



Staff Briefing Papers – Volume I (TCR Rider Financial Issues)

Meeting Date	October 31, 2024	Agenda Item 6**	
Company	Northern States Power Co. d/b/a Xcel Energy		
Docket No.	E-002/M-23-467		
	In the Matter of Xcel Energy’s Petition for Approval of the Transmission Cost Recovery Rider Revenue Requirements for 2023-2024 and Revised Adjustment Factors		
Issues	Should the Commission approve or modify Xcel Energy’s 2023 and 2024 Transmission Cost Recovery (TCR) Rider revenue requirements and the resulting adjustments factors by customer class?		
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The attached materials are work papers of the Commission Staff. They are intended for use by the Public Utilities Commission and are based upon information already in the record unless noted otherwise.

✓ **Relevant Documents**

	Date
Xcel Energy-Petition (Public & Trade Secret)	November 1, 2023 ¹
Department of Commerce-Letter	November 30, 2023
Commission-Order	December 19, 2023
Xcel Energy-Letter	April 12, 2024
Department of Commerce, Office of Attorney General, and Citizens Utility Board-Joint Comments (Public & Trade Secret)	July 31, 2024
Department of Commerce-Comments	July 31 2024
Xcel Energy-Reply Comments (Public & Trade Secret)	August 26, 2024

¹ Company Filing shows an October 31, 2023 date but it was received in edockets on November 1, 2023.

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I. Issues

Should the Commission approve or modify Xcel Energy's 2023 and 2024 Transmission Cost Recovery (TCR) Rider revenue requirements and the resulting adjustments factors by customer class?

II. Background

On October 31, 2023, Northern States Power Company, doing business as Xcel Energy (Xcel, Company), filed a petition (Petition) for approval of its 2023-2024 Transmission Cost Recovery Rider revenue requirements and the resulting adjustment factors by customer class. The Company is seeking recovery of distribution-grid modernization projects, collectively called Advanced Grid Intelligence & Security (AGIS)², previously certified by the Commission and eligible for TCR cost recovery. The Company is also seeking to recover costs associated with Hosting Capacity Analysis (HCA), a newly eligible distribution-grid modernization project. No new Transmission, Renewable Statute, or Greenhouse Gas projects were proposed for cost recovery.

On November 24, 2021, in accordance with Minn. Stat. § 216B.16, subd. 7b (the Transmission Statute), Xcel filed its petition for approval of its 2021-2022 Transmission Cost Recovery (TCR) Rider revenue requirements and resulting rate classes' adjustment factors. In the final round of comments, the Joint Commenters (Department, OAG, CUB) recommended that recovery of the Advanced Meter Infrastructure (AMI) and Field Area Network (FAN) components of AGIS be subject to certain conditions, including a requirement for Xcel to submit performance incentive mechanisms with associated penalties, and additional reporting requirements.

On June 28, 2023, in Docket No. E-002/M-21-814, the Commission approved Xcel's proposed 2021-2022 TCR recovery of certain transmission projects and AGIS projects and also ordered a set of 12 performance evaluation metrics and targets reflecting AMI/FAN benefits.³ For those 12 metrics, the Commission ordered the Company to file three years of baseline data, targets, and evaluation methods. The Company was also required to propose Performance Incentive Mechanisms (PIMs) for the 12 metrics in its next TCR Rider proceeding. For any benefits that may not be captured by AMI metrics, the Company was ordered to consider if benefits could be

²AGIS is comprised of Advanced Distribution Management System (ADMS), Advanced Metering Infrastructure (AMI), Field Area Network (FAN), Residential Time of Use (TOU) Pilot, and Advanced Planning Tool (APT, also known as LoadSEER).

