

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF SOUTH DAKOTA**

**IN THE MATTER OF THE APPLICATION BY NORTHERN STATES POWER
COMPANY, DOING BUSINESS AS XCEL ENERGY, AND OTTER TAIL POWER
COMPANY FOR A FACILITY PERMIT FOR A 765 KV TRANSMISSION FACILITY
AND ASSOCIATED FACILITIES IN GRANT, DEUEL, AND BROOKINGS COUNTIES,
SOUTH DAKOTA**

SD PUC DOCKET _____

**PRE-FILED DIRECT TESTIMONY OF TONY WENDLAND
ON BEHALF OF NORTHERN STATES POWER COMPANY, DOING BUSINESS AS XCEL
ENERGY, AND OTTER TAIL POWER COMPANY**

September 4, 2026

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I. INTRODUCTION AND QUALIFICATIONS

Q. Please state your name, employer, and business address.

A. My name is Tony Wendland. I am employed by Northern States Power Company, doing business as Xcel Energy (Xcel Energy). My business address is 414 Nicollet Mall, Minneapolis, Minnesota.

Q. What is your position with Xcel Energy?

A. I am employed as a Project Director.

Q. Briefly describe your educational and professional background.

A. I obtained a Bachelor of Science in Construction Management from the University of Minnesota – Mankato in 2007. I have held Project Management Professional Certification since 2013 and a Scheduling Profession Certification since 2012, both from the Project Management Institute. I joined Xcel Energy as a Senior Project Controls Specialist in November 2010. I have held multiple positions within Xcel Energy over the past 15 years. In those positions, I managed business plans and performance tracking for construction and operation of electric and natural gas transmission projects. I also managed construction and scheduling of transmission lines and substations, and supervised employees constructing transmission projects. In July 2024, I was promoted to the role of Project Director. As part of my job responsibilities, I provide strategic leadership while directing management for projects that require greater oversight due to the large scope and complexity. My statement of qualifications is attached as **Schedule 1**.

Q. What is your role with respect to PowerOn: Big Stone South to Brookings County to South Dakota/Minnesota Border Project (Project)?

A. As Project Director, I oversee and provide direction to the project managers and project teams that are responsible for the development of the scope, schedule and cost of the Project.

II. PURPOSE OF TESTIMONY

Q. What is the purpose of your Direct Testimony?

A. The purpose of my Direct Testimony is to:

- Provide an overview of the Project;
- Discuss the Project schedule and cost; and
- Provide information on the Project's design, construction, and operation;

Q. What schedules are attached to your Direct Testimony?

A. The following schedule is attached to my Direct Testimony:

- **Schedule 1**: Statement of Qualifications.

Q. Please identify which sections of the Application you are sponsoring for the record.

A. I am sponsoring the following portions of the Application:

- Section 1: Introduction
- Section 2.1: Big Stone South to Brookings to South Dakota/Minnesota Border Project
- Section 5: Names of Participations, as it concerns Xcel Energy
- Section 6: Names of Owner and Manager
- Section 8: Estimated Cost of Facility
- Section 9.2.2: Expanded Brookings Substation
- Section 9.3: Temporary Use Areas
- Section 9.4.3: Transmission Construction Procedures
- Section 9.4.4: Substation Construction Procedures
- Section 9.4.7: Maintenance Procedures
- Section 9.4.8: Storm and Emergency Response and Restoration
- Section 19: Time Schedule
- Section 23: Employment Estimates
- Section 24: Future Additions and Modifications

III. XCEL ENERGY AND PROJECT OVERVIEW

Q. Please describe Xcel Energy's business operations.

A. Xcel Energy is an investor-owned public utility that generates electrical power and transmits, distributes, and sells power to residential and business customers within service territories assigned by state regulators in parts of South Dakota, North Dakota, Minnesota, Wisconsin, and the upper peninsula of Michigan. Xcel Energy and Northern States Power Company (collectively, the NSP Companies), own and operate the five-state integrated NSP System pursuant to the terms of the Federal Energy Regulatory Commission-approved Interchange Agreement. The NSP Companies have about 1.8 million electricity customers in the upper Midwest.

Q. Please generally describe the Project.

A. The Project consists of an approximately 90-mile-long 765 kilovolt (kV) transmission line that connects the existing Big Stone South Substation to the Brookings County Substation and then crosses the South Dakota/Minnesota border. The Project also includes expansion of the existing Big Stone South Substation in Grant County, South Dakota, the expansion of the Brookings County 765 kV Substation area in Brookings County, South Dakota, and expansion of the existing Brookings 345 kV Substation in Brookings County. The Project will also involve an approximately five-mile-long, single-circuit 345 kV transmission line in Brookings County which will connect the expanded Brookings 345 kV Substation to the expanded Brookings 765 kV Substation.

