnect to the several substations in the area as it would not meet the Project need. Applicants studied five RAs (one of which was the Proposed Route) that would meet the purpose of the Project.[107]

101. RA1 (80th Ave SW) and RA2 (90th Ave SW) are environmentally comparable alternatives to the Proposed Route; however, both RA1 and RA2 would utilize approximately 9 and 8 miles less, respectively, of existing transmission line corridor than the Proposed Route.[108]

102. While RA3 (U.S. Highway 12) and RA4 (BNSF Railway) are slightly shorter than the Proposed Route, these route alternatives appear to be the least environmentally preferred. For example, these RAs have less co-location with existing utility and transportation corridors relative to the other routes; have more residences within 200 feet of the routes; would cross additional MDNR public lands, which includes the Danvers Wildlife Management Area (WMA), which also includes a public water basin/designated shallow lake; and would cross the USFWS Benson WPA. In addition, co-location with the BNSF Railway or U.S. Highway 12 poses additional congestion, constructability, and access and maintenance issues. These two alternatives also have more road or railroad crossings than the other routes.[109]

103. Compared to the other route alternatives, the Proposed Route better minimizes overall environmental impacts while adhering to the Commission's routing criteria by using existing transmission line ROW for 67 percent of the route and co-locating with road ROWs for 68 percent of the route.[110]

E. No Alternatives Proposed During Scoping

104. No route or alignment alternatives were proposed during the scoping process.[111] EERA therefore recommended that the Commission authorize EERA to include in the scoping decision for the EA solely the Proposed Route and the three City of Benson alignment alternatives for the Project.[112]

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[106] Ex. APP-5 at 61 (Application).
[107] Ex. APP-5 at 57-58 (Application).
[108] Ex. APP-5 at 61 (Application).
[109] Ex. APP-5 at 60-61 (Application).
[110] Ex. APP-5 at 60-61 (Application); *see* Ex. PUC-8 at 2-3 (EA).
[111] Ex. EERA-2 (Oral Comments on Scope of EA); Ex. EERA-3 (Written Comments on Scope of EA).
[112] Ex. EERA-4 at 1 (Scoping Summary and Recommendation).

105. The Commission authorized EERA to include solely in the EA an analysis of the Proposed Route and the alternative alignments within the City of Benson proposed by Applicants.[113]

V. PUBLIC PARTICIPATION & TRIBAL, STATE, AND LOCAL PARTICIPATION

A. Public Outreach

106. Prior to filing the Application, Applicants held open houses in the City of Appleton and the City of Benson, Minnesota, on November 1 and 2, 2023, respectively. Invitations to the meeting, including a Project fact sheet with maps, were mailed to landowners within and adjacent to the Proposed Route, as well as to representatives from regulatory agencies and local governments. Advertisements were also placed in the *Swift County Monitor-News* and the *Appleton Press*. Applicants' staff members were available to provide information to members of the public and answer questions concerning the Project, including the reason for the Project, the process for permitting, tree and vegetation cutting or removal, easement requirements and acquisition, and the Project timeline. Large posters showing the existing/proposed transmission line alignment and pictures of what the structures will look like were also available for review.[114]

107. Applicants also implemented their Notice Plan, as approved by the Commission, by mailing a notice letter to landowners within the identified notice area. Notice was published in the *Star Tribune* and the *Swift County Monitor-News*.[115]

108. Applicants were available during open houses before the public information and scoping meetings in March 2025, where stakeholders and community members could ask questions of Applicants regarding the Project.[116] Applicants likewise were available during open houses before the public hearings in September 2025.[117] Applicants' technical representatives provided information about the Project, answered questions and responded to comments.[118]

B. Agency and Stakeholder Outreach and Tribal Coordination

109. Applicants began contacting agencies with potential interest in the Project in October 2023. Then, once the Proposed Route was developed after the open houses, Applicants sent initial notification letters to federal, Tribal, state, and local agencies on September 5, 2024.[119]

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[113] Ex. PUC-6 at 1 (Order (EA Scope)).
[114] Ex. APP-5 at 8, 138-39 (Application).
[115] Ex. APP-5 at 11, 139 (Application); Ex. APP-26 (Compliance Filing – Notice Plan); Ex. APP-27 (Compliance Filing – Notice Plan – Corrected Attachment F).
[116] Ex. APP-31 at 7 (Direct Testimony of M. Strohfus); Ex. PUC-1 (Notice of Public Information and Environmental Assessment Scoping Meetings).
[117] Ex. PUC-10 (Amended Notice of Public Hearings and Availability of the Environmental Assessment).
[118] *See* Ex. EERA-2 (Oral Comments on Scope of EA); *see also* Ex. APP-5 at 139 (Application).
[119] Ex. APP-5 at 140, Appendix K (Application, Agency Correspondence).

110. Applicants also requested feedback on the Project from the 11 federally recognized Tribes with geography within Minnesota, the Minnesota Chippewa Tribe and the Minnesota Indian Affairs Council (MIAC) in its Project notification letters sent on September 5, 2024. Letters were sent to the Tribal Historic Preservation Officers (THPOs) in addition to the executive leaders of Tribal governments. Applicants received a response from the Leech Lake Band of Ojibwe THPO confirming that the Leech Lake Band of Ojibwe does not have any recorded historic properties within the Project area.[120]

111. Applicants also mailed a notice to Tribal officials and stakeholders, including letters and a Project fact sheet with a map of the Project, pursuant to their Notice Plan.[121]

112. On October 23, 2024, Applicants sent a notification to the THPOs associated with the 11 federally recognized Tribes to offer a copy of the literature review submitted to the SHPO. The Shakopee Mdewakanton Sioux Community THPO and the Upper Sioux Community THPO requested a copy, which was provided on October 23, 2024. The Shakopee Mdewakanton Sioux Community THPO responded that because no burials were identified as being impacted by the proposed Project and because an Unanticipated Discoveries Plan will be developed for the Project, the THPO has no concerns with the Project. Applicants indicated their commitment to keeping Tribes updated regarding the Project.[122]

VI. SUMMARY OF PUBLIC COMMENTS

113. No members of the public filed written comments throughout this proceeding. No members of the public offered oral comments during public information and scoping meetings held on March 12 and 13, 2025.[123] During the public hearings held on September 3 and 4, 2025, members of the public asked questions regarding the Project's routing, co-location with existing ROW, substation placement, environmental impact, the construction process, and the land acquisition process. Applicants responded to these questions during the hearings.

114. During the scoping comment period ending March 28, 2025, MIAC, MnDOT, and MDNR submitted written comments.[124] MIAC's comments note that there are no known or suspected burial sites that may be affected by the Project, and request that Applicants have an Inadvertent Discovery Plan in place. The comments note that there are "No Concerns" related to the Project. MnDOT's and MDNR's comments included recommendations for certain topics to be studied in the EA, to which Applicants indicated they had no objection.[125]

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[120] Ex. APP-5 at 108, Appendix K (Application, Agency Correspondence).
[121] Ex. APP-5 at 139 (Application); Ex. APP-26 (Compliance Filing – Notice Plan); Ex. APP-27 (Compliance Filing – Notice Plan – Corrected Attachment F).
[122] Ex. APP-5 at 108, Appendix K (Application, Agency Correspondence).
[123] *See* Ex. EERA-2 (Oral Comments on Scope of EA).
[124] *See* Ex. EERA-3 (Written Comments on Scope of EA).
[125] Ex. EERA-3 (Written Comments on Scope of EA); Ex. APP-30 (Response to Scoping Comments).

115. The written comment period remained open through September 30, 2025. During this time, four comments were submitted by four agencies.[126]

116. Commission Staff filed comments provided by the USFWS on September 11, 2025, in response to Staff's request. Notably, the Project occurs within a sensitive area for migratory birds. The USFWS recommended continued coordination through Project planning and construction, design and routing strategies to minimize impact to migratory birds, obtainment of an eagle take permit if necessary, avoiding habitat fragmentation, and proposed strategies for preservation and enhancement of native plant communities, especially for re-vegetation of areas disturbed within new and existing ROW.[127]

117. MDNR filed written comments on September 19, 2025. MDNR's comments concerned potential impacts to rare resources, use of avian flight diverters, potential impacts to trails, vegetation management strategies, continued coordination with MDNR, and Draft Route Permit conditions regarding facility lighting, dust control measures, wildlife-friendly erosion control measures.[128]

118. DER filed written comments on September 30, 2025, related to the merits of the Certificate of Need. DER reviewed the need analysis detailed in the Application and concluded that "the Applicants' Petition satisfies the requirements of relevant rules. Furthermore, the probable result of denial would be an adverse effect upon the future adequacy, reliability, or efficiency of energy supply to the Applicants, to the Applicants' customers, and to the people of Minnesota and neighboring states." DER concluded that there is not a more reasonable and prudent alternative to the Project. DER also concluded that the Application met various policy requirements of Minnesota Statutes. DER recommended that the Commission consider the impacts detailed in the Environmental Report, and, if the impacts are acceptable, approve the Certificate of Need. [129]

119. The VMPWG filed written comments on September 30, 2025, regarding Applicants' proposed VMP. The VMPWG suggested amending the proposed VMP to include identification of specific management sections along the proposed route based on the different vegetation communities planned for restoration; better describe the existing vegetation conditions; clarify management practices for herbicide use, including if there will be herbicide application to stumps and identify the type and application method of the herbicides; include more information on soil stabilization and intended seed mixes to be used; identify and address any rare or sensitive areas and resources; and establish

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[126] *See* USFWS Comment (September 11, 2025) (eDocket No. 20259-222913-01); MDNR Comment (September 19, 2025) (eDocket Nos. 20259-223187-01; 20259-223187-02); VMPWG Comment (September 30, 2025) (eDocket No. 20259-223416-01); DER Comment (September 30, 2025) (eDocket No. 20259-223398-01).
[127] USFWS Comment (September 11, 2025) (eDocket No. 20259-222913-01).
[128] MDNR Comment (September 19, 2025) (eDocket Nos. 20259-223187-01; 20259-223187-02).
[129] DER Comments (September 30, 2025) (eDocket No. 20259-223398-01).

an annual monitoring and reporting protocol to be conducted by a qualified, third-party monitor.[130]

VII. CERTIFICATE OF NEED CRITERIA

120. Minnesota Statutes § 216B.243 identifies the criteria the Commission must evaluate when assessing the need for a large energy facility, which includes:

> (1) the accuracy of the long-range energy demand forecasts on which the necessity for the facility is based;
>
> (2) the effect of existing or possible energy conservation programs under Minn Stat. §§ 216C.05 to 216C.30 and 216B.243 or other federal or state legislation on long-term energy demand;
>
> (3) in the case of a high-voltage transmission line, the relationship of the proposed line to regional energy needs, as presented in the transmission plan submitted under Minn. Stat. § 216B.2425;
>
> (4) promotional activities that may have given rise to the demand for this facility;
>
> (5) benefits of this facility, including its uses to protect or enhance environmental quality, and to increase reliability of energy supply in Minnesota and the region;
>
> (6) possible alternatives for satisfying the energy demand or transmission needs including but not limited to potential for increased efficiency and upgrading of existing energy generation and transmission facilities, load-management programs, and distributed generation;
>
> (7) the policies, rules, and regulations of other state and federal agencies and local governments;
>
> (8) any feasible combination of energy conservation improvements, required under Minn. Stat. § 216B.241, that can (i) replace part or all of the energy to be provided by the proposed facility, and (ii) compete with it economically;
>
> (9) with respect to a high-voltage transmission line, the benefits of enhanced regional reliability, access, or deliverability to the extent these factors improve the

[130] VMPWG Comments (September 30, 2025) (eDocket No. 20259-223416-01).

robustness of the transmission system or lower costs for electric consumers in Minnesota;

(10) whether the applicant is in compliance with applicable provisions of Minn. Stat. §§ 216B.1691 and 216B.2425, subdivision 7, and has filed or will file by a date certain an application for certificate of need under Minn. Stat. § 216B.243 or for certification as a priority electric transmission project under Minn. Stat. § 216B.2425 for any transmission facilities or upgrades identified under Minn. Stat. § 216B.2425, subdivision 7;

(11) whether the applicant has made the demonstrations required under Minn. Stat. § 216B.243, subdivision 3a; and

(12) if the applicant is proposing a nonrenewable generating plant, the applicant's assessment of the risk of environmental costs and regulation on that proposed facility over the expected useful life of the plant, including a proposed means of allocating costs associated with that risk.[131]

121. Minn. R. 7849.0120 further provides that the Commission shall grant a certificate of need if it determines that:

A. the probable result of denial would be an adverse effect upon the future adequacy, reliability, or efficiency of energy supply to the applicant, to the applicant's customers, or to the people of Minnesota and neighboring states, considering:

(1) the accuracy of the applicant's forecast of demand for the type of energy that would be supplied by the proposed facility;

(2) the effects of the applicant's existing or expected conservation programs and state and federal conservation programs;

(3) the effects of promotional practices of the applicant that may have given rise to the increase in the energy demand, particularly promotional practices which have occurred since 1974;

(4) the ability of current facilities and planned facilities not requiring certificates of need to meet the future demand; and

[131] Minn. Stat. § 216B.243, subd. 3.

(5) the effect of the proposed facility, or a suitable modification thereof, in making efficient use of resources;

B. a more reasonable and prudent alternative to the proposed facility has not been demonstrated by a preponderance of the evidence on the record, considering:

(1) the appropriateness of the size, the type, and the timing of the proposed facility compared to those of reasonable alternatives;

(2) the cost of the proposed facility and the cost of energy to be supplied by the proposed facility compared to the costs of reasonable alternatives and the cost of energy that would be supplied by reasonable alternatives;

(3) the effects of the proposed facility upon the natural and socioeconomic environments compared to the effects of reasonable alternatives; and

(4) the expected reliability of the proposed facility compared to the expected reliability of reasonable alternatives;

C. by a preponderance of the evidence on the record, the proposed facility, or a suitable modification of the facility, will provide benefits to society in a manner compatible with protecting the natural and socioeconomic environments, including human health, considering:

(1) the relationship of the proposed facility, or a suitable modification thereof, to overall state energy needs;

(2) the effects of the proposed facility, or a suitable modification thereof, upon the natural and socioeconomic environments compared to the effects of not building the facility;

(3) the effects of the proposed facility, or a suitable modification thereof, in inducing future development; and

(4) the socially beneficial uses of the output of the proposed facility, or a suitable modification thereof, including its uses to protect or enhance environmental quality; and

D. the record does not demonstrate that the design, construction, or operation of the proposed facility, or a suitable modification of the facility, will fail to comply with relevant policies, rules, and regulations of other state and federal agencies and local governments.

122. There is sufficient evidence in the record for the Administrative Law Judge to assess the Proposed Project using the criteria and factors set out above.

VIII. APPLICATION OF CERTIFICATE OF NEED CRITERIA

A. The Project Meets the Requirements of Minn. R. 7849.0120; Minn. Stat. § 216B.243, subd. 3 (1)-(9)

123. To a significant extent, criteria or concerns the Commission must consider pursuant to Minn. Stat. § 216B.243, subd. 3(1)-(9), are incorporated into the subitems of Minn. R. 7849.0120. This portion of the Report is organized according to the subitems of Minn. R. 7849.0120. The Report notes where the identical or similar criteria is set out in statute. Where a concern for the Commission's consideration pursuant to subdivision 3 is not related to any subitems of Minn. R. 7849.0120, the Report considers the concern separately at the conclusion of this section.