³In its November 24, 2021 Transmission Cost Recovery (TCR) Rider petition in Docket No. E-002/M-21-814, Xcel sought cost recovery for AMI and FAN. The Company explained how AMI and FAN will provide two-way communication that can increase outage response speed as well as interval data that can facilitate time dependent rates with which customers could monitor and manage their energy use. The Company described additional benefits to the grid, EVs, and data ground-truthing.

captured by Performance Based Ratemaking.⁴ In its September 25, 2023 compliance filing, the Company explained how it could calculate baselines, interim targets, and evaluate its methodologies.⁵ The Company's Petition included a PIM.⁶

III. Discussion

A. Should the Commission approve, modify, or reject Xcel Energy's 2023-2024 TCR \$62,708,031 revenue requirement, including the carryover balance, and resulting recovery adjustment factors, by class, to be included in the Resource Adjustment on bills for Minnesota electric customers for the 12 months beginning January 1, 2024?

1. Xcel Energy

As seen in Table 1, Xcel Energy requested 2023-2024 a \$62.7 million revenue requirement. As a result of previous transmission projects being moved from the TCR to base rates in Xcel's most recent rate case,⁷ when compared to 2021-2022 TCR, the current revenue requirement request is \$41.8 million lower. The Company's Petition does not include any new transmission projects.

⁴Order Approving Rider Recovery, Capping Costs, and Setting Filing Requirements issued June 28, 2023 in Docket No. E-002/M-21-814.

⁵Xcel Compliance Filing for Transmission Cost Recovery Rider filed Sept. 25, 2023 in Docket No. E-002/M-21-814. The Company set interim targets for the three years during (2023-2025) and then immediately after AMI deployment (2026-2028). The Company believed interim targets, targets different from those in its initial petition and CBA, were appropriate because the original CBA was based on benefits realized throughout the entire 20-year life expectancy of the meters and complete deployment.

⁶Xcel Initial Filing made October 31, 2023 in Docket No. E-002/M-23-467 at Attachment 15.

⁷ Docket No. E-002/GR-21-630.

Table 1. 2024 Forecast Revenue Requirement⁸

New Distribution-Grid Modernization Projects	
AGIS-ADMS	5,448,747
AGIS-AMI	36,558,134
AGIS-FAN	10,117,734
AGIS LoadSeer	596,137
AGIS-TOU Pilet	667,882
Sub-Total	\$53,388,634
Transmission Projects	
Big Stone-Brookings	0
CAPX2020 – Brookings	0
CAPX2020 – Fargo	0
CAPX2020 – La Crosse Local	0
CAPX2020 – La Crosse MISO	0
CAPX2020 – La Crosse MISO - WI	0
Huntley – Wilmarth	0
Hosting Capacity	273,411
LaCrosse - Madison	0
Sub-Total	\$273,411
Projects - Total	\$53,662,045
Adjustments	\$9,045,986
Revenue Requirement	\$62,708,031

Table 2 summarizes Xcel Energy's proposed TCR revenue requirements allocation⁹ for its Minnesota Jurisdiction.

Table 2. 2022 Implemented and 2024 Proposed Adjustment Factors¹⁰

	2022 Implemented	2024 Proposed
Total Revenue Requirements	\$104,536,270	\$62,708,031
Residential Rate / kWh	\$0.005856	\$0.005474
Commercial Non-Demand /kWh	\$0.004602	\$0.003634
Demand / kW	\$1.095	\$0.240
Critical Peak Price TOU Pilot / kWh	N/A	\$0.000625

When compared to the current TCR adjustment factor, an average residential customer using

⁸ See Xcel Petition (October 31, 2023), Attachment 7 Page 4 revenue requirement by project.

⁹ Allocation is based on Company's last rate case.

¹⁰ Petition at 12, Table 1

600 kWh per month will see a \$0.23 monthly saving. Tables 3 and 4 show Xcel Energy's updated costs and related caps for the distribution projects.¹¹

