MINNESOTA
PUBLIC UTILITIES COMMISSION

Staff Briefing Papers

Meeting Date	May 7, 2026		Agenda Item **1
Company	Northern States Power Co. d/b/a Xcel Energy		
Docket No.	E002/M-25-142 In the Matter of Xcel Energy's 2025 Integrated Distribution Plan		
Issues	1. Should the Commission approve, modify or reject Xcel Energy's Proactive Upgrade Proposal? 2. What type and amount of cost cap should the Commission establish for total Proactive Distribution Upgrade costs? 3. Should the Commission approve Xcel Energy's proposed tariff pages?		
Staff	Hanna Terwilliger	hanna.terwilliger@state.m.us	651-201-2243

✓ **Relevant Documents**	**Date**
Xcel Energy – Compliance Filing, Proactive Grid Upgrade Proposal *(Public and Trade Secret)*	October 31, 2025
Order Establishing Framework for Proactive Distribution Grid Upgrades – Docket E002/CI-24-318	September 2, 2025

Initial Comments	
Office of the Attorney General	January 28, 2026
Fresh Energy	January 28, 2026
Department of Commerce *(Public and Trade Secret)*	January 28, 2026
Environmental Law & Policy Center, Cooperative Energy Futures, and Vote Solar	January 28, 2026

✓ Relevant Documents	Date
Reply Comments	
Xcel Energy	February 18, 2026
Department of Commerce	March 9, 2026
Office of the Attorney General	March 11, 2026
Environmental Law & Policy Center, Cooperative Energy Futures, and Vote Solar	March 11, 2026
Fresh Energy	March 11, 2026

Table of Contents

Acronyms

DER	Distributed Energy Resources
IDP	Integrated Distribution Plan
MN DIP	Minnesota Distributed Energy Resource Interconnection Process
NWA	Non-Wires Alternative
PUP	Proactive Upgrade Proposal
TPS	Technical Planning Standard

1. Statement of the Issues

1. Should the Commission approve, modify or reject Xcel Energy's Proactive Upgrade Proposal?
2. What type and amount of cost cap should the Commission establish for total Proactive Distribution Upgrade costs?
3. Should the Commission approve Xcel Energy's proposed tariff pages?

2. Introduction

Xcel has seen over 1.6 GW of distributed energy resources (DERs), the vast majority of which are distributed solar, interconnect with its distribution systems over the past decade. Simultaneously, adoption of electric vehicles and other beneficial electrification technologies is resulting in increasing load forecasts that are growing for the first time in decades.

The growth in load and DERs is occurring on a distribution system that is rapidly aging and facing significant costs to replace end-of-life equipment. Additionally, Xcel's system is already strained by existing DER interconnections with some areas in the Company's service territory facing decades long waits and millions of dollars in upgrade costs to interconnect new solar.

In the face of these challenges, the Legislature, through Minn. Stat. 216B.2425, Subd. 9, and the Commission, through its Integrated Distribution Planning (IDP) process, started looking into ways to more efficiently and economically manage the transformation of the distribution

system. The Legislature required Xcel Energy to forecast anticipate system upgrades to accommodate DERs and potential alternative solutions to traditional upgrades and cost allocation methodologies starting with its 2023 IDP.

Xcel filed Appendix I to its 2023 IDP in compliance with the statute, which included a discussion of potential methods of cost allocation for distribution grid upgrades.[1] The Company also included the following budgets in its 5-year budget forecast:

- $190 million for proactive system upgrades to increase DER hosting capacity.[2]
- $132 million to proactively upgrade the grid for increased load from electrification.[3]

The Commission received robust comments on this topic, a summary of which can be found on pages 42 through 53 of Staff Briefing Papers for the July 2, 2024 Agenda Meeting in Docket E002/M-23-452. Two key concepts emerged: whether Xcel should engage in proactive distribution upgrades, and how costs for such upgrades should be allocated and recovered from DER customers and ratepayers.

Commenters in Xcel's 2023 IDP generally agreed that additional record development was necessary before taking further action due to the complexities of moving from a "reactive" approach to grid planning to one that is proactive. The Commission concurred, and adopted Order Point 14 in its September 16, 2024 Order in Docket E002/M-23-452 which delegated authority to the Executive Secretary to establish a stakeholder process to develop a framework on cost allocation and proactive upgrades for Xcel Energy.

Commission Staff convened the Proactive Distribution Grid Upgrade Workgroup starting in November of 2024 and continuing through March of 2025. Members of the workgroup collaboratively developed The Proactive Distribution Upgrade Framework ("Framework"), which the Commission adopted in its September 2, 2025 Order in Docket E002/CI-24-318. The Framework is designed guide Commission in evaluating Xcel's forecasted grid upgrades that will be necessary to meet customer demand for DERs and electrification.