B. Adequacy, Reliability, and Efficiency of Energy Supply

124. Minnesota Rule 7849.0120(A) requires that a certificate of need must be granted if "the probable result of denial [of a CN] would be an adverse effect upon the future adequacy, reliability, or efficiency of energy supply to the applicant, to the applicant's customers, or to the people of Minnesota and neighboring states. . . ." In making this determination, the Commission is directed to evaluate the criteria discussed below.

i. Criteria (A)(1): Forecast Accuracy

Minn. R. 7849.0120(A)(1): "[T]he accuracy of the applicant's forecast of demand for the type of energy that would be supplied by the proposed facility."[132]

125. In 2020, Great River Energy, Otter Tail Power, MRES, and Xcel Energy completed the Benson Area Load Study (BAL Study) to evaluate the shutdown of the 55 MW FibroMinn Energy Center near Benson, Minnesota.[133] The FibroMinn plant had played a significant role in supplying power and regulating the reactive power need in the local area. The retirement created near-term load-serving reliability concerns. In addition, future load growth forecasting determined a deficit in the area. The Project will provide

[132] Minn. R. 7849.0120 (A)(1); *see also* Minn. Stat. § 216B.243, subd. 3(1) (requiring the Commission to evaluate "the accuracy of the long-range energy demand forecasts on which the necessity for the facility is based").
[133] *See* Ex. APP-5 at Appendix I (Application, BAL Study).

needed capacity increases and system improvements to service forecasted load for decades to come.[134]

126. Utilities that serve load in the transmission system Study Area provided the 2019 summer and winter peak data for the BAL Study using peak demands from the five years leading up to 2019. That data was then used to forecast the peak loads for 2028. The Study Area system peak included 115-kV and 41.6-kV transmission system connected loads that directly affect the performance of the 115-kV transmission system.[135]

127. The study results showed that the existing transmission system cannot serve current or forecasted load within the planning criteria. The proposed Project addresses North American Electric Reliability Corporation (NERC) standard reliability violations including contingency low voltage and thermal concerns on the 115-kV system, addresses existing N-2 contingency voltage collapse on the 115-kV system, accommodates future load growth in the 41.6-kV and 115-kV transmission systems which is expected to reach a peak demand of 101.61 MW in 2028 and 106.87 MW in 2033, and reduces losses in the Project area. Additionally, the Project will provide increased load serving capability to areas outside the immediate Project area, such as 115-kV lines west out of Appleton towards Ortonville and the Morris to Canby 115-kV transmission system.[136]

128. Since the 2020 BAL Study, several system modifications have been completed and updated forecasts have been made available. This planning study update (Update) reanalyzed the load serving need in the area based on the topology changes as updated from the MISO Transmission Expansion Plan (MTEP) 2018 data series to the MTEP 2023 data series.[137]

129. The Update utilized historical meter data from the last five years through the end of 2023 and updated the Benchmark MISO model with these load forecasts accordingly.[138] In addition to updating the existing load forecasts, two new loads have been included in this Update that should be in-service by 2028: Darnen and Hodges Substations.[139]

130. The analysis also incorporates the most recent load forecasts for the distribution substations. The Update analyzed distribution substations, a subset of the original 68 distribution substations analyzed in the BAL Study. The BAL Study encompassed a wider area involving multiple sections but concluded that the key area to

[134] Ex. APP-5 at 35 (Application); Ex. APP-32 at 3 (Direct Testimony of N. Goater).
[135] Ex. APP-5 at 40 (Application).
[136] Ex. APP-5 at 35-47 (Application); Ex. APP-32 at 3-4 (Direct Testimony of N. Goater).
[137] Ex. APP-5 at 35-47 (Application); Ex. APP-32 at 5 (Direct Testimony of N. Goater).
[138] Ex. APP-5 at 39 (Application).
[139] Ex. APP-5 at 40 (Application).

be addressed was the 29 distribution substations interconnected to the 115-kV system around Benson. This analysis confirms the need for additional load-serving support.[140]

131. Compared to the original 2028 forecast based on 2019 peak loads, the 2028 forecast based on 2023 data is greater, in part due to the addition of these new loads. In the BAL Study, the peak load was 79 MW for the Study Area with a forecasted peak 2028 load of 87 MW. In contrast, the peak load based on 2023 data is 83 MW with a 2028 forecast of 99 MW in this update.[141]

132. The Update: reaffirms the Project will be the best performing option to meet the identified needs; determines that updated load forecasts predict higher growth rates; reinforces the need for the Project; affirms that the existing load cannot be reliably served without the Project; and demonstrates the Project will provide an additional 47 MW of system capacity under the worst single (N-1) contingency and an additional 77 MW of capacity under the worst double (N-2) contingency.[142]

133. Applicants' forecast of demand for the type of energy that would be supplied by the proposed facility is reasonable and is sufficiently accurate to demonstrate the need for the Project as required by Minn. R. 7849.0120(A)(1); Minn. Stat. § 216B.243, subd. 3(1). Applicants satisfied the criteria listed in Minn. R. 7849.0120(A)(1), noting that "actual demand already exceeds the reliable supply capacity of the transmission grid."[143]

ii. Criteria (A)(2): Effects of Applicant's Existing or Expected Conservation Programs and State and Federal Conservation Programs

Minn. R. 7849.0120(A)(2): "[T]he effects of the applicant's existing or expected conservation programs and state and federal conservation programs."[144]

134. Applicants considered demand side management (DSM) and conservation as alternatives to the Project. In this context, DSM and conservation are assumed to encompass all forms of peak-shaving programs such as interruptible loads and dual fuel programs, as well as more general energy conservation programs, such as energy-efficiency rebates.[145]

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[140] Ex. APP-5 at 35-47 (Application); Ex. APP-32 at 5 (Direct Testimony of N. Goater).
[141] Ex. APP-5 at 40 (Application).
[142] Ex. APP-5 at 7, 35 (Application); Ex. APP-32 at 4 (Direct Testimony of N. Goater).
[143] *See also* DER Comments at 6 (September 30, 2025) (eDocket No. 20259-223398-01).
[144] Minn. R. 7849.0120(A)(2); *see also* Minn. Stat. § 216B.243, subd. 3(2) (requiring the Commission to evaluate "the effect of existing or possible energy conservation programs under sections 216C.05 to 216C.30 and this section or other federal or state legislation on long-term energy demand"). Minn. Stat. § 216B.243, subd. 3(8), requires the Commission to evaluate "any feasible combination of energy conservation improvements, required under section 216B.241, that can (i) replace part or all of the energy to be provided by the proposed facility and, (ii) compete with it economically."
[145] Ex. APP-5 at 50, Appendix J (Application, Energy Conservation and Efficiency Information).

135. To meet the identified need, DSM and conservation in the amount of 40 MW would have to be achieved. Although conservation programs will continue to be implemented in the Project area to encourage efficient use of electricity, these programs are insufficient to reduce the 83 MW existing load by half. For these reasons, solutions involving DSM and conservation are not a more reasonable and prudent alternative to the Project.[146]

136. Demand response, demand management, and conservation programs are not sufficient means of meeting the need of the Project. Applicants satisfied the criteria listed in Minn. R. 7849.0120(A)(2).[147]

iii. Criteria (A)(3): Effects of Promotional Activities

Minn. R. 7849.0120(A)(3): "[T]he effects of promotional practices of the applicant that may have given rise to the increase in the energy demand, particularly promotional practices which have occurred since 1974."[148]

137. Applicants have not conducted any promotional activities or events that have triggered the need for the Project. Rather, the Project is driven by regional reliability issues that have arisen from the shutdown of the 55 MW FibroMinn Energy Center near Benson, Minnesota. The Project will provide the necessary transmission system improvements to service current load and forecasted load in the decades to come.[149]

138. There is no evidence in the record that Applicants' promotional practices created the need for the Project. Applicants satisfied the criteria listed in Minn. R. 7849.0120(A)(3).[150]

iv. Criteria (A)(4): Ability of Current and Future Facilities Not Requiring Certificates of Need to Meet Demand

Minn. R. 7849.0120(A)(4): "[T]he ability of current facilities and planned facilities not requiring certificates of need to meet the future demand."[151]

139. Study results showed that the existing transmission system cannot serve current or forecast load within the planning criteria. The load serving capability of the system before the proposed Project is 65 MW in the defined Study Area under single contingency (N-1) conditions and 0 MW under N-2 conditions. This is insufficient to meet the existing load of 86 MW and forecast load of 101.61 MW in 2028. After the addition of the Project, the load serving capability will be 112 MW under single contingency (N-1) conditions (an increase of 47 MW) and 77 MW under multiple contingency (N2) conditions (an increase of 77 MW). The Project will also provide increased load serving capability to

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[146] Ex. APP-5 at 50, Appendix J (Application, Energy Conservation and Efficiency Information).
[147] *See also* DER Comments at 7 (September 30, 2025) (eDocket No. 20259-223398-01).
[148] Minn. R. 7849.0120(A)(3); *see also* Minn. Stat. § 216B.243, subd. 3(4) (requiring the Commission to evaluate "promotional activities that may have given rise to the demand for this facility").
[149] Ex. APP-5 at 54 (Application).
[150] *See also* DER Comments at 7 (September 30, 2025) (eDocket No. 20259-223398-01).
[151] Minn. R. 7849.0120 (A)(4).

areas outside the immediate Study Area, such as 115-kV lines west out of Appleton towards Ortonville and the Morris to Canby 115-kV transmission system.[152]

140. The record demonstrates that no current or planned generation or transmission alternative that do not require a CN is capable of addressing the identified needs. Applicants satisfied the criteria listed in Minn. R. 7849.0120(A)(4).[153]

v. Criteria (A)(5): Effect of Proposed Facility on Efficient Use of Resources

Minn. R. 7849.0120(A)(5): "[T]he effect of the proposed facility, or a suitable modification thereof, in making efficient use of resources."[154]

141. The Application states that the Project provide an additional 47 MW of system capacity under the worst single (N-1) contingency, which is expected to meet the demand for electricity for decades to come.[155]

142. The Project will make efficient use of existing interconnection rights and resources. Applicants satisfied the criteria listed in Minn. R. 7849.0120(A)(5).[156]

C. Absence of Superior Alternatives

143. Minnesota Statutes § 216B.243, subd. 3(6), directs the Commission to evaluate "possible alternatives for satisfying the energy demand or transmission needs including but not limited to the potential for increased efficiency and upgrading of existing energy generation and transmission facilities, load-management programs, and distributed generation." Minnesota Rule 7849.0120(B) requires the Commission to consider whether "a more reasonable and prudent alternative to the proposed facility has not been demonstrated by a preponderance of the evidence on the record" and directs the Commission to consider four concerns in making its evaluation.

i. Criteria (B)(1): Appropriateness of the Size and Type of Facility

144. Minnesota Statutes provide additional direction to the Commission with respect to the range of "reasonable alternatives" that should be considered. Minnesota Statutes § 216B.2426 requires that:

> the Commission shall ensure that opportunities for the installation of distributed generation, as that term is defined in section 216B.169, subdivision 1, paragraph (c), are considered in any proceeding under section . . . 216B.243 [Certificate of Need for Large Energy Facilities].

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[152] APP-5 at 46-47 (Application).
[153] *See also* DER Comments at 8 (September 30, 2025) (eDocket No. 20259-223398-01).
[154] Minn. R. 7849.0120(A)(5).
[155] Ex. APP-5 at 7 (Application).
[156] *See also* DER Comments at 8 (September 30, 2025) (eDocket No. 20259-223398-01).

145. Minnesota Statutes § 216B.2422, subd. 4, requires that:

> the Commission shall not approve a new or refurbished nonrenewable energy facility in an integrated resource plan or a certificate of need, pursuant to section 216B.243, nor shall the Commission allow rate recovery pursuant to section 216B.16 for such a nonrenewable energy facility, unless that utility has demonstrated that a renewable energy facility is not in the public interest.

146. Applicants considered generation solutions, including new dispatchable generation, distributed generation, renewable generation, and battery energy storage.[157] Due to the comparative benefits of the Project, cost, and Minnesota's carbon-free standard, and the Project's benefit and purpose of linking two areas together and benefiting a larger geographic area on both ends of the transmission line, Applicants determined that dispatchable fossil-fueled generation is not an alternative to the Project.[158]

147. Applicants considered distributed generation as an alternative to the Project. Distributed generation means dispatchable generation, most likely run on natural gas or other fossil fuels, which is connected to the local distribution system and able to run continuously when called upon. Fossil-fueled distributed generation has the same fundamental limitations as transmission-connected dispatchable generation, and likely at a greater cost if consisting of multiple smaller generators in diverse locations. Therefore, the addition of new fossil-fueled distributed generators is not a more reasonable and prudent alternative to the Project.[159]

148. Renewable generation, i.e., solar and wind, are non-dispatchable resources. As such, they are not feasible alternatives to the Project.[160]

149. Storage was evaluated to provide both thermal and reactive support to the area. A 50 MW/100 megawatt-hour (MWh) lithium-ion battery was considered as a replacement which could provide support for two hours. This solution, however, could require the addition of solar to allow for charging during longer-duration outages and would require the battery to be replaced at least once to have a comparable life to transmission solutions of at least 40 years. The Project is also superior to meet the need when considering cost and longevity. Accordingly, a battery storage alternative was not further considered.[161]

150. Applicants evaluated whether higher or lower voltage alternatives could meet the identified Project need. Voltages above 115-kV were not carried forward for detailed analysis because voltages higher than 115-kV have not been established at

[157] Ex. APP-5 at 47 (Application).
[158] Ex. APP-5 at 48-49 (Application).
[159] Ex. APP-5 at 49-50 (Application).
[160] Ex. APP-5 at 50 (Application).
[161] Ex. APP-5 at 50 (Application).

Appleton or Benson and 115-kV was sufficient for load serving needs in this area. To establish voltages greater than 115-kV at Appleton or Benson, new transformers and substation equipment would be needed, and larger conductors would be required.[162]

151. A lower voltage Appleton-Benson 41.6-kV alternative was also evaluated. Upgrading the existing 41.6-kV line and operating network would not provide the necessary capacity to supply the system at peak loads. Operating this system networked would cause reliability concerns due to the lack of communication between relays on each end of the system at 41.6-kV.[163]

152. Applicants considered different conductors. Both single and twisted pair conductors were considered. The conductors selected allow for sufficient capacity to supply loads in the area, allow for future growth, and are better suited for the wind and ice conditions for the area.[164]

153. Applicants also determined that undergrounding is not feasible for this Project due to the construction, maintenance, reliability, and cost drawbacks of high-voltage underground transmission lines.[165]

154. Finally, Applicants did not identify any combination of the above alternatives that could meet the Project need.[166]

155. The size and type of the Project was appropriate, and that "a more reasonable and prudent alternative to the proposed facility is not demonstrated by a preponderance of the evidence in the record."[167]

156. Applicants reasonably considered and rejected as either insufficient or not cost-effective or both, new dispatchable generation, distributed generation, renewable generation, battery energy storage, lower voltage, higher voltage, and underground transmission.[168] Overall, a more reasonable and prudent alternative to the Project has not been demonstrated by a preponderance of the evidence on the record.

ii. Criteria (B)(2): Cost of Proposed Facility and the Cost of Energy to be Supplied

Minn. R. 7849.0120(B)(2): "[T]he cost of the proposed facility and the cost of energy to be supplied by the proposed facility compared to the costs of reasonable alternatives and the cost of energy that would be supplied by reasonable alternatives."

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[162] Ex. APP-5 at 51 (Application).
[163] Ex. APP-5 at 51 (Application).
[164] Ex. APP-5 at 51 (Application).
[165] Ex. APP-5 at 52 (Application).
[166] Ex. APP-5 at 53 (Application).
[167] *See* DER Comments at 9-14 (September 30, 2025) (eDocket No. 20259-223398-01).
[168] *See* DER Comments at 14-19 (Sept. 6, 2024) (eDocket No. 20249-210008-01).

157. Alternatives studied demonstrate that the Project bears a reasonable cost to the cost of the energy to be supplied. For example, the construction cost of locating the entire length of the Project's proposed transmission underground is estimated to be as much as five to 16 times greater per mile than if it were to be constructed overhead as proposed.[169] Likewise, alternative forms of generation would cost significantly more than the Project and would not meet the identified need as effectively.[170]

158. Many alternatives evaluated would impose substantially higher costs than the Project.[171]

159. The cost of the Project compares favorably to other alternatives considered and the cost condition identified above proposed by Applicants and supported by DER is reasonable and supported by the record.

iii. Criteria (B)(3): Effects of Facility on Natural and Socioeconomic Environment

Minn. R. 7849.0120(B)(3): "[T]he effects of the proposed facility upon the natural and socioeconomic environments compared to the effects of reasonable alternatives."

160. The EA analyzed potential impacts on the natural environment and concluded that negative impacts of the Project on environmental justice communities, such as increased traffic and noise during construction will be generally short term.[172]

161. The EA also analyzed the effects of the proposed facility upon the natural and socioeconomic environments compared to the effects of reasonable alternatives. Notably, EERA concluded that if the Project is not constructed, the Project Area will continue to have a deficit in load serving capability, placing the communities at risk of service interruptions under certain contingency conditions.[173] EERA's analysis is discussed further in later sections of these Findings.

162. Based upon the environmental analysis in this record, a more reasonable and prudent alternative to the Project has not been demonstrated by a preponderance of the evidence on the record.

iv. Criteria (B)(4): Reliability of the Project

Minn. R. 7849.0120(B)(4): "[T]he expected reliability of the proposed facility compared to the expected reliability of reasonable alternatives."

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[169] Ex. APP-5 at 52 (Application).
[170] Ex. APP-5 at 47-53 (Application).
[171] *See* DER Comments at 11 (September 30, 2025) (eDocket No. 20259-223398-01); Ex. PUC-8 at 15-18 (EA).
[172] *See* DER Comments at 12-13 (September 30, 2025) (eDocket No. 20259-223398-01); Ex. PUC-8 at 42-44 (EA).
[173] Ex. PUC-8 at 15 (EA).

163. The Project is driven by regional reliability issues that have arisen from the shutdown of the 55 MW FibroMinn Energy Center. As a result, the system is currently experiencing low voltages resulting in insufficient capacity to reliably serve all load under contingency conditions. The Project will provide an additional 47 MW of system capacity under the worst possible contingency, which is expected to meet the region's demand for electricity for decades to come.[174]

164. The Project is designed to solve the transmission reliability issues in the area after the shutdown of existing generation, and that a generation alternative would not provide the larger geographic benefit of linking two areas together.[175]

165. The record demonstrates that the Project's reliability compares favorably to the reliability of alternatives within the record.

D. Protection of Natural and Socioeconomic Environments and Human Health

166. In considering whether a CN must be granted to Applicants, the effects of the proposed facility on natural and socioeconomic environments compared to the effects of reasonable alternatives must be considered.[176]

i. Criteria (C)(1): Relationship of Facility to Overall State Energy Needs

Minn. R. 7849.0120(C)(1): "[T]he relationship of the proposed facility, or a suitable modification thereof, to overall state energy needs."