Table 3. AMI and FAN Total Costs and Cost Caps¹²

AMI Forecast O&M and Capital - in Millions											
AMI	Pre 2021	2022	2023	2024	2025	2026	2027	2028	Total	Cap	Variance
Capital	\$10.40	\$32.70	\$96.10	\$118.00	\$63.20	\$20.20	\$0.00	\$0.00	\$340.60	\$366.30	\$ (25.70)
O&M	\$3.00	\$2.30	\$6.10	\$15.70	\$16.50	\$15.50	\$0.00	\$0.00	\$59.10	\$92.90	\$ (33.80)
Total	\$13.40	\$35.00	\$102.20	\$133.70	\$79.70	\$35.70	\$0.00	\$0.00	\$399.70	\$459.20	\$ (59.50)
Fan Forecast O&M and Capital - in Millions											
FAN	Pre 2021	2022	2023	2024	2025	2026	2027	2028	Total	Cap	Variance
Capital	\$7.70	\$11.90	\$44.80	\$18.40	\$9.00	\$1.30	\$0.70	\$1.90	\$95.70	\$98.10	\$ (2.40)
O&M	\$0.60	\$0.20	\$0.20	\$0.10	\$0.10	\$0.10	\$0.00	\$0.00	\$1.30	\$6.40	\$ (5.10)
Total	\$8.30	\$12.10	\$45.00	\$18.50	\$9.10	\$1.40	\$0.70	\$1.90	\$97.00	104.5	\$ (7.50)

Table 4. ADMS Total Costs and Cost Caps¹³

ADMS Forecast O&M and Capital - in Millions											
ADMS	Pre 2021	2022	2023	2024	2025	2026	2027	2028	Total	Cap	Variance
Capital	\$48.80	\$1.10	\$1.70	\$0.90	\$0.00	\$0.00	\$0.00	\$0.00	\$52.50	\$69.10	\$ (16.60)
O&M	\$4.70	\$1.50	\$1.20	\$1.80	\$1.80	\$1.70			\$12.70		
Total	\$53.50	\$2.60	\$2.90	\$2.70	\$1.80	\$1.70	\$0.00	\$0.00	\$65.20	\$69.10	\$ (3.90)

Xcel Energy complied with November 2021 Order by excluding Hosting Capacity Analysis (HCA) costs from its next rate case if recovery is sought through the TCR Rider. According to Minn. Stat. § 216B.16, subd.7b(4), the TCR Rider allows recovery of costs related to distribution planning as outlined in Minn. Stat. § 216B.2425, subd.8. While the statute mandates biennial reporting, Xcel complies by filing the study annually, with the HCA Report submitted alongside the biennial transmission report, although as a separate document since 2018. HCA costs are outlined in the Table 5:

¹¹ Docket No. E-002/M-21-8140

¹² Petition at 21

¹³ Petition at 23

Table 5. Summary of HCA Costs¹⁴

Development Roadmap Items	Estimated Costs (+50% Contingency)	One-time or Recurring Costs	
Foundational Improvements	\$2,895,000	One-Time	
ADMS CIM Extract	\$825,000	One-Time	
CRS Integration/Cleanup	\$470,000	One-Time	
Modeling Database and Hardware	\$400,000	One-Time	
Project Team Labor	\$900,000	One-Time	
Additional Support Staff	\$ 300,000/year	Recurring	Not yet included in TCR cost recovery
Monthly Updates	\$600,000		
Additional Support Staff	\$ 600,000/year	Recurring	Not yet included in TCR cost recovery
Modeling Software Review	\$2,095,000	One-Time	

For 2023, Xcel forecasts expenses under MISO’s schedule 26 and 26A at \$135.95 million and for 2024 at \$128.59 million. These costs are expected to be offset by revenues from MISO tariffs for NSP System investments, estimated at \$140.4 million in 2023 and \$145.5 million in 2024. The result is a net negative revenue requirement of (\$3.2) million for 2023 and (\$12.3) million in 2024 for Minnesota jurisdiction. Xcel Energy states that the cost recovery is calculated in accordance with Transmission Statute and complies with previous Commission orders.

To calculate its 2024 annual revenue requirement in this filing Xcel Energy used the 9.25% return on equity (ROE), that was approved in its most recent rate case Docket.

2. Department of Commerce – Comments

The Department reviewed the \$62,708,303 revenue requirement of, including the carryover balance and resulting adjustment factors by class and concluded the proposed revenue requirements appear to be reasonable. The Department recommended approval with, as explained below, the following modification: Xcel should remove \$1,304,743 of capitalized internal labor from its total HCA capital costs for TCR revenue recovery purposes.