Under the Framework, Xcel may submit a Proactive Upgrade Proposal (PUP) for distribution upgrades that are forecasted to occur outside of the traditional five-year planning horizon. The Commission then evaluates the potential upgrades based on the Framework criteria and approves, modifies, or denies the proposal. If the proposal is approved, Xcel may proceed with construction and collect a cost-share fee to offset the cost of the upgrades from certain load and generation customers.

On October 31, 2025 Xcel Energy filed its first Proactive Upgrade Proposal in conjunction with its 2025 Integrated Distribution Plan.

On January 28, 2026 the following organizations filed initial comments:

- Minnesota Department of Commerce (Department)

---

[1] Docket E002/M-23-452, Xcel Energy, 2023 IDP Part 3 of 3, Appendix I, November 1, 2023
[2] Docket E002/M-23-452, Xcel Energy, 2023 IDP Part 2 of 3, Appendix D, November 1, 2023, p. 5 (PDF p. 94)
[3] Docket E002/M-23-452, Xcel Energy, 2023 IDP Part 2 of 3, Appendix D, November 1, 2023, p. 6 (PDF p. 95)

- Minnesota Office of the Attorney General, Residential Utilities Division (OAG)
- Fresh Energy
- Environmental Law and Policy Center, Vote Solar, and Cooperative Energy Futures (ELPC/VS/CEF)

By March 11, 2026, the following organizations filed reply comments:

- Xcel Energy (Xcel)
- Minnesota Department of Commerce (Department)
- Minnesota Office of the Attorney General, Residential Utilities Division (OAG)
- Fresh Energy
- Environmental Law and Policy Center, Vote Solar, and Cooperative Energy Futures (ELPC/VS/CEF)

On May 7, 2026 the matter came before the Commission.

In the present proceeding, the Commission has four decisions to make:

- Whether to approve Xcel's Proactive Upgrade Proposal ("Proposal") to construct a new feeder in the Phillips neighborhood of South Minneapolis to accommodate future load growth. The Department, Fresh Energy, the OAG, and ELPC/VS/CEF recommend deferring a decision until the 2027 IDP, while Xcel recommends approval in the current proceeding.
- Whether to modify how the cost share fee is calculated to include the total revenue requirement for the Proposal. The OAG recommended that since cost share fees will be an offset to the revenue requirement, the amount of the cost share fee should be based on the revenue requirement of the Proposal instead of the total capital cost. Xcel is opposed.
- Whether to establish a cost cap for all proactive upgrades. The Department recommended a $15 million cost cap, while Xcel recommended deferring a decision until Phase 2 is concluded.
- Whether to approve Xcel's proposed tariff pages implementing the proactive upgrade. There is no opposition to adopting the proposed tariffs.

3. Proactive Upgrade Proposal

Xcel's initial Proposal contains a single upgrade project located in South Minneapolis. The Company proposed adding a feeder to the existing Midtown substation, which will extend northwards through the Phillips neighborhood towards downtown Minneapolis.[4] The new feeder is estimated to have a capital cost of $3.7 million and revenue requirement of $4.8 million.[5] The upgrade's expected lifetime is estimated at 40 years and would add 12 MVA of

[4] Xcel, Proactive Grid Upgrade Proposal, p. 12
[5] Xcel, Proactive Grid Upgrade Proposal, p. 12; 16

generation hosting capacity and 13.9 MVA of load hosting capacity.[6] The Company estimated project design, permitting, and construction would take at minimum 22 months, but noted there could be delays due to the location in a dense urban neighborhood.[7]

Xcel explained that the key drivers of the Proposal are increasing EV and beneficial electrification adoption that will result in the peak load of the existing MDT077 feeder exceeding 75% of the capacity rating in 2034 and 100% in 2036. The existing feeder is also expected to switch from summer to winter peaking in 2031.[8] This met the Company's site selection criteria that a proactive upgrade would need to "address at least one overload risk identified in the five-to-ten-year forecast, with no existing funded mitigation in place to resolve or reduce that risk." [9] Xcel expected the new feeder would allow MDT077 to stay under the planned loading limit until 2045.[10]

A. Proposal Evaluation

i. Forecast

Xcel forecasts three scenarios in LoadSEER to identify future system conditions:

- **Base Case** – reflects known and expected growth in load and distributed generation.
- **High Adoption** – assumes significantly higher load growth across nearly all customer classes.
- **Expanded Non-Residential** – assumes high load growth in commercial and industrial classes, with other classes following Base Case trends.

