Before the Public Service Commission
of
The State of North Dakota

In the Matter of the Application of
MINNKOTA POWER COOPERATIVE, INC.

Consolidated Application to the North Dakota Public Service Commission for a Certificate of Corridor Compatibility and Route Permit
Agassiz Transmission Line and Substation, Cass County, North Dakota

Case No. PU-26-22

Pre-filed Testimony
of
Megan Moore

I. Introduction

Q1. **Please state your name, business address, and your occupation.**

A1. My name is Megan Moore. I serve as Environmental Supervisor for Transmission and Substation Projects with Minnkota Power Cooperative, Inc. in Grand Forks, North Dakota.

Q2. **Please state your educational and professional background.**

A2. I hold a Bachelor's degree in Environmental Science and a Master's degree in Chemical Oceanography, both from Florida State University. While working for the state governments in Florida and Pennsylvania, I processed registration applications and assisted with regulatory language updates to the state's solid waste rule and enforced safe drinking water regulations and managed enforcement activities.

Q3. **What is your employment history and work experience with Minnkota?**

A3. I have been employed with Minnkota Power Cooperative for almost 2 years. My role includes supervising a team of environmental professionals to complete NEPA reviews in an effort to mitigate environmental impacts of transmission line and substation remodels, rebuilds, and new construction projects to increase electric reliability.

Q.4 **What have been your responsibilities in connection with the Agassiz Transmission and Substation Project (the "Project")?**

A.4 I am responsible for the overall preparation and coordination of the environmental analysis of this Project. This involved working with an interdisciplinary consultant team, who contacted and met with public officials; coordinating activities with other Minnkota departments; as well as, reviewing and coordinating reports supporting the Public Service Commission ("**Commission"**) application.

I. Corridor and Route Selection

Q.5. **The North Dakota Energy Conversion and Transmission Facility Siting Act (Act) discusses corridors and routes for transmission lines, can you please describe corridors and routes?**

A.5. The Act defines a corridor as the area of land where a designated route may be established for an electric transmission facility and a route is the location of an electric transmission facility within a designated corridor.

Q.6. **What is the size of the corridor in this Project?**

A.6. The corridor is approximately 1.74 miles long and 150 feet wide. This is also the easement width that will be used for construction and maintenance for the life of the Project. As the corridor encompasses the route, throughout the rest of my testimony when referring to the corridor, I will be referring to the route and corridor.

Q.7. **Would you please describe the width and length requirements for a transmission corridor as described in the North Dakota Administrative Code?**

A.7. The width of a corridor must be at least ten percent of its length, but not less than one mile or greater than six miles unless otherwise determined by the Commission.

Q.8. **Why is it appropriate for the Commission to approve the proposed 150 foot corridor?**

A.8. Minnkota proposed a one-mile-wide study area 0.5 mile on either side of the Project Route, with a 150-foot-wide Project Corridor, the combination of which provides sufficient information for the Commission to evaluate the factors addressed in the Act. Utilizing a corridor width equal to the width of the right-of-way also helps avoid the confusion or uncertainty for landowners, agencies, and governmental representatives that could occur with a wider corridor. Thus, under the circumstances presented, it is appropriate for the Commission to approve the 150-foot corridor width.

Q.9. **Would you please provide a general description of the terrain along the proposed route?**

A.9. This transmission line is an extension of Minnkota's legacy 345kv line which runs East from the Bison substation taking a south 90 degree turn connecting into the Maple River substation. The transmission line will tie in to the existing Minnkota Maple River–Bison Line east of 57th Street North; travel north adjacent to an existing MPC 69-kV distribution line and 230-kV transmission line; cross northeast across Cass County Road 81, U.S. Interstate 29 (I-29), and the Burlington Northern Santa Fe (BNSF) Railroad; and terminate at the proposed Agassiz Substation (see Figure 1; on[] page of the Project Application).

The proposed substation will be on approximately 15 acres northwest of the intersection of 64th Avenue North and 45th Street North in Reed Township within the extraterritorial jurisdiction (ETJ) of the City of Harwood. The transmission line will occur in the ETJ of both the City of Harwood and the City of Fargo.

