

NORTH DAKOTA PUBLIC SERVICE COMMISSION

**MINNESOTA POWER
LONGSPUR WIND PROJECT
APPLICATION FOR A CERTIFICATE OF SITE COMPATIBILITY
LONGSPUR 230kV TRANSMISSION LINE
CONSOLIDATED APPLICATION FOR A CERTIFICATE OF CORRIDOR
COMPATIBILITY AND ROUTE PERMIT**

CASE NOS. PU-25-304 AND PU-25-305

**MAY 6, 2026
PART II**

**PREPARED TESTIMONY OF
MITCHELL BETTENHAUSEN**

1 **I. Introduction and Background**

2 **Q1. Please state your name, your employer, and your business address.**

3 A. My name is Mitchell Bettenhausen. I am employed by Minnesota Power. My business
4 address is 6043 30th St. SW, Glen Ullin, ND 58631.

5 **Q2. What is your position with Minnesota Power?**

6 A. I am a Project Manager for Minnesota Power's wind development team. In this role, I
7 oversee the development and execution of wind energy projects, including site selection,
8 permitting, construction, and commissioning. Additionally, I manage operations for
9 ALLETE Clean Energy's (ACE) North Dakota and Montana wind facilities, ensuring they
10 operate efficiently, safely, and in compliance with all regulatory requirements. My
11 responsibilities include coordinating with internal teams, contractors, and stakeholders to
12 support the successful operation and growth of the company's energy portfolio.

13 **Q3. Briefly describe your educational background and professional experience.**

14 A. I hold an Associate of Applied Science degree in Renewable Generation Technology and
15 a Bachelor of Applied Science degree in Energy Management, both from Bismarck State
16 College. I also earned a Master of Business with a certificate in Organization Leadership
17 from the University of Mary.

1 I have been employed with ALLETE, Inc. and its subsidiaries for the past eleven years.
2 During this time, I have worked as a wind technician, performing technical operations and
3 maintenance at wind generation facilities. I have also assisted with safety audits at
4 Minnesota Power's generating facilities to ensure compliance with safety standards.
5 Additionally, I have overseen the reclamation of the Glen Ullin Energy Center and
6 managed other construction projects for ALLETE, focusing on environmental stewardship
7 and successful project completion.

8 In addition to my work in the energy sector, I farm and ranch in the Glen Ullin area. I
9 operate several small businesses in North Dakota. I also serve on my local school board
10 and am a member of the Bismarck State College Energy Advisory Board. Furthermore, I
11 am an adjunct instructor at Bismarck State College, where I help educate the next
12 generation of energy professionals.

13 **Q4. What is your role with respect to the Longspur Wind Project ("Wind Project") and**
14 **the Longspur 230kV Transmission Line ("Transmission Project") (collectively, the**
15 **"Projects")?**

16 A. In my current position with Minnesota Power, I serve as the project manager for the
17 Longspur Wind Project and the associated Longspur 230kV Transmission Line. My
18 responsibilities include overseeing the technical operations, maintenance, and compliance
19 activities for these projects. I coordinate with internal teams and external stakeholders to
20 ensure that both the Wind Project and Transmission Project are developed, constructed,
21 and operated in accordance with regulatory requirements, safety standards, and
22 environmental best practices.

23 Additionally, I am involved in project planning, permitting, and community engagement
24 efforts to support the successful completion and integration of these projects into
25 Minnesota Power's portfolio. My background in wind facility operations, construction
26 management, and environmental stewardship enables me to provide effective leadership
27 and oversight throughout all phases of the Projects.