Xcel developed individual assumptions for various load and generation components, including rooftop solar, distributed storage, energy efficiency, demand response, and electrification. For proactive upgrades, Xcel recommended using the High Adoption scenario as it "highlights how quickly distribution system capacity needs can emerge." The Company explained that given local government climate goals for electrification, using the IDP high scenario reflects the potential for rapid load growth.[11] The MDT077 feeder is also projected to switch from summer to winter peaking in 2031 due to adoption of electrified end uses. It will exceed the planning limit in 2034 (year nine of the forecast), triggering an upgrade. Xcel anticipates the upgrade will take between 22 and 26 months from design until completion, assuming no delays. The Company acknowledged that using the High Adoption scenario carries more risk than relying on the Base Case. However, Xcel also explained that because the forecasted growth is expected to come from multiple customer and load types, some of the risk is mitigated.[12]

---

[6] Xcel, Proactive Grid Upgrade Proposal, p. 13; 15
[7] Xcel, Proactive Grid Upgrade Proposal, p. 12
[8] Xcel, Proactive Grid Upgrade Proposal, p. 1-2; 13-14
[9] Xcel, Proactive Grid Upgrade Proposal, p. 10
[10] Xcel, Proactive Grid Upgrade Proposal, p. 13
[11] Xcel, Proactive Grid Upgrade Proposal, p. 6
[12] Xcel, Proactive Grid Upgrade Proposal, p. 8-9

The Department disputed the accuracy of Xcel's forecast and therefore recommended denial without prejudice.

The Department explained that because LoadSEER uses Xcel's system-wide forecast, if the system-wide forecast is inaccurate, the resulting spatial allocation will also be inaccurate. In Table 1, the Department compared the past 10 years of Xcel's system wide forecasts to actual energy sales. Red indicates when a forecasted year's energy sales are higher than the actual sales, and blue when the forecasted year's energy sales are lower than the actual sales. The Department's analysis indicated that in years six through ten, the time period upon which a proactive upgrade's need is established, Xcel has historically overestimated energy sales between 5 and 13 percent, with overestimates increasing in the out-years of the forecast.[13]

Table 1: Comparison of Xcel Minnesota Energy Sales Forecasts to Actual Energy Sales[14]

	Forecast Vintage									
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
2015	1.4%									
2016	2.1%	1.2%								
2017	3.9%	3.1%	1.5%							
2018	1.5%	0.3%	-1.4%	-3.1%						
2019	6.2%	5.2%	3.6%	0.0%	0.6%					
2020	**10.3%**	9.5%	7.4%	3.6%	4.4%	1.6%				
2021	**7.5%**	**6.8%**	4.8%	0.5%	1.1%	-2.1%	-3.1%			
2022	**7.4%**	**6.5%**	**4.1%**	-0.2%	0.4%	-3.1%	-3.7%	-2.3%		
2023	**8.6%**	**7.6%**	**5.1%**	**0.4%**	0.9%	-3.0%	-3.8%	-1.5%	-1.2%	
2024	**12.6%**	**11.5%**	**8.7%**	**3.8%**	**4.4%**	-0.3%	-1.0%	2.1%	1.5%	1.9%

Source: Docket No. E999/M-YR-11

The Department also provided Xcel's initial analysis of its 2023 LoadSEER forecast accuracy. As indicated in Table 2, the 2023 IDP Low Forecast was 6.1% higher than the actual, while the 2024 forecast was 10.1% higher.[15]

Table 2: LoadSEER Forecast Accuracy[16]

Aggregate MN Distribution Feeder Peak Load (MW)	2023	2024
Actual	**8,205**	**7,996**
2023 IDP Low Forecast	8,702 (+6.1%)	8,806 (+10.1%)
2023 IDP Med Forecast	8,708 (+6.1%)	8,819 (+10.3%)
2023 IDP High Forecast	8,715 (+6.2%)	8,837 (+10.5%)

[13] Department, 1-28-26 Initial Comments, p. 5-6
[14] Department, 1-28-26 Initial Comments, p. 5, Table 1
[15] Department, 1-28-26 Initial Comments, p. 6
[16] Department, 1-28-26 Initial Comments, p. 6, Staff adapted from Table 2

The Department contrasted this with the systemwide forecast in Table 1, which had much lower deviations between the forecast and actuals in the first and second years of the forecast.

In addition to looking at the system wide forecast, the Department also compared forecast accuracy for individual capacity projects with costs of over $5 million from the Company's 2025 IDP. The results of the trade secret analysis can be found on page 7 of the Department's initial comments.[17]

Collectively, the Department's analysis found that Xcel's forecasts overestimate energy and capacity needs, especially in the out-years of a forecast. In particular, the Department expressed concern that because use of LoadSEER is relatively new, there is not sufficient data to assess the forecast validity, which may grow exponentially in years 6-10 of the forecast.[18]

The Department also pointed out that the 2025 LoadSEER forecast was unable to account for the impacts of HR 1 as it was conducted before the repeal of Inflation Reduction Act (IRA) tax credits. While the Department acknowledged that predicting the impact of HR1 is difficult, in general it is expected to reduce the number of EV sales, which will in turn result in lower peak-load growth. Additionally, the removal of tax credits for heating and water electrification is also expected to decrease forecasted peak load. Taken together with Xcel's use of the IDP High scenario justification of the current Proposal, the Department reasoned this will further reduce peak load from Xcel's forecast.[19]

Based on this analysis, the Department concluded Xcel had overestimated the peak load used to justify the Proposal. As the expected need does not occur until year 9 of the existing forecast, the Department reasoned a revised forecast that accounts for the sources of error identified above could result in a delayed need for the upgrade. The Department recommended denying the MDT077 Proposal without prejudice and requiring Xcel to file an updated forecast and upgrade need with the 2027 IDP.