All of the Project corridor area is comprised of cultivated fields owned by Minnkota. Additionally, the corridor runs mostly parallel to an existing Minnkota legacy 230kv transmission line, until it turns east across I-29.

There is a Department of Transportation crossing, over I-29, with a Burlington Northern Santa Fe railway crossing directly to the East of I-29.

Q.10. **Who participated in the route selection process?**

A.10. A multidisciplinary team at Minnkota including Environmental Services, Engineering, and Right-of-Way personnel worked together in the route selection process as well as Minnkota's consultant, Burns & McDonnell.

Q.11. **Would you describe Minnkota's general philosophy in the selection of the route?**

A.11. The goal of the route selection process is to locate a suitable line route between the two end points while adhering to the Commission's Avoidance and Exclusion Area criteria to minimize environmental, cultural, socioeconomic impacts, and reduce costs associated with engineering and construction. In this instance proximity to existing transmission assets aligned with minimizing environmental and human health impacts.

Where potential adverse impacts could occur, Minnkota reviewed the NDAC selection criteria to identify if and how minimization measures could be implemented should impacts be significant. Minnkota also reviewed the policy criteria to identify potential benefits from the Project, as recognized in the NDAC, along with design and construction limitations and economic considerations in Project planning.
The corridor does not impact any Avoidance or Exclusion Areas.

Q.12. **Did Minnkota incorporate public input in the route selection process?**
A.12. Yes. All required local, state, and federal agencies were contacted for assistance in identifying concerns or issues within the study area. Minnkota has maintained coordination throughout the process with stakeholders via in-person meetings and phone calls.

II. Exclusion and Avoidance Areas

Q.13. **Please describe what an "Exclusion Area" is.**
A.13. An Exclusion Area is a geographical area that must be excluded in the consideration of a route for a transmission facility.

Q.14. **Please describe what an "Avoidance Area" is.**
A.14. 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.

Q.15. **What direction do the Act and the Commission's Siting Rules provide regarding Exclusion and Avoidance Areas?**

A.15. The North Dakota Administrative Code provides that, "[e]xclusion and avoidance Areas may be located within a corridor, but at no given point may such an area or areas encompass more than fifty percent of the corridor width unless there is no reasonable alternative."

Q.16. **Does the corridor contain any Exclusion Areas?**

A.16. No.

Q.17. Does the corridor contain any Avoidance Areas?

A.17. We identified the outer limits of a community water protection area for the Lake Shure Home Owners Association, a small real estate development located to the west of the corridor and Minnkota's legacy line. As part of our application, we included that area under the avoidance category of reservoirs and municipal water supplies. Nonetheless, BMPs, including the implementation of avoidance and minimization measures will be used to minimize potential impacts to surface and ground water. Accordingly, no adverse impacts are anticipated. No other avoidance areas are present.

Q.18. Has the entire route been surveyed for cultural resources?

A.18. Yes. Since the application was submitted, the entire route has been surveyed for cultural resources. Minnkota has submitted an addendum to the cultural resources survey, and the 30-day review period for NDSHPO is expected to expire end of the day on April 2. We will comply with any mitigation or recommendation from the NDSHPO.

Q.19. **Would the Project have a significant effect on scenic areas, historic sites and structures, and paleontological or archaeological sites?**

A.19. There are no designated scenic areas that will be affected by the Project. Minnkota's consultant Burns & McDonnell performed the Class III Cultural Resources Inventory and reviewed the Class I Literature Review performed by In Situ Inc. and determined that any archaeological sites are outside the Project Corridor, or are found to not likely to exist. The final

addendum to these surveys will be submitted to the Commission's docket once NDSHPO concurrence is received.

Q.20. **Does Minnkota anticipate visual impacts in the area of the Project?**

A.20. No. The Project will be visible to landowners and travelers along roadways. However, Minnkota has collocated the Project with existing transmission infrastructure to the maximum extent practicable, with no less than 82 percent of the proposed transmission line either collocated or within existing or proposed transmission line ROW. The majority of the Project Corridor (0.75 mile or 43 percent) is directly adjacent to an existing 230-kV transmission line ROW, while 0.49 mile or 28 percent will be within an existing 345-kV transmission line ROW. Therefor there is minimal change in characteristics of the viewshed.

