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## STAFF MEMORANDUM

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**TO:** COMMISSIONERS AND ADVISORS

**FROM:** ERIC PAULSON, LOGAN SCHAEFBAUER, AND JENNIE FUERST

**RE:** EL24-030 - IN THE MATTER OF THE PETITION OF NORTHERN STATES POWER COMPANY DBA XCEL ENERGY FOR APPROVAL OF ITS 2025 TRANSMISSION COST RECOVERY ELIGIBILITY AND RATE ADJUSTMENT

**DATE:** NOVEMBER 14, 2024

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### BACKGROUND

On August 30, 2024 the South Dakota Public Utilities Commission (Commission) received a petition from Northern States Power Company dba Xcel Energy (Xcel) for approval of project eligibility and a revised Transmission Cost Recovery (TCR) rider adjustment factor for 2025. The filing also requested approval of the 2024 tracker report for approved transmission project investments, expenditures, and revenues received.

South Dakota Codified Laws §§ 49-34A-25.1 through 25.4 authorize the Commission to approve a tariff mechanism for the automatic annual adjustment of charges for the jurisdictional costs of new or modified transmission facilities with a design capacity of thirty-four and one-half kilovolts or more and which are more than five miles in length.

In Docket EL07-007, the Commission approved the establishment of the TCR rider to recover the costs associated with six transmission projects. These costs were incorporated into base rates during Xcel's 2009 rate case, Docket EL09-009. As such, in January 2010, the TCR rider adjustment factor was adjusted to remove the costs related to the six transmission projects and to collect only the remaining balance in the tracker account.

In Docket EL12-035, the Commission approved TCR recovery of the 2011-2012 revenue requirement associated with fourteen new transmission projects and Midcontinent Independent System Operator (MISO)<sup>1</sup> Schedule 26 expenses. The Commission approved the Settlement Stipulation supporting the "refined split method" approach for allocating MISO approved cost-shared projects with company investment. In subsequent years, the Commission approved recovery of additional projects and expenses.

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<sup>1</sup> Midcontinent Independent System Operator, Inc.

Most recently, in Docket EL23-026, the Commission approved TCR recovery of the 2024 revenue requirement associated with twenty-two previously approved transmission projects, four new transmission projects, and MISO Schedule 26 expenses.

Xcel proposes to include six new projects in this docket for 2025. The proposed 2025 revenue requirement results in a rate of \$0.000441 per kWh, calculated based on an effective date of January 1, 2025. This represents an increase of \$0.000236 per kWh from the existing rate.

## **STAFF ANALYSIS**

### **Analysis of Updated Projects**

On pages 3 through 6 of Attachment 1, Xcel discusses the previously approved projects that have had changes to their scope and any significant variances in capital cost forecast compared to the forecasts in EL22-022. Each year, Xcel identifies, budgets for, and develops specific projects during its budget process and based on the health score of its transmission lines as determined by the Line Prioritization Matrix. As health scores and projects change from year to year, these projects may get reprioritized, causing delays in projects or shifts into other seasons. Other times, projects are sequenced in a way that is least disruptive to agricultural activities in the area. These timeline shifts, along with other obstacles like hard rock drilling and unfavorable weather conditions, can all result in forecast changes from one year to the next.

### **Analysis of New Projects**

#### **Line 0732 Rebuild: Black Oak to Elrosa**

The Black Oak to Elrosa project satisfies statute requirements as a rebuild of 9.5 miles of existing 69 kV transmission line. The existing line was originally built in 1952 and runs between Xcel's Black Oak Substation and Paynesville Transmission Substation. This line has no record of being rebuilt, and the existing poles and crossarms are decayed. Also, the frame design is prone to galloping and the insulators are showing decay, increasing the risk for outages. Xcel confirms that it will be eligible for the Open Access Transmission Tariff (OATT) once it is placed in-service in approximately 2027.

#### **Line 0982 Rebuild: Crandall to Lake Crystal**

The Crandall to Lake Crystal project satisfies statute requirements as a rebuild of 31 miles of existing 345 kV transmission line. The existing line was originally built in 1955 and runs between Xcel's Crandall Substation and Wilmarth Substation. This line has no record of being rebuilt, and the existing poles and crossarms are decayed. Xcel confirms that it will be eligible for the Open Access Transmission Tariff (OATT) once it is placed in-service in approximately 2026.

The next four projects are all part of the MISO Long Range Transmission Planning (LRTP) Tranche 1 Projects portfolio.

### **MISO LRTP2 Alexandria to Big Oaks**

The MISO LRTP 2 Alexandria to Big Oaks project consists of adding a second circuit to two 345 kV lines, associated substation upgrades, installing a new greenfield 345 kV segment, building a new 345 kV substation, and re-terminating four existing 345 kV lines into the new substation.