The Department also recommended long-term tracking of LoadSEER's accuracy given Xcel's expanded use of the tool in its capacity planning process. The Department believed this would be best achieved through a new IDP filing requirement, rather than as part of the Framework. In reply comments, the Department noted it was moving its recommendation to the IDP, as it believed that was a more appropriate forum to add new filing requirements.[20]

ELPC/VS/CEF had three main critiques of Xcel's forecast. First, like the Department, they were skeptical of Xcel's decision to use the High Load forecast from the IDP rather than the Base Case or Expanded Non-Residential which would have likely resulted in the need for an upgrade later than 2034. Second, ELPC/VS/CEF noted that Xcel's existing planned loading limit is designed to give the utility a buffer below the maximum equipment rating to account for delayed construction times. Finally, they explained that with the switch to a winter peaking feeder there

[17] Department, 1-28-26 Initial Comments, Trade Secret, p. 7
[18] Department, 1-28-26 Initial Comments, p. 8
[19] Department, 1-28-26 Initial Comments, p. 8-9
[20] Department, 3-9-26 Reply Comments, p. 7-8

could be an increase in rated capacity as lines are able to disperse more heat in the winter, reducing the risk of equipment damage. ELPC/VS/CEF requested more information about the specific components Xcel expects to be overloaded, and whether winter ratings would change the need for a capacity upgrade. Taken together, ELPC/VS/CEF explained the conservativeness of the forecast and planning assumptions provide Xcel a sufficient safety margin to defer approval of the MDT077 upgrade until the 2027 IDP cycle.[21]

Xcel's reply comments focused exclusively on the Department's recommendation to require ongoing tracking of LoadSEER's accuracy through comparison of historical forecasts to actuals. Xcel claimed that this retroactive assessment of the forecast was not appropriate for the proactive planning process, which already includes safeguards for the inherently uncertain nature of utility forecasts. Therefore, Xcel recommended rejection of the Department's request.[22]

Xcel countered stakeholder concerns about potential changes in circumstances by pointing to Framework provisions that allow the Company to submit modification requests or discontinue a previously approved upgrade.[23] However, both the Department and ELPC/VS/CEF pointed out that the Commission's decision on Xcel's Proposal creates a rebuttable presumption of prudence which creates a higher burden of proof for any stakeholder to counter in a cost recovery proceeding, especially as Xcel is not required to disclose changes to its forecast for approved upgrades.[24] The Department added that only Xcel may propose changes to a proactive upgrade, but it is not required to do so by the Framework. The Department contended that the Framework is meant to guide the Commission through the approval process, not give Xcel automatic approval if it submits the required information.[25]

After review of other participant Comments, the OAG echoed the Department's, ELPC/VS/CEF's, and Fresh Energy's recommendation to delay consideration of the Proposal to the next IDP. The OAG noted that further development of the Framework in Phase 2 could also assist with better evaluation of the Proposal.[26]

ii. Risk of Delay

Xcel explained that using the existing planning process for the upgrade could result in system overloads, prolonged outages, and delays in customer energization, especially if there are any delays. Due to population density in South Minneapolis, the Company expects construction to take a minimum of two years with a high likelihood of extensions due to permitting delays. The Company pointed to the short window between when MDT077 is expected to exceed the

[21] ELPC/VS/CEF, 1-28-26 Initial Comments, p. 4-5
[22] Xcel, 2-18-26 Reply Comments, p. 6-8
[23] Xcel, 2-18-26 Reply Comments, p. 2
[24] ELPC/VS/CEF, 3-11-26 Reply Comments, p. 4-5
[25] Department, 3-9-26 Reply Comments, p. 4-6
[26] OAG, 3-11-26 Reply Comments, p. 3-4

planning limit and when it would hit the full capacity rating as justification for proceeding with a proactive upgrade.[27]

ELPC/VS/CEF disagreed with Xcel's assessment that approval now is necessary to avoid the outlined risks. They pointed out that even if Xcel did not start any Proposal related activities until 2030, it would still have four years to complete construction before the forecasted exceedance of the loading standard in 2034. Therefore, ELPC/VS/CEF reiterated their recommendation that the Commission defer a decision on the upgrade until the 2027 IDP, when an updated forecast could reduce the risk of an unnecessary upgrade.[28]