The Department asked Xcel, In its Information Request No. 35, the Department asked Xcel to provide the total amount of internal labor capital costs included in total HCA capital cost figure of \$2,727,933 shown in Attachment 5B of Xcel’s Petition. Xcel’s response:

The estimate for internal labor expenditures associated with the HCA investments is \$1,304,743. This is based on calculating the difference in total HCA expenditures

¹⁴ Petition Attachment 4, at 14

between TCR Attachment 5A (CWIP Expenditures Excluding Internal Labor) and Attachment 5B (CWIP Expenditures with Internal Labor).

The Department sees HCA and other capital projects to be the same as it relates to capital labor and recommended removing \$1,304,743 from TCR revenue requirement. The adjusted recovery amount would be \$61,403,560.

3. Xcel Energy - Reply Comments

In its September 15, 2023 Order in Docket No. E-002/M-22-574, the Commission approved Xcel's recovery of costs associated with new HCA requirements through the TCR Rider. Xcel laid out costs, benefits, and alternatives for the HCA project, including capitalized internal labor costs, which the Company considers essential for fulfilling the additional work mandated by the Commission.

Minn. Stat. § 216B.16, subd.7b(4) allows the recovery of costs related to distribution planning, which includes the HCA, under Minn. Stat. § 216B.2425, subd.8. Xcel view HCA as critical starting point for interconnection applications and argues that the associated investments in grid modernization are in the public interest and should be include capitalized labor costs. These labor costs are integral to executing Commission-required reporting, compliance, ongoing grid improvements.

The Department recommended the removal of \$1.3 million in capitalized internal labor costs from the total HCA costs, arguing that HCA labor costs are no different from other capital projects. Xcel disagreed, asserting that the labor required for the HCA project is unique due to the project's specific nature, and internal labor should be included in capital expenses when necessary for such essential projects. Xcel emphasized that these labor costs were not anticipated in the 2022-2024 budget at the time of their last rate case.¹⁵

B. Should the Commission approve Xcel's proposed tariff revisions and customer notice?

In its Petition Xcel provided a proposed customer notice¹⁶ and redline and clean versions of its tariff revisions.¹⁷

The Department reviewed proposed tariff revisions and customer notice and recommended approval.

C. Does the information provided by Xcel in its Petition comply with relevant ordering paragraphs in Commission Orders issued July 23, 2020 in Docket No. E-002/M-19-666

¹⁵ Xcel Reply Comments at 14-15

¹⁶ Petition, at 28.

¹⁷ Petition, Attachment 16.

and September 27, 2019 in Docket No. E-002/M-17-797?

Beginning on page 4 and throughout its Petition, Xcel addressed its compliance with the Commission Orders issued in Dockets No. E-002/M-19-666 and E-002/M-17-797.

The Department concluded Xcel complied with the Commission's Orders.

D. Does Xcel Energy's AGIS-related cost recovery request, in this docket and relevant filings cited below, comply with the Commission's June 28, 2023 Order, including Xcel's proposals for:

- 1. Baseline data for AMI/FAN metrics**
- 2. New metrics**
- 3. Interim performance targets and evaluation methods for all metrics**
- 4. PIM structure, including penalties and incentives as well as dates when the PIMs will take effect and terminate**

The topic is covered in Volume II.

E. Are new metrics more appropriate to assess Xcel's AMI/FAN performance and to use as the basis for cost recovery than metrics listed in the Commission's June 28, 2023 Order?

This topic is covered in Volume II.

F. Should the Commission allow Xcel to include the electric share of participant compensation amounts it has paid pursuant to Minn. Stat. § 216B.631 as a line item for recovery through the TCR Rider in its next TCR proceeding?

The Department noted the Participant Compensation Statute appears to be intended to promote participation by other intervenors in proceedings such as this one. As such, the Department recommended recovery approval of participant compensation expenses through the TCR Rider in Xcel's next TCR proceeding.

G. Has Xcel Energy appropriately discussed its plans to maximize the benefits of the Inflation Reduction Act (IRA) and the IRA's impact on the utility's planning assumptions pursuant to Order Point 1 of the Commission's September 12, 2023 Order in Docket No. E,G-999/CI-22-624?

