

**STATE OF NORTH DAKOTA  
PUBLIC SERVICE COMMISSION**

**Minnesota Power & Light  
HVDC Modernization Project – Oliver County  
Siting Application**

**Case No. PU-24-381**

**Great River Energy  
HVDC Modernization Project – Oliver County  
Siting Application**

**Case No. PU-24-382**

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

\_\_\_\_\_, 2025

**Preliminary Statement**

On December 11, 2024, in Case Nos. PU-24-381 and PU-24-382, Minnesota Power & Light (Minnesota Power) and Great River Energy (Great River) filed the following documents with the North Dakota Public Service Commission (Commission):

1. A Consolidated Application for Certificates of Corridor Compatibility and Route Permits (Consolidated Application) for a high-voltage direct-current (HVDC) modernization project (Project) in Oliver County, North Dakota.
2. An Application for Waiver or Reduction of Procedures and Time Schedules (Waiver Application) requesting a waiver from the requirement to conduct a public hearing and issuance of a notice of opportunity for hearing on the Consolidated Application.
3. An Application for Protection of Information related to cultural resource location information.

On January 22, 2025, a Notice of Filing and Notice of Opportunity for Consolidated Public Hearing was issued requesting comments and requests for hearing by March 5, 2025. The Notice identified the following issues to be considered with respect to the Waiver Application:

1. Are the proposed facilities of such length, design, location, or purpose that they will produce minimal adverse effects and that adherence to applicable procedures and time schedules may be waived?
2. Is it appropriate for the Commission to waive any procedures and time schedules as requested in the application?

The Notice identified the following issues to be considered with respect to the Consolidated Application:

1. Will the location, construction, and operation of the proposed facilities produce minimal adverse effects on the environment and upon the welfare of the citizens of North Dakota?

2. Are the proposed facilities compatible with the environmental preservation and the efficient use of resources?
3. Will the proposed facility locations minimize adverse human and environmental impact while ensuring continuing system reliability and integrity and ensuring that energy needs are met and fulfilled in an orderly and timely fashion?

On February 12, 2025, the North Dakota Department of Environmental Quality (NDDEQ) filed comments. No other comments or requests for hearing were filed in the docket.

On May 1, 2025, the Commission conducted an informal hearing with Minnesota Power and Great River.

On May 20, 2025, Minnesota Power and Great River filed executed Certifications Relating to Order Provisions – Transmission Facility Siting and proposed Findings of Fact, Conclusions of Law and Order.

### **FINDINGS OF FACT**

1. Minnesota Power is an operating division of ALLETE, Inc. (ALLETE), an investor-owned energy company headquartered in Duluth, Minnesota. Minnesota Power is authorized to conduct business in North Dakota.
2. Great River is a not-for-profit wholesale electric power cooperative and is authorized to conduct business in North Dakota.
3. The Project is designed to modernize Minnesota Power's aging HVDC transmission assets, increase HVDC converter station capacity, and improve the reliability of the regional transmission system to ensure continuous, efficient delivery of energy resources. Specifically, the Project will provide bi-directional transfer capability of the HVDC transmission assets, significantly reduce and minimize unplanned outages and curtailments on the system, and increase transmission transfer capability.
4. The Project will be constructed in two phases. The Phases and the locations of the proposed Project components are shown on Maps 2a-2c in Appendix A of the Consolidated Application.
5. Phase 1 involves construction of the following:
  - Nelson Lake Substation 230-kilovolt (kV) Yard;
  - Approximately 0.3 mile long single-circuit 230-kV alternating-current (AC) transmission line (between Nelson Lake 230-kV Substation and double-circuit 230-kV AC transmission line);
  - Approximately 1.5 miles long double-circuit 230-kV AC transmission line (between proposed single-circuit 230-kV AC transmission line and existing Square Butte East Substation);