Fresh Energy noted that Xcel referred to the difficulty in obtaining permits as one of the justifications for the Proposal. Therefore, it asked for the Company to provide additional information on which permits may delay upgrade construction, and any instance of where it faced similar challenges in the past. Fresh Energy explained this would assist stakeholders and the Commission in a better risk assessment of delaying the Proposal until a future IDP cycle.[29] ELPC/VS/CEF also requested better clarification on the timeline for construction and on what specific load growth thresholds would result in the start of construction, along with potential offramps if expected load growth does not occur. They also requested a more detailed cost breakdown for the different stages of project development (design, permits, equipment, etc).[30]

Xcel replied that at this stage it could provide high level assumptions but needed Commission approval prior to doing any detailed work that would result in a timeline and granular budget. The Company pointed out that the Framework is designed this way, with a process for modifications if there are material changes to the upgrade. Xcel expected that it would fund the upgrade in 2027 and 2028, with an expected in-service date of Q4 2028.[31]

iii. Projected Upgrade Benefits

In addition to the avoided risks, Xcel indicated there could be further benefits from the MDT077 Proposal. The Company outlined reliability and operational efficiency benefits which it linked to the ability more easily switching of load from one feeder to another during outages. Additionally, while the feeder has ample capacity for solar adaptation, the upgrade will further increase hosting capacity.[32]

ELPC/VS/CEF requested additional information on the expected reliability benefit, specifically how the upgrade could improve the ability to segment feeders and reduce outage risk.[33] In response, Xcel explained the new feeder would mitigate N-1 risks for nearly 4MW of load during a feeder level outage event.[34] ELPC/VS/CEF encouraged Xcel to include this type of

[27] Xcel, Proactive Grid Upgrade Proposal, p. 16
[28] ELPC/VS/CEF, 1-28-26 Initial Comments, p. 5-6
[29] Fresh Energy, 1-28-26 Initial Comments, p. 3
[30] ELPC/VS/CEF, 1-28-26 Initial Comments, p. 8
[31] Xcel, 2-18-26 Reply Comments, p. 6
[32] Xcel, Proactive Grid Upgrade Proposal, p. 14
[33] ELPC/VS/CEF, 1-28-26 Initial Comments, p. 7
[34] Xcel, 2-18-26 Reply Comments, p. 9

analysis in future proposals along with other quantification of reliability benefits such as how many customers may be transferred to the new feeder, which could help quantify reduction in outage exposure.[35]

Fresh Energy commended Xcel for choosing a site in an Environmental Justice Area of Concern where it could assist an underserved community in meeting carbon reduction and electrification goals.[36]

iv. Alternative Analysis

The Framework requires Xcel to indicate whether it performed a non-wires alternative (NWA) analysis for individual proposal upgrades, and if not, "provide a discussion of alternative measures, if any, that could be taken to mitigate the risk(s) the upgrade is intended to address, including energy-conservation, load-management measures and/or flexible interconnection."[37]

Xcel explained that it was unable to include the Proposal in its 2025 NWA analysis due to the timing of the PUP filing but it would include it in the 2026 analysis, which would include consideration of alternative measures like energy efficiency, demand response, solar, and storage.[38]

Fresh Energy and ELPC/VS/CEF acknowledged that the timing of the 2025 filings meant that Xcel was unable to do a NWA for the proposed upgrade. Both noted, however, that it was an additional reason to delay the consideration of the Proposal to 2027, as it would allow the Company sufficient time to complete the NWA and see if alternative solutions were possible.[39] ELPC/VS/CEF noted that a NWA analysis under the IDP framework is not the only alternative, and future proposals should include consideration of whether flexible interconnection or the mobile battery discussed in Xcel's 2025 IDP could defer the need for the upgrade.[40]

Xcel replied that if the 2026 analysis identified a NWA was viable for the proposed upgrade there would be sufficient time to file a modification request under section C.5 of the Framework. Therefore, the Company saw no reason for the lack of a NWA analysis to defer approval of the Proposal.[41]

v. Staff Analysis

Like stakeholders, Staff is pleased to see Xcel's first Proactive Upgrade Proposal and agrees that the Company has put together a filing that fulfill the required components of the Framework. Overall, Staff concurs with the Department, ELPC/VS/CEF, and Fresh Energy that delaying a decision on the MDT077 Proposal until the 2027 filing is unlikely to result in additional system risk given the need for the upgrade is expected in 2034 at the earliest, and there is no other