Xcel stated they are working with external advisors, including Edison Electric Institute (EEI), to assess the IRA and maximize customer benefits. The IRA's primary near-term benefits are related to tax credits which are returned to customers in base rates or through Renewable Energy Standard (RES) Rider, but there are also potential benefits in future investments the Company is exploring. If any benefits relate to investments eligible for recovery through the

TCR Rider, the Company will address in greater detail in future rider filings.¹⁸

In its Information Request No. 33, the Department asked Xcel to provide a list of potential IRA benefits due to investments the Company is exploring. Xcel replied:

The Company is in the process of developing a list as part of our forthcoming filing in Docket No. E-999/CI-22-624. This report is due on August 1, 2024.¹⁹ Below is the list from August 1, 2024 filing:

Tax Credits Considered for Supply Side Resources

- o Investment Tax Credit (ITC)
- o Renewable Energy Production Tax Credit (PTC)
- o Clean Hydrogen Production Tax Credit

Tax Credits Considered for Demand Side Resources

- o Residential Clean Energy Credit
- o Home Energy Performance-Based, Whole-House Rebates (HOMES)
- o High Efficiency Electric Home Rebate Act (HEEHRA)
- o Commercial Building Energy Efficiency Tax Deduction
- o Energy Efficiency Home Improvement Credit
- o Tribal Home Electrification and Appliance Rebates Program

IV. Staff Analysis

Staff has reviewed TCR filing and parties' responses and agrees with the approval recommendations of Xcel Energy's 2023-2024 TCR.

Regarding HCA capitalized labor, Xcel has asserted that these costs are discretely attributable to the HCA. Therefore, at the agenda meeting, the Commission may want to ask the Department and other parties if they feel that Xcel has provided the necessary proof to satisfy inclusion of these costs in this proceeding. Since Xcel referenced them as recovery justification, for ease, Staff has attached Minn. Stat. § 216B.16, subd.7b(4) and the related Order Points from Docket No. E-002/M-22-574.

V. Decision Options

1001. Approve Xcel Energy's 2023-2024 TCR revenue requirement of \$62,708,031, as proposed in Xcel's November 1, 2023 Petition. (Xcel)

And

¹⁸ Petition at 9

¹⁹ Per Xcel's Response to Department Information Request No. 33. See DOC Attachment 1 to these comments.

1002. Approve the TCR adjustment factors proposed in Xcel's November 1, 2023 petition. (Xcel)

And

1003. Approve the tariff revisions and customer notice proposed in Xcel's November 1, 2023 Petition. (Xcel)

Or

1004. Approve Xcel Energy's proposed 2023-2024 TCR revenue requirement, adjusted to exclude \$1,304,743 in internal capitalized labor costs for HCA. (DOC)

And

1005. Require Xcel to revise its adjustment factors consistent with the approved revenue requirement and to file the updated adjustment factors in this docket within 15 days of the order. Delegate authority to the Executive Secretary to approve the revised adjustment factors. (Staff, if Decision Option 1004 is selected)

And

1006. Require Xcel to update the proposed tariff revisions and customer notice to reflect the Commission's decision, and to file the updated versions in this docket within 15 days of the order. Delegate authority to the Executive Secretary to approve the updated tariff revisions and customer notice. (Staff, if Decision Option 1004 is selected)

1007. Allow Xcel to include a line item for recovery of participant compensation expenses through the TCR Rider in Xcel's next TCR proceeding. (Xcel, DOC)

Attachment 1

I. Subd. 7b. **Transmission cost adjustment.**

(a) Notwithstanding any other provision of this chapter, the commission may approve a tariff mechanism for the automatic annual adjustment of charges for the Minnesota jurisdictional costs net of associated revenues of:

(1) new transmission facilities that have been separately filed and reviewed and approved by the commission under section [216B.243](#) or new transmission or distribution facilities that are certified as a priority project or deemed to be a priority transmission project under section [216B.2425](#);

(2) new transmission facilities approved by the regulatory commission of the state in which the new transmission facilities are to be constructed, to the extent approval is required by the laws of that state, and determined by the Midcontinent Independent System Operator to benefit the utility or integrated transmission system; and

(3) charges incurred by a utility under a federally approved tariff that accrue from other transmission owners' regionally planned transmission projects that have been determined by the Midcontinent Independent System Operator to benefit the utility or integrated transmission system.