28

1 **Q5. Are you familiar with the contents of Minnesota Power’s Application for a Certificate**
2 **of Site Compatibility for the Wind Project, and the Consolidated Application for a**
3 **Certificate of Corridor Compatibility and Route Permit for the Transmission Project,**
4 **(collectively, the “Applications”)?**

5 A. Yes. I am familiar with the contents of the Applications for both Projects.

6 **Q6. Do these Applications accurately describe the Projects?**

7 A. Yes, along with the supplemental filings and supporting information that has been filed
8 with the Commission.

9 **Q7. What entities will construct, own, and operate the Projects?**

10 A. Minnesota Power will own the Projects and is the entity responsible for construction, and
11 operation of the Projects. Minnesota Power has engaged with M.A. Mortenson to be the
12 construction contractor on the Longspur Project. Mortenson is headquartered in
13 Minneapolis, MN and has locations in several states, including Fargo, ND. Mortenson has
14 constructed about 40GW of wind in the United States and 430MW in North Dakota.

15 **Q8. What is the purpose of your testimony?**

16 A. My testimony provides an overview of the Projects, including development history,
17 interconnection, site selection, layout, facility design, land acquisition, landowner
18 coordination, and benefits.

19 **II. Description of the Projects**

20 **Q9. What factors make the Project site a good site for wind development?**

21 A. Minnesota Power selected the Wind Project Area because the site is exceptionally well-
22 suited for wind development due to several important factors. First, the area offers a strong
23 and consistent wind resource, which is essential for efficient and reliable energy
24 generation. Additionally, the site benefits from favorable interconnection opportunities,
25 with access to existing transmission infrastructure—specifically at the 230kV level—
26 allowing efficient delivery of power to the grid. The land itself is primarily agricultural,
27 making it highly compatible with wind energy; turbines occupy a small footprint, enabling
28 ongoing farming and ranching activities. The region also provides a business-friendly

1 environment that promotes business growth and land rights. Finally, there is strong support
2 from local landowners and the community, which is critical for the successful development
3 and long-term operation of the project. These combined factors make the Project site an
4 ideal location for wind energy development.

5 **Q10. Please describe the Wind Project, its general location, proposed capacity, and**
6 **associated facilities.**

7 A. The Wind Project has a planned nameplate capacity of approximately 200 MW to be
8 located in Morton County. The Wind Project is primarily on rural and agricultural land
9 and encompasses approximately 26,100 acres.

10 The Wind Project consists of 45 primary turbines and 12 alternate wind turbine locations.
11 Minnesota Power expects to use Vestas V163 4.5 MW wind turbines, which have an
12 approximately 370.7-foot hub height and a rotor diameter of approximately 534.8 feet.
13 Total turbine height measured from base of tower to upright blade is approximately 638.2
14 feet.

15 The permanent impacts from wind turbine structures will occupy up to 68 acres during
16 operation, which is less than 0.3 percent of the total participating land.

17 Additional facilities associated with the Wind Project include access roads to turbine
18 locations, underground electrical collection and communication systems, a collection
19 substation, an operations and maintenance (“O&M”) building, one permanent
20 meteorological tower (“MET”), and one permanent Aircraft Detection Lighting System
21 (“ADLS”) radar system tower.

22 The Wind Project’s temporary facilities will include a construction laydown area, staging
23 areas at turbine locations, intersection improvements to existing roads, and crane paths
24 between turbines.

25 **Q11. Describe the associated Transmission Project, its general location, facilities, and**
26 **where it will interconnect to the grid.**

27 A. In addition to the Wind Project, Minnesota Power is also seeking a Certificate of Corridor
28 Compatibility and Route Permit for the associated Transmission Project located in Morton

1 and Mercer Counties. The Transmission Project is an approximately 2.5-mile long, 230kV
2 overhead transmission line, of which approximately 2.1 miles are in Morton County, and
3 approximately 0.37 miles are in Mercer County. The Transmission Project's corridor
4 ranges from 158 to 510-feet wide and encompasses 74 acres. The increased corridor is due
5 to crossing requirements of existing utilities. To comply with the Dakota Access Pipeline
6 (DAPL) requirements when crossing the pipeline, the transmission line needs to cross at a
7 perpendicular angle which increases our corridor. When crossing the DAPL at a 90-degree
8 angle there also is a wetland that needs to be avoided. Avoiding these constraints increases
9 the corridor to 510 feet. The Transmission Project will convey electricity from the Wind
10 Project to the point of interconnection at Minnesota Power's existing Tri-County
11 Substation in Mercer County.