167. The Project furthers Minnesota's goals of developing transmission to support reliable electrical service while ensuring local homes and businesses can rely on the electric system for day-to-day needs.[177]

168. The Project is designed to meet the need to provide reliable service in the local area, has little relation to the state's overall energy needs, and recognizes that without the Project, existing and future forecasted loads cannot be served reliably.[178]

ii. Criteria (C)(2): Effects on Natural and Socioeconomic Environment

Minn. R. 7849.0120(C)(2): "[T]he effects of the proposed facility, or a suitable modification thereof, upon the natural and socioeconomic environments compared to the effects of not building the facility."

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[174] Ex. PUC-8 at 15-19 (EA).
[175] *See* DER Comments at 13-14 (September 30, 2025) (eDocket No. 20259-223398-01).
[176] *See* Minn. R. 7849.0120(A).
[177] Ex. APP-5 at 54 (Application).
[178] *See* DER Comments at 14-15 (September 30, 2025) (eDocket No. 20259-223398-01).

169. The EA analyzed various system alternatives to the Project and did not find a comparable, feasible alternative that could meet the identified need that would be less impactful than the Project.[179]

170. The Commission should consider the EA in the Commission's decision in this matter.[180]

171. The record demonstrates that the natural and socioeconomic impacts of the Project compare favorably to the effects of not building the Project and to other system alternatives studied in the EA.

iii. Criteria (C)(3): Effects on Inducing Future Development

Minn. R. 7849.0120(C)(3): "[T]he effects of the proposed facility, or a suitable modification thereof, in inducing future development."[181]

172. The Project is not intended to induce future development but rather is intended to maintain reliable service to the local communities.[182] Additionally, the EA determined that the Project would not impact future development in the area.[183] This, taken together with the Project's anticipated benefits discussed previously, supports the issuance of a Certificate of Need.

173. The Commission should consider the EA in the Commission's decision in this matter.[184]

iv. Criteria (C)(4): Socially Beneficial Uses of Output

Minn. R. 7849.0120(C)(4): "[T]he socially beneficial uses of the output of the proposed facility or a suitable modification thereof, including its uses to protect or enhance environmental quality."[185]

174. The purpose of the Project is to maintain critical transmission reliability for Applicants' customers in the Project region. The Project arises after the shutdown of the FibroMinn Energy Center near Benson, Minnesota. As detailed elsewhere in the Application, existing load cannot be reliably served without the addition of the Project, and updated load forecasts predict higher growth rates that further require the Project.

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[179] Ex. PUC-8 at 15-19 (EA).
[180] *See also* DER Comments at 15 (September 30, 2025) (eDocket No. 20259-223398-01).
[181] Minn. Stat. § 216B.243, subd. 3(3) requires the Commission to evaluate "the relationship of the proposed line to regional energy needs, as presented in the transmission plan submitted under section 216B.2425." Subdivision 7 of this section places requirements on entities to report transmission projects to the Commission.
[182] Ex. APP-5 at 54 (Application); Ex. PUC-8 at 19 (EA).
[183] Ex. PUC-8 at viii (EA).
[184] *See also* DER Comments at 15 (September 30, 2025) (eDocket No. 20259-223398-01).
[185] Similarly, Minn. Stat. § 216B.243, subd. 3(5) requires the Commission to evaluate the benefits of the Project "including its uses to protect or enhance environmental quality and to increase reliability of energy supply in Minnesota and the region."

The Project will continue to support reliable service in the area and ensure local homes and businesses can rely on the electric system for day-to-day needs.[186]

175. The Commission should consider the EA in the Commission's decision in this matter.[187]

176. The record related to this criterion supports the issuance of a Certificate of Need for the Project.

E. Compliance with Laws

Minn. R. 7849.0120(D): "[T]he record does not demonstrate that the design, construction, or operation of the proposed facility, or a suitable modification of the facility, will fail to comply with relevant policies, rules, and regulations of other state and federal agencies and local governments."

177. In addition to the Certificate of Need and Route Permit sought by Applicants, the Application and EA identified several other permits, licenses, approvals, or consultations may be required to construct the Project, depending on the actual route selected and the conditions encountered during construction.[188] There is no evidence in the record that Applicants will be unable to obtain and comply with these permits and approvals.

F. Analysis Under Minn. Stat. § 216B.243, subd. 3(10) through (12) and subd. 3a

178. Minnesota Statutes § 216B.243, subd. 3(10) requires the Commission to evaluate:

> whether the applicant or applicants are in compliance with applicable provisions of sections 216B.1691 [renewable energy objectives] and 216B.2425, subdivision 7 [transmission needed to support renewable resources], and have filed or will file by a date certain an application for certificate of need under this section or for certification as a priority electric transmission project under section 216B.2425 for any transmission facilities or upgrades identified under section 216B.2425, subdivision 7.

179. Applicants are in compliance with the applicable provisions of Minn. Stat. §§ 216B.1691 and 216B.2425, subd. 7. The Commission has found Applicants' Certificate of Need petition, as supplemented by Applicants' reply comments, to be

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[186] Ex. APP-5 at 54 (Application).
[187] *See also* DER Comments at 15 (September 30, 2025) (eDocket No. 20259-223398-01).
[188] Ex. APP-5 at 13-17 (Application); Ex. PUC-8 at 12-14 (EA).

complete.[189] The Project will meet the regional demand for electricity for decades to come.[190] Applicants met this statutory criterion.[191]

180. Minn. Stat. § 216B.243, subd. 3(11), requires the Commission to determine whether Applicants have made the demonstrations required under subd. 3a of the same section. Under certain conditions, Minn. Stat. § 216B.243, subd. 3a, bars the Commission from issuing a certificate of need "for a large energy facility that generates electric power by means of a nonrenewable energy source, unless the applicant for the certificate has demonstrated to the commission's satisfaction that it has explored the possibility of generating power by means of renewable energy sources and has demonstrated that the alternative selected is less expensive, including environmental costs, than power generated by a renewable energy source." Because the Project is not a facility that generates electric power by means of a nonrenewable energy source, subdivision 3a does not apply.

181. The principal objective and effect of the Project is to relieve congestion preventing consumers from accessing inexpensive wind and solar energy; the requirement of Minn. Stat. § 216B.243, subd. 3(11) is met.

182. Minn. Stat. § 216B.243, subd. 3(12), applies only when an applicant is proposing a nonrenewable generating plant and is not applicable because the Project is not a nonrenewable generating plant.

IX. FACTORS FOR A ROUTE PERMIT

183. The Power Plant Siting Act (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."[192]

184. 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

[189] Ex. PUC-3 (Order).
[190] Ex. APP-5 at 7 (Application).
[191] *See also* DER Comments at 20 (September 30, 2025) (eDocket No. 20259-223398-01).
[192] Minn. Stat. § 216E.03, subd. 7. Minn. Stat. Ch. 216I became effective on July 1, 2025. Because the Application was filed prior to July 1, 2025, Minn. Stat. Ch. 216E applies to the Application.

evaluation of new or improved methods for minimizing adverse impacts of water and air discharges and other matters pertaining to the effects of power plants on the water and air environment;

(2) environmental evaluation of sites and routes proposed for future development and expansion and their relationship to the land, water, air and human resources of the state;

(3) evaluation of the effects of new electric power generation and transmission technologies and systems related to power plants designed to minimize adverse environmental effects;

(4) evaluation of the potential for beneficial uses of waste energy from proposed large electric power generating plants;[193]

(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

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

circuiting or design modifications;

(11) evaluation of irreversible and irretrievable commitments of resources should the proposed site or route be approved;

(12) when appropriate, consideration of problems raised by other state and federal agencies and local entities;

(13) evaluation of the benefits of the proposed facility with respect to (i) the protection and enhancement of environmental quality, and (ii) the reliability of state and regional energy supplies;

(14) evaluation of the proposed facility's impact on socioeconomic factors; and

(15) evaluation of the proposed facility's employment and economic impacts in the vicinity of the facility site and throughout Minnesota, including the quantity and quality of construction and permanent jobs and their compensation levels. The commission must consider a facility's local employment and economic impacts, and may reject or place conditions on a site or route permit based on the local employment and economic impacts.

185. 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."

186. 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 high voltage transmission line (HVTL):

A. effects on human settlement, including, but not limited to, displacement, noise, aesthetics, cultural values, recreation, and public services;

B. effects on public health and safety;

C. effects on land-based economies, including, but not limited to, agriculture, forestry, tourism, and mining;

D. effects on archaeological and historic resources;

E. effects on the natural environment, including effects on air and water quality resources and flora and fauna;

F. effects on rare and unique natural resources;

G. application of design options that maximize energy efficiencies, mitigate adverse environmental effects, and could accommodate expansion of transmission or generating capacity;

H. use or paralleling of existing rights-of-way, survey lines, natural division lines, and agricultural field boundaries;

I. use of existing large electric power generating plant sites;[194]

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.

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

X. APPLICATION OF ROUTING FACTORS

A. Effects on Human Settlement

188. Minnesota law requires consideration of the Project's effects on human settlement, including displacement of residences and businesses, noise created by

[194] This factor is not applicable because it applies only to power plant siting.

construction and operation of the Project, and impacts to aesthetics, cultural values, recreation, and public services.[195]

i. Displacement

189. No residences or businesses are anticipated to be displaced by the Project. The Project will be designed in compliance with local, state, National Electrical Safety Code (NESC), and Applicants' standards regarding clearance to ground, clearance to crossing utilities, clearance to buildings (including residences), strength of materials, and ROW widths.[196]

190. The Proposed Route, which includes locations for proposed substation expansions and relocations, provides sufficient design flexibility and distances from existing homes and structures for a transmission line design that achieves the requisite clearances.[197]

191. Applicants will work with landowners to address construction timelines, transmission alignment adjustments and structure placement, as necessary, to avoid impacts to irrigators within the proposed route width.[198]

ii. Land Use and Zoning

192. Land cover along the proposed route is primarily agriculture (row crops) and developed.[199] Zoning along the proposed route is primarily Agricultural Preservation District 1. The proposed route also traverses the following zoned municipal areas:

- City of Appleton – Within the city of Appleton, the proposed route crosses developed land zoned for industrial, heavy/medium land use. Applicants have identified three potential locations for the new Appleton substations. According to the city of Appleton's Comprehensive Plan, one location is zoned for industrial land use and the other two locations are directly north of Highway 7 and the city of Appleton's industrial park (outside of the city limits).

- Town of Holloway – Within the town of Holloway, the proposed route crosses developed–open space, Northern Tallgrass Prairie, and cultivated cropland based on U.S. Geological Survey (USGS) Gap Analysis Program data. The town of Holloway does not have a Comprehensive Plan.

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[195] Minn. Stat. § 216E.03, subd. 7(b); Minn. R. 7850.4100, subp. A.
[196] Ex. APP-5 at 72 (Application); Ex. PUC-8 at 36 (EA).
[197] Ex. APP-5 at 72 (Application).
[198] Ex. APP-5 at 73 (Application); Ex. PUC-8 at 36 (EA).
[199] Ex. APP-5 at 80 (Application); Ex. PUC-8 at 37 (EA).

- Town of Danvers - The proposed route crosses developed–open space adjacent to but outside of the town of Danvers. The town of Danvers does not have a Comprehensive Plan.

- City of Benson–According to the city of Benson's Comprehensive Plan, the proposed route crosses land zoned for commercial, public and semi-public, limited industrial, railroad ROW, and park–open space land uses. The Benson Municipal Substation fence line will be expanded on the city of Benson's existing parcel.[200]

193. The land use specifically associated with new potential substations are as follows:

- Appleton Substations: The substations will be located and developed in open space.

- Moyer Substation: If a new Moyer Substation is constructed, it will be located in proximity to the existing substation within agricultural and developed land use.

- Danvers Substation: If a new Danvers Substation is constructed, it will be located in proximity to the existing substation within agricultural and developed land use.[201]

194. The proposed route also crosses four BWSR administered RIM riparian and floodplain restoration easements. However, the proposed ROW crosses only three RIM easements, of which one intersects the proposed alignment. The RIM Reserve program is the primary land acquisition program for state-held conservation easements and restoration of wetlands and native grasslands on privately owned land in Minnesota. Among other restrictions, easements can prohibit harvesting of trees and erecting or constructing any type of structure, temporary or permanent, on the easement area.[202] Applicants initiated consultation with BWSR on September 5, 2024, to confirm easement applicability with the Project and any land use restrictions.[203] Additionally, while both the transmission line itself (i.e., structures) and the ROW cross the easement east of Holloway, only the ROW (i.e., no structures) crosses the easements near the City of Benson. Applicants committed to working with BWSR to ensure clearing practices where needed within the ROW are consistent with the RIM easement requirements. Regarding the easement east of Holloway, Applicants committed to attempting to minimize the siting of structures within the easement.[204]

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[200] Ex. APP-5 at 80-81 (Application); Ex. PUC-8 at 37-38 (EA).
[201] Ex. APP-5 at 80 (Application).
[202] Ex. PUC-8 at 38 (EA).
[203] Ex. APP-5 at 81 (Application); Ex. PUC-8 at 38 (EA).
[204] Ex. APP-35 at 3 (Comments Regarding EA).

195. Impacts to land use as a result of the Project are expected to be minimal, and the Project is not expected to change land uses or zoning designations since the Project will largely be located within existing utility and road ROW and is largely consistent with existing land uses.[205]

iii. Noise

196. Construction noise, including removal activity, is generally expected to occur during daytime hours as the result of heavy equipment operation and increased vehicle traffic associated with the transport of construction personnel and materials to and from the work area, and is expected to be temporary. Construction activities will be performed with standard heavy equipment such as backhoes, cranes, boom trucks, and assorted small vehicles. Construction equipment noise levels will typically be less than 85 dBA at 50 feet when equipment is operating at full load and will only occur when equipment is operating. Upon completion of construction activities, noise associated with construction equipment will cease.[206]

197. The Project will include construction of new substations and modifications to existing substations to connect to the 115-kV transmission line. A typical 115-kV transformer will result in noise levels of about 50 dBA at a distance of approximately 50 feet from the transformer. No perceptible change in noise levels is expected at receptors near the substations due to these location changes and upgrades.[207]

198. Transmission lines can generate a small amount of sound energy during corona activity where a small electrical discharge caused by the localized electric field near energized components and conductors ionizes the surrounding air molecules. Operational noise levels produced by a 115-kV transmission line are generally less than outdoor background levels and are therefore not usually perceivable. As such, noticeable operational noise impacts are not anticipated as a result of the Project. Further, proper design and construction of the transmission line in accordance with industry standards will help to ensure that noise impacts do not exceed applicable limits.[208]

199. Section 5.3.6 of the Draft Route Permit addresses noise from the Project and requires compliance with noise standards established in Minn. R. 7030.0010 to .0080.[209]

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[205] Ex. APP-5 at 81 (Application); Ex. PUC-8 at 38 (EA).
[206] Ex. PUC-8 at 39-40 (EA).
[207] Ex. PUC-8 at 40 (EA).
[208] Ex. PUC-8 at 40 (EA).
[209] Ex. PUC-8 at Appendix C (EA, Draft Route Permit).

iv. Property Values

200. Impacts to property values, if they occur, are expected to be incremental and localized since the proposed route largely follows existing transmission line ROW.[210] No mitigation is proposed.

v. Socioeconomics

201. During construction, there may also be short-term positive impacts to the nearby communities including potential increases in local revenue 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.[211]

202. Because impacts to socioeconomics would be generally short-term and beneficial, no mitigation is proposed.[212]

vi. Aesthetics

203. The environmental setting of the Project area is predominantly agricultural fields, interspersed with isolated residential and agricultural developments. The Project will not impact any designated scenic byways or wild and scenic rivers.[213]

204. Approximately 67 percent of the Project will be constructed within existing transmission line ROW, and the Project will be co-located with existing road ROW for 68 percent of the Proposed Alignment; 8.0 miles of new construction is proposed. For the portions of the Project that will upgrade, rebuild, or reconductor existing lines, the Project will replace 41.6-kV and 115-kV facilities.[214]

205. The existing structure heights along the 41.6-kV system range between 35 to 80 feet above ground, and between 55 and 75 along Great River Energy's existing 115-kV system. Typical structure heights for the new 115-kV line will range from 50 to 100 feet above ground and spans between structures will generally range from 300 to 500 feet. Applicants will primarily use single-pole wood structures.[215]

206. The Project will also construct new and expand or modify existing substations in the Project area. New substations are proposed in proximity to the existing substations and the existing substations would be decommissioned. The Project upgrades and substation expansions and relocations will continue to be visible along the roadways and will appear similar to the existing 41.6- and 115-kV systems.[216]

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[210] Ex. PUC-8 at 45 (EA).
[211] Ex. APP-5 at 79 (Application); Ex. PUC-8 at 44 (EA).
[212] Ex. APP-5 at 80 (Application); Ex. PUC-8 at 44 (EA).
[213] Ex. APP-5 at 71 (Application).
[214] Ex. APP-5 at 71 (Application); Ex. PUC-8 at 34 (EA).
[215] Ex. APP-5 at 71 (Application); Ex. PUC-8 at 34 (EA).
[216] Ex. APP-5 at 71 (Application).