- Re-routing existing Great River 230-kV AC transmission line through proposed Nelson Lake Substation by installing new parallel single-circuit lines for approximately 0.3 mile, then a new double-circuit line for approximately 0.6 mile;
  - Modifications to existing Square Butte East Substation (adding one breaker);
  - One permanent access road; and
  - Temporary workspaces/temporary laydown yard.
6. Phase 2 will interconnect to Phase 1 of the Project and includes the following:
- East Oliver HVDC Converter Station;
  - East Oliver 345-kV Yard;
  - Nelson Lake Substation 345-kV Yard;
  - Approximately 3.9 mile long double-circuit capable (but operated as a single circuit) 345-kV AC transmission line (connecting Nelson Lake 345-kV Substation, East Oliver 345-kV Yard, and East Oliver HVDC Converter Station);
  - Re-routing existing +/-250-kV HVDC Line by installing approximately 0.9 mile of new line between East Oliver HVDC Converter Station and existing +/-250-kV HVDC line and removing approximately 3.0 miles of existing +/-250-kV HVDC line;
  - Four permanent access roads; and
  - Temporary workspaces/temporary laydown yard.
7. Minnesota Power will own and operate all Project facilities, with the exception of the segments of single-circuit and double-circuit 230-kV transmission line that will be owned and operated by Great River.
8. The proposed Project design specifications for each Phase are identified in Table 4.1-1 and Table 4.2-1 of the Consolidated Application.
9. The existing transmission facilities utilize Supervisory Control and Data Acquisition (SCADA) systems to relay messages between interconnection points. The Project includes the components necessary to interconnect to and use the existing SCADA systems during operations.
10. Project construction and design will meet the requirements of the National Electrical Safety Code (NESC) and other applicable local or national building codes.
11. Construction of Phase 1 is anticipated to begin in the Second Quarter of 2025 and be completed in 2027, with commercial operations commencing in 2027. Construction of Phase 2 is anticipated to begin in the Third Quarter of 2025 and be completed between 2028 and 2030, with commercial operations commencing between 2028 and 2030.
12. The estimated cost to construct Minnesota Power's portion of the Project will be approximately \$399 to \$599 million. Great River's Project costs will be approximately \$5.4 million.
13. The Project will primarily be constructed on land owned by either ALLETE or Minnkota Power Cooperative. With respect to the access road to the Nelson Lake Substation 230-kV Yard,

Minnesota Power plans to construct the access road within section line right-of-way and is coordinating with the landowners to secure an easement and with Oliver County to obtain authorization to use the right-of-way.

### **Study of Preferred Location**

14. Minnesota Power and Great River analyzed a Study Area for the Project that is generally at least 0.5 mile from the boundary of the Project Survey Area (Survey Area), except along the widest portion of the Study Area, and encompasses approximately 5,139 acres.

15. Minnesota Power and Great River performed a desktop evaluation of the Study Area for soils, land use, wetlands and waterbodies, woodlands, and protected species and critical habitats.

16. The Survey Area is an irregularly shaped area approximately 3 miles long east to west and 1.25 miles wide north to south and consists of the area field surveyed for cultural resources and wetlands. The Survey Area includes the proposed Project Corridors and Routes.

17. Minnesota Power and Great River conducted a Class I Literature Review of the Project Corridor and a buffer area, and Class III Cultural Resource Inventories of the Project Corridors and temporary work sites. Nine cultural resource sites that are eligible, potentially eligible or unevaluated for listing on the National Register of Historic Places (NRHP) were identified within the Project Corridors. Reports summarizing the results of these surveys were submitted to and accepted by the State Historical Society of North Dakota (SHSND).

18. The Project has been designed to avoid all NRHP-eligible, potentially eligible or unevaluated cultural resources. As a result, no impacts to cultural resources are anticipated.

19. Minnesota Power and Great River have developed an Unanticipated Discoveries Plan, which will be implemented during construction of the Project.

20. Minnesota Power and Great River conducted wetland and waterbody field delineations of the Project Corridors and temporary work sites. The Project has been sited to avoid or minimize impacts to wetlands. Construction of the East Oliver HVDC Converter Station will permanently impact approximately 0.77 acres of wetlands. This impact cannot be avoided because the converter station and yard facilities must be built within close proximity to existing electrical transmission infrastructure where ALLETE has land rights.

21. No floodplains are present in the Project Corridors. The Project is not anticipated to impact surface water or groundwater resources. The Project will span Nelson Lake, thereby avoiding impacts.

22. The Project will have minimal impact on the surrounding community. Through voluntary negotiation with the landowners, Minnesota Power acquired one farmstead adjacent to the proposed East Oliver HVDC Converter Station site and plans to remove the existing structures from the farmstead. As a result, the nearest residence is more than 0.5 miles north of the proposed Project right-of-way.