12 The Transmission Project will be constructed using 18 transmission line structure
13 locations, consisting of 12 single-pole tangent structures and 6 single-pole dead-end
14 structures. The average height of a single pole structure is 95 feet and will range from 85
15 feet to 105 feet depending on final engineering design. All structure foundations will be
16 concrete drilled piers. Structure spans will average approximately 750 feet.

17 Permanent impacts from the Transmission Project will be approximately 0.02 acres. Pole
18 foundations comprise about 50 square feet of permanent impacts per structure.

19 **Q12. Describe the development history of the Projects.**

20 A. Longspur has been engaged with landowners and stakeholders in this area for many years.
21 Some of the agreements and negotiations with landowners in what is now the proposed
22 project area date back to 2010. I joined the project team in 2023. Since then, the Longspur
23 team has continued the project development process by conducting environmental and
24 technical studies, advancing engineering design, and refining site layouts to optimize
25 project performance and minimize impacts. We have regularly engaged with our
26 landowners, members of the surrounding communities and local civic and governmental
27 organizations. We have successfully obtained project permits from Morton and Mercer
28 counties. All these efforts have led to the current project before the Commission.

1 **Q13. Have there been any changes to the Wind Project’s site plan since Minnesota Power**
2 **filed its Application with the Commission?**

3 A. Yes. After the Wind Application was filed, we received a request from a nonparticipating
4 landowner to have their parcels excluded from the Wind Project boundary. In response to
5 this request, we updated the Wind Project boundary to exclude these parcels which are
6 reflected in the updated map is filed as Attachment L to the May 6, 2026 Filing. We have
7 also provided supplemental filings with updated information to the Commission as studies
8 have been completed, and additional stakeholder coordination and correspondence has
9 taken place.

10 **Q14. What are the Projects’ estimated costs?**

11 A. The Wind Project is estimated to cost approximately \$780 million, and the Transmission
12 Project is estimated to cost approximately \$10.9 million.

13 **Q15. What is the status of land and easement acquisition for the Projects?**

14 A. Minnesota Power has secured all necessary land use agreements for construction and
15 operation of the Projects. We continue to pursue efforts to optimize the Wind Project
16 design and we are open to offering good neighbor agreements with individuals that are
17 within or adjacent to our project, but are not current participants in the Wind Project.

18 **Q16. Please describe the Wind Project’s electrical collection system and collection**
19 **substation.**

20 A. The power from the wind turbines will be run through an underground 34.5 kV collection
21 system consisting of various sized cables. Collection lines will be buried at least 48 inches
22 deep and will not affect farming operations. The wind turbines will be interconnected by
23 underground power collection cables and co-located with fiber optic communication
24 cables. All the collection system cables will terminate at the Project collection substation.
25 The substation will include power transformers to step up the voltage from 34.5-kV to 230-
26 kV and provide the necessary protection and control for interconnection to the transmission
27 grid.

1 **Q17. Please describe the Projects' interconnection arrangements.**

2 A. Longspur submitted generator interconnection applications to the Midcontinent
3 Independent System Operator (MISO) in 2021, to connect 200 MW in total to the Tri-
4 County Substation in Mercer County. Longspur wind will connect to the Minnesota Power-
5 owned Tri-County substation with a 230 kV transmission line. The Tri-County substation
6 is directly connected to the Bison 230 kV substation, which then connects to the Square
7 Butte East Substation in Oliver County. The Square Butte East Substation is also the
8 termination point of Minnesota Power's Square Butte high-voltage direct current (HVDC)
9 line that transmits power from North Dakota to Minnesota.