III. Factors to be considered in evaluating applications and designation of sites, corridors, and routes

Q.21. **Did Minnkota evaluate the impacts to public health and welfare, natural resources and the environment that could be expected from the location, construction, and operation of the Project?**

A.21. Yes. Based on the careful analyses presented in the application, the Project will not have any significant impacts to public health and welfare, natural resources, or the environment.

Q.22. **Did Minnkota evaluate the irreversible and irretrievable commitment of natural resources?**

A.22. Yes. Considering the length and location to existing transmission assets there are minimal commitments of resources associated with this Project that are irreversible and irretrievable, but these include resources primarily related to construction.

Q.23. **Did Minnkota evaluate direct and indirect economic impacts of the Project?**

A.23. Yes. Minnkota expects the Project to create some positive economic impacts. These economic impacts of the Project include payments for property acquisition and use rights, employment opportunities, transmission line tax payments to the state of North Dakota based on mileage and voltage, as well as sales and use taxes on materials.

No residents will be displaced, and existing agricultural land in most of the Project ROW west of I-29 will be returned to agricultural production after Project completion.

Q.24. **Does the Project impact existing development plans of the state, local government, and private entities at or in the vicinity of the route?**

A.24. No conflicts are anticipated with existing state, local government, or private entities' development plans. Minnkota contacted key local, state, and federal agencies for assistance in identifying concerns or issues within the study area. Public and agency correspondence received as of December 2025 are included in the application. Minnkota will continue to meet with various state and county officials as the Project moves forward.

Q.25. **Did the environmental studies for the Project address any concerns for threatened or endangered species?**

A.25. Burns & McDonnell conducted a natural resource inventory of 1,389-acre area (**Study Area**) which included an evaluation of habitat for federally listed species. Assessments for federally listed threatened and endangered species were conducted by evaluating historic accounts and reported occurrences of listed species within the area of the proposed Project. Prior to field surveys, the United States Fish and Wildlife Service (USFWS) Information for Planning and Conservation tool was reviewed and indicated that 1 threatened, endangered, and candidate species could potentially occur within the Survey Area, the monarch butterfly. As noted, there are no federally listed species that are likely to occur in the Study Area. The monarch is a proposed species, which could occur in limited areas with sparse habitat in the Project work area.

No protection is required for proposed species from private actions under Sections 9 and 10 of the ESA.

Minnkota is a Partner in the voluntary Monarch Candidate Conservation Agreement with Assurances (CCAA). The Certificate of Inclusion was executed in March 2025, which included MPC in University of Illinois, Chicago's Section 10(a)(1)(A) Enhancement of Survival and Incidental Take Permit. The CCAA provides regulatory certainty to not require additional conservation requirements beyond those performed on a subset of the enrolled lands should the monarch be listed.

Burns & McDonnell conducted surveys for bald eagle and raptor nests December 5, 2025. The survey identified a potential bald eagle nest approximately 1,200 feet west of the Project Corridor and one medium-sized nest approximately 750 feet (120 feet from the temporary access road) from the Project Corridor, both were observed within the shelterbelt that occurs within the Study Area. No Birds of Conservation Concern or state Species of Greatest Conservation Need are anticipated to use these nests during the breeding season.

The Project is anticipated to result in negligible to minor impacts on wildlife, including threatened and endangered species, migratory birds, eagles, and Species of greatest conservation concern due to the limited and highly disturbed habitat in and adjacent to the Project Workspace.

On January 8, 2026, the North Dakota Game and Fish, in response to Minnkota's introduction letter, stated that it had reviewed the Project and did not believe the Project will have a significant adverse effect on wildlife or wildlife habitat based on the information provided.