(b) Upon filing by a public utility or utilities providing transmission service, the commission may approve, reject, or modify, after notice and comment, a tariff that:

(1) allows the utility to recover on a timely basis the costs net of revenues of facilities approved under section [216B.243](#) or certified or deemed to be certified under section [216B.2425](#) or exempt from the requirements of section [216B.243](#);

(2) allows the utility to recover charges incurred under a federally approved tariff that accrue from other transmission owners' regionally planned transmission projects that have been determined by the Midcontinent Independent System Operator to benefit the utility or integrated transmission system. These charges must be reduced or offset by revenues received by the utility and by amounts the utility charges to other regional transmission owners, to the extent those revenues and charges have not been otherwise offset;

(3) allows the utility to recover on a timely basis the costs net of revenues of facilities approved by the regulatory commission of the state in which the new transmission facilities are to be constructed and determined by the Midcontinent Independent System Operator to benefit the utility or integrated transmission system;

(4) allows the utility to recover costs associated with distribution planning required under section [216B.2425](#);

(5) allows the utility to recover costs associated with investments in distribution facilities to modernize the utility's grid that have been certified by the commission under section [216B.2425](#);

(6) allows a return on investment at the level approved in the utility's last general rate case, unless a different return is found to be consistent with the public interest;

(7) provides a current return on construction work in progress, provided that recovery from Minnesota retail customers for the allowance for funds used during construction is not sought through any other mechanism;

(8) allows for recovery of other expenses if shown to promote a least-cost project option or is otherwise in the public interest;

(9) allocates project costs appropriately between wholesale and retail customers;

(10) provides a mechanism for recovery above cost, if necessary to improve the overall economics of the project or projects or is otherwise in the public interest; and

(11) terminates recovery once costs have been fully recovered or have otherwise been reflected in the utility's general rates.

(c) A public utility may file annual rate adjustments to be applied to customer bills paid under the tariff approved in paragraph (b). In its filing, the public utility shall provide:

(1) a description of and context for the facilities included for recovery;

(2) a schedule for implementation of applicable projects;

(3) the utility's costs for these projects;

(4) a description of the utility's efforts to ensure the lowest costs to ratepayers for the project; and

(5) calculations to establish that the rate adjustment is consistent with the terms of the tariff established in paragraph (b).

(d) Upon receiving a filing for a rate adjustment pursuant to the tariff established in paragraph (b), the commission shall approve the annual rate adjustments provided that, after notice and comment, the costs included for recovery through the tariff were or are expected to be prudently incurred and achieve transmission system improvements at the lowest feasible and prudent cost to ratepayers.

Attachment 2**ORDER**

1. The Commission accepts Xcel's 2022 Hosting Capacity Program Report.
2. Xcel shall pursue implementation of the Monthly Updates use case.
3. Xcel shall provide information related to the Modeling Software Review RFP in a future cost recovery request proceeding.
4. Xcel shall provide more robust cost-benefit analysis for the FTSRS use case. This analysis should include benefits to developers derived from consultations with external stakeholders and whether Xcel could gain monetary savings by using internal labor to conduct the FTSRS.
5. Xcel shall provide the following information in its cost recovery request for any investment Xcel makes in its HCA and requests cost recovery for in a future TCR Rider proceeding:
 - a. the functionality of the investment(s)
 - b. analysis of alternatives to the investment(s)
 - c. clearly identifiable costs and benefits of the investment(s)
 - d. a comparison between scenarios that illustrates the impact that the investment(s) is/are expected to have.
6. In future HCA annual reports, Xcel shall do the following:
 - a. provide all actual historical and all future estimated costs related to the hosting capacity analysis broken down by cost type.
 - b. indicate where HCA costs are recovered from or where it proposes to recover the costs from.
 - c. employ a net load methodology consistent with other Company planning processes for its Load-HCA.
7. This order shall become effective immediately.