State of Minnesota
Court of Administrative Hearings

For the Public Utilities Commission

In the Matter of the Application for a Certificate of Need for the PowerOn Midwest 765 kV and 345 kV High Voltage Transmission Line Project

MPUC Docket No. E002, ET2, ET6675/CN-25-117

CAH Docket No.: 28-2500-41617

Direct Testimony of Derrick Johnson

August 13, 2026

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I. INTRODUCTION AND QUALIFICATIONS

Q. Please state your name and business address.

A. My name is Derrick Johnson. My business address is 12300 Elm Creek Boulevard, Maple Grove, Minnesota 55369.

Q. By whom are you employed and in what capacity?

A. I am employed as a Regional Transmission Project Manager by Great River Energy.

Q. Please briefly describe your educational background and professional experience.

A. I earned a degree in Powerline/Utility from Minnesota West Community and Technical College and a certificate in project management. I have more than 30 years of experience in the utility industry with 11 years at a distribution cooperative (South Central Electric) and 21 years at Great River Energy.

Q. What are your responsibilities as a Regional Transmission Project Manager at Great River Energy?

A. As Regional Transmission Project Manager, I am responsible for managing all aspects of assigned projects including schedule, budget, internal and external resources. I also oversee the entire project lifecycle from development to operation, and track and manage progress through key areas, including governing commissions and public forums, inter-utility agreements, routing and siting, land acquisition, design, engineering, material procurement, construction, and commissioning.

Q. For whom are you testifying?

A. I am testifying on behalf of Great River Energy, Northern States Power Company, doing business as Xcel Energy, and ITC Midwest LLC (collectively, Applicants), in support of their Joint Certificate of Need Application (Application) to the Minnesota Public Utilities Commission (Commission) for the PowerOn Midwest Project (Project).

Q. What is your role with respect to the Project?

I am the Transmission Project Manager for the Pleasant Valley Substation, which Great River Energy will own, and the two lines where Great River Energy is the lead development utility: Pleasant Valley to Lakefield and Pleasant Valley to North Rochester.

II. TESTIMONY OVERVIEW

Q. How is your Direct Testimony organized?

A. My Direct Testimony is organized as follows:

- Section III: Project Costs
- Section IV: Project Schedule
- Section V: Construction and Restoration
- Section VI: Operations and Maintenance

Q. What schedules are attached to your Direct Testimony?

A. The following schedules are attached to my Direct Testimony:

- **Schedule 1**: Statement of Qualifications

Q. Are you sponsoring any sections of the Application?

A. Yes, I am sponsoring the following sections of the Application:

- Section 1.7 – Project Schedule and Costs
- Section 2.4.1 – Construction Costs
- Section 2.4.2 – Operation and Maintenance Costs
- Section 2.6 – Project Schedule
- Section 9.3 – Construction Procedures
- Section 9.4 – Restoration and Clean-up Procedures
- Section 9.5 – Maintenance Practices
- Section 9.6 – Storm and Emergency Response and Restoration

III. PROJECT COSTS

Q. How much is the Project expected to cost?

A. Estimated costs for the Project are approximately $3.327 billion to $4.323 billion. These estimates were prepared for the Application. A summary of the anticipated Project costs as set forth in Section 2.4 of the Application is below.

Table 2.4-1
Project Cost Estimate by Project Component

Project Component	Base ($2024)	High-Range (Base Plus Contingency) ($2024)
765 KV TRANSMISSION LINES		
MN/SD State Line to Lakefield Junction	$582 million	$756 million
Lakefield Junction to MN/IA State Line	$115 million	$150 million
Lakefield Junction to Pleasant Valley	$813 million	$1.056 billion
Pleasant Valley to North Rochester	$196 million	$255 million
345 KV TRANSMISSION LINES		
Pleasant Valley to North Rochester	$160 million	$207 million
North Rochester to Hampton	$74 million	$96 million
SUBSTATIONS		
Lakefield Junction Substation	$434 million	$564 million
Pleasant Valley Substation	$393 million	$512 million
North Rochester Substation	$553 million	$718 million
Hampton Substation	$7 million	$9 million
PROJECT TOTAL	**$3.327 billion**	**$4.323 billion**

Q. Can you explain the two different cost estimates?

A. Yes. In preparing the cost estimates for the Project, the Applicants considered a base cost and a high-range cost. The base estimate was calculated using the Project scope and schedule and by incorporating the best-available cost estimate information at the time of filing. The Applicants' due diligence included a soils investigation and multiple rounds of bids from contractors and vendors. The Applicants also retained multiple firms to contribute to the engineering design, as well as 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 which could impact the final cost. A 30 percent contingency is consistent with industry practices, Applicants' experiences, and MISO guidelines for this stage of project development.