10 As part of MISO's 2021 Definitive Planning Phase (DPP) study group, final
11 interconnection costs will be revealed in the DPP Phase 3 results, which were expected on
12 April 30th, 2026 per MISO's current schedule. The DPP Phase 2 results, which were
13 published in mid-2025, included MISO system upgrades, as well as upgrades on
14 neighboring systems: Southwest Power Pool, Minnkota Power Cooperative, Manitoba
15 Hydro, and Saskatchewan Power. The preliminary mitigation costs allocated to Longspur
16 Projects were \$200M due to other projects on the neighboring systems. Because most of
17 these other neighboring projects withdrew between DPP Phases 2 and 3 (9 of 13 projects),
18 it is expected that the Projects' mitigation costs will decrease in the third and final study
19 phase.

20 **Q18. What is the proposed timeline for construction and operation of the Projects.**

21 A. Subject to receipt of Commission approval, Minnesota Power currently anticipates
22 beginning construction of the Projects as early as the summer of 2026 and placing the
23 Projects into commercial operations by December 2027.

24 **Q19. Provide a brief overview of the Projects' construction process.**

25 A. Several activities must be completed prior to commercial operations. The majority of the
26 activity relates to equipment procurement and construction of the facilities, with most of
27 the equipment procurement already in progress. Pre-construction, construction, and post-
28 construction activities for the Projects will include:

- 1 • Procurement of all necessary components including turbine towers, nacelles,
2 blades, and transformers;
- 3 • Final turbine siting;
- 4 • Complete survey of site locations of permanent and temporary facilities;
- 5 • Complete soil borings, testing, and analysis for proper foundation design and
6 materials;
- 7 • Clearing and grubbing, as necessary;
- 8 • Installation of best management practices (BMPs) for erosion and sedimentation
9 control;
- 10 • Construction of access roads, to be used for construction and maintenance;
- 11 • Construction of underground collection lines;
- 12 • Design and construction of the Longspur Substation;
- 13 • Installation of turbine foundations;
- 14 • Installation of underground and aboveground junction boxes;
- 15 • Wind turbine erection;
- 16 • Acceptance testing of facility; and
- 17 • Commencement of commercial operation.

18 In addition to these construction activities, the Projects' will continue to coordinate and
19 comply with applicable local, state, and federal agencies.

20 **Q20. How will topsoil removal be handled during construction?**

21 A. Minnesota Power will comply with the Commission's requirements regarding topsoil
22 removal, segregation, and replacement in accordance with the Commission's Certifications
23 Relating to Order Provisions.

24 **Q21. What roads are necessary for the construction and operation of the Projects?**

25 A. Approximately 38 acres of permanent access roads are necessary for the Wind Project.
26 Permanent access roads will be 16 feet wide on average. No permanent access roads will
27 be built to construct or maintain the Transmission Project.

1 **Q22. During construction how many construction jobs are the Projects anticipated to**
2 **create?**

3 A. The Projects will create approximately 350 temporary construction jobs at the peak of
4 construction activities and up to 11 regular full-time local operations and maintenance
5 (O&M) jobs. The construction contractor for the Project, Mortenson, intends to hire local
6 skilled and non-skilled labor through local Unions. Mortenson has indicated Union Labor
7 Agreements are in place with Laborers Local 563, Operators Local 49, IBEW, UBC
8 Carpenters and Millwrights Local 1091 and 1176 and Ironworkers Local 512. These
9 agreements fall under the Heavy Highway, Builders, and Industrial Agreements varying
10 by trade. Mortenson will build the Projects with a minimum of 15% of the total labor hours
11 performed by qualified apprentices. Additional goods and services will be sourced locally
12 to the extent possible.

