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May 8, 2025

In the Matter of a Commission Inquiry into a Framework for Proactive Distribution Grid Upgrades and Cost Allocation for Xcel Energy

Docket No. E002/CI-24-318

INITIAL COMMENTS OF FRESH ENERGY

Fresh Energy submits these Initial Comments in response to the Commission's April 7, 2025, *Notice of Comment Period* ("Notice") regarding the Commission's Inquiry into a Framework for Proactive Distribution Grid Upgrades and Cost Allocation for Xcel Energy.

I. Introduction

Background

As Minnesota continues progressing toward its 100% Clean by 2040 law, the state's electricity system is undergoing rapid changes. The adoption of Distributed Energy Resources and electrification is posing new challenges for system planners. As of December 2023, Minnesota had 1.54 AC GW of nameplate capacity attributable to DERs, up from about 0.15 AC KW in 2016.[1] The majority of this growth has occurred within Xcel Energy's service territory and is expected to continue as the Company makes progress toward the state's carbon-free standard.[2] To facilitate this continued growth, distribution planning processes must adapt to be more proactive and create opportunities for grid investments

[1] MN PUC, DER Dashboard, https://mn.gov/puc/activities/economic-analysis/distributed-energy/der-data-dashboard/, Accessed May 6, 2025.
[2] MN PUC Docket No. 23-452, 2023 Integrated Distribution Plan, Appendix A1 pp. 67 – 68, November 1, 2023.

based on expected need, which can help reduce interconnection wait times and reduce barriers to DER adoption and electrification.

Xcel Energy is the first Minnesota utility to propose a proactive planning process. In its 2023 IDP, the Company included a $190 million budget allocation for proactive system upgrades.[3] The Company indicated this was a placeholder estimate, and it intended to seek feedback from the Commission and stakeholders on how to prioritize these funds.[4] Many stakeholders, including Fresh Energy, expressed an interest in engaging with Xcel to identify how the Company should select proactive grid upgrade projects.[5] In its September 16, 2024 Order in Docket E002/M-23-452, the Commission delegated authority to the Executive Secretary to establish a stakeholder process to develop a framework for these investments.[6] Commission Staff convened five working groups, concluding with the development of a Draft Framework, included as Attachment A of the Notice. Fresh Energy was a participant in these working groups.

The Draft Framework is a necessary and positive step toward better distribution planning to accommodate growth of DERs and electrification and Fresh Energy supports the Commission establishing a framework for Proactive Distribution Grid Upgrades. We believe this framework enables Company to identify upgrades that are in the public interest and cost-effective, particularly for behind-the-meter assets like electric vehicles and rooftop solar. Phase 2 of the proceeding will further refine this framework and create requirements for investments that enable increased capacity for front-of-the-meter resources like distributed generation. The outcome of this entire process will be a set of requirements that allows the Company to invest its proactive upgrade budget in a manner that is in the public interest and consistent with Minnesota's policy priorities.

Recommended Draft Framework Requirements

Fresh Energy is pleased with much of the Draft Framework developed through the stakeholder process. Table 1 summarizes Fresh Energy's positions on the individual requirements outlined in the Draft Framework. Fresh Energy takes no position on requirements not included in Table 1.

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[3] MN PUC Docket No. 23-452, 2023 Integrated Distribution Plan, Appendix C pp. 8 – 9, November 1, 2023.
[4] *Ibid.*
[5] MN PUC Docket No. 23-452, Xcel Energy Reply Comments, pp. 36 – 37, March 22, 2024.
[6] MN PUC Docket No. 23-452, Order Accepting 2023 Integrated Distribution Plan and Modifying Reporting Requirements, September 16, 2024.

Table 1 - Fresh Energy's Positions on the Draft Framework

Requirement	Fresh Energy Position		Requirement	Fresh Energy Position
A.1	Support		F.6	Support
A.3	Support		F.8	Support
A.5	Support		G.1	Support
A.6	Support		G.2	Support
A.8	Support		G.3	Support
A.11	Support		G.4	Support
A.14	Support		G.5	Support
A.15	Support		G.6	Support
B.2	Support		G.7	Support
B.3	Support		G.8	Support
B.4	Support		G.9	Support
B.5	Support		G.10	Support
B.6	Support		G.11	Support
B.7	Support		G.12	Support
B.9	Support		G.13	Support
B.10	Support		G.15	Support
B.11	Support		G.16	Support
B.12	Support		Section H	Support all
B.13	Support		J.1	Support
B.15	Support		J.2	Support
B.16	Support		J.4	Support
B.17	Support		J.5	Support
C.1	Support		J.6	Support
C.2	Support		J.10	Support
C.3	Support		J.11	Support
C.4	Support		J.12	Support
C.6	Support		J.13	Support
C.8	Support		J.17	Support
C.9	Support		J.18	Support
C.10	Support		K.1	Support
C.11	Oppose, push to Phase 2		K.2	Support
Section D	Support all		K.3	Support
Section E	Support all		K.4	Support
F.1	Support		K.5	Support
F.2	Support		K.6	Support
F.3	Support		K.23	Support
F.4	Support		K.26	Support