207. There are residences and other buildings along the proposed route. There are eight residences within 100 feet of the proposed alignment and 36 residences with 200 feet. Because many of these residences are already near existing 41.6-kV and 115-kV lines, aesthetic impacts are anticipated to be incremental.[217]

208. Applicants will work with landowners to identify concerns related to the transmission line and aesthetics. In general, mitigation includes enhancing positive effects as well as minimizing or eliminating negative effects, including incorporating input from landowners into the locations of structures, ROW, and other disturbed areas, preserving the natural landscape to the extent practicable, compensating landowners for the removal of trees and vegetation based on easement negotiations, and placement of structures at the maximum feasible distance from trail and water crossings, within limits of structure design and applicable regulations.[218]

209. Section 5.3.7 of the Draft Route Permit addresses potential aesthetic impact from the Project.[219]

vii. Public Services and Infrastructure

210. There are existing transmission lines within the Project Area, many of which will be replaced by the Project. Other existing utilities, such as gas and oil pipelines and electric distribution lines, and site improvements, such as septic systems and wells, will be identified during survey activities.[220]

211. The Proposed Route will parallel and intersect with several city, township, county, and state-managed roads and highways. Applicants have initiated coordination with MnDOT, Swift County, and the cities crossed by the Proposed Route regarding the Project.[221]

212. Applicants initiated the FAA Obstruction Evaluation / Airport Airspace Analysis Process by running the Notice Criteria Tool. Using a maximum height of 120 feet, which includes a 20-foot buffer for cranes, filing with the FAA is required for both airports. Because both airports are already near existing transmission infrastructure, impacts to aviation services are not expected.[222]

213. Applicants will coordinate Project construction schedules, including any outages, to avoid or minimize disruptions to service in the area. Based on the location of other existing utilities and site improvements that are identified during survey activities, the Project will be designed to meet or exceed required clearances and structure locations. No structures will be placed on existing utilities, including pipelines. Because the majority of the Proposed Route will follow existing utility and road ROW, no impacts

[217] Ex. PUC-8 at 34 (EA).
[218] Ex. APP-5 at 72 (Application); Ex. PUC-8 at 34-35 (EA).
[219] Ex. PUC-8 at Appendix C (EA, Draft Route Permit).
[220] Ex. PUC-8 at 46 (EA).
[221] Ex. APP-5 at 85 (Application).
[222] Ex. APP-5 at 85 (Application); Ex. PUC-8 at 48 (EA).

to public services are anticipated. Similarly, because the Project is primarily proposed to be routed in existing utility and road ROW, Applicants do not anticipate impacts to site improvements such as wells or septic systems.[223]

214. Temporary access for construction of the Project will occur along the 100-foot-wide ROW to the extent practicable. Temporary and infrequent traffic impacts associated with equipment and material delivery and worker transportation will occur. Local roads in the vicinity of the Project may experience some increased traffic during construction. To ensure that any short-term and infrequent traffic impacts are minimized, Applicants will coordinate with all affected road authorities and, to the extent practicable, schedule large material and equipment deliveries to avoid periods when traffic volumes are high.[224]

215. The Draft Route Permit proposed Special Condition No. 6.6 regarding MnDOT consultation.[225] Applicants assert that this proposed special condition is vague and that it is unclear what constitutes a "pole-by-pole analysis" of an initial design prior to construction. Applicants indicated a commitment to continued coordination with MnDOT and to comply with applicable MnDOT regulation. Applicants proposed the following revisions to Special Condition No. 6.6:

> The Permittees shall coordinate with the Minnesota Department of Transportation regarding pole placement, where applicable, and will comply with applicable MnDOT regulations. ~~including a pole-by-pole analysis once an initial project design has been prepared, prior to construction. In particular, consultation with~~ Particularly, the Permittees will consult with MnDOT regarding the intersection of US Highway 59, 60th St. SW, and Burlington Northern Railroad, ~~must occur~~ during the design phase to ensure compliance with MnDOT regulations.[226]

216. The Draft Route Permit proposed Special Condition No. 6.7 regarding wellhead protection.[227] Applicants stated that this condition is overly broad and is unnecessary as proposed.[228] In the Application, Applicants committed to requesting well information from landowners once a final route is selected, and continued coordination with landowners regarding well access, as needed.[229] Applicants proposed a similar condition regarding wellhead protection that the Commission adopted in a recently issued transmission line Route Permit:

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[223] Ex. APP-5 at 86 (Application).
[224] Ex. APP-5 at 86 (Application); Ex. PUC-8 at 48 (EA).
[225] Ex. PUC-8 at Appendix C (EA, Draft Route Permit).
[226] Ex. APP-35 at 5-6 (Comments Regarding EA).
[227] Ex. PUC-8 at Appendix C (EA, Draft Route Permit).
[228] Ex. APP-35 at 6-7 (Comments Regarding EA).
[229] Ex. APP-5 at 119 (Application).

Permittee shall request well information from landowners and coordinate with landowners regarding well access. Permittees shall also obtain copies of the applicable emergency response plans for the cities of Appleton and Benson prior to construction and comply with any applicable requirements. Records of compliance shall be retained by the Permittee, and be provided to the Commission staff upon request.[230]

viii. Cultural Values

217. The EA reviewed and analyzed the cultural values of the Cities of Appleton and Benson.[231] EERA found that construction and operation of the Project is not expected to conflict with the cultural values of the area.[232]

ix. Recreation

218. Recreational resources near the Proposed Route include local parks and recreational areas, snowmobile trails, and watercourses. The Proposed Alignment and ROW cross the Pomme de Terre River, a state water trail, and are adjacent to the MDNR-administered Pomme de Terre River, Larson Landing Public Water Access Site. The Chippewa River, another state water trail, is located within the Proposed Route but is not crossed by the Proposed Alignment.[233]

219. The Proposed Alignment and ROW are located north of 30th Street SW, which is adjacent to, but does not cross, the Clair Rollings WMA which is home to various game species. Additionally, the Lac qui Parle WMA is located approximately one mile southwest of City of Appleton. There are several snowmobile trails located within the Proposed Route. The Proposed Alignment and associated ROW cross six snowmobile trails and are co-located with approximately 6,000 feet of the Ridge Runner Trails and 8,000 feet of the Northern Lights Trails. Both of these trails are Grant-in-Aid trails used for snowmobiling. Additionally, a park area maintained by the City of Benson is located within the Proposed Route north of and along the BNSF Railway; however, the Proposed Alignment does not cross this park.[234]

220. Applicants have designed the Project to avoid impacts to the recreational opportunities in the Project area. The Project, including substation relocations and expansions, will not preclude recreational activities or appreciably diminish the use or experience at these locations. Although tree clearing or trimming may be required, because it would largely be within or adjacent to existing ROW, the Project is not anticipated to affect wildlife viewing or recreational opportunities. Direct impacts to

[230] Ex. APP-35 at 6-7 (Comments Regarding EA).
[231] Ex. PUC-8 at 35 (EA).
[232] Ex. APP-5 at 83 (Application); Ex. PUC-8 at 35 (EA).
[233] Ex. APP-5 at 104-05 (Application); Ex. PUC-8 at 41 (EA).
[234] Ex. APP-5 at 105 (Application); Ex. PUC-8 at 41-42 (EA).

watercourses are not anticipated and Applicants do not anticipate disrupting recreational activities along the state water trails.[235]

221. Applicants may need to temporarily close or reroute access to snowmobile trails during construction activities. If construction activities impact any of the snowmobile trails, Applicants committed to coordinating with the trail associations regarding any trail closures to mitigate impacts by assisting in finding alternate routes. Applicants may also need to temporarily close or reroute access to other recreational areas during construction activities. Applicants committed to working with the cities and towns crossed by the Project to ensure public safety, coordinate temporary closures and/or reroutes, and notify the public. To ensure that any short-term and infrequent traffic impacts are minimized, Applicants indicated a commitment to coordinate with all affected road authorities and, to the extent practicable, schedule large material/equipment deliveries to avoid periods when traffic volumes are high.[236]

x. Environmental Justice

222. The EA assessed environmental justice under the Minnesota framework.[237]

223. Under the Minnesota framework, although not directly applicable to certificate of need and Route Permit determinations, for other purposes, Minn. Stat. § 216B.1691, subd. 1(e), defines areas with environmental justice concerns in Minnesota as areas that meet one or more of the following criteria: (1) 40 percent or more of the area's total population is nonwhite; 35 percent or more of households in the area have an income that is at or below 200 percent of the federal poverty level; (3) 40 percent or more of residents over the age of five have limited English proficiency; or (4) the area is located within Indian country, as defined in United State Code, title 18, section 1151.[238]

224. The Project does not cross any areas located within “Indian country,” as defined in 18 U.S.C. § 1151.[239] While there are communities in the Project Area for whom there are environmental justice concern, these communities will not be impacted disproportionately when compared to other, non-EJ communities, and the socioeconomic impacts of the Project are generally anticipated to be positive.[240]

B. Effects on Public Health and Safety

225. Minnesota’s HVTL routing factors require consideration of the Project’s potential effect on health and safety.[241]

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[235] Ex. APP-5 at 105 (Application).
[236] Ex. APP-5 at 105-06 (Application); Ex. PUC-8 at 42 (EA).
[237] Ex. PUC-8 at 42-44 (EA).
[238] Ex. APP-5 at 77 (Application); Ex. PUC-8 at 43 (EA).
[239] Ex. APP-5 at 78 (Application); Ex. PUC-8 at 44 (EA).
[240] Ex. PUC-8 at 44 (EA).
[241] Minn. Stat. § 216E.03, subd. 7(b)(1); Minn. R. 7850.4100, subp. B.

226. Impacts to human health and safety are assessed by looking at four main issues: general construction safety, electric and magnetic fields, stray voltage, and induced voltage.[242]

i. General Construction Safety

227. The Project will be designed in compliance with local, state, NESC, and Applicants' standards regarding clearance to the ground, clearance to crossing utilities, strength of materials, and ROW widths. Construction crews and/or contract crews will comply with local, state, and NESC standards regarding installation of facilities and standard construction practices. Applicants' established safety procedures, as well as industry safety procedures, will be followed during and after installation of the transmission line, including clear signage during all construction activities.[243]

228. Section 5.3.2 of the Draft Route Permit requires the permittees to train all employees, contractors, and other persons involved in the Project construction regarding the terms and conditions of the Route Permit.[244]

ii. Electromagnetic Fields

229. Electric and magnetic fields (EMF) are invisible forces that result from the presence of electricity. EMF occurs naturally and is caused by weather or the geomagnetic field. Human-made EMF is caused by all electrical devices and is found wherever people use electricity. Both electric field (EF) and magnetic field (MF) strength decrease rapidly as the distance from the source increases.[245]

230. As it pertains to the Project, the term "EMF" refers to the extremely low frequency (ELF) decoupled EF and magnetic fields (MFs) that are present around any electrical device or conductor and can occur indoors or outdoors. EFs are the result of electric charge, or voltage, on a conductor. The intensity of an EF is related to the magnitude of the voltage on the conductor. MFs are the result of the flow of electricity, or current, traveling through a conductor. The intensity of a magnetic field is related to magnitude of the current flow through the conductor. EF and MF can be found in association with transmission lines, local distribution lines, substation transformers, household electrical wiring, and common household appliances.[246]

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[242] Ex. PUC-8 at 50 (EA).
[243] Ex. PUC-8 at 50 (EA).
[244] Ex. PUC-8 at Appendix C (EA, Draft Route Permit).
[245] Ex. PUC-8 at 50 (EA).
[246] Ex. APP-5 at 88 (Application); Ex. PUC-8 at 50 (EA).

231. There is no federal standard for transmission line electric fields. The Commission, however, has imposed a maximum electric field limit of 8 kV/m measured at one meter above the ground.[247]

232. Applicants have calculated the approximate EF for the Project's transmission configuration and estimates the peak magnitude of EF density to be well below the EQB standard at approximately 1.59 kV/m and 2.68 kV/m underneath the conductors one meter above ground for the proposed single circuit and double circuit transmission lines, respectively.[248]

233. Impacts to human health from possible exposure to EMFs are not anticipated. The Project would be constructed to maintain proper safety clearances and the substations would not be accessible to the public. EMF associated with the Project are below Commission permit requirements, and state and international guidelines.[249]

234. Section 5.4.2 of the Draft Route Permit requires the permittees to design, construct, and operate the Project in such a manner that the electric field measured one meter above ground level immediately below the transmission line shall not exceed 8.0 kV/m rms.[250]

iii. Stray Voltage

235. "Stray voltage" is a condition that can potentially occur on a property or on the electric service entrances to structures from distribution lines connected to these structures— not transmission lines as proposed here. More precisely, stray voltage is a voltage that exists between the neutral wire of either the service entrance or of premise wiring and grounded objects in buildings such as barns and milking parlors.[251]

236. Stray voltage is generally associated with distribution lines. The Project – a transmission line – does not create stray voltage because it does not directly connect to businesses, residences, or farms.[252]

iv. Induced Voltage

237. Transmission lines can also induce a current on a distribution circuit that is parallel and immediately under the transmission line. Applicants are aware of this effect and committed to take precautions in these situations to ensure safe work practices.[253]

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[247] *In the Matter of the Route Permit Application for a 345 kV Transmission Line from Brookings County, S.D. to Hampton, Minn.*, MPUC Docket No. E-T2/TL-08-1474, Order Granting Route Permit (Sept. 14, 2010) (adopting the Administrative Law Judge's Findings of Fact, Conclusions, and Recommendation at Finding 194); Ex. APP-5 at 89 (Application); Ex. PUC-8 at 51 (EA).
[248] Ex. APP-5 at 89 (Application); Ex. PUC-8 at 51 (EA).
[249] Ex. APP-5 at 96-97 (Application); Ex. PUC-8 at 55-56 (EA).
[250] Ex. PUC-8 at Appendix C (EA, Draft Route Permit).
[251] Ex. APP-5 at 87 (Application); Ex. PUC-8 at 56 (EA).
[252] Ex. APP-5 at 87 (Application); Ex. PUC-8 at 56 (EA).
[253] Ex. APP-5 at 87 (Application).

238. To ensure the safety of persons in the proximity of high voltage transmission lines, the NESC requires that any discharge be less than 5 milliAmperes root mean square. Applicants will work with those affected to mitigate any induced voltages to within NESC limit.[254]

239. The Project will be designed and constructed to minimize the potential for induction issues. Induction and its potential impacts can be mitigated through implementation of appropriate design measures and techniques, including the grounding of conductive objects in and along the transmission line ROW. Proper grounding is required by the NESC and a standard Route Permit condition.[255]

240. Section 5.4.1 of the Draft Route Permit requires the permittees to design, construct, and operate the transmission line in a manner so that the maximum induced steady-state short-circuit current shall be limited to five milliamperes root mean square alternating current between the ground and any non-stationary object within the right-of-way.[256]

v. Electronic Interference

241. Under certain conditions, the localized EF near an energized transmission line conductor can produce small electric discharges, which can ionize nearby air. This is commonly referred to as the "corona" effect. Most often, corona formation is related to some sort of irregularities on the conductor, such as scratches or nicks, dust buildup, or water droplets. The air ionization caused by corona discharges can result in the formation of audible noise and radio frequency noise.[257]

242. Corona formation is a function of the conductor radius, surface condition, line geometry, weather condition, and most importantly, the line's operating voltage. Corona-induced audible noise and radio and television interference are typically not a concern for power lines with operating voltages below 161-kV (like the Project), because the EF intensity is too low to produce significant corona.[258]

243. Because the likelihood of significant corona formation on the Project is minimal, the likelihood of radio and television interference due to corona discharges associated with the Project is also minimal. Applicants are unaware of any complaints related to radio or television interference resulting from the operation of any of its existing 115-kV facilities and do not expect radio and television interference to be an issue along the Proposed Route.[259]

244. Section 5.4.3 of the Draft Route Permit requires the permittees take whatever action is necessary to restore or provide reception equivalent to reception levels

[254] Ex. APP-5 at 87 (Application); Ex. PUC-8 at 56 (EA).
[255] Ex. APP-5 at 87 (Application); Ex. PUC-8 at 57 (EA).
[256] Ex. PUC-8 at Appendix C (EA, Draft Route Permit).
[257] Ex. APP-5 at 88 (Application); Ex. PUC-8 at 36 (EA).
[258] Ex. APP-5 at 88 (Application); Ex. PUC-8 at 36 (EA).
[259] Ex. APP-5 at 88 (Application); Ex. PUC-8 at 36 (EA).

in the immediate area just prior to the construction of the Project if electronic interference does occur.[260]

C. Effects on Land-Based Economies

245. Minnesota's HVTL routing factors require consideration of the Project's impacts to land-based economies—specifically, agriculture, forestry, tourism, and mining.[261]

i. Agriculture

246. According to the 2022 U.S. Department of Agriculture (USDA) Census of Agriculture, Swift County has 708 individual farms with an average farm size of 530 acres and farmland covers approximately 374,933 acres (77 percent) of the county.[262]

247. The proposed alignment will cross about 14.8 miles of agricultural land, or 197.0 acres (within the 100-foot-wide ROW). The Project will allow for continued agricultural land use within the transmission line ROW; therefore, the transmission line is compatible with future and ongoing use as pasture, hay, or other crop cultivation.[263]