13 **Q23. How does Minnesota Power plan to mitigate impacts during construction?**

14 A. Minnesota Power is committed to minimizing impacts on local communities and the
15 environment during construction. We are working with Morton County to develop a road
16 use agreement to minimize road impacts. To control dust during construction, the Projects
17 will use water trucks for dust suppression where needed. In certain areas, where additional
18 dust control mitigation may be needed, like haul routes in front of rural residences, the
19 Projects will consider using additional dust suppression methods in coordination with
20 Morton County such as magnesium chloride. Construction traffic will follow posted speed
21 limits, yield to local vehicles, and observe 4-way stops at all intersections, regardless of
22 existing signage. Additionally, escorts will accompany specific heavy equipment, such as
23 Rough-Terrain cranes and rollers, when traveling on public roads to ensure safety. Any
24 road closures will be carefully coordinated with the North Dakota Department of
25 Transportation (NDDOT) and will follow an approved traffic control plan to minimize
26 disruptions. Throughout the construction process, Minnesota Power will maintain open
27 communication with local residents and stakeholders, and will implement best
28 management practices to protect soil, water, and wildlife resources.

1 **Q24. Does Minnesota Power have a process for coordinating with landowners if a**
2 **landowner has any concerns during or after construction?**

3 A. Prior to construction, all landowners within the Project will receive mailers that will
4 include the Construction Manager’s contact information. During construction, a mailer will
5 be sent out containing the O&M Manager’s contact information. If a landowner has
6 concerns, they may contact the Construction Manager during construction and the O&M
7 Manager after construction. Additionally, post-construction reclamation concerns may be
8 directed to the local O&M Manager. The Construction Manager and O&M Manager for
9 Minnesota Power are both local residents.

10 **Q25. Please briefly explain Minnesota Power’s desktop review and field studies of**
11 **geologically unstable areas.**

12 A. A desktop review of the Projects using the North Dakota Geological Survey (“NDGS”)
13 landslide mapping data was conducted as recommended by the NDGS. Based on data from
14 the NDGS, several landslide deposits have been identified in the southeastern portion of
15 the Wind Project Area, and a few have also been identified in the western portion of the
16 Wind Project Area (Wind Application, Figure 6). No infrastructure is located in areas
17 where landslide deposits are present. With respect to the Transmission Project, mapped
18 landslides are not present within the Transmission Project Corridor according to the NDGS
19 survey data.

20 **Q26. Has Minnesota Power designed the Projects to ensure they avoid areas that are**
21 **geologically unstable?**

22 A. Yes. The Projects avoid all unstable areas identified from NDGS data. Additionally,
23 Longspur has conducted geotechnical surveys on areas where turbine, transmission line,
24 and other infrastructure will be placed.

25 **III. Telecommunications, Weather Radar, and Lighting**

26 **Q27. Has Minnesota Power studied whether there are any possible effects from the Wind**
27 **Project on microwave beam paths, telecommunications, and weather radar facilities?**

28 A. Yes. Existing telephone and fiber optic cables within the Wind Project will be located in
29 the field by the respective utility companies prior to construction to ensure that impacts to

1 telephone and fiber optic cables will be avoided. Minnesota Power received a response
2 from the National Telecommunications and Information Administration (NTIA) on
3 October 4, 2024. NTIA completed its review and found the Project Area is 67.7 kilometers
4 west of KBIS Bismarck, North Dakota Next Generation Weather Radar (NEXRAD) and
5 is within the notification zone of that radar. However, NTIA concluded there will be low
6 impact to this system. NTIA requested additional consultation only if the Project Area
7 changes or if the turbine height increases by 10 meters or more, which has not occurred.
8 The NTIA indicated the Department of Energy identified the Project has potential to impact
9 Western Area Power Administration (WAPA) operations and requested the Project
10 coordinate turbine placement with WAPA. Minnesota Power has communicated with
11 WAPA throughout the development process on turbine size and location. WAPA
12 expressed no concerns with the Wind Project.

13 **Q28. Will the Wind Project comply with Federal Aviation Administration (“FAA”)**
14 **requirements?**

15 A. Yes. The wind turbines and the meteorological tower (MET) must comply with FAA
16 lighting and marking requirements. The Wind Project has received FAA Determinations
17 of No Hazard for all of the primary and alternate wind turbine locations. The FAA’s review
18 included the evaluation of any potential interference with air traffic and concluded the
19 proposed turbine locations do not pose a hazard.