Q. How does the Project relate to the larger PowerOn Midwest Project?

A. The larger PowerOn Midwest Project is a series of 765 kV transmission lines that will create a path connecting South Dakota, Minnesota, Iowa, and Wisconsin, and with the broader region. Collectively, PowerOn Midwest will enhance grid reliability, reduce transmission congestion, and increase access to low-cost energy.

The Project is the South Dakota portion of the larger PowerOn Midwest Project. The Project was studied, reviewed, and approved as part of the Midcontinent Independent

1 System Operator, Inc. (MISO) Long-Range Transmission Planning (LRTP) Tranche 2.1
2 Portfolio. MISO is a federally registered regional planning authority and regional
3 transmission organization (RTO). MISO is responsible for planning and operating the
4 transmission system and energy market in parts of 15 states, including parts of eastern and
5 northern South Dakota, and the Canadian province of Manitoba. In 2024, MISO approved
6 the next phase of the LRTP (LRTP Tranche 2.1) to establish a new 765 kV transmission
7 backbone across the Midwest. The LRTP Tranche 2.1 includes 24 projects totaling
8 approximately 3,600 miles of new and upgraded transmission in MISO's Midwest
9 subregion (Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, North Dakota, South
10 Dakota, and Wisconsin). In MISO's review, the Project is identified as the South Dakota
11 portion of LRTP 22.
12

13 **Q. Will the Applicants construct, own, operate, maintain, and manage the Project?**

14 A. Yes. As set forth in Table 6-1 of the Application, Xcel Energy and Otter Tail Power
15 Company (Otter Tail) will co-own and operate the Project. Specifically, Xcel Energy will
16 own the 345 kV and 765 kV expansion of the Brookings substation and 345 kV
17 transmission line connecting them. Xcel Energy will also own the 765 kV Transmission
18 line from the Brookings substation to the South Dakota border. The Applicants will co-
19 own the 765 kV transmission line between the Big Stone South substation and the
20 Brookings substation. Xcel Energy will construct, operate, maintain and manage both the
21 co-owned assets and well as the Xcel Energy owned assets. Otter Tail will own construct,
22 operate, maintain and manage the Big Stone South substation and associated expansion.
23

24 **Q. What are the anticipated benefits of the larger PowerOn Midwest Project, which**
25 **includes the Project?**

26 A. The Project will make South Dakota's connection to the broader Midwest and eastern
27 United States more robust and resilient, enabling South Dakota and the region to meet its
28 electrical demands in a more reliable and cost-effective manner. The Project will enhance
29 the ability of the transmission system to move energy into and out of South Dakota and
30 surrounding areas. This geographic diversity and "reach" to access generation across
31 multiple states (i.e., where the wind is blowing and/or the sun is shining) will allow for a

1 steady flow of electricity to serve communities, so long as the transmission system can
2 efficiently move the energy from where it is produced to where it is consumed. In addition,
3 these new transmission connections will help ensure reliability 24 hours a day, 7 days a
4 week, and 365 days a year during extreme weather events. During these times, South
5 Dakota may have to rely on neighboring states to provide power to maintain the system.
6 For example, in February 2021 during Winter Storm Uri, it was necessary for MISO to
7 import an unprecedented level of power from the eastern United States to maintain
8 reliability for the MISO region. The Project will enable utilities to reliably serve existing
9 and additional future demands for electricity.

10
11 **Q. Is the Project essential to realizing the benefits of the broader PowerOn Midwest**
12 **Project?**

13 A. Yes. The Project is a key component of not only the PowerOn Midwest Project, but also
14 the entire Tranche 2.1 Portfolio approved by MISO. As such, the Project is essential to
15 obtaining the benefits outlined above.

16 17 **IV. PROJECT COST AND SCHEDULE**

18
19 **Q. What is the estimated total cost of the Project?**

20 The estimated total capital costs for the Project are approximately \$3.327 billion (\$2024)
21 (base) to \$4.323 billion (\$2024) (high-range: base plus contingency). Estimated costs are
22 based on the proposed route and preliminary engineering and are subject to change based
23 on the final Project design.

24
25 **Q. Explain the difference between the two cost estimates.**

26 A. The base estimate was calculated through an extensive due diligence effort and uses the
27 Project scope and schedule as presented in the Application and by incorporating the best
28 available cost estimate information at the time of filing. The Applicants' due diligence
29 included multiple rounds of bids from contractors and vendors. The Applicants also
30 retained multiple firms to contribute to the engineering design. Further, the Applicants
31 retained independent consultants to support the analysis and validation of the estimates.

The high-range (base plus contingency) cost estimate adds 30 percent to the base cost to account for a reasonable level of potential factors that could impact the final cost of the Project, such as engineering and routing considerations and material costs.

Q. What is the anticipated schedule for construction and operation of the Project?

A. Construction of the Project is expected to begin in 2030 and be complete in 2034, with the Project being placed in service in 2034. Project scheduling is subject to change as planning, permitting, engineering, land acquisition, regulatory review, material procurement, contractor availability, and other Project-related factors evolve. Additional schedule information is included in Section 19 of the Application.