248. There will be loss of production of up to 25 acres of agricultural land use if the Appleton, Moyer, and Danvers substations are installed within areas used for agricultural use. Further, a minor amount of agricultural land will be taken out of production where the transmission poles are installed (5 to 8 feet in diameter per pole). Applicants are currently working with landowners regarding substation locations and indicated commitment to also coordinate with landowners regarding pole placement during development of the final design. Accordingly, there will be minor, but largely negligible, impacts to pasture, hay, and cultivated lands.[264]

249. Applicants indicated a commitment to 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 Project activities. Areas disturbed will be repaired, restored, and left in a condition that will facilitate natural revegetation, provide for proper drainage, and prevent erosion.[265] Applicants will also coordinate with landowners during construction to identify irrigation equipment and avoid, minimize, and/or mitigate impacts to that equipment.[266]

250. Applicants committed to incorporate specific measures to mitigate impact to agriculture, including using local roads as practicable for moving equipment and installing structures, limiting movement of crews and equipment to the ROW to the greatest extent possible, scheduling construction activities during periods when

[260] Ex. PUC-8 at Appendix C (EA, Draft Route Permit).
[261] Minn. Stat. § 216E.03, subd. 7(b)(5); Minn. R. 7850.4100, subp. C.
[262] Ex. APP-5 at 101 (Application); Ex. PUC-8 at 57 (EA).
[263] Ex. APP-5 at 101 (Application); Ex. PUC-8 at 57 (EA).
[264] Ex. APP-5 at 101 (Application); Ex. PUC-8 at 57 (EA).
[265] Ex. APP-5 at 101-02 (Application); Ex. PUC-8 at 58 (EA).
[266] Ex. PUC-8 at 58 (EA).

agricultural activities will be minimally affected to the extent possible, or the landowner will be compensated accordingly, purchase ROW easements through negotiations with each landowner affected by the Project, including restoration or compensation for reasonable crop damage or other property damages that occurs during construction or maintenance as negotiated.[267]

251. Standard permit conditions in Draft Route Permit minimize agricultural impacts, such as Section 5.3.8 (Soil Erosion) and 5.3.17 (Drainage Tiles). The Draft Route Permit also proposed Special Condition No. 6.1 regarding impacts to irrigators.[268] Applicants requested revisions to Special Condition No. 6.1 to provide for flexibility in Applicants' coordination with landowners on irrigator impacts, and stated that although Applicants' primary intention is to avoid impacts to irrigation equipment altogether, to the extent complete avoidance is not possible, Applicants request that the Route Permit acknowledge that mitigation (as part of the easement acquisition process) may also be appropriate in some circumstances:

> The Permittees shall coordinate with landowners that maintain irrigation equipment within the proposed route to ensure that impacts to irrigation operations are avoided, minimized, and/or mitigated. This coordination shall include consultation with landowners regarding pole placement. ~~Landowners should be consulted during the Project's design phase to ensure that pole placement and clearances will not negatively impact irrigation operations.~~[269]

ii. Forestry

252. Based on forested areas shown on the aerial maps, Applicants intend to clear or trim approximately 9.9 cumulative acres of trees over approximately 0.9 miles within the 100-foot-wide ROW. Trees are primarily located on private residential and city-owned properties. No commercial forestry operations were identified within the Proposed Route.[270]

253. Since the Project will be largely located within an existing utility ROW and/or parallel to road ROWs, minimal incremental impacts are expected from the construction and maintenance of the Project. No impacts to forestry resources are anticipated.[271]

254. Mitigation measures for potential impacts to forest resources include offering compensation for the removal of vegetation in the ROW to landowners during

[267] Ex. APP-5 at 102 (Application); Ex. PUC-8 at 58 (EA).
[268] Ex. PUC-8 at 59, Appendix C (EA, Draft Route Permit).
[269] Ex. APP-35 at 4 (Comments Regarding EA).
[270] Ex. APP-5 at 102 (Application); Ex. PUC-8 at 60 (EA).
[271] Ex. APP-5 at 102 (Application); Ex. PUC-8 at 60 (EA).

easement negotiations, and giving landowners the option to keep any portions of the trees (e.g., timber, branches, chips, shreds) cut within the easement area.[272]

iii. Mining

255. According to the Aggregate Resource Mapping Program, there is a high potential for aggregate resources in the Project area, principally occurring along U.S. Highway 59 between Appleton and Holloway. Prospects and field observations are located adjacent to or crossed by the Proposed Route. Additionally, the Proposed Route crosses access to one existing active gravel pit along 60th Street SW. Applicants indicated a commitment to work with future proponents as needed regarding any future proposed mining operations and will ensure the Project does not preclude access to the existing gravel pit.[273]

256. The Project will not result in impacts to active mining activities, so no mitigative measures are proposed.[274]

iv. Tourism

257. The Proposed Alignment and ROW cross the Pomme de Terre River (a state water trail) and are located adjacent to, but do not cross, the MDNR-administered Pomme de Terre River, Larson Landing Public Water Access Site.[275] The Proposed Alignment and ROW are located north of 30th Street SW, which is adjacent to, but does not cross, the Clair Rollings WMA. Otter Tail Power's existing 41.6-kV transmission line also occurs adjacent to this WMA. Additionally, the Lac qui Parle WMA is located approximately one mile southwest of City of Appleton. Other recreational resources near the Proposed Route that may be enjoyed by tourists include local parks and recreational areas, snowmobile trails, and watercourses.[276]

258. The Proposed Route, including proposed expansions and relocations of substations, avoids many of the areas that would be considered local tourist destinations, and the Project would not preclude tourism activities or appreciably diminish the use or experience at tourist destinations. Although tree clearing or trimming may be required, because it would largely be within or adjacent to existing ROW, the Project is not anticipated to affect wildlife viewing or recreational opportunities.[277]

259. To ensure that any short-term and infrequent traffic impacts are minimized, Applicants indicated a commitment to coordinate with all affected road authorities and, to the extent practicable, schedule large material/equipment deliveries to avoid periods when traffic volumes are high. Applicants may need to temporarily close or reroute access to trails and/or access to some parks and/or recreational areas whose access is along

[272] Ex. APP-5 at 102 (Application); Ex. PUC-8 at 60 (EA).
[273] Ex. APP-5 at 104 (Application); Ex. PUC-8 at 60 (EA).
[274] Ex. APP-5 at 104 (Application); Ex. PUC-8 at 60 (EA).
[275] Ex. APP-5 at 103 (Application); Ex. PUC-8 at 59 (EA).
[276] Ex. APP-5 at 103 (Application); Ex. PUC-8 at 59 (EA).
[277] Ex. APP-5 at 104 (Application); Ex. PUC-8 at 59 (EA).

the Proposed Alignment and ROW during construction activities. Applicants do not anticipate impacts on tourism associated with the Lac qui Parle WMA due to the Project's distance from these features; therefore, no mitigation is proposed. Access to the WMA will not be impacted by construction activities.[278]

D. Effects on Archaeological and Historic Resources

260. Minnesota Rule 7850.4100, subpart D, requires consideration of the effects of the Project on historic and archaeological resources.

261. Merjent, Inc. (Merjent) conducted a cultural resource literature review for features within a half mile buffer of the Proposed Alignment (the Merjent Study Area). The literature review was based on cultural resources site information (i.e., archaeological sites and historic structures) and previous survey files from the SHPO. Merjent Cultural Resource Specialists reviewed archaeological site files on the OSA Portal, as well as the General Land Office maps and available historical aerial photography accessed online through the OSA Portal. This literature review and Merjent's evaluation of the possible effects of the proposed Project on archaeological and historic properties in the Project area was provided to the Minnesota SHPO in a letter dated October 22, 2024.[279]

262. According to the OSA and SHPO files, there is one site within the Merjent Study Area that does not intersect the Proposed Route. There are no sites within the Proposed Route.[280] Ninety historic buildings and structures are located within the Merjent Study Area, seven of which occur within the Proposed Route.[281]

263. On November 26, 2024, the SHPO recommended that archaeological surveys are conducted based on the location and nature of the Project. Applicants intend to conduct an archaeological survey on the selected route.[282] On March 20, 2025, the Commission filed a letter authorizing consultation with the Minnesota State Historic Preservation Office (SHPO) pursuant to Minn. Stat. § 138.665.[283]

264. Section 5.3.15 in the Draft Route Permit applies to protection of archeological and historic resources. It requires the Permittee to avoid impacts to archeological and historic resources where possible and to mitigate impacts where avoidance is not possible; train workers about the need to avoid cultural properties, how to identify cultural properties, and procedures to follow if undocumented cultural properties, including gravesites, are found during construction; if previously unidentified archaeological sites are found during construction, to stop construction and contact

[278] Ex. APP-5 at 104 (Application); Ex. PUC-8 at 59 (EA).
[279] Ex. APP-5 at 106, Appendix K (Application); Ex. PUC-8 at 60-61 (EA).
[280] Ex. APP-5 at 106, Appendix K (Application); Ex. PUC-8 at 61 (EA).
[281] Ex. APP-5 at 107 (Application); Ex. PUC-8 at 61 (EA).
[282] Ex. APP-5 at 108, Appendix K (Application); Ex. APP-35 at 3 (Comments Regarding EA).
[283] Ex. PUC-5 (SHPO Authorization).

SHPO and the State Archaeologist to determine how best to proceed; if human remains are discovered, to stop ground disturbing activity and notify local law enforcement.[284]

265. Additionally, if human remains are encountered during construction activities, Applicants will follow an Unanticipated Discoveries Plan, which includes ceasing all ground disturbing activity, and immediate notification of local law enforcement per Minn. Stat. § 307.08.[285]

266. Section 5.4.15 of the Draft Route Permit concerns mitigating and minimizing impacts to archaeological and historic resources.[286]

E. Effects on Natural Environment

267. 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.[287]

i. Air Quality

268. Impacts on air quality from construction and operation of the Project would be low and primarily limited to the period of construction. Temporary and localized air quality impacts caused by construction vehicle emissions and fugitive dust from ROW clearing and construction are expected to occur. Construction activities will be performed with standard heavy equipment such as backhoes, cranes, boom trucks, and assorted small vehicles over the course of construction.[288]

269. Temporary and localized air quality impacts caused by construction vehicle emissions and fugitive dust from ROW clearing and construction are expected to occur. Exhaust emissions from diesel equipment will vary during construction but will be minimal and temporary. The magnitude of emissions will be influenced heavily by weather conditions and the specific construction activity taking place. Appropriate dust control measures will be implemented during construction.[289] Moreover, additional requirements regarding the use of dust suppressants can be found in Route Permit Special Condition 6.4.[290]

270. During operation, potential air emissions from a transmission line result from corona effects. Ionization of air molecules near the conductor can produce ozone and oxides of nitrogen. Ozone is a reactive form of oxygen molecule that combines readily with other elements and compounds in the atmosphere, making it relatively short lived. Ozone forms naturally in the lower atmosphere from lightning discharges and from reactions between solar ultraviolet radiation and air pollutants such as hydrocarbons from

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[284] Ex. PUC-8 at 62 (EA).
[285] Ex. APP-5 at 108 (Application); Ex. PUC-8 at 62 (EA).
[286] Ex. PUC-8 at Appendix C (EA, Draft Route Permit).
[287] Minn. Stat. § 216E.03, subd. 7(b)(1)–(2); Minn. R. 7850.4100, subp. E.
[288] Ex. APP-5 at 97 (Application); Ex. PUC-8 at 63 (EA).
[289] Ex. APP-5 at 98 (Application); Ex. PUC-8 at 63-64 (EA).
[290] Ex. PUC-8 at 64 (EA).

auto emissions. The natural production rate of ozone is directly proportional to temperature and sunlight, and inversely proportional to humidity. Thus, the conditions that are most likely to cause corona formation on a transmission line – humid, rainy, or foggy conditions – actually inhibit the production of ozone.[291]

271. Corona-induced ozone and nitrogen oxides (NO_X) are typically not a concern for power lines like the Project with operating voltages below 161-kV because the EF intensity is too low to produce significant corona. Therefore, Applicants expect ozone and NO_X concentrations associated with the Project to be negligible, and well below all federal standards.[292] No impacts to air quality are anticipated due to the operation of the Project.[293]

272. Special Condition No. 6.4 of the Draft Route Permit includes a condition related to dust control from Project construction.[294]

ii. Climate Change and Greenhouse Gas

273. Construction of the Project will result in temporary minor greenhouse gas (GHG) emissions from fuel combustion in construction equipment, commuter vehicles, and delivery trucks.[295] During construction, vehicle emissions will be mitigated by limiting vehicle idling to only times when necessary.[296]

274. Sulfur hexafluoride (SF_6), a greenhouse gas, is used as an insulating material in substation breakers. Under normal operations, the SF_6 remains contained in the breakers and is not released to the atmosphere.[297] Applicants indicated a commitment to monitor the SF_6 gas levels in the breakers as part of its routine monitoring of substation equipment. When gas losses are detected, the SF_6 will be extracted to a separate tank to allow the breaker to be repaired. Any gas collected from decommissioned breakers will be shipped offsite for recycling.[298]

275. The EA determined that the Project would have minimal impacts on GHG emissions in Minnesota, and as such, no mitigation is proposed.[299]

276. Climate change is the change in global or regional climate patterns over time. Generally, Minnesota's climate already is changing and will continue to do so. Noticeable effects into the future include warmer periods during winter and at night,

[291] Ex. APP-5 at 98 (Application); Ex. PUC-8 at 36 (EA).
[292] Ex. APP-5 at 98 (Application).
[293] Ex. APP-5 at 99 (Application); Ex. PUC-8 at 36 (EA).
[294] Ex. PUC-8 at Appendix C (EA, Draft Route Permit).
[295] Ex. APP-5 at 99 (Application); Ex. PUC-8 at 64 (EA).
[296] Ex. APP-5 at 100 (Application); Ex. PUC-8 at 65 (EA).
[297] Ex. PUC-8 at 64 (EA); Ex. PUC-8 at 65 (EA).
[298] Ex. APP-5 at 100 (Application); Ex. PUC-8 at 65 (EA).
[299] Ex. PUC-8 at 65 (EA).

increased precipitation, heavier downpours, increased summer heat, and the potential for longer dry spells.[300]

277. Climate change could result in an increased risk of flooding in the Project Area, increased temperatures, extreme weather events such as high winds, excessive rainfall, and freezing rain. The Project as proposed will be designed to withstand these changes and will increase reliability in the Project Area, as it is an upgrade to a system which presently exists. Applicants assess risks to the reliable operation of its transmission system and are working to continue to provide a reliable electrical system. For example, Applicants' assessments have identified a higher potential for freezing rain in the Project Area. To mitigate damage from freezing rain, Applicants are planning to use twisted pair conductors, which are more resilient to damage that can occur when ice forms on the conductors.[301]

iii. Wildlife

278. During construction, there is a potential for erosion and sediment control products to negatively affect wildlife. The MDNR recommends that erosion control blankets be limited to "bio-netting" or "natural netting" types to reduce the potential for entanglement with small animals, and specifically not products containing plastic mesh netting or other plastic components,[302] to which Applicants stated they had no objection.[303]

279. There is minimal potential for the displacement of wildlife and loss of habitat from construction of the Project. Wildlife that inhabits the Project Area could be temporarily displaced during construction activities. Individuals that use forested habitat within the Project Area may be permanently displaced; however, because the Project follows existing utility and road ROWs, tree clearing will be minimized. The distance that animals will be displaced will depend on the species. Additionally, these animals will be typical of those found in agricultural settings, will likely be able to find similar habitat nearby and, therefore, should not incur population level effects due to construction.[304]

280. Raptors, waterfowl, and other bird species may be affected by the construction and placement of the transmission lines. Avian collisions are a possibility after the completion of the transmission lines. Waterfowl are typically more susceptible to transmission line collision, especially if the transmission line is placed between agricultural fields that serve as feeding areas, or between wetlands and open water, which serve as resting areas. Project design and construction will be done in accordance with Avian Power Line Interaction Committee guidelines. Any eagle or other migratory bird

[300] Ex. APP-5 at 100 (Application); Ex. PUC-8 at 65-66 (EA).
[301] Ex. APP-5 at 100 (Application); Ex. PUC-8 at 66 (EA).
[302] Ex. PUC-8 at 81 (EA).
[303] Ex. APP-35 at 3 (Comments Regarding EA).
[304] Ex. APP-5 at 124 (Application); Ex. PUC-8 at 82 (EA).

nests incidentally observed during or reported during the land acquisition process will be reported to the USFWS and Applicants will adhere to guidance provided.[305]

281. Several sections of the Draft Route Permit include conditions to reduce the potential impacts to wildlife: Section 5.3.16 (Avian Protection), Section 6.3 (Facility Lighting), Section 6.4 (Dust Control), and Section 6.5 (Wildlife-Friendly Erosion Control).[306]

iv. Vegetation

282. Construction and operation of the Project may cause short-term and long-term impacts on vegetation. During construction, vegetation may be impacted if invasive or non-native species are introduced into the ROW during construction or restoration, or by changes in soil or stormwater runoff that adversely impacts plant growth. Standard conditions are included in the Draft Route Permit to reduce impacts associated with invasive species and noxious weeds.[307]