Q. What potential factors could impact the Project's final cost?

A. The Project estimates could be affected by multiple factors, including land values, potential distribution relocations and transmission crossings, and commodity prices. The final Project costs will be dependent on additional factors, including the final route for the Project approved by the Commission, soil conditions, labor and materials pricing.

Q. Why is the cost estimate prepared for the Project by Midcontinent Independent System Operator, Inc. (MISO) less than what the Applicants are currently estimating?

A. MISO approved the LRTP Tranche 2.1 Portfolio on December 12, 2024. MISO's cost estimates for the Project were developed based on a planning-level scope and cost assumptions finalized on May 1, 2024. The Applicants' costs are based on detailed engineering scope and estimates obtained from equipment manufacturers and construction contractors in late-2025. The Applicants' current cost estimates are higher than the MISO 2024 cost estimates primarily due to the costs to construct the 765 kilovolt (kV) substations, including the need for additional substation equipment, and the work required to install that additional equipment, that was not included in MISO's cost estimate. In addition, the cost of materials has increased over the last two years due to current market factors.

Q. Describe the operations and maintenance (O&M) costs for the Project.

A. The Applicants anticipate a post-construction annual maintenance cost of approximately $3,000 to $6,000 per mile. O&M costs associated with the new transmission lines during the operational phase will be initially driven by vegetation management costs associated with controlling regrowth and vegetation within the right-of-way. In general, transmission lines are highly reliable, with unplanned outages typically being limited, O&M costs

associated with repairs are expected to be minimal. The average annual availability of transmission infrastructure is very high, in excess of 99.9 percent.

Generally, the Applicants will inspect the Project at least once by air and once by ground annually. The Applicants also perform other general maintenance on their transmission facilities, such as conducting regular right-of-way maintenance and repairing aged or worn equipment or facilities. The specific O&M costs for an individual transmission line vary based on the location of the line, the number of trees located along the right-of-way, the age and condition of the line, the voltage of the line, and other factors.

Maintenance at substations include regular inspections at the expanded and upgraded substations, equipment maintenance, and necessary repairs, and maintaining the substations free of vegetation and will maintain site drainage.

IV. PROJECT SCHEDULE

Q. What is the Applicants' anticipated schedule for completing the Project?

A. The Applicants anticipate starting construction on the Project as early as 2029. The target energization for the Project is 2032 for the 345 kV facilities and 2034 for the 765 kV facilities. This schedule is dependent on the anticipated timing of the Certificate of Need proceeding, Route Permit proceedings, and post-permit requirements that must be completed prior to the start of construction. The schedule is also dependent on the Applicants advancing design work in parallel with the Commission permitting processes. For instance, the Applicants assumed early design work to coincide with the issuance of the Route Permit.

Q. Can the Project schedule be delayed or take longer than what is discussed above?

A. It is possible. The Applicants have spent substantial effort developing the Project schedule and have reviewed ways in which to optimize the schedule, and believe the schedule

currently reflects a best-case scenario in terms of the timing of the overall Project, there are factors that can affect Project scheduling. Factors such as material lead times, personnel resources, and regulatory approval processes can result in delays. The Applicants continue to perform work that can occur in parallel with regulatory proceedings, to maintain the current Project schedule.

V. CONSTRUCTION AND RESTORATION

Q. How will the Project be constructed?

A. Construction of the Project will generally occur in phases – first, site clearing and access route preparations; second, foundation and structure assembly and installation; third, conductor and shield wire stringing; and, fourth, restoration. The Project will be constructed in tracts, meaning that the different phases may occur simultaneously along different tracts (or geographic areas) of the Project.

Q. Please describe the first phase of the Project's construction process.

A. After the Applicants obtain all necessary and applicable permits and approvals, the first phase of construction activities will involve survey staking of the transmission line centerline, easement boundaries, and/or structure locations, soil borings, and then the removal of all trees and other vegetation from the full width of the easement area. This phase will also include the preparation of access routes to accommodate construction equipment.

Q. What is the next phase in the construction process?

A. After site clearing and access route preparation are complete, the Applicants will begin structure and foundation installation. This generally involves excavation, placement of a steel rebar cage in the excavation, along with an anchor bolt cage or stub angle, and fill with concrete. Structure components will then be transported from staging areas and delivered to the appropriate foundation locations once the concrete has properly cured. The

Applicants will assemble and erect the structures in sections. The structure base will be bolted to the foundation via the anchor bolts or stub angles, and then insulators and associated hardware will be attached to the structure.

Q. What happens next after the foundations and structures are assembled?

A. The next action generally involves installation of conductor and shield wire and the stringing and clipping of the transmission line. Where the Project crosses streets, roads, highways, or other energized conductors or obstructions, the Applicants may install temporary guard structures before conductor stringing. The temporary guard structures ensure that conductors will not obstruct traffic or contact existing energized conductors or other cables during stringing operations and also protect the conductors from damage.