Minnkota will implement the following mitigation measures for the Project on a site-specific and species-specific basis, in coordination with applicable state and federal agencies as appropriate:

- Minnkota will carry out preconstruction surveys to identify active nests within 0.5 mile of the Project workspace. If active nests are found in or adjacent to Project workspace, no-activity buffers will be implemented to minimize disturbance to the extent feasible.

- Construction personnel will be trained on restricted activities near active bird nests and how to recognize signs of disturbance.
- Where the Project Corridor intersects the shelterbelt, no tree clearing is anticipated during construction of the transmission line.
- Minnkota will install bird diverters according to its Avian Protection Plan as necessary based on the final Project design.

Q.27. Has the Project addressed issues raised by agencies?

A.27. Yes. Minnkota contacted jurisdictional federal, state, and local agencies for comment. No agency raised any specific problems with the Project.

Q.28. Will the Project have any impacts to the operation of airports?

A.28. No. the Project tie-in with the existing transmission line is within the Federal Aviation Administration (FAA) Obstruction Evaluation area for Combined Part 77 Surfaces and will require a Determination of No Hazard from the FAA under Code of Federal Regulations (CFR) 77.9. Determinations of no hazard were sought from the FAA for any permanent or temporary structures exceeding notice criteria, and no hazard determinations were received on February 3, 2026 for all structures and crane work.

Q.29. **Is Minnkota's proposed route based solely on economic considerations?**

A.29. No.

IV. Selection Criteria

Q.30. **Have there been any concerns raised about potential impacts to agricultural production or family farms and ranches?**

A.30. No. There are no anticipated effects to agricultural production, family farms or ranches.

Q.31. **What impact will construction and operation of the Project have on irrigation, surface drainage, wetlands and flow patterns?**

A.31. The Project will avoid or have minimal impacts on surface water and groundwater resources. The Agassiz Transmission Line will span and consequently have no impact on the single palustrine emergent wetland and intermittent stream that occur in the Project Corridor.

Q.32. **Do you anticipate the Project will have any significant adverse effects on noise-sensitive lands?**

A.32. No. Upon operation there may be a minimal amount of sound if air molecules near a conducting wire are ionized due to changes in the electric field intensity at the conductor surface. The sound would be most noticeable when a conductor is wet as a result of precipitation.

Q.33. **Does Minnkota anticipate any significant impacts on areas of extractive or storage resources?**

A.33. No. There are no extractive or storage resources within the Project area.

Q.34. **Do you anticipate any significant impacts on wetlands, woodlands or wooded areas?**

A.34. No. Minnkota designed the Project to avoid all wetlands. Trees in proximity to the Project Corridor have been previously impacted as a result of the existing Maple River-Bison Line ROW. Replacement of the structure in the wooded shelterbelt may require minimal amounts of vegetation clearing, but no impacts to trees are expected. The ROW in the wooded shelterbelt will continue to be maintained as herbaceous or shrub vegetation for the life of the Project.

Q.35. **Will the Project effect radio and television reception, or other communication facilities?**

A.35. The Project is not anticipated to affect radio, television, communication, or other electronic control facilities.

Q.36. **Does Minnkota expect the Project may affect human health and safety, animal health and safety, or plant life?**

A.36. No. Minnkota will comply with or exceed the National Electrical Safety Code (**NESC**) standards and inspect the lines through the life of the Project to maintain integrity, avoiding impacts to human health and safety. Minnkota is committed to mitigating potential impacts to wildlife as described in the application. Damage to plant life is anticipated to be negligible. The transmission line structures will result in less than one acre of permanent ground disturbance. Any temporarily disturbed areas will be restored as practicable.

Q.37. **Will the Project violate any city or county zoning ordinances?**

A.37. No. The Project Corridor is within zoning districts of the ETJ of Harwood and the ETJ of the City of Fargo that allow Transmission lines as a permitted use.

Q.38. **Are there any additional permits needed to begin construction of the Project?**

A.38. No, other than awaiting NDSHPO letter of concurrence.

Q.40. **Are the proposed facilities compatible with the environmental preservation and the efficient use of resources?**

A.40. Yes.

Q.41. **Does this conclude your testimony?**

A.41. Yes.