283. Long-term impacts would primarily result from tree trimming and removal in the ROW. Applicants anticipate removal of approximately 10.0 acres of trees within the ROW for the Project. Maintenance of the ROW must meet electrical safety standards; therefore woody vegetation that is removed from the ROW is unlikely to be replaced. The Draft Route Permit includes a standard condition to minimize tree removal.[308]

284. Several sections of the Draft Route Permit include conditions to reduce the potential impacts to vegetation: Section 5.3.10 (Vegetation Management), Section 5.3.12 (Invasive Species), Section 5.3.13 (Noxious Weeds), and Section 6.9 (Vegetation Management Plan).[309]

v. Soils

285. Soil information for the Project ROW was obtained from the USDA Natural Resources Conservation Service Soil Survey Geographic (SSURGO) database.[310]

286. Impacts on soils are dependent, to some extent, on the conditions of the soil surface at the time of construction. Most impacts will be temporary and depend on conditions during construction and soil types. Surface soils will be disturbed by site clearing, grading, and excavation activities at structure locations, substation sites, pulling and tensioning sites, setup areas, and during the transport of crews, machinery, materials, and equipment over access routes (primarily along ROWs). During dry conditions, this disturbance will be temporary, minimal, and generally will be less invasive than typical agricultural practices such as plowing and tilling. Soil compaction may occur

[305] Ex. PUC-8 at 82 (EA).
[306] Ex. PUC-8 at 81-82 (EA).
[307] Ex. PUC-8 at 80 (EA).
[308] Ex. PUC-8 at 80 (EA).
[309] Ex. PUC-8 at 80-81 (EA).
[310] Ex. APP-5 at 110 (Application); Ex. PUC-8 at 69-71 (EA).

on access roads, and at other locations as a result of heavy equipment activity. Soil erosion may occur if surface vegetation is removed, especially on fine textured soils that occur on sloping topography.[311]

287. Soil compaction within wetlands would be mitigated by construction during frozen conditions, use of low ground pressure equipment, and/or installation of construction mats. Ground disturbance and soil exposure along the transmission line will be primarily limited to the structure locations, which will typically consist of augering a hole 10 to 25 feet deep and 3 to 5 feet in diameter for each structure. Larger and deeper holes will be required for large angles or for longer spans and for concrete foundations associated with substation relocations and improvements. Applicants indicated a commitment to take measures to alleviate soil compaction where needed.[312]

288. Erosion and sediment control best management practices (BMPs) will be utilized to minimize runoff during line construction. Such BMPs may include but are not limited to the installation of sediment barriers (e.g., silt fence, straw bales, bio-logs), filter socks, mulch, upslope diversions, and slope breakers. Exposed soils will be revegetated as soon as possible to minimize erosion.[313]

289. Since substation relocation and upgrades are expected to result in the disturbance of more than one acre of soils, Applicants will obtain coverage under the Construction Stormwater General Permit and will prepare a Stormwater Pollution Prevention Plan.[314]

290. Section No. 5.3.8 of the Draft Route Permit includes a condition related to soil erosion and sediment control.[315]

vi. Geology and Groundwater

291. Impacts associated with geology and groundwater are typically associated with unstable rock formations, dewatering during construction, improper installation or abandonment of wells, or the introduction of a source of pollutants to an area identified for the protection of groundwater.[316]

292. Few geological constraints on design, construction, or operation are anticipated in the Project Area. It is anticipated that each above ground structure will be buried by auguring a hole typically 10 to 25 feet deep and 3 to 5 feet in diameter, which will not impact subsurface geologic features. Concrete foundations may be required for large angles or for longer spans. The foundations are typically 5 to 8 feet in diameter and 15 to 45 feet deep with one foot exposed above the existing ground level. Concrete

[311] Ex. APP-5 at 112 (Application); Ex. PUC-8 at 71 (EA).
[312] Ex. APP-5 at 112 (Application); Ex. PUC-8 at 71 (EA).
[313] Ex. APP-5 at 112 (Application); Ex. PUC-8 at 71 (EA).
[314] Ex. APP-5 at 112 (Application); Ex. PUC-8 at 72 (EA).
[315] Ex. PUC-8 at Appendix C (EA, Draft Route Permit).
[316] Ex. APP-5 at 109 (Application); Ex. PUC-8 at 66 (EA).

foundations will also be required for new and expanded substations but are not anticipated to impact subsurface geologic features.[317]

293. Construction of the Project will not alter the geology along the routes; therefore, no mitigation is proposed.[318]

294. Impacts to groundwater as a result of the Project are not anticipated. The majority of the excavations associated with the structure foundations will range from 10 feet to 25 feet in depth; concrete foundations may extend up to 45 feet deep. All foundation materials will be non-hazardous. Any effects on water tables will be localized and temporary and will not affect hydrologic resources. Applicants will conduct geotechnical investigations to help identify shallow depth to groundwater resource areas, which may require special foundation designs.[319]

295. Dewatering activities are not expected for this Project, and any effects on water tables will be localized and short term and will not affect hydrologic resources. If test results from soil borings suggest that dewatering may be necessary, Applicants will apply for and obtain a Dewatering Permit from the MDNR.[320]

vii. Surface Waters, Floodplains, and Wetlands

296. Surface water resources include surface water bodies, watercourses, and wetlands that supply water for drinking, irrigation and industrial uses, provide wildlife habitat, and serve as swimming and fishing resources for people.[321]

297. According to the USFWS NWI, there are no lakes or ponds that intersect the proposed route. The closest pond is approximately 350 feet south of the proposed route and located in an agricultural field 0.4 miles west of the intersection of U.S. Highway 59 and the proposed route.[322]

298. The MDNR Hydrography Dataset indicates that a total of 19 rivers and streams are located within the proposed route.[323] The Proposed ROW crosses two BWSR administered RIM easements just west of the City of Benson along the Chippewa River. The northernmost easement is a Floodplain Easement located north of U.S. Highway 12 and the other is a Riparian Easement south of U.S. Highway 12. The proposed ROW runs parallel to the eastern boundary of both easements.[324] While both the transmission line itself (i.e., structures) and the ROW cross the easement east of Holloway, only the ROW (i.e., no structures) crosses the easements near the City of Benson. Applicants will work with BWSR to ensure clearing practices where needed within the ROW are consistent with the RIM easement requirements, and regarding the

[317] Ex. APP-5 at 109 (Application); Ex. PUC-8 at 66 (EA).
[318] Ex. APP-5 at 109 (Application); Ex. PUC-8 at 66-67 (EA).
[319] Ex. APP-5 at 119 (Application); Ex. PUC-8 at 68 (EA).
[320] Ex. APP-5 at 119 (Application); Ex. PUC-8 at 68 (EA).
[321] Ex. PUC-8 at 72 (EA).
[322] Ex. PUC-8 at 73 (EA).
[323] Ex. APP-5 at 114 (Application); Ex. PUC-8 at 73 (EA).
[324] Ex. PUC-8 at 73-74 (EA).

easement east of Holloway, Applicants indicated a commitment to attempt to minimize the siting of structure within the easement.[325]

299. The proposed alignment and associated ROW cross an additional Riparian Easement east of the town of Holloway along an intermittent Unnamed Stream. There is an additional easement located south of 30th St SW east of the Town of Danvers that occurs within the Route Width but is avoided by the proposed alignment and ROW.[326]

300. MDNR PWI basins and wetlands (waterbodies) are not intersected by the proposed route, alignment, or associated ROW. However, four PWI watercourses are intersected by the proposed alignment and associated ROW: Pomme de Terre River, Cottonwood Creek, Judicial Ditch 8, and County Ditch 3. The Chippewa River, a PWI watercourse, is also currently crossed by the proposed route, but not the proposed alignment or ROW.[327]

301. The rivers and streams crossed by the Proposed Route can be spanned by the transmission line and no structures will be installed within those water resources. During construction, Applicants will utilize erosion and sediment control BMPs (e.g., silt fencing) to mitigate the potential for sediment to reach receiving surface waters. Applicants may need to install temporary bridges across some rivers and streams to allow access during construction and restoration. Equipment bridges will be designed to meet the requirements of the applicable agencies and local authorities. Bridges will be installed during clearing and will be removed as soon as possible during final restoration once the bridge is no longer required to complete and monitor restoration activities.[328]

302. BWSR confirmed that the proposed alignment (0.2 miles) and ROW (1.7 acres) cross the Riparian Easement located east of the town of Holloway, but only the ROW crosses the two RIM easements located southwest of the City of Benson (approximately 1.2 and 2.5 acres, respectively). BWSR indicated that vegetation maintenance must be consistent with the conservation plan associated with the easement and that siting of permanent structures within the easements should be avoided. Compensatory mitigation will be required for impacts to the easements. Additionally, while both the transmission line itself (i.e., structures) and the ROW cross the easement east of Holloway, only the ROW (i.e., no structures) crosses the easements near the City of Benson. Applicants indicated a commitment to work with BWSR to ensure clearing practices where needed within the ROW are consistent with the RIM easement requirements. Regarding the easement east of Holloway, Applicants indicated a commitment to attempting to minimize the siting of structure within the easement.[329] Applicants indicated a commitment to continue to coordinate with BWSR to avoid and/or mitigate impacts to these easements and to obtain the required authorization.[330]

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[325] Ex. APP-35 at 3 (Comments Regarding EA).
[326] Ex. PUC-8 at 73-74 (EA).
[327] Ex. APP-5 at 117 (Application); Ex. PUC-8 at 74 (EA).
[328] Ex. APP-5 at 65 (Application); Ex. PUC-8 at 77 (EA).
[329] Ex. APP-35 at 3 (Comments Regarding EA).
[330] Ex. PUC-8 at 77 (EA).

303. Applicants may need to install temporary bridges to cross some of the PWI watercourses during construction and restoration. Equipment bridges will be designed to meet the requirements of the MDNR and other applicable permitting authorities. Bridges will be installed during clearing and will be removed as soon as possible during final restoration once the bridge is no longer required to complete and monitor restoration activities. Applicants will also install sediment and erosion control BMPs (e.g., silt fencing) during construction to mitigate the potential for sediment to reach receiving PWI watercourses. Applicants will coordinate with the MDNR to obtain the applicable licenses and/or leases for these crossings based on the final transmission line design.[331]

304. Thirty-seven NWI wetlands intersect the proposed route. Thirteen of the wetlands are crossed by the 100-foot-wide ROW and eight are crossed by the proposed alignment. None of the crossed wetlands are classified as PWI wetlands.[332]

305. Temporary impacts to wetlands may occur where temporary access or construction workspace is required, or where the 100-foot-wide permanent ROW occurs in non-woody vegetation wetland communities requiring vegetation clearing. Clearing in wetlands will be conducted during frozen conditions, using low ground pressure equipment or mats will be installed to minimize impacts to vegetation if frozen ground conditions are not sustained. Staging or stringing setup areas will not be placed within or adjacent to water resources to the extent practicable.[333]

306. The maximum span distance between structures is approximately 500 feet. Based on the current proposed alignment, only one wetland is over 500 feet long that may require structure installation within the wetland. During the final design process, Applicants will minimize wetland impacts by placing the structures to span and avoid wetlands, to the extent practicable. Substation relocations and upgrades will not be sited in wetlands.[334]

307. The majority of the Project occurs in Federal Emergency Management Agency (FEMA) Non-Special Flood Hazard Area designated as Zone X, which has 0.2 percent annual chance of a flood hazard or area of minimal flood hazard. However, the Project also crosses Special Flood Hazard Areas, including: Zone A unmapped floodplain, Zone AE mapped flood fringe, and Zone AE mapped floodway. Zone A floodplain and Zone AE flood fringe areas are high-risk areas that will be inundated by the flood event having a one-percent chance of being equaled or exceeded in any given year. The one-percent annual chance flood is also referred to as the base flood or 100-year flood.[335]

308. Applicants will not place structures within Zone AE floodways and will avoid the placement of structures within Zone A and Zone AE flood fringe areas to the extent

[331] Ex. APP-5 at 119-20 (Application); Ex. PUC-8 at 77 (EA).
[332] Ex. APP-5 at 118 (Application); Ex. PUC-8 at 76, 78 (EA).
[333] Ex. PUC-8 at 78 (EA).
[334] Ex. APP-5 at 121 (Application); Ex. PUC-8 at 78 (EA).
[335] Ex. APP-5 at 118-19 (Application); Ex. PUC-8 at 76 (EA).

practicable. Infrastructure located within the floodplain will be flood proofed in accordance with State Building Code or elevated above the regulatory flood protection elevation.[336]

309. Section No. 5.3.9 of the Draft Route Permit includes a condition related to wetlands and water resources.[337]

F. Effects on Rare and Unique Natural Resources

310. Minnesota's HVTL routing factors require consideration of the Project's effect on rare and unique natural resources.[338]

311. Rare and unique resources include assemblages of species or habitat that are designated for special care and conservation by state and federal agencies because loss of habitat and because small or shrinking populations are cause for concern.[339]

312. Applicants reviewed the USFWS IPaC website for a list of federally threatened and endangered species, candidate species, and designated critical habitat that may be present within the Project Area. Based on the official species list provided by the USFWS, three species federally listed under Endangered Species Act (ESA), one species proposed for listing, and one candidate species have been previously documented within the vicinity of the proposed route. No federally designated critical habitat is present within the proposed route.[340]

313. The federal species include the northern long-eared bat (NLEB) (endangered), the Dakota skipper (threatened), the Monarch butterfly (proposed threatened), and the Western Regal Fritillary (proposed threatened).[341] Suitable habitat for these species, except the Dakota Skipper, may be present within the proposed route.[342] Applicants will incorporate measures to mitigate impact to these species, including, conducting tree clearing activities when the NLEB is in hibernation and not present on the landscape, comply with applicable USFWS guidance in effect at the time of Project construction, and develop appropriate avoidance and conservation measures in coordination with the USFWS.[343]

314. At the state level, the evaluation and protection of Minnesota's rare and unique resources is overseen by the MDNR through the identification and evaluation of native plant communities, native prairie, plants, wildlife, and unique wetlands such as calcareous fens.[344]

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[336] Ex. APP-5 at 122 (Application); Ex. PUC-8 at 79 (EA).
[337] Ex. PUC-8 at Appendix C (EA, Draft Route Permit).
[338] Minn. Stat. § 216E.03, subd. 7(b)(1); Minn. R. 7850.4100, subp. F.
[339] Ex. PUC-8 at 83 (EA).
[340] Ex. APP-5 at 125-26 (Application); Ex. PUC-8 at 83 (EA).
[341] Ex. APP-5 at 126 (Application); Ex. PUC-8 at 83 (EA).
[342] Ex. APP-5 at 126 (Application); Ex. PUC-8 at 83 (EA).
[343] Ex. APP-5 at 132 (Application); Ex. PUC-8 at 84-85 (EA).
[344] Ex. PUC-8 at 86 (EA).

315. Merjent, on behalf of Applicants, submitted a formal Natural Heritage Review Request on October 26, 2023, through the MDNR's Minnesota Conservation Explorer (MCE). An official response was received on January 18, 2024. Applicants committed to further consulting with the MDNR on the resources identified once a final alignment is available.[345]

316. The review found seven state species within the Project Area, including Blanding's turtle (threatened), elktoe (threatened), round pigtoe (special concern), black sandshell (special concern), creek heelsplitter (special concern), short-eared owl (special concern), and the great plains toad (special concern).[346]

317. Regarding native plant communities, the Proposed Alignment and associated 100-foot-wide ROW will cross approximately 165 feet of the Holloway Railroad Prairie Site of Biodiversity Significance. Applicants committed to avoiding structure placement within this vegetation community. Applicants will also use the seed mix recommended by the MDNR associated with the crossing of the Holloway Railroad Prairie Site of Biodiversity Significance, as needed. The Proposed Alignment and associated ROW traverses approximately 2,900 feet of the Benson Prairie Site of Biodiversity Significance; therefore, structure placement within this area cannot be avoided; however, in accordance with the recommendations provided by the MDNR, Applicants have co-located the Proposed Alignment with an existing road ROW to limit disturbance. The ROW also traverses approximately 300 feet of a Southern Wet Prairie NPC located within the Benson Prairie Site of Biodiversity Significance located north of the BNSF Railway along County Road 3. Applicants indicated a commitment to avoiding structure placement within this NPC. Applicants intend to use the seed mix recommended by the MDNR associated with the crossing of the Benson Prairie Site of Biodiversity Significance, as needed.[347]

318. Applicants will implement avoidance and mitigation measures recommended by the MDNR to mitigate impacts to state species, including confine construction activities to the existing road ROWs, to the extent practicable; operate within already-disturbed areas; minimize vehicular disturbance in the area (allow only vehicles necessary for the proposed work); prohibit parking of equipment or stockpiling of supplies in the area; prohibit placement of spoil within the area; inspect and clean all equipment prior to bringing it to the site to prevent the introduction and spread of invasive species; if possible, conduct construction activities during frozen conditions; install effective erosion and sediment control BMPs; revegetate disturbed soil with native species suitable to the local habitat as soon after construction as possible; and use only weed-free mulches, topsoil and seed mixes as outlined in Permit Condition 5.3.13.[348]

319. The Draft Route Permit proposed Special Condition No. 6.2 regarding Blanding's Turtle. Applicants opined that this condition as proposed is overly broad and inconsistent with MDNR requirements and recommendations made in this docket.