[35] ELPC/VS/CEF, 3-11-26 Reply Comments, p. 6-7
[36] Fresh Energy, 1-28-26 Initial Comments, p. 2
[37] Proactive Distribution Upgrade Framework, Section G.6. September 2, 2025 Order, Docket E002/CI-24-318
[38] Xcel, Proactive Grid Upgrade Proposal, p. 16
[39] ELPC/VS/CEF, 1-28-26 Initial Comments, p. 7-8; Fresh Energy, 1-28-26 Initial Comments, p. 3
[40] ELPC/VS/CEF, 3-11-26 Reply Comments, p. 5-6
[41] Xcel, 2-18-26 Reply Comments, p. 5

existing system work or upgrades in the same location. On the other hand, this is a new process and approval of the Proposal now would allow Xcel, stakeholders, and the Commission to pilot the Framework with a relatively small and low-cost upgrade. This may be especially useful given Phase 2 is expected to result in the Company proposing upgrades to increase hosting capacity for large, front-of-the-meter generation projects in its 2027 filing, which will likely come with an increased total proposal cost. Working out any administrative or accounting issues with this initial upgrade could result in better long-term outcomes. If the Commission chooses to approve the Proposal, Staff suggests it emphasize it is a pilot of the Framework and require the Company to submit an updated forecast for the upgrade with its 2027 IDP. Staff believes that both options, approval now or deferring a decision to 2027, are reasonable outcomes.

In its review of Xcel's ongoing rate case (Docket 24-320) and IDP (Docket 25-142) Staff observed the Company has two other planned capacity expansion projects for the Midtown substation: installation of the MDT072 and MDT064 feeders in 2026. Staff acknowledges that the timing of the planning for the various projects likely did not align but notes this an example of how the prior lack of proactive planning potentially resulted in a missed opportunity to pair existing capacity upgrade work with a longer term forecasted need. Staff suggests that in Xcel's next PUP the Company should examine existing budgeted capacity projects to ensure the planned expansions are in line with the long-term system forecast. Likewise, in the Company's future IDPs and rate cases, it may be useful for them to provide additional information about the long-term forecast for capacity upgrades and indicate whether the proposed projects will meet future needs.

Decision Option 1 approves the Proposal.
Decision Option 2 denies the Proposal without prejudice.
Decision Option 3 would require Xcel to refile the proposal in 2027.

B. Cost Recovery

Xcel indicated that, consistent with the Framework, it plans to request cost recovery through a future rate case proceeding. The Company will use a dedicated tracker to record all Proposal related costs and cost share fees, with cost share fees accruing to a regulatory liability account that will subsequently be amortized as credits to customers during the test years of a rate case. The cost share window will open when the upgrade is put into service and go through 2044, 10 years after the anticipated need date.[42] As required by the Framework, Xcel indicated it will apply the distribution allocation factors approved in its most recent rate case and will use the same Revenue Requirement calculation methodology that is applied to traditional rate base assets.[43]

Fresh Energy noted that the Commission ordered additional consideration of cost recovery methodologies during Phase 2, which could shift how the Company approaches cost recovery.

[42] Xcel, Proactive Grid Upgrade Proposal, p. 21
[43] Xcel, Proactive Grid Upgrade Proposal, p. 23

For Fresh Energy, this provided additional justification delaying consideration of the Proposal until 2027.[44]

C. Cost Share Fee Calculation

Using the methodology approved under section J.2 of the Framework, Xcel estimated the cost share fee to be $266 per kW.

$$\frac{Estimated\ Cost\ of\ Project\ (\$3.7\ M)}{Incremental\ Rated\ Capacity\ (13{,}000\ kW)} = \$\ per\ kW\ Cost\ Share\ Fee\ (\$266/kW$$

All demand-metered load customers and non-Priority Queue[45] interconnection customers connecting to either the existing MDT077 feeder or the newly constructed feeder from the Proposal in service date through 2044 would be required to pay a proactive cost share fee.[46] For example, if a 500-kW solar project interconnected on the new feeder in 2036 it would pay a cost-share fee of $133,000.

The OAG pointed out that Xcel used the total estimated *capital* cost of the upgrade to calculate the per kW fee. However, as the initial Framework approval orders Xcel to use cost share fees as an offset to the revenue requirement of the upgrades rather than an offset to rate base, the OAG determined it would be more appropriate to use the total lifetime revenue requirement as the numerator in the calculation of the cost share fee. This would, in the OAG's estimation, make the ratepayer "whole" relative to an alternative where the fee offsets the ratebase, as the cost share fee would also cover Xcel's rate of return on the Proposal. Xcel estimated the net present value of the revenue requirement for the current PUP to be approximately $4.8 million, resulting in a fee of $348/kW.[47]

In response, Xcel stated that the Commission should use the existing cost recovery methodology as outlined in the Framework, and apply any changes implemented from Phase 2 on a prospective basis.[48]

The OAG pushed back on Xcel's claim that the current calculation to use the capital cost was set in the Framework. The OAG explained section J.2 of the Framework states:

> …The fee calculation shall be the total cost of all approved Proactive Distribution Upgrades divided by the total kWac of capacity added by all approved Proactive Distribution Upgrades…