23. The Project will have minimal impact on existing land uses, soil, geologic resources, and vegetation. The Project is sited in close proximity to existing transmission infrastructure. Existing agricultural uses will be able to continue around the substation/yard/converter sites, and in the transmission line rights-of ways between structures. No recreational resources are located within the Project Corridors.

24. In consultation with the U.S. Fish and Wildlife Service (USFWS) and the North Dakota Game and Fish Department (NDGFD), Minnesota Power and Great River conducted Dakota skipper habitat assessments and delineations in October 2022 and September 2023. Dakota skipper occupancy surveys were conducted within mapped potentially suitable habitat in 2023 and 2024. No Dakota skippers were observed during the occupancy surveys. In accordance with USFWS recommendations, additional Dakota skipper occupancy surveys will be conducted in 2025. However, based on the surveys conducted to date, the Project is not anticipated to impact Dakota skipper.

25. The Project is not anticipated to impact federally-listed species or species of conservation priority, and is anticipated to have minimal impacts overall to wildlife species.

26. North Dakota Century Code (NDCC) § 49-22-16(4) provides that a route shall not be designated that violates the rules of a state agency. The federal, state and local departments, agencies and entities that were consulted and provided comments are as follows:

A. Federal – U.S. Army Corps of Engineers (USACE); USFWS; U.S. Air Force, Minot Air Force Base; U.S. Department of Agriculture, Natural Resources Conservation Service.

B. State – SHSND; NDGFD; NDDEQ; North Dakota Parks and Recreation Department; North Dakota Department of Transportation; North Dakota Department of Trust Lands.

C. Local – Oliver County.

27. Agency consultations and comments are noted Sections 7.11 and 8.0 and in Appendix E of the Consolidated Application and in the Commission dockets.

28. Minnesota Power and Great River obtained a conditional use permit for the Project from Oliver County in November 2024 and will comply with applicable county zoning ordinance requirements.

### **Siting Criteria**

29. The Commission has established criteria pursuant to NDCC § 49-22-05.1 to guide the Commission in evaluating the suitability of granting a Certificate of Corridor Compatibility and Route Permit. The criteria, as set forth in North Dakota Administrative Code (NDAC) § 69-06-08-02, are classified as Exclusion Areas, Avoidance Areas, Selection Criteria, and Policy Criteria.

30. Minnesota Power and Great River evaluated the Project with respect to the Exclusion Areas, Avoidance Areas, Selection Criteria, and Policy Criteria.

31. A transmission facility route must not be sited within an Exclusion Area. Exclusion Areas may be located within the corridor, but at no given point may such an area or areas encompass more than 50 percent of the corridor unless there is no reasonable alternative.
32. No Exclusion Areas are present within the Project Corridors or crossed by the Project Routes.
33. No designated critical habitat for federally-listed species is present within the Project Corridors.
34. An Avoidance Area is a geographical area that may not be considered in the routing of a transmission facility unless the applicant shows that, under the circumstances, there is no reasonable alternative. Avoidance areas may be located within a corridor, but at no given point can such an area or areas encompass more than 50 percent of the corridor width unless there is no reasonable alternative.
35. Cultural resources are present within the Project Corridors, but the Project has been designed to span or otherwise avoid impacts to cultural resource sites.
36. Areas identified as geologically unstable are present within the Project Corridors and Routes, but the Project has been designed to avoid these areas.
37. A reservoir, Nelson Lake, is present within the Project Corridors. The northeast arm of Nelson Lake will be spanned and no impacts are anticipated.
38. No other Avoidance Areas are present within the Project Corridors or crossed by the Project Routes.
39. In accordance with the Commission's Selection Criteria, a transmission facility shall be approved only if it is determined that any significant adverse effects that will result from the location, construction and operation of the facility as they relate to the Selection Criteria will be at an acceptable minimum, or will be managed and maintained at an acceptable minimum.
40. Minnesota Power and Great River have analyzed the impacts of the Project in relation to all relevant Selection Criteria. No significant adverse impact will result from the location, construction and operation of the Project.
41. In accordance with the Commission's Policy Criteria, the Commission may give preference to an applicant that will maximize the benefits that result from the adoption of policies and practices designated within the Commission's Policy Criteria.
42. Minnesota Power and Great River have demonstrated their commitment to maximize the benefits of the Project to meet the Commission's Policy Criteria by designing and locating the Project in a manner so as to maximize operational efficiency and economic benefits while minimizing Project impacts.