[345] Ex. APP-5 at 128 (Application); Ex. PUC-8 at 86 (EA).
[346] Ex. APP-5 at 128-30 (Application); Ex. PUC-8 at 86-88 (EA).
[347] Ex. APP-5 at 133 (Application); Ex. PUC-8 at 89 (EA).
[348] Ex. APP-5 at 133-34 (Application); Ex. PUC-8 at 89-90 (EA).

Applicants assert that MDNR's January 14, 2024 MCE Correspondence # 2023-00817 does not require an avoidance plan. Rather, it requires an applicant to implement avoidance measures. MDNR's scoping comments filed in this docket also recommend "including a special permit condition that the Applicant will comply with applicable requirements related to state-listed endangered and threatened species in accordance with Minnesota's Endangered Species Statute (Minnesota Statutes, section 84.0895) and associated Rules (Minnesota Rules, part 6212.1800 to 6212.2300 and 6134)."[349] Applicants propose a new Special Condition 6.2 to more closely reflect MDNR's guidance and comments filed in this docket and included in a prior Route Permit:

> The Permittee will comply with applicable Minnesota Department of Natural Resources requirements related to the Blanding's turtle. The Permittee shall keep records of compliance with this section and provide them upon the request of Commission staff.[350]

320. The Draft Route Permit proposed Special Condition No. 6.8 regarding bat protections. Applicants proposed a revised condition related to bat protection that clarifies USFWS is the agency responsible for the protected species, that USFWS guidance has changed over time and may continue to do so, and that is consistent with other recent Route Permits issued by the Commission:

> The Permittee will coordinate with the U.S. Fish and Wildlife Service regarding the timing of tree clearing and any other conservation measures to mitigate impacts to Northern Long-Eared Bat. The Permittee shall keep records of compliance with this section and provide them upon the request of Commission staff.[351]

G. Application of Various Design Considerations

321. 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.[352]

322. The Project upgrades approximately 18.3 miles of existing 41.6-kV transmission lines, rebuilds or reconductors approximately 1.0 mile of an existing 115-kV transmission line, and constructs 8.0 miles of new 115-kV transmission line. The transmission lines that are upgraded, rebuilt, reconductored, and/or constructed new will connect the five substations: Appleton, Shible Lake, Moyer, Danvers, and Benson.[353]

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[349] Ex. EERA-3 (Written Comments on Scope of EA).
[350] Ex. APP-35 at 4-5 (Comments Regarding EA).
[351] Ex. APP-35 at 7 (Comments Regarding EA).
[352] Minn. Stat. § 216E.03, subd. 7(b)(2); Minn. R. 7850.4100, subp. G.
[353] Ex. APP-5 at 4-6 (Application); Ex. PUC-8 at 20 (EA).

323. The Project is designed to meet a critical need, deliver reliable service to the area while addressing increasing demand, and minimize environmental and human impacts by co-locating the Project within existing ROW where possible. Moreover, the Project is designed to be sufficient to serve this area for many years into the future.[354]

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

324. Minnesota's HVTL routing factors require consideration of the Project's use of or paralleling of existing right-of-way, survey lines, natural division lines, and agricultural field boundaries.[355]

325. As recognized by the EA, "The proposed route largely follows existing rights-of-way (ROWs)."[356] Additionally, the Project is located in an area with several existing overhead distribution lines and will be constructed along and within areas of previous disturbance, including existing ROW and agricultural fields.[357]

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

326. Minnesota HVTL routing factors require consideration of the Project's use of existing transportation, pipeline, and electrical transmission system right-of-way.[358]

327. Generally, the Project will follow existing ROW. Approximately 67 percent of the Project will be constructed within existing transmission ROW, and the Project will be co-located with existing road ROW for 68 percent of the Proposed Route. 8.0 miles of new construction is proposed. For the portions of the Project that will be upgraded, rebuilt, and/or reconductored, the Project will replace 41.6-kV and 115-kV facilities.[359]

328. The Proposed Route also incorporates MDNR recommendations, which includes designing a route that follows the existing 41.6-kV transmission line to the extent possible, particularly between the Cities of Danvers and Benson to avoid the Danvers WMA and reduce potential natural resource impacts and tree clearing within the WMA.[360]

J. Electrical System Reliability

329. Minnesota's HVTL routing factors require consideration of the Project's impact on electrical system reliability.[361]

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[354] Ex. APP-5 at 31 (Application); Ex. PUC-8 at 34 (EA).
[355] Minn. Stat. § 216E.03, subd. 7(b)(9); Minn. R. 7850.4100, subp. H.
[356] Ex. PUC-8 at viii (EA).
[357] Ex. APP-5 at 108 (EA).
[358] Minn. Stat. § 216E.03, subd. 7(b)(8); Minn. R. 7850.4100, subp. J.
[359] Ex. APP-5 at 7 (Application); Ex. APP-31 at 4 (Direct Testimony of M. Strohfus); Ex. PUC-8 at 2-3 (EA).
[360] Ex. APP-5 at 61 (Application);
[361] Minn. Stat. § 216E.03, subd. 7(b)(5)–(6); Minn. R. 7850.4100, subp. K.

330. The Project will be designed and constructed in accordance with NESC standards.[362] The Project is needed to provide the necessary transmission system improvements to service current load and forecasted load for decades to come. The Project addresses NERC standard reliability violations including contingency low voltage and thermal concerns on the 115-kV system, addresses existing N-2 contingency voltage collapse on the 115-kV system, accommodates future load growth in the 41.6-kV and 115-kV transmission systems. As such, the Project will improve the reliability of the electrical system in the area.[363]

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

331. Minnesota's HVTL routing factors require consideration of the Project's cost of construction, operation, and maintenance.[364]

332. There are several main components of the cost of constructing facilities, such as permitting, engineering and design, ROW, materials, land, and construction. Estimated costs for the facilities 100-kV and greater within the Application based on the Proposed Route are approximately $62 million (2024), which includes approximately $23 million for substation work and $40 million for transmission line work.[365]

333. The estimated annual cost of ROW maintenance and operation of Applicants' transmission lines (41.6-kV to 500-kV) in Minnesota currently averages up to $6,000 per mile. Storm restoration, annual inspections, and ordinary replacement costs are included in these annual operating and maintenance costs.[366]

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

334. Minnesota's HVTL routing factors require consideration of the adverse human and natural environmental effects that cannot be avoided.[367]

335. The Project will be designed, constructed, and operated using processes and procedures, as described in this Application, which will avoid, minimize, and mitigate potential impacts. The impacts from construction activities will include aesthetic (i.e., visual) impacts, short-term traffic delays, temporary and localized air quality impacts, conversion of forested land to cleared ROW, short-term disruption of recreational activities, soil compaction and erosion, vegetative clearing, habitat loss, and temporary disturbance and displacement of wildlife. The nominal impacts from operations will include the continued maintenance of tall growing vegetation, visual impacts, interference

[362] Ex. PUC-8 at 14 (EA).
[363] Ex. APP-5 at 53-54 (Application); Ex. APP-32 at 3 (Direct Testimony of N. Goater).
[364] Minn. R. 7850.4100, subp. L.
[365] Ex. APP-5 at 31 (Application).
[366] Ex. APP-5 at 31 (Application).
[367] Minn. Stat. § 216E.03, subd. 7(b)(6); Minn. R. 7850.4100, subp. M.

with AM radio signals, and individual wildlife impacts from habitat reduction and avian collisions.[368]

M. Irreversible and Irretrievable Commitments of Resources

336. Minnesota's HVTL routing factors require consideration of the irreversible and irretrievable commitments of resources that are necessary for the Project.[369]

337. 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 are primarily related to construction. Construction resources will include aggregate resources, concrete, steel, and hydrocarbon fuel. During construction, vehicles necessary for these activities will be deployed on site and will need to travel to and from the construction area, consuming hydrocarbon fuels. Other resources will be used in structure construction, structure placement, and other construction activities.[370]

N. Summary

338. Generally, the Project's environmental and human effects are anticipated to be temporary or minor. The Project will largely occur within or adjacent to existing ROW and will parallel existing roads. Potential effects include a change in aesthetics associated with new/modified substations, new transmission line infrastructure, and taller structures relative to the existing structures. No homeowners will be displaced by the Project, and Applicants will be required to comply with applicable noise standards during construction and operations.[371]

339. Most of the impacts would be short-term and are common to any large construction project, such as noise, dust, and soil disturbance. These impacts can be mitigated through standard and site-specific construction practices. Long-term permanent (operational) impacts, such as aesthetics or avian fatalities, cannot be avoided, but can be minimized by routing choices. The Project would not impact future development in the area.[372]

XI. ROUTE PERMIT CONDITIONS

340. Commission staff included a Draft Route Permit as Appendix C to the EA that includes a description of the Project as well as numerous permit conditions.

[368] Ex. APP-5 at 135 (Application); Ex. PUC-8 at 92 (EA).
[369] Minn. Stat. § 216E.03, subd. 7(b)(11); Minn. R. 7850.4100, subp. N.
[370] Ex. APP-5 at 135-36 (Application); Ex. PUC-8 at 92 (EA).
[371] Ex. APP-5 at 134 (Application).
[372] Ex. PUC-8 at viii (EA).

Applicants are agreeable to a majority of the draft permit conditions but proposed some revisions to the Project description portion of the draft Route Permit.[373]

341. Applicants proposed the following revision to Section 2.1 (Structures) to reflect a small segment of the Project which will be double circuited, and to reflect how Project structures will be constructed:

> The upgraded, newly built, and rebuilt transmission line will include new structures and wires. The majority of the new 115 kV transmission line would consist of single circuit, horizontal post, or braced post monopole wood structures. A short segment in the City of Benson and south of Great River Energy's Benson substation will be double circuited. The structures will be direct-embedded when feasible, and concrete piers will be used to provide the necessary support for ~~embed~~ the poles when direct-embedding is not feasible.[374]

342. Applicants proposed the following revision to Section 2.2 (Conductors) to reflect a small segment of the Project which will be double circuited:

> The single circuit structures will have three single conductor phase wires and one shield wire. The double circuit structures will have six single conductor phase wire and one or two shield wires. Additional wires may also be attached if mitigation is required by BNSF along this double-circuited section. The phase wires proposed will be twisted pair conductor with 266 Aluminum Conductor Steel Reinforced (ACSR) or 366 ACSR wire sizes or a conductor with similar capacity. The shield wire will be 0.528 optical ground wire.[375]

343. Applicants proposed revisions to Condition No. 5.3.9 (Wetlands and Water Resources) to add flexibility to assemble structures on site, if needed and if such assembly would be less impactful. The following recommended revision allows Applicants flexibility to proceed with construction in a lesser impactful manner and is consistent with MDNR recommendations.

> ***
>
> The Permittees shall contain soil excavated from the wetlands and riparian areas and not place it back into the wetland or riparian area. The Permittees shall access wetlands and riparian areas using the shortest route possible in order to minimize travel through wetland areas and prevent unnecessary impacts. The Permittees shall not place staging or stringing set up areas within or adjacent to wetlands or water resources, as practicable. The Permittees shall assemble

[373] *See generally*, Ex. APP-35 (Comments Regarding EA).
[374] Ex. APP-35 at 8 (Comments Regarding EA).
[375] Ex. APP-35 at 8 (Comments Regarding EA).

power pole structures on upland areas before they are brought to the site for installation unless, after consultation with MDNR, it is shown that assembling certain structures on site is less impactful than assembly on upland areas.

***[376]

344. Applicants proposed a new Condition (Substation Construction) in the Route Permit which addresses the timing of substation construction, in acknowledgement that substation construction may be commenced prior to other portions of the Project to maintain the Project schedule:

> Notwithstanding any other requirements in this Permit, Permittee may commence construction of the substations identified in Section 2.3 of this Permit, provided that Permittee complies, as applicable, with Sections 9.1 and 9.2 of this Permit with respect to the specific scope of the construction activities sought to be conducted by Permittee.[377]

345. The Draft Route Permit proposes 9 special permit conditions for the Project.[378] Applicants stated they do not have objections to Special Conditions 6.3, 6.4, 6.5, and 6.9.[379] Applicants proposed revisions to Special Conditions No. 6.1, 6.2, 6.6, 6.7, and 6.8. Applicants also proposed adding a new Special Condition regarding vegetation clearing.[380]

346. Applicants proposed a revised version to Special Condition No. 6.1 (Impacts to Irrigators) to provide flexibility to Applicants in coordinating with landowners. Although Applicants' primary intention is to avoid impacts to irrigation equipment altogether, to the extent complete avoidance is not possible, Applicants requested that the Route Permit acknowledge that mitigation (as part of the easement acquisition process) may also be appropriate in some circumstances. [381] The Commission should make the following revision to Special Condition No. 6.1:

> The Permittees shall coordinate with landowners that maintain irrigation equipment within the proposed route to ensure that irrigation operations are not impacted by Project construction or operation. Landowners should be consulted during the Project's design phase to ensure that pole placement and clearances will not negatively impact irrigation operations. To the extent irrigation

[376] Ex. APP-35 at 9 (Comments Regarding EA); MDNR Comments – Attachment (March 28, 2025) (eDocket No. 20253-216974-02).
[377] Ex. APP-35 at 11 (Comments Regarding EA).
[378] Ex. PUC-8 at Appendix C (EA).
[379] Ex. APP-35 at 3 (Comments Regarding EA).
[380] Ex. APP-35 at 4-7 (Comments Regarding EA).
[381] Ex. APP-35 at 4 (Comments Regarding EA).

equipment avoidance is not feasible, Permittees shall coordinate with landowners to minimize or mitigate impact.

347. Applicants proposed a revised version of Special Condition No. 6.2 (Blanding's Turtle) discussed in the EA. Applicants opined that the condition as proposed is contrary to MDNR's January 14, 2024 MCE Correspondence # 2023-00817.[382] The Judge recommends the following revised Special Condition No. 6.2:

> The Permittees must work with DNR to develop a Blanding's Turtle avoidance and mitigation plan consistent with applicable DNR requirements related to the Blanding's turtle for those portions of the project DNR determines applicable for the project. The avoidance and mitigation plan must include measures to be taken to minimize disturbance to the species and seasonal maps of disturbance areas overlayed with the timing of project impacts. Permittees shall keep records of compliance with this section and provide them upon the request of Commission staff.

348. Applicants proposed the following revision to Special Condition No. 6.6 (MnDOT Consultation and Coordination) to provide clarity as to Applicants' obligations and to reflect Applicants' commitment to coordinate with MnDOT and comply with MnDOT regulations:

> The Permittees shall coordinate with the Minnesota Department of Transportation regarding pole placement, where applicable, and will comply with applicable MnDOT regulations. ~~including a pole-by-pole analysis once an initial project design has been prepared, prior to construction. In particular, consultation with~~ Particularly, the Permittees will consult with MnDOT regarding the intersection of US Highway 59, 60th St. SW, and Burlington Northern Railroad, ~~must occur~~ during the design phase to ensure compliance with MnDOT regulations.[383]

349. Applicants proposed a revised version of the Special Condition No. 6.7 (Wellhead Protection) discussed in the EA to reflect Applicants' commitment that they will request well information from landowners once a final route is selected, and will coordinate with landowners regarding well access, and to reflect a similar condition that the Commission adopted in a recently issued transmission line Route Permit:

> Permittee shall request well information from landowners and coordinate with landowners regarding well access. Permittees shall also obtain copies of the applicable emergency response plans for the cities of Appleton and Benson prior to construction and comply with any applicable requirements. Records of compliance shall be

[382] Ex. APP-35 at 4-5 (Comments Regarding EA); Ex. EERA-3 (Written Comments on the Scope of EA).
[383] Ex. APP-35 at 5-6 (Comments Regarding EA).

retained by the Permittee and be provided to the Commission staff upon request.[384]

350. Applicants proposed a revised version of the Special Condition No. 6.8 (Bat Protections) identified in the EA to reflect that USFWS is the agency responsible for the protected species, that USFWS guidance has changed over time and may continue to do so, and to propose a condition consistent with other recent Route Permits issued by the Commission:

> The Permittee will coordinate with the U.S. Fish and Wildlife Service regarding the timing of tree clearing and any other conservation measures to mitigate impacts to Northern Long-Eared Bat. The Permittee shall keep records of compliance with this section and provide them upon the request of Commission staff.[385]

351. Applicants proposed adding a Special Condition to the draft Route Permit regarding Vegetation Clearing to reflect the Project's planned phased construction. As further modified by the Judge, the Commission should add Special Condition No. 6.10:

> 6.10. If Permittees will clear vegetation for any portion of the Transmission Facility prior to completion of the design necessary to provide a plan and profile contemplated under Section 9.2, Permittees shall file with the Commission at least 14 days prior to such vegetation clearing activities:
>
> A. If applicable, any vegetation management plan that is applicable to any portion of the Transmission Facility being proposed for vegetation clearing;
>
> B. A map showing the area proposed for vegetation removal and its location within the Designated Route and compared to the right-of-way identified in this route permit;
>
> C. A statement of confirmation that Permittees have obtained, or will obtain before commencing, necessary land rights and agency permits for the proposed vegetation removal. The required permits must be provided to the Commission prior to vegetation clearing.
>
> D. Permittees' plan for notifying landowners in the identified area(s) and for providing contact information for Permittees' field representative; and
>
> E. If Permittees have made any modifications to the right-of-way or alignment within the Designated Route from that identified in this route permit, Permittees shall demonstrate that the right-of-way to be

[384] Ex. APP-35 at 6-7 (Comments Regarding EA).
[385] Ex. APP-35 at 7 (Comments Regarding EA).

cleared of vegetation will be located so as to have comparable overall impacts relative to the factors in Minn. R. 7850.4100, as does the right-of-way and alignment identified in this route permit.[386]

352. In comments, DER recommends a condition that the Commission place a cap on Otter Tail Power's cost recovery at Otter Tail Power's share of the Project's $62 million overall cost estimate.[387] Otter Tail Power does not oppose reporting its share of the overall cost of the Project and requests the opportunity to do so after a Route Permit is issued. Specifically, Otter Tail Power requests that the Commission require Otter Tail Power to file a final cost cap number or cap amount for Otter Tail Power's share of the cost of the Project within 90 days of the Commission's order issuing a Route Permit.[388] In order for the Commission to hold utilities subject to its jurisdiction accountable for their transmission CN cost estimates, the Commission should cap Otter Tail Power's cost recovery at Otter Tail Power's share of the Project's $62 million overall cost estimate. Because there are additional recovery options for cost overruns of the Project, this condition is supported by the record and consistent with Minn. Stat. ch. 216B.

