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**STATE OF MINNESOTA**
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February 26, 2026

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| **In the Matter of Xcel Energy's 2025 Integrated Distribution Plan** | **Docket No. E-002/M-25-142** |

**COMMENTS OF FRESH ENERGY**

Fresh Energy submits these Initial Comments in response to the Commission's November 13, 2025, *Notice of Comment Period* ("Notice") regarding Northern States Power Company dba Xcel Energy's ("Xcel") 2025 Integrated Distribution Plan ("IDP"). These comments focus on the Company's 2025 IDP and its request for certification of a mobile battery system (Notice topics 11 – 17).

## I. Introduction

On October 31, 2025, Xcel Energy filed its 2025 IDP pursuant to the Commission's September 16, 2024 Order in Xcel's most recent IDP, Docket No. E002/M-23-452.

### A. Scope of Comments

Fresh Energy appreciates Xcel putting forth an IDP that aligns with Commission requirements and continues to build on previous IDPs and Commission orders. We continue to view IDPs as essential tools for evaluating Xcel's distribution planning process and providing opportunities for stakeholder and Commission input on distribution system issues. In this IDP, Xcel has made a number of forecasting improvements in response to the Commission's most recent IDP order. The Company has also included cost-benefit analyses for two discretionary program-level

investments, something Fresh Energy is particularly interested in. We appreciate the Company engaging with stakeholders to develop these analyses and are pleased to see them included in the 2025 IDP.

Xcel's proposed distribution system budget has increased substantially since the last IDP. This mirrors a broader trend in the utility industry as increased DER penetration, load growth, and aging infrastructure require utilities to upgrade their distribution systems to meet the needs of a changing grid. Increased distribution spending puts upward pressure on rates, as utilities recover costs for capital investment in the distribution system.[1] In the current environment, where a number of factors are driving increased rates and energy affordability is becoming a challenge for more households, sound distribution planning is critical to ensure the Company's capital investments are targeted toward projects that deliver robust benefits to the Company's system and its ratepayers.

Fresh Energy is supportive of Xcel investing in its distribution infrastructure to meet Minnesota's policy goals and provide its customers with a reliable, decarbonized grid. These investments will play a crucial role in complying with Minnesota's 100% law and decarbonizing the state's economy. Given the importance of the distribution system in decarbonization and its impact on rates, it is crucial the Company's capital investments are driven by a sound, analytically rigorous distribution planning process. While the IDP is not the venue for evaluating the prudency of proposed investments, the analysis contained in an IDP is essential for supporting the evaluation of distribution system spending. As noted in the IDP planning objectives, specified in the Commission's order in Docket E002/CI-18-251, the IDP shall:

*Provide the Commission with the information necessary to understand Xcel Energy's short-term and long-term distribution system plans, the costs and benefits of specific investments, and a comprehensive analysis of ratepayer cost and value.*

Accordingly, we believe continued refinement of Xcel's distribution planning process is important. This includes more thorough consideration of programs that can help offset capital

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[1] Buchsbaum, Jesse and Kahn-Lang, Jenya. 2026. *What's Happening to Electricity Affordability? In Five Charts*, Resources for the Future, https://www.resources.org/archives/whats-happening-to-electricity-affordability-in-five-charts/

expenditures, including non-wires alternatives ("NWAs") and demand flexibility. It also includes providing more transparency into the Company's budgeting process and improving its use of cost-benefit analyses. The bulk of our comments are aimed at providing Xcel with feedback on these topics and giving the Commission recommendations for how they may be further refined in future IDPs to maximize their effectiveness. We also provide brief analysis of Xcel's request for certification of its Mobile Battery System.

Fresh Energy's comments address the following issues in the IDP:

- Forecasted distribution budget, specifically:
  - Asset Health and Reliability ("AH&R") expenditures
  - Capacity expenditures
- Xcel's approach to demand-side management and flexible load.
- Xcel's approach to NWAs.
- Xcel's cost-benefit analysis ("CBA") methodology.
- Request for certification of the mobile battery system.