### **Measures to Minimize Impacts**

43. Minnesota Power and Great River will obtain a building permit from Oliver County for the transmission line structures, if needed, prior to construction.
44. Minnesota Power and Great River will use best management practices to avoid and/or minimize potential impacts to existing resources, as outlined in the Consolidated Application.
45. Minnesota Power and Great River will implement appropriate erosion control measures, obtain coverage under the North Dakota Pollutant Discharge Elimination System (NDPDES) General Construction Permit, and develop a Storm Water Pollution Prevention Plan.
46. Minnesota Power and Great River will utilize the North Dakota One-Call Excavation Notice System.
47. Minnesota Power and Great River will design the Project in accordance with the Avian Power Line Interaction Committee's recommendations.
48. Minnesota Power and Great River have agreed to certain steps to mitigate the impact of the Project as indicated by their execution of Certifications Relating to Order Provisions, dated May 12, 2025, which have been filed with the Commission.

From the foregoing Findings of Fact, the Commission makes the following:

### **CONCLUSIONS OF LAW**

1. The Commission has jurisdiction over Minnesota Power and Great River and the subject matter of these applications under NDCC Chapter 49-22.
2. Minnesota Power and Great River Energy are each a utility as defined in NDCC § 49-22-03(14).
3. The Project consists of electric transmission facilities as defined by NDCC § 49-22-03(6).
4. The location, construction and operation of the Project will produce minimal adverse effects on the environment and upon the welfare of the citizens of North Dakota.
5. The Project is compatible with environmental preservation and the efficient use of resources.
6. The Project will minimize adverse human and environmental impact while ensuring continuing system reliability and integrity and ensuring that energy needs are met and fulfilled in an orderly and timely fashion.
7. Waiver of the public hearing requirements is authorized pursuant to NDCC § 49-22-07.2 and NDAC Chapter 69-06-06 because the Project is of such length, design, location, and purpose that it will produce minimal adverse effects.

8. The Commission is authorized to limit access to, and release of, information that contains data that specifically identifies the location of cultural, archaeological, historical, or paleontological sites under NDCC § 49-22-26.

From the foregoing Findings of Fact and Conclusions of Law, the Commission issues the following:

### **ORDER**

The Commission orders:

1. Minnesota Power's and Great River's Consolidated Application for certificates of corridor compatibility and route permits is granted.
2. Certificate of Corridor Compatibility No. \_\_\_\_ is issued to Minnesota Power designating a corridor for the construction, operation and maintenance of Minnesota Power's portion of the Project in Oliver County, North Dakota, as identified in Appendix A to the Consolidated Application.
3. Certificate of Corridor Compatibility No. \_\_\_\_ is issued to Great River designating a corridor for the construction, operation and maintenance of Great River's portion of the Project in Oliver County, North Dakota, as identified in Appendix A to the Consolidated Application.
4. Route Permit No. \_\_\_\_ is issued to Minnesota Power designating a route in Oliver County, North Dakota, for the construction, operation and maintenance of Minnesota Power's portion of the Project, as identified in Appendix A to the Consolidated Application.
5. Route Permit No. \_\_\_\_ is issued to Great River designating a route in Oliver County, North Dakota, for the construction, operation and maintenance of Great River's portion of the Project, as identified in Appendix A to the Consolidated Application.
6. The May 12, 2025 Certification Relating to Order Provisions – Transmission Facility Siting executed on behalf of Minnesota Power is incorporated by reference and attached to this Order as to Minnesota Power.
7. The May 12, 2025 Certification Relating to Order Provisions – Transmission Facility Siting executed on behalf of Great River is incorporated by reference and attached to this Order as to Great River.
8. To the extent there are any conflicts or inconsistencies between the Consolidated Application and the Certifications, the Certification provisions control.
9. The Waiver Application is granted with respect to the requirement to conduct a consolidated public hearing on the Consolidated Application.
10. The Application for Protection of Information with respect to cultural resource location information is granted.



## **PUBLIC SERVICE COMMISSION**

---

Sheri Haugen-Hoffart  
Commissioner

---

Randy Christmann  
Chair

---

Jill Kringstad  
Commissioner