353. The recommended modifications and additions to the above-noted descriptions and Route Permit Conditions in this section (XI) are supported by the record.

NOTICE REQUIREMENTS

354. Minnesota statutes and rules require an applicant for a route permit to provide certain notice to the public as well as to local governments before and during the application for a route permit process.[389] Minnesota rules also require an applicant for a certificate of need to propose and receive approval of a notice plan prior to filing an application for a certificate of need.[390]

355. Applicants provided notice to the public and to local governments in satisfaction of Minnesota statutory and rule requirements.[391]

356. Minnesota statutes and rules also require the EERA and the Commission to provide certain notice to the public throughout the route permit process. The EERA and the Commission provided the notice in satisfaction of Minnesota statutes and rules.[392]

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[386] Ex. APP-35 at 9-10 (Comments Regarding EA).
[387] DER Comments (September 30, 2025) (eDocket No. 20259-223398-01).
[388] *See also* Applicants' Reply Comments to DER (October 8, 2025) (eDocket No. 202510-223699-01).
[389] Minn. Stat. § 216E.03, subd. 3a and 4; Minn. R. 7850.2100, subp. 2 and 4.
[390] Minn. R. 7829.2550.
[391] Ex. APP-25 (Notice of Filing Joint Application); Ex. APP-26 (Compliance Filing – Notice Plan); Ex. APP-27 (Compliance Filing – Notice Plan – Corrected Attachment F); Ex. APP-28 (Compliance Filing - Notice of Filing Joint Application).
[392] Minn. Stat. § 216E.03, subd. 6; Minn. R. 7850.2300, subp. 2, .2500, subp. 2 and 7–9; Ex. PUC-1 (Notice of Public Information and Environmental Assessment Scoping meetings), Ex. PUC-4 (Newspaper Notice), Ex. PUC-9 (Notice of Hearings and Availability of the Environmental Assessment), and Ex. PUC-11 (Amended Notice of Public Hearings and Availability of the Environmental Assessment); Ex. EERA-5

ENVIRONMENTAL ASSESSMENT

357. The EA process is the alternative environmental review approved by the Environmental Quality Board for HVTL. 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.[393]

358. 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 raised in the Scoping Decision.

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

CONCLUSIONS OF LAW

1. Any of the forgoing Findings of Fact more properly designated as Conclusions of Law are hereby adopted as such.

2. The Commission and the Judge have jurisdiction to consider Applicants' Joint Application for a Certificate of Need and Route Permit for the 115-kV Appleton to Benson Transmission Line Project.

3. Minn. Stat. § 216B.243, subd. 4 and Minn. R. 7849.1900, subp. 4, permit the Commission to hold joint proceedings for the Certificate of Need and Route Permit in circumstances where a joint hearing is feasible, more efficient, and may further the public interest.

4. The Commission determined that the Application was substantially complete and accepted the Application on March 10, 2025.

5. Applicants, the Commission, and the EERA have substantially complied with the procedural and notice requirements of Minn. Stat. § 216B.243, Minn. Stat. Ch. 216E, Minn. R. Ch. 7849, and Minn. R. Ch. 7850. All procedural requirements for the Certificate of Need and Route Permit were met.

6. EERA has conducted an appropriate environmental analysis of the Project for purposes of the Certificate of Need and Route Permit proceedings, and which satisfies Minn. R. 7849.0230, 7850.3700, and 7850.3900.

7. Public hearings were held on September 3 (in-person) and September 4, 2025 (remote-access). Proper notice of the public hearings was provided, and the public was given an opportunity to speak at the hearings and to submit written comments.

(Notice of EA Scoping Decision). *See also* Notice of Comment Period on Request for exemption from Certain Certificate of Need Application Content Requirements (August 8, 2024) (eDocket No. 20248-209339-01); Notice of Comment Period (January 3, 2025) (eDocket No. 20251-213500-01).

[393] Minn. R. 4410.4400, subp. 6; Minn. R. 7850.3900, subp. 2.

8. Applicants gave notice as required by Minn. Stat. § 216E.03, subd. 3a and 4; Minn. Stat. § 216E.04, subd. 4; Minn. R. 7850.2100, subp. 2 and 4; and Minn. R. Ch. 7829, as applicable.

9. The Commission and/or EERA gave notice as required by Minn. Stat. §§ 216B.243, 216E.03, subd. 6, and Minn. R. 7850.2300, subp. 2; Minn. R. 7850.2500, subps. 2 and 7-9; Minn. R. 7849.1400; and Minn. R. 7849.0230.

10. All procedural requirements for processing the Certificate of Need and Route Permit have been met.

11. The record evidence demonstrates that the Project meets the criteria for the issuance of a Certificate of Need, as set forth in Minn. Stat. § 216B.243, subd. 3, and Minn. R. 7849.0120.

12. The record evidence demonstrates that Applicants' Proposed Route satisfies the Route Permit criteria set forth in Minn. Stat. § 216E.03, subd. 7(a) and Minn. R. 7850.4100 based on the factors in Minn. Stat. § 216E.03, subd. 7 and Minn. R. 7850.4000.

13. The record evidence demonstrates that constructing the Project along Applicants' Proposed Route does not present a potential for significant adverse environmental effects pursuant to the Minnesota Environmental Rights Acts, Minn. Stat. §§ 116B.01 - .13, and the Minnesota Environmental Policy Act, Minn. Stat. §§ 116D.01 - .11.

14. 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.

15. Applicants' Proposed Route, with the modifications to the permit's conditions discussed above, satisfy the Route Permit criteria in Minn. Stat. § 216E.03 and meets all other applicable legal requirements.

Based upon these Conclusions, the Administrative Law Judge makes the following:

RECOMMENDATION

Based upon these Findings of Fact and Conclusions of Law, the Commission should issue a Certificate of Need and Route Permit for Applicants' Proposed Route to Applicants to construct and operate the Project and associated facilities in Swift County in Minnesota, and that the Route permit include the Draft Route Permit conditions amended as set forth in the Findings above.

Dated: December 5, 2025

SUZANNE TODNEM
Administrative Law Judge

NOTICE

Notice is hereby given that exceptions to this Report, if any, by any party adversely affected must be filed under the time frames established in the Commission's rules of practice and procedure, Minn. R. 7829.1275, .2700 (2025), unless otherwise directed by the Commission. Exceptions should be specific and stated and numbered separately. Oral argument before a majority of the Commission will be permitted pursuant to Minn. R. 7829.2700, subp. 3. The Commission will make the final determination of the matter after the expiration of the period for filing exceptions, or after oral argument, if an oral argument is held.

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

MINNESOTA
COURT OF ADMINISTRATIVE HEARINGS

Court of Administrative Hearings
PO Box 64620
Saint Paul, MN 55164-0620
651-361-7900
mn.gov/cah/

December 5, 2025

See Attached Service List

Re: ***In the Matter of the Application of Great River Energy, Otter Tail Power Co., Western Minnesota Municipal Power Agency, Agralite Electric Coop and the City of Benson (the Applicants) for a Certificate of Need and Route Permit for the Appleton to Benson 115 Kilovolt Transmission Line Project***

CAH 23-2500-40748
MPUC ET-2, E-017, ET-6135, E-100/CN-24-263 and ET-2, E-017, ET-6135, E-100/TL-24-264

To All Persons on the Attached Service List:

Enclosed and served upon you is the Administrative Law Judge's **FINDINGS OF FACT, CONCLUSIONS OF LAW, AND RECOMMENDATIONS** in the above-entitled matter. The Court of Administrative Hearings' file is now closed.

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

Sincerely,

Samantha Cosgriff

SAMANTHA COSGRIFF
Legal Assistant

Enclosure
cc: Docket Coordinator

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

CERTIFICATE OF SERVICE

In the Matter of the Application of Great River Energy, Otter Tail Power Co., Western Minnesota Municipal Power Agency, Agralite Electric Coop and the City of Benson (the Applicants) for a Certificate of Need and Route Permit for the Appleton to Benson 115 Kilovolt Transmission Line Project	CAH Docket No.: 23-2500-40748 MPUC ET-2, E-017, ET-6135, E-100/CN-24-263 and ET-2, E-017, ET-6135, E-100/TL-24-264

On December 5, 2025, a true and correct copy of the **FINDINGS OF FACT, CONCLUSIONS OF LAW, AND RECOMMENDATIONS** was served by eService, and United States mail, (in the manner indicated on the attached service list) to the following individuals:

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
1	Lisa	Agrimonti	lagrimonti@fredlaw.com	Fredrikson & Byron, P.A.		60 South Sixth Street Suite 1500 Minneapolis MN, 55402-4400 United States	Electronic Service		No	24-264 Official CC Service List
2	Cody M.	Bauer	cbauer@fredlaw.com	Fredrikson & Byron, P.A.		60 South 6th Street, Suite 1500 Minneapolis MN, 55402 United States	Electronic Service		No	24-264 Official CC Service List
3	Generic	Commerce Attorneys	commerce.attorneys@ag.state.mn.us		Office of the Attorney General - Department of Commerce	445 Minnesota Street Suite 1400 St. Paul MN, 55101 United States	Electronic Service		No	24-264 Official CC Service List
4	Sharon	Ferguson	sharon.ferguson@state.mn.us		Department of Commerce	85 7th Place E Ste 280 Saint Paul MN, 55101-2198 United States	Electronic Service		No	24-264 Official CC Service List
5	Thomas	Hoffman	thoffman@agralite.com	Agralite Electric Cooperative		320 Highway 12 SE Benson MN, 56215 United States	Electronic Service		No	24-264 Official CC Service List
6	Breann	Jurek	bjurek@fredlaw.com	Fredrikson & Byron PA		60 S Sixth St Ste 1500 Minneapolis MN, 55402 United States	Electronic Service		No	24-264 Official CC Service List
7	Kris	Koch	kkoch@otpco.com	Otter Tail Power Company		215 S. Cascade Street Fergus Falls MN, 56537 United States	Electronic Service		No	24-264 Official CC Service List
8	Stacy	Kotch Egstad	stacy.kotch@state.mn.us		MINNESOTA DEPARTMENT OF TRANSPORTATION	395 John Ireland Blvd. St. Paul MN, 55155 United States	Electronic Service		No	24-264 Official CC Service List
9	Stephen	Kowal	skowal@bensonmnlaw.com	Wilcox Law Office, P.A.		1150 Wisconsin Avenue Benson MN, 56215 United States	Electronic Service		No	24-264 Official CC Service List
10	Sam	Lobby	sam.lobby@state.mn.us		Public Utilities Commission	350 Metro Square Building 121 7th Place East St. Paul MN, 55101 United States	Electronic Service		No	24-264 Official CC Service List
11	David C.	McLaughlin	dmclaughlin@fluegellaw.com	Western Minnesota Municipal		129 2nd Street Ortonville MN, 56278	Electronic Service		No	24-264 Official CC

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
				Power Agency		United States				Service List
12	Generic Notice	Residential Utilities Division	residential.utilities@ag.state.mn.us		Office of the Attorney General - Residential Utilities Division	1400 BRM Tower 445 Minnesota St St. Paul MN, 55101-2131 United States	Electronic Service		No	24-264 Official CC Service List
13	Janet	Shaddix Elling	jshaddix@janetshaddix.com	Shaddix And Associates		7400 Lyndale Ave S Ste 190 Richfield MN, 55423 United States	Electronic Service		No	24-264 Official CC Service List
14	Suzanne	Todnem	suzanne.todnem@state.mn.us		Office of Administrative Hearings	600 Robert St N PO Box 64620 St. Paul MN, 55164 United States	Electronic Service		No	24-264 Official CC Service List
15	Haley	Waller Pitts	hwallerpitts@fredlaw.com	Fredrikson & Byron, P.A.		60 S Sixth St Ste 1500 Minneapolis MN, 55402-4400 United States	Electronic Service		No	24-264 Official CC Service List
16	Sam	Weaver	sam.weaver@state.mn.us		Department of Commerce		Electronic Service		No	24-264 Official CC Service List
17	Brian	Zavesky	brianz@mrenergy.com	Missouri River Energy Services		3724 West Avera Drive P.O. Box 88920 Sioux Falls SD, 57108-8920 United States	Electronic Service		No	24-264 Official CC Service List

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
1	Lisa	Agrimonti	lagrimonti@fredlaw.com	Fredrikson & Byron, P.A.		60 South Sixth Street Suite 1500 Minneapolis MN, 55402-4400 United States	Electronic Service		No	24-263 Official CC Service List
2	Cody M.	Bauer	cbauer@fredlaw.com	Fredrikson & Byron, P.A.		60 South 6th Street, Suite 1500 Minneapolis MN, 55402 United States	Electronic Service		No	24-263 Official CC Service List
3	Generic	Commerce Attorneys	commerce.attorneys@ag.state.mn.us		Office of the Attorney General - Department of Commerce	445 Minnesota Street Suite 1400 St. Paul MN, 55101 United States	Electronic Service		No	24-263 Official CC Service List
4	Sharon	Ferguson	sharon.ferguson@state.mn.us		Department of Commerce	85 7th Place E Ste 280 Saint Paul MN, 55101-2198 United States	Electronic Service		No	24-263 Official CC Service List
5	Thomas	Hoffman	thoffman@agralite.com	Agralite Electric Cooperative		320 Highway 12 SE Benson MN, 56215 United States	Electronic Service		No	24-263 Official CC Service List
6	Breann	Jurek	bjurek@fredlaw.com	Fredrikson & Byron PA		60 S Sixth St Ste 1500 Minneapolis MN, 55402 United States	Electronic Service		No	24-263 Official CC Service List
7	Kris	Koch	kkoch@otpco.com	Otter Tail Power Company		215 S. Cascade Street Fergus Falls MN, 56537 United States	Electronic Service		No	24-263 Official CC Service List
8	Stacy	Kotch Egstad	stacy.kotch@state.mn.us		MINNESOTA DEPARTMENT OF TRANSPORTATION	395 John Ireland Blvd. St. Paul MN, 55155 United States	Electronic Service		No	24-263 Official CC Service List
9	Stephen	Kowal	skowal@bensonmnlaw.com	Wilcox Law Office, P.A.		1150 Wisconsin Avenue Benson MN, 56215 United States	Electronic Service		No	24-263 Official CC Service List
10	Sam	Lobby	sam.lobby@state.mn.us		Public Utilities Commission	350 Metro Square Building 121 7th Place East St. Paul MN, 55101 United States	Electronic Service		No	24-263 Official CC Service List
11	David C.	McLaughlin	dmclaughlin@fluegellaw.com	Western Minnesota Municipal		129 2nd Street Ortonville MN, 56278	Electronic Service		No	24-263 Official CC

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
				Power Agency		United States				Service List
12	Generic Notice	Residential Utilities Division	residential.utilities@ag.state.mn.us		Office of the Attorney General - Residential Utilities Division	1400 BRM Tower 445 Minnesota St St. Paul MN, 55101-2131 United States	Electronic Service		No	24-263 Official CC Service List
13	Janet	Shaddix Elling	jshaddix@janetshaddix.com	Shaddix And Associates		7400 Lyndale Ave S Ste 190 Richfield MN, 55423 United States	Electronic Service		No	24-263 Official CC Service List
14	Suzanne	Todnem	suzanne.todnem@state.mn.us		Office of Administrative Hearings	600 Robert St N PO Box 64620 St. Paul MN, 55164 United States	Electronic Service		No	24-263 Official CC Service List
15	Haley	Waller Pitts	hwallerpitts@fredlaw.com	Fredrikson & Byron, P.A.		60 S Sixth St Ste 1500 Minneapolis MN, 55402-4400 United States	Electronic Service		No	24-263 Official CC Service List
16	Sam	Weaver	sam.weaver@state.mn.us		Department of Commerce		Electronic Service		No	24-263 Official CC Service List
17	Brian	Zavesky	brianz@mrenergy.com	Missouri River Energy Services		3724 West Avera Drive P.O. Box 88920 Sioux Falls SD, 57108-8920 United States	Electronic Service		No	24-263 Official CC Service List