F.5	Support		Section L	No position, further discussion needed
F.7	Support		Section M	Support all

II. Fresh Energy's Assessment of the Draft Framework

In our Initial Comments on the 2023 Xcel Energy Integrated Distribution Plan, Fresh Energy proposed four "pillars" proactive upgrade investments should meet to help ensure they are in the public interest.[7] These pillars are:

1. **Useful:** Proactive upgrades should be located in a relevant spot, needed, and useful.
2. **Timely:** Proactive upgrades should be reasonably certain of being useful within a specified period of time.
3. **Efficient:** Proactive upgrades that are recovered in base rates should be paired with programs that require or encourage efficient use of the grid (such as charging/discharging at preferable times to maximize utility of the infrastructure.)
4. **Equitable:** The costs and benefits of proactive upgrades should be equitably distributed, and any upgrades recovered in base rates should prioritize projects serving under-resources areas of the system.

Fresh Energy continues to believe these pillars should be key components of any framework approved by the Commission for proactive distribution system investments. Our analysis of the Draft Framework requirements specified in Table 1 is based on their alignment with these pillars. Below, we expand on where we believe the Draft Framework aligns with each pillar.

Useful

Selecting useful upgrades starts with effective forecasting of system need. This requires granular forecasting and scenario planning to mitigate the risk of overspending or stranded assets.[8] Fresh Energy believes the Draft Framework includes adequate requirements for forecasting and provides a foundation for the Company to make data-driven grid investment decisions. As proactive planning continues to evolve both in Minnesota and across the industry, we encourage the Company and the Commission to evaluate opportunities for improved forecasting with each IDP filing.

After identifying a forecasted need, an effective framework must provide appropriate criteria for evaluating the usefulness of proposed upgrades. Fresh Energy believes the Draft

[7] MN PUC Docket No. 23-452, Fresh Energy Initial Comments, March 1, 2024, pp 19-20.
[8] PNNL, Proactive Regulatory Approaches to Electrification and Load Growth, January 2025, p. 11.

Framework provides relevant criteria for evaluating the usefulness of proposed upgrades through the requirements included in Section F and G.

To maximize the usefulness of the upgrades, the utility should demonstrate it has appropriately considered alternatives to distribution system investments, such as non-wires alternatives (NWAs).[9] Accordingly, Fresh Energy strongly supports the inclusion of requirement G.6 in the Draft Framework. While Xcel considers NWAs as part of its standard process in evaluating distribution system upgrades, Fresh Energy believes including a requirement for NWA analysis in the proactive upgrade framework is necessary for providing justification for any proactive investments. We do not think the Company should be required to duplicate any analyses, instead as part of its evaluation of potential proactive upgrades it should reference the existing NWA analysis. This will provide stakeholders and the Commission with a comprehensive understanding of the alternatives considered by the Company when evaluating a proactive upgrade proposal.

Timely

When identifying and selecting proactive investments, the Company should be reasonably certain that upgrade will be useful in the near term. One possible hinderance to timely uptake of hosting capacity could be poorly applied capacity reservations. Fresh Energy has some concerns that capacity reservation requirements could delay the uptake of newly created hosting capacity. However, we do support the concept of capacity reservations to ensure equitable access to hosting capacity for both load and generation resources. While we do not have a position on any of the specific proposals at this time, we would like to hear from other stakeholders on how the framework can strike the appropriate balance of ensuring equitable distribution while not delaying uptake. In reply comments, we will provide further analysis and a more specific position after reviewing initial comments and having additional discussions with other stakeholders.

In general, Fresh Energy believes load resources, including electric vehicles, should have priority for new capacity created through proactive investment. We also believe customer on-site distributed generation should have priority over large-scale distributed generation. We do not believe the primary purpose of proactive upgrades should be to enable large-scale front-of-the-meter projects and we do not support the socialization of costs for upgrades that solely benefit these projects. However, we are unsure of the best way to allocate capacity given the focus of Phase 1 has not been on front-of-the-meter DG. Thus,

[9] Environmental Defense Fund, Building the Grid to Need: Best Practices for Proactively Developing Distribution Grids to Support Truck and Bus Electrification, January 2024, p. 16.

we encourage other parties to engage in this topic in reply comments and look forward to continuing this discussion.

Efficient

Programs that require efficient use of the grid, such as managed charging programs, should be paired with proactive upgrades to best align electricity demand with infrastructure capabilities.[10] Currently, Xcel provides waivers for Contributions in Aid of Construction (CIAC) for grid upgrades to residential customers who enroll in managed charging programs. This incentivizes participation in managed charging programs which can help lower costs and promote efficient use of grid infrastructure.[11] Fresh Energy supports the continued use of these waivers for proactive investments, as specified in requirement K.23 in the Draft Framework. We recommend any changes to CIAC waivers to be considered in the Company's Transportation Electrification Plan, where parties can evaluate proposed changes as part of the broader portfolio of charging programs.