20 **Q29. Explain Minnesota Power’s plans for use of light-mitigating technology at the Wind**
21 **Project.**

22 A. The Wind Project will have one associated Aircraft Detection Lighting System (ADLS)
23 radar tower at the Project. The ADLS will comply with all FAA and North Dakota
24 requirements and will be operational when the Wind Project enters commercial operations.

25 **IV. Operations and Maintenance and Project Decommissioning**

26 **Q30. Discuss the personnel that will operate and maintain the Projects?**

27 A. The Projects will be operated and maintained with up to 11 local O&M employees. The
28 O&M staff will have full responsibility for ensuring that the Projects operate in a manner

1 consistent with applicable permits, prudent industry practice, and equipment manufacturer
2 recommendations.

3 **Q31. Explain what monitoring and maintenance are required for the Projects?**

4 A. Minnesota Power's on-site O&M staff will be responsible for maintenance of the Projects
5 on a daily basis. O&M field duties include performing all scheduled and unscheduled
6 maintenance, including periodic operational checks and tests, regular preventive
7 maintenance on all turbines, related plant facilities and equipment, safety systems, controls,
8 instruments, and machinery. In addition to the on-site O&M staff, remote staff will control,
9 monitor, operate, and maintain the Wind Project by means of a SCADA system and can
10 shut down turbines if necessary. Monitoring of the Project will occur 24 hours a day, 7
11 days a week by Minnesota Power.

12 **Q32. Please explain what steps Minnesota Power will take to ensure the Projects'
13 emergency preparedness.**

14 A. Minnesota Power is committed to ensuring the Projects' emergency preparedness through
15 a combination of proactive planning, staff training, and coordination with local emergency
16 services. The company will develop and implement a comprehensive emergency response
17 plan tailored to the specific risks associated with the Projects. All personnel will receive
18 training on emergency procedures, including how to respond to medical incidents, fires,
19 severe weather, and other potential hazards. Regular emergency drills will be conducted to
20 ensure that everyone on site is familiar with their roles and responsibilities. Minnesota
21 Power will also establish clear communication protocols and designate key contacts to
22 coordinate response efforts efficiently. In addition, the company will work closely with
23 local first responders and emergency management agencies to ensure rapid and effective
24 assistance if needed. These steps are designed to protect the safety of workers, contractors,
25 and the surrounding community throughout the duration of the Projects.

26 **Q33. What is the estimated life of the Wind Project?**

27 A. The expected life of the Wind Project is approximately 35 years. As technology continues
28 to evolve, the life of the Wind Project may be extended with future upgrades.

1 **Q34. What are Minnesota Power’s plans regarding de-commissioning of the Wind Project?**

2 A. Minnesota Power will develop a decommissioning plan and provide financial assurance in
3 accordance with the Commission’s decommissioning rules and regulations. In addition,
4 Minnesota Power is contractually obligated to the landowners to remove the wind facilities,
5 including foundations to a depth of four feet below ground, when the wind easement
6 expires and to restore the area to the same physical condition that existed immediately
7 before the construction of the turbines.

8 **V. Conclusion**

9 **Q35. Will Minnesota Power make additional commitments to minimize adverse impacts**
10 **with respect to the Projects?**

11 A. Yes. Minnesota Power will comply with the requirements set forth in the Commission’s
12 Certifications Relating to Order Provisions for the Projects. Executed copies of the
13 Certifications will be filed with the Commission.

14 **Q36. Will the Projects’ location and operation produce minimal adverse effects on the**
15 **environment and on the citizens of North Dakota?**

16 A. Yes. The Projects have been sited to comply with Morton and Mercer County zoning
17 regulations and the Commission’s siting criteria, as well as to minimize potential impacts
18 to existing land uses, infrastructure, and environmental resources. Additionally, the
19 Projects will provide significant benefits to the local community and the state. For these
20 reasons, and as demonstrated through the Applications, supporting filings, and my
21 testimony, the Projects will produce minimal adverse effects.

22 **Q37. Does this conclude your testimony?**

23 A. Yes.