Unlike other areas of the Framework, J.2 uses "total cost" and not "capital cost," which the OAG contended left the provision open ended for the Commission to match the calculation of

[44] Fresh Energy, 1-28-26 Initial Comments, p. 3
[45] Projects up to 40kW in size along with Solar on Schools and Solar on Public Buildings projects are eligible for the Priority Queue.
[46] Xcel, Proactive Grid Upgrade Proposal, p. 20-21
[47] OAG, 1-28-26 Initial Comments, p. 2
[48] Xcel, 2-18-26 Reply Comments, p. 4-5

the cost share fee to the method of cost recovery.[49] The OAG therefore recommended **Decision Options 4 and 5**.

i. Staff Analysis

The calculation of the fee depends on the interpretation of "total cost." Staff believes the Commission could choose either the total capital cost or the total revenue requirement as J.2 is open ended, but in general Staff agrees with the OAG's assessment that the calculation of the "total cost" should match how the cost-share fees are being used to offset the cost of the upgrades. However, if the Commission does not approve the Proposal in the instant proceeding, it does not need to decide on the cost share fee today and could consider it as part of the larger Phase 2 decision.

4. Cost Cap

In the Commission's September 2, 2025 Order adopting the Proactive Distribution Upgrade Framework, it determined the total cost of proactive upgrades recoverable from ratepayers should be capped. The exact amount of the cost cap would be determined as part of the initial PUP decision. Xcel did not discuss a potential cost cap in its initial filing.

The Department noted that Xcel's initial PUP is relatively small at $3.7 million. To determine an appropriate cost cap, the Department looked at Xcel's estimated costs for various types of upgrades, outlined in Table 3.

Table 3: Upgrade Costs[50]

Upgrade Type	Cost Estimate
Feeder upgrades	$100k - $10 million
Feeder extensions	$100k - $10 million
New feeder circuits	$1 million - $15 million
Substation upgrades	$500k - $5 million
Expanded substations	$4 million - $20 million
New substations	$5 million - $50 million

The Department explained that cost cap of $10 million may be too small, and limit the scope of potential upgrades, while a $50 million cap would permit all upgrades types and potentially allow for the approval of multiple projects. Given the long lead time for proactive upgrades, the Department expressed concern that the Commission would not know whether a particular upgrade is used and useful until six to ten years after it is approved. In addition, given the uncertainty around Xcel's LoadSEER forecast, the Department recommended setting a lower cost cap in the near term while the validity of the forecast is assessed. In the Department's estimation, a $15 million cumulative cost cap would allow for several small upgrades to proceed an "pilot" the proactive planning process until more information about LoadSEER's

[49] OAG, 3-11-26 Reply Comments, p. 5
[50] Xcel, Proactive Grid Upgrade Proposal, Table 1, p. 3

accuracy is available.[51] The OAG agreed with the Department on setting a $15 million cost cap and also noted opposition to a cost cap based on a percentage of Xcel's overall distribution budget due to the rapidly increasing costs.[52]

In response, Xcel noted it may be too soon to establish a cost cap as it is unknown what scale of upgrades may be constructed via the Framework. Specifically, Xcel was concerned that a $15 million cap would be arbitrary and potentially restrict the types of investments. Instead, the Company preferred to use Phase 2 discussions to better inform whether a cost cap is necessary, and if so, the structure and amount for a future cost cap. However, if the Commission preferred to establish a cost cap now, Xcel recommended basing it on a percentage of the Company's overall distribution system capital budget with the specifics to be developed through the Phase 2 workgroup process.[53]

The Department disagreed with Xcel's assessment, stating that its "proposed cost cap is not arbitrary but is instead intended to limit the ratepayer risk of a highly speculative and uncertain process that has yet to demonstrate its merits." It reiterated the justification from its Initial Comments, but also expressed openness to further discussions during Phase 2 before implementing a cost cap.[54] **Decision Option 6** establishes a cost cap of $15 million. Taking no action would effectively defer a decision on a cost cap to Phase 2.

i. Staff Analysis

Staff notes that development of a cost cap was not referred to Phase 2, and as the Department points out, the Framework explicitly referenced approval with the initial PUP decision. That said, given the lack of record development in the instant docket Staff is not opposed to deferring the establishment of a cost cap to part of the broader Phase 2 decision. This would allow for better cap design and consideration based on additional information available from the Company's forecasted upgrades it includes as part of IDP, as well as allowing the cap to be informed by the outcome of the DSRUP proceeding.

5. Proposed Tariff Changes

The Commission's September 2, 2025 Order required Xcel to file proposed tariff pages implementing the relevant portions of the Framework. Xcel filed both clean and redline draft tariff sheets with the petition. The Company explained that the tariff sheets contain the following:

- A process for identifying, via the tariff, specific feeders subject to the Proactive Cost Share Fee.
- How the fee is applied—based on the date a complete load or generation application is submitted—and the fee amount, calculated on a per-kilowatt ($/kW) basis.