Equitable

Site selection

As noted in our initial comments on the 2023 IDP, Fresh Energy believes proactive investments are most likely to be in the public interest when they serve under-resourced or under-served customers or when the cost of an investment is borne by the customers benefiting from it.[12] To serve under-resourced customers, Fresh Energy supports a requirement that the Company consider the impact of a particular upgrade on under-resourced communities. We support requirements F.4 and G.10 in the Draft Framework, which require the company to consider the impact of a proposed upgrade on environmental justice communities as defined by Minn. Stat. §216B.1691, Subd. 1 (e).

Fresh Energy does have concerns that increasing hosting capacity in under-resourced communities does not lead to increased DER adoption or electrification or address service quality issues. These concerns are supported by a study conducted by Bhavin Pradhan and Gabriel Chan at the University of Minnesota which found evidence that hosting capacity for DERs is higher in disadvantaged communities and communities of color.[13] These communities also face increased service quality issues and longer duration outages. While the study does not establish a causal relationship, Fresh Energy believes it is reasonable to

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[10] Energy Systems Integration Group, Charging Ahead: Grid Planning for Vehicle Electrification, January 2024, p. 57.
[11] *Ibid.* p. 37.
[12] MN PUC Docket No. 23-452, Fresh Energy Initial Comments, March 1, 2024, p. 20.
[13] Bhavin Pradhan and Gabriel Chan, Racial and Economic Disparities in Electric Reliability and Service Quality in Xcel Energy's Minnesota Service Area, February 2024, pp. 21-22.

conclude this increased hosting capacity could be due to lower uptake of DERs in these communities. We believe Xcel should clearly articulate its strategy for addressing these disparities and ensuring the proactive planning process will not further exacerbate existing inequities. In its reply Comments, Fresh Energy would appreciate a response from Xcel to the following questions:

1. What is the Company's strategy for increasing DER adoption in communities with adequate hosting capacity that may not be candidates for proactive upgrades?
2. How will proactive upgrades benefit customers in communities with poor service quality and high hosting capacity, such as those identified in the Pradhan and Chan study?

Cost allocation

Fresh Energy supports requirement K.6, which socializes proactive upgrade costs consistent with approved rate case allocators and established revenue requirement procedures for residential customers, defined in the Draft Framework as non-Cost Share Customers. As outlined in our initial comments on the 2023 IDP, proactive upgrades that share costs across ratepayers ("shared-cost, proactive upgrades") can benefit ratepayers adopting DER and electrification measures by reducing interconnection wait times.[14] We recognize socialization creates a risk of cross-subsidization because adoption of DERs is typically concentrated in high-income households.[15] However, we believe socialization for residential customers is essential to reducing barriers to DER adoption and electrification, both of which support state policy goals. Further, Fresh Energy supports the inclusion of K.26, which requires the utility to identify and mitigate adverse bill impacts on under-resourced customers. This requirement will provide additional protection for under-resourced customers.

For large commercial and industrial customers, defined in the Draft Framework as Cost Share Customers, Fresh Energy supports requirement K.2, which charges a fee to interconnecting customers to offset costs to the rate base. This aligns with the "individually-paid, proactive upgrades" cost allocation strategy outlined in our initial comments on the 2023 Xcel IDP.[16] This approach protects customers who do not benefit directly from an upgrade by requiring an interconnecting customer to pay-down a portion of the upgrade cost through an interconnection fee, reducing the costs that are passed on to the rate base. For larger customers who may take up a significant amount of the hosting

[14] *Ibid.* p. 17.
[15] Deloitte Insights, Modernizing the distribution grid, June 12, 2024.
[16] MN PUC Docket No. 23-452, Fresh Energy Initial Comments, March 1, 2024, p. 14.

capacity created by a proactive upgrade, this cost allocation methodology is more equitable.

Under both cost allocation strategies, reporting will be an essential tool to help stakeholders and the Commission evaluate whether the framework is functioning as intended. Fresh Energy supports the reporting requirements outlined in section M of the Draft Framework and believes these requirements provide an opportunity for evaluating whether proactive investments made by the Company are equitable. We emphasize that Phase 1 represents an initial step toward a robust, proactive planning process and there will be future opportunities for revising the framework based on initial outcomes.

III. Phase 2 of the Proactive Distribution Grid Upgrade Proceeding

Fresh Energy supports the Commission establishing Phase 2 of the proactive distribution grid upgrade proceeding. We do not have a position on the timing of phase two and are comfortable with a Commission decision occurring in either Q2 or Q3 of 2027. We support the inclusion of all topics included in Attachment B of the Notice.

Additionally, we believe requirements related to coordination with distributed generation developers, as outlined in C.11 of the Draft Framework, are better suited for inclusion in Phase 2. Fresh Energy does not oppose the creation of a distributed generation working group, as proposed in C.11, but believes it would be premature to adopt these requirements before Phase 2 of the framework has been established.

Fresh Energy appreciates the opportunity to comment on the important matters under consideration here. Thank you for the Commission's time and consideration of our comments.

Respectfully submitted,

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