The first segment adds a 42-mile new circuit (Line Number 5656) on existing transmission line 0954 between Mississippi River Energy Services' (MRES) Alexandria Substation near the City of Alexandria, MN and Great River Energy's (GRE) Riverview substation near Freeport, MN. The estimated in-service date for this segment is late 2026.

The second segment adds a 59-64 mile new circuit (Line Number 5657) on existing transmission lines 0954 and 0973 and 1-4 miles of new circuit on new structures between GRE's Riverview substation and the Company's new Big Oaks substation near Becker, MN. Line 0954 and 0973 are 345 kV lines constructed in 2014 and 2011 respectively. Both lines were constructed with the capacity to allow a second circuit to be installed at a future date. The estimated in-service date for this segment is mid-2026 for approximately 35 miles and late 2025 for the remaining approximately 29 miles.

Additionally, four existing 345 kV transmission lines, (0984/0985/0991/0992) will be re-terminated into the new Big Oaks Substation. The new Big Oaks Substation will be a seven-row 345 kV breaker and half configuration with 50mVar reactor and future capability to expand to eight 345 kV rows and four 115 kV rows. The estimated in-service date for this segment is late 2027.

This project would improve reliability, relieve congestion, improve system resilience, and increase access to lower cost generation.

Xcel has filed permits for this line where necessary and anticipates route permits and Certificate of Need order dates of November 2024.

### **MISO LRTP4 Wilmarth to North Rochester to Tremval**

The MISO LRTP4 Wilmarth to North Rochester to Tremval project consists of installing two new 345 kV circuits, associated substation upgrades, and relocating an existing 161 kV circuit.

The first two segments build a new 75-80 mile 345 kV circuit (Line Number 5662) on rebuilt double circuit structures with existing 69 kV or 115 kV circuits and some greenfield single circuit structures depending on route selection between the Company's Wilmarth substation near the city of Mankato, MN and the Company's North Rochester substation near the city of Pine Island, MN. The first segment has an estimated in-service date of late 2027 and the second segment has an estimated in service date of late 2028.

The third segment modifies the existing double circuit capable 345 kV line 0965 that runs between the Company's North Rochester substation and the Company's Briggs Road substation near the village of Holmen, WI. Modifications include: 1) Increased voltage on the existing 161 kV line 5309 that is double

circuited with line 0965 for 16 miles to make it 345/345 kV double circuit 0965/5663; 2) Adds 16 miles of new 345 kV circuit (Line number 5663) to the existing 0965 double circuit capable structures; and 3) Increases the voltage on the existing 161 kV Dairyland Power Cooperative (DPC) line that is double circuited with line 0965 for ten miles to the Mississippi River to make it 345/345 kV double circuit 0965/5663. Line 0965 is a 345 kV line constructed in 2015 with the capacity to add a second circuit at a future date. Line 5309 and DPC's 161 kV line were both built 345 kV capable in the second circuit position to be used at a future date. The estimated in-service date of this segment is early 2030.

The fourth segment relocates the existing 161kV line 5309 between the Company's North Rochester Substation and Rochester Public Utilities' (RPU) Chester Substation near the city of Rochester, MN into a new alignment that could be greenfield, or rebuilt double circuit with existing 161 kV lines depending on route selection. Line 5309 was constructed in 2016. The Wilmarth substation footprint will be expanded to accommodate a new 345 kV breaker row. The North Rochester substation will build out two 345 kV breaker rows within the existing substation footprint. The Rochester substation has an estimated in service date of late 2028. The transmission line has an estimated in-service date of late 2029.

This project would improve reliability, relieve congestion, improve system resilience, and increase access to lower cost generation.

Xcel has filed permits for this line where necessary and anticipates route permits and Certificate of Need order dates of September 2025.

#### **MISO LRTP5 Tremval to Eau Claire to Jump River**

The MISO LRTP5 Tremval to Eau Claire to Jump River project consists of installing two new 345 kV circuits, building a new substation, expanding an existing substation, and either expanding another substation or building a second new substation.

The first segment builds a new 41-49 mile 345 kV circuit (Line Number W3105) between either the Company's Eau Claire substation near the city of Eau Claire, WI or the Company's new Elk Farm substation near the Town of Seymour, WI and American Transmission Company's (ATC) new Jump River Substation that will either be located near the Town of Longwood, WI or near the Town of Ruby, WI depending on route selection. The estimated in-service date is late 2028.

The second segment builds a new 39-45 mile 345 kV circuit (Line Number W3106) between either the Company's Eau Claire substation or new Elk Farm Substation and the Company's Tremval substation near the Town of Preston, WI depending on route selection. The new circuit will include single and double circuit portions with potential rebuild of existing 115 kV/161 kV/345 kV circuits depending on route selection. The estimated in-service date is late 2028.