[51] Department, 1-28-26 Initial Comments, p. 10-11
[52] OAG, 3-11-26 Reply Comments, p. 6-7
[53] Xcel, 2-18-26 Reply Comments, p. 3-4
[54] Department, 3-9-26 Reply Comments, p. 8-9

- The due date for payment, consequences for nonpayment, and the dispute resolution process.[55]

The Company explained that the tariff will also include the following table, which will be filled out overtime with details of approved Proactive Upgrade Proposals.

Table 4: Proposed Tariff Table for Proactive Upgrades[56]

Feeder	Applicable to load applications submitted (or generation applications deemed complete) on or after …	Proactive Cost- Share Fee ($/kW of estimated Billing Demand [or, as applicable contracted firm demand] for load applications, and $/kW of Nameplate Rating as defined in MN DIP for generation applications)	Proactive Cost-Share Window closes for load applications submitted (and generation applications deemed complete) on or after…

Xcel requested the Commission establish a negative check-off process similar to the approach used under section 1.1.6.2 of the Minnesota Distributed Energy Resources Interconnection Process (MN DIP):[57]

> When seeking to revise the Proactive Cost-Share Fee tariff, the Company shall file a Notice with the Commission of the proposed revision. The Notice shall include a copy of the proposed revised tariff in redline format how the revision would alter the tariff. If no objection or notice of intent to object is filed within 30 days, then the proposed revision to the tariff would be considered approved by the Commission. If there is a timely filed objection or notice of intent to object, then the proposed revision would not be considered approved by the Commission and could only be used if the Commission subsequently issues a written Order authorizing its use.

The Department initially recommended a modification to add additional information about the date a cost share becomes active, but withdrew the recommendation based on Xcel's explanation that it would not add useful information for retail customers.[58]

i. Staff Analysis

Staff supports adoption of Xcel's proposed tariff and update process. However, the Commission may wish to clarify with Xcel if it would still like approval of the proposed tariff if a decision on the Proposal is deferred until 2027. **Decision Option 7** approves the proposed tariff and **Decision Option 8** establishes a negative check-off process for tariff updates.

[55] Xcel, Proactive Grid Upgrade Proposal, p. 24
[56] Xcel, Proactive Grid Upgrade Proposal, p. 24
[57] Xcel, Proactive Grid Upgrade Proposal, p. 24-25
[58] Department, 3-9-26 Reply Comments, p. 10

6. Decision Options

The Commission must choose either Decision Option 1 or 2. If the Commission selects Decision Option 2, it may also select Decision Option 3.

1. Approve the MDT077 Proactive Upgrade Proposal. *(Xcel)*

OR

2. Defer a decision on the MDT077 Proactive Upgrade Proposal until Xcel Energy's 2027 IDP. *(Department, ELPC/VS/CEF, OAG, Fresh Energy)*

3. Require Xcel to file an updated MDT077 Proactive Upgrade Proposal, including an updated forecast, in conjunction with its November 1, 2027 Integrated Distribution Plan. *(Staff modification of Department)*

Cost Share Fee

If the Commission selects Decision Option 1 it may also select Decision Options 4 and 5.
If the Commission selects Decision Option 2 it may defer a decision on the cost share fee until Phase 2.

4. Require Xcel to calculate the cost share fee by using the lifetime revenue requirement of proactive upgrade proposals as the total upgrade cost of the upgrade. *(OAG)*

AND

5. Set the Cost Share Fee for the current proactive upgrade proposal at $348 per kW. *(OAG)*

Cost Cap

The Commission may select Decision Option 6 with either Decision Option 1 or 2, or it may defer a decision on the Cost Cap until Phase 2.

6. Set a Proactive Distribution Upgrade Framework cost cap of $15 million. *(Department, OAG)*

Tariff

The Commission must select Decision Options 7 and 8 if it selects Decision Option 1. It may select them with Decision Option 2 or wait until it approves a future Proactive Upgrade Proposal.

7. Approve the Company's proposed tariff as outlined in its October 31, 2025 initial filing. *(Xcel, Department)*

8. Approve the following process for updating the Proactive Cost-Share Fee tariff:

   When seeking to revise the Proactive Cost-Share Fee tariff, the Company shall file a Notice with the Commission of the proposed revision. The Notice shall include a copy of the proposed revised tariff in redline format showing how the revision

would alter the tariff. If no objection or notice of intent to object is filed within 30 days, then the proposed revision to the tariff would be considered approved by the Commission. If there is a timely filed objection or notice of intent to object, then the proposed revision would not be considered approved by the Commission and could only be used if the Commission subsequently issues a written Order authorizing its use.

(Staff modification of Xcel)