V. PROJECT CONSTRUCTION

Q. Discuss the personnel that will be involved in the construction of the Project.

A. It is estimated that Project construction will require the employment of approximately 210 workers with various responsibilities, such as project management, project assistant, safety, structure hauling, structure framing and setting, linemen, civil foundation drilling and installation, quality assurance/quality control, construction project management, inspections, design, concrete truck drivers, and an environmental manager.

Q. Please provide an overview of the construction process.

A. Construction can begin once all necessary regulatory permits, authorizations, and clearances are obtained. The general steps in the construction process are:

- Construction survey and staking;
- ROW clearing;
- Mobilization and preparation of staging / laydown yards;
- Grading (as needed), excavation, and foundation installation;
- Structure setting;
- Wire stringing and clipping once there are enough structures set consecutively in a row to support a wire pull; and
- Cleanup of the construction areas.

1 Following the cleanup procedure, restoration and reseedling will begin (outside of areas
2 that were previously cultivated). Areas disturbed by construction will be restored to
3 preconstruction contours to the extent practicable and in accordance with landowner
4 agreements.

5
6 **Q. Will the Project be constructed to maintain the minimum conductor to ground
7 clearance required by the National Electrical Safety Code (NESC)?**

8 A. Yes.

9
10 **Q. How will the Applicants minimize impacts during construction?**

11 A. The Applicants have conducted extensive work to-date to avoid, minimize, and/or mitigate
12 potential environmental impacts, and will continue those efforts during construction. As
13 described in the Application, the Applicants will employ best management practices
14 (BMPs) to minimize and mitigate impacts, particularly to wetlands, waterbodies, and
15 agricultural areas. This includes development and implementation of a stormwater
16 pollution prevention plan (SWPPP) and compliance with applicable stormwater,
17 wetland/waterbody, and floodplain permitting requirements. Mitigation measures for
18 agricultural areas include weed management during construction, and re-establishing
19 drainage patterns and contours after construction to the extent possible and in accordance
20 with applicable permits and landowner agreements.

21
22 **Q. With respect to the use of existing local roads during construction, will the Applicants
23 coordinate with local road authorities regarding the use and restoration of those
24 roads?**

25 A. Yes. The Applicants will coordinate with Deuel, Brookings, and Grant Counties regarding
26 road use. In accordance with SDCL § 49-41B-38, the Applicants will provide a road bond
27 to the Commission in favor of the applicable road authorities.

1 **Q. What steps will the Project take to prepare for a potential emergency situation at the**
2 **Project site during construction and when the Project is operational?**

3 A. The Applicants will develop a workplan and an emergency response plan and support
4 workforce and community safety during Project construction. The Project's general
5 contractor will identify and secure all active construction areas to prevent public access to
6 potentially hazardous areas and will require workers to follow safety standards. In the event
7 an incident does occur, the Project's emergency response plan will be implemented, and
8 area local emergency services will be contacted, as needed. In addition, the construction
9 workforce is not anticipated to impact the local government, utilities, or community
10 services.

11
12 **VI. PROJECT OPERATION AND MAINTENANCE**
13

14 **Q. Please describe the procedures that will be employed for inspections and maintenance**
15 **of the Project.**

16 A. Generally, the Applicants will inspect the Project at least once by air and once by ground
17 annually. If maintenance concerns are identified during inspection, repairs will be
18 performed as necessary. Should any damage occur during this work, the Applicants will
19 restore the affected area and/or compensate the landowner for damages pursuant to the
20 terms of the easements. The annual inspections are a fixed annual cost for maintaining and
21 operating transmission facilities. The aerial inspections cost approximately \$35 to \$55 per
22 mile, and the ground inspections cost approximately \$200 to \$400 per mile. Actual line-
23 specific maintenance costs depend on the setting, the amount of vegetation management
24 necessary, storm damage occurrences, structure types, materials used, and the age of the
25 line.

26
27 **Q. How will the Applicants respond if the Project is damaged or taken out of service due**
28 **to severe weather?**

29 A. If a storm or emergency outage were to occur, the Applicants have the necessary
30 infrastructure and crews in place to respond quickly and safely to return the line to service.
31 The goal of any repair is to place the transmission system back into service as quickly and

1 safely as possible to minimize the impact to the transmission system. In addition to line
2 crews, the Applicants also have experienced internal engineering departments that can
3 assist in the event of unplanned outages. If a storm or emergency outage were to occur, on-
4 call engineers can be notified to assist in identifying an appropriate repair. The engineer
5 will assess the situation based on feedback from on-site personnel and design an
6 appropriate solution for any damaged infrastructure. Based on the scale of the damage,
7 additional engineering resources can be requested as needed.

8
9 **VII. CONCLUSION**

10
11 **Q. Does this conclude your Direct Testimony?**

12 **A. Yes.**

13
14 Dated this 4th day of September, 2026.

15
16 /s/ Tony Wendland

17 Tony Wendland