Substation scope is all route dependent. The Jump River substation would be a new 345 kV 4-position ring bus expandable to a 6-position breaker and a half configuration in the future. The Eau Claire substation would expand from a 345 kV 4-position ring bus to an 8-position breaker and a half

configuration. The Elk Farm substation would be a new 345 kV (6) position breaker and a half configuration expandable to ten positions with potential 161 kV yard in the future. The Tremval substation would be expanded to add a new 345 kV yard with a 6-position ring bus configuration expandable to a 10-position breaker and a half configuration and a potential 161 kV yard in the future. The Briggs Road substation would be expanded from a 3-position ring bus to four positions to reconfigure an existing line reactor to a bus position. The substations have varying estimated in service dates but generally are estimated around late 2028.

This project supports MISO's goals to maintain robust and reliable performance in future conditions with greater uncertainty and variability in supply, enable access to lower-cost energy production, provide cost-effective solutions allowing the future resource fleet to serve load across the footprint and allow more flexibility in the fuel mix for customer choice.

Xcel has filed permits for this line where necessary and anticipates route permits and Certificate of Need order dates of February 2026.

### **MISO LRTP6 Tremval to Rocky Run to Columbia**

The MISO LRTP6 Tremval to Rocky Run to Columbia project consists of installing a new 345 kV circuit. The larger project builds a new 80-mile 345 kV circuit (Line Number W3107) between the Company's Tremval substation near the Town of Preston, WI and ATC's Arpin substation near the Village of Pepin, WI. The new line will be partial greenfield single circuit and partial rebuilt double circuit with existing 69 kV lines. The Company will be responsible for constructing 39-43 miles of this segment, depending on route selection, from the Company's Tremval substation to a golden spike point at which location ATC will build the remainder of the segment to their Arpin substation. The estimated in-service date is mid-2029.

This project supports MISO's goals to maintain robust and reliable performance in future conditions with greater uncertainty and variability in supply, enable access to lower-cost energy production, provide cost-effective solutions allowing the future resource fleet to serve load across the footprint and allow more flexibility in the fuel mix for customer choice.

Xcel has filed permits for this line where necessary and anticipates route permits and Certificate of Need order dates of December 2025.

### **2024 TRACKER REPORT**

The rate approved in Docket EL23-026 was based on the balance in the tracker account and the 2024 estimated revenue requirements. In this docket, Staff reviewed the revised 2024 revenue requirement to determine if the costs were prudent and at the lowest reasonable cost to ratepayers. Xcel states in its petition it analyzes up to a dozen project alternatives for a given project, uses a competitive bidding process, and has developed a standard design for collector stations to minimize design and engineering costs.

Staff also reviewed the Company's calculation of the under/over collection of costs incorporated in the new TCR rates, comparing actual recoveries to actual costs. Attachment 6 summarizes the tracker activity by month for 2024. Individual project detail for the projects are found on Attachment 12.

## **2025 TCR REVENUE REQUIREMENT**

The total estimated 2025 revenue requirement of \$991,151, subject to later true-up to actual costs and recoveries, is based on the 2024 under-collection in the tracker account and the estimated 2025 revenue requirement associated with the 31 transmission projects and MISO Schedule 26 revenue and expenses. This represents an increase from the 2024 revenue requirement amount of approximately \$535,000.

The 2025 revenue requirement continues to apply the other provisions agreed upon in the EL13-006 settlement, including the jurisdictional demand allocators, carrying charge, and rate design. Additionally, the Company will continue to employ the same rate of return method with a true up of the 2025 rider balance calculations to reflect the cost of debt and capital structure at December 31, 2024 levels and the return on equity approved in rate case Docket EL22-017.

## **2025 TCR RATE**

The TCR rate is designed to be implemented effective January 1, 2025, and is calculated based on forecasted sales from January 2025 through December 2025. The TCR rate, proposed to be effective January 1, 2025, is \$0.000441 per kWh and represents an increase of \$0.000236 per kWh from the existing rate.

## **Reasonableness of Overall Earnings from Regulated Rates**

Consistent with the terms of the EL13-006 settlement agreement, the Company will continue to file, by June 1 of each year, an annual report with the Commission detailing its South Dakota jurisdictional earnings for the preceding calendar year. These reports will continue to be filed in EL07-007. Staff believes the report is necessary to monitor the Company's earnings and the potential effect of adding the TCR rider, and other riders, to its South Dakota tariff.

## **RECOMMENDATION**

Staff's recommendation is based on its analysis of Xcel's filing, discovery information, relevant statutes, and previous Commission orders. Staff's review consisted of, but was not limited to, the 2024 tracker report, the forecasted 2025 revenue requirement, and rate calculation.

Staff believes the Company's filing is consistent with the settlement approved in Docket EL13-006 and consistent with prior TCR filings. Staff recommends the Commission approve the updated 2025 revenue requirements and updated TCR rate of \$0.000441 per kWh, with an effective date of January 1, 2025.