Q. Will helicopters be used for Project construction?

A. Yes. Applicants intend to use helicopters for stringing and clipping operations. Helicopters may also be used for lifting structures if a situation requiring such a use occurs.

Q. Have the Applicants identified and will Applicants continue to identify steps to avoid and minimize potential construction impacts in sensitive areas?

A. Yes. As detailed in Section 9.3 of the Application, this includes:

- Consultation and coordination with appropriate resource agencies;
- When practicable, construction will be scheduled during frozen ground conditions;
- When construction during frozen conditions is not practicable, construction mats may be used to minimize impacts in wetlands and other sensitive areas;
- Equipment fueling and other maintenance will occur away from environmentally sensitive areas and waterways. These construction practices help prevent soil contamination and ensure that fuel and lubricants do not enter waterways or impact environmentally sensitive areas; and
- Various best management practices will be identified in the Project's Stormwater Pollution Prevention Plan, including the use of silt fences, bio logs, erosion control

blankets with embedded seeds, hydromulch, and other sound water and soil conservation practices to protect topsoil and adjacent water resources and to minimize soil erosion.

Q. What restoration work will the Applicants undertake after construction?

A. Once construction is completed in an area, the Applicants will restore disturbed areas to their original condition to the maximum extent feasible. Some areas may require temporary restoration before the completion of construction in accordance with construction stormwater permit requirements. A Project representative will contact the property owner to discuss any damage that has occurred as a result of the Project after construction activities are complete. The Applicants will repair (or reimburse the landowner to repair) damage to fences, drain tile, or other property damaged by construction of the Project, including compensation for any crop and compaction damages.

VI. OPERATIONS AND MAINTENANCE

Q. Describe the maintenance that will be performed once the Project is placed in service.

A. Generally, the Applicants will inspect the Project at least once by air and once by ground annually. These inspections will be limited to the defined easement areas and through other access easement areas where obstructions or terrain dictate. If maintenance concerns are identified during inspection, repairs will be performed, as necessary. Additionally, the Applicants will manage their easement areas to control any encroachments that may interfere with the operation of the transmission line, including removal of vegetation that interferes with the operation and maintenance of the transmission line. Native shrubs that will not interfere with the safe operation and maintenance of or access to the transmission line will often be allowed to reestablish in the outer edge the right-of-way.

Q. Describe the Applicants' storm and emergency response.

A. Generally, transmission infrastructure has few mechanical elements and is built to withstand weather extremes that are normally encountered in the region. With the exception of outages due to severe weather such as tornadoes, extreme winds, and heavy ice storms, transmission lines rarely fail.

In the event of a fault on the transmission system, protective relaying equipment is designed to immediately detect the fault and automatically remove the transmission line from service. Such interruptions are usually only momentary. Scheduled maintenance outages are also infrequent. If an unplanned outage were to occur, the Applicants have the necessary infrastructure and crews in place in central and southern Minnesota to respond quickly and safely to return the line to service. The Applicants will deploy first responders to the lines as quickly as possible to patrol the line and assess the damage. Once the damage has been assessed, the first responder will immediately relay information including the magnitude of damage, requirements for switching, and material, crew, and equipment needed for restoration.

Based on this information, the Applicants will develop a plan to restore the damaged facilities. The goal of the repair is to place the transmission system back into service as quickly and safely as possible to minimize the impact to the transmission system.

VII. CONCLUSION

Q. Does this conclude your Direct Testimony?

A. Yes.

DJ

DERRICK JOHNSON

EXPERIENCE

REGIONAL PROJECT MANAGER • GREAT RIVER ENERGY• SEPT 2025-PRESENT

PROJECT MANAGER II • GREAT RIVER ENERGY• FEBRUARY 2024-SEPT.2025
Management of Transmission and Substation projects in both area and regional.

LEAD METERING TECHNICIAN • GREAT RIVER ENERGY • MAY 2007-FEBRUARY 2024
Construction and Maintenance of substation and metering infrastructure.

POWERLINE TECHNICIAN • GREAT RIVER ENERGY • June 2005-May 2007
Construction and Maintenance of Transmission powerlines and Substations.

POWERLINE/ SUBSTATION TECHNICIAN • SOUTH CENTRAL ELECTRIC • JUNE 1994-JUNE 2005
Construction and Maintenance of powerlines, substation, and metering equipment. Project and construction management of substation and line construction.

Education

POWERLINE/ UTILITY • MAY 1996• MN WEST JACKSON
3.14 GPA with a degree in powerline and electrical utility
Certificate of Completion in Project Management

Journeyman Line degree from Merchant in 2002
Journeyman Meterman degree from IEBW 2008

DERRICK JOHNSON

LEADERSHIP
Field Representative for the MRES/GRE Lorain substation project
Field Representative on the Frazee substation rebuild.
Field Representative for the St James Shop Construction
MREA/GRE Leadership Training
Project Lead on the SCEA NorthStar sub and Ethanol plant