**B. Summary of recommendations**

Fresh Energy's recommendations to the Commission are:

1. Accept Xcel Energy's 2025 IDP as in compliance with IDP reporting requirements.
2. Require Xcel to provide more transparency into its methodology for prioritizing AH&R projects/programs and establishing associated budgets.
3. Require Xcel to develop a methodology for estimating the expected reliability improvements from its AH&R expenditures.
4. In future IDPs or rate case applications, require Xcel to include a forward-looking CBA demonstrating that the customer benefits exceed the costs of its planned Grid Reinforcement expenditures.
5. Require Xcel to prioritize the integration of its DSM and distribution planning/operations systems and processes to more easily utilize DSM resources to address local capacity constraints.
6. If Xcel receives no responses to its NWA RFP, require the Company to work with stakeholders and developers to reconsider its approach to NWAs.
7. **[BEGIN TRADE SECRET]** [redacted]

[redacted]

[redacted]**END TRADE SECRET]**

8. Require Xcel to expand the development of CBAs to additional categories of AH&R expenditures, including its Line Equipment Renewal, Pole Related Renewal, and Cable Replacement programs.

Fresh Energy also requests that Xcel, in reply comments, explain the concept of an "overload customer minute out" and its application in the Risk Scoring Framework. We also request that Xcel address the following related to its request for certification of its mobile battery project:

- How will the Company prioritize where to deploy the battery when multiple feeders or substations have congestion constraints?
- Could the mobile battery be deployed to address reliability or service quality issues in low-income or otherwise disadvantaged areas?
- Will the mobile battery be primarily deployed to serve new customers or to address existing congestion issues?

## II. Fresh Energy's Assessment of Xcel's 2025 IDP

We appreciate the Company's engagement in the stakeholder process that preceded the submission of the 2025 IDP. The Company continues to improve its distribution planning process with each subsequent IDP, and the 2025 IDP represents a continuation of this trend.

Fresh Energy appreciates the Company's willingness to pursue cost-benefit analyses for several of its investment categories in the 2025 IDP. We also appreciate the Company hosting several workshops on this topic and allowing expert presentations on topics related to cost-benefit analysis, which informed the analyses developed for this IDP.

As discussed above, Fresh Energy's analysis is focused on ensuring proposed capital investments are supported by rigorous analysis and the Company is giving full consideration to alternatives that may help delay the need for capital investment to best mitigate ratepayer impacts while supporting a modernized grid.

These comments represent Fresh Energy's initial analysis of the issues presented in the 2025 IDP. We expect to provide additional analysis and recommendations in response to initial comments from other parties and the Company's reply comments in our reply comments, due April 9, 2026.

**Asset Health & Reliability**

Xcel's largest capital budget category is Asset Health & Reliability ("AH&R"), defined as programs to "proactively maintain and upgrade the system to reduce outages, improve performance, and manage long-term costs."[2] Xcel has budgeted $1.56 billion in 2026-2030 for AH&R in MN, a 29% increase from the $1.21 billion of MN AH&R expenditures in 2021-2025.[3]

Despite the magnitude of these planned AH&R investments, Xcel's methodology for prioritizing these projects/programs and establishing associated budgets is opaque. In response to a Fresh Energy information request seeking clarity for AH&R routine projects, Xcel responded:

> The Company employs a structured process to manage routine asset health investments ... Assets are identified through condition assessments, age, failure history, and inspection data, with emergent needs such as storm damage incorporated into planning. Projects are prioritized based on reliability, safety, and system performance … Annual budgets are determined using historical spending trends, forecasted failure rates, and lifecycle analysis, and are adjusted for emergent work and economic conditions.[4]

Furthermore, undefined amounts of the $1.56 billion 2026-2030 AH&R budget are "placeholders" and not associated with specific projects or programs. Xcel explained:

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[2] Xcel Energy's 2025 IDP, Chapter 2, p. 4.
[3] Xcel Energy's 2025 IDP, Attachment L - Tabular Data for Chap. 1-6-10, Fresh Energy analysis.
[4] Xcel Energy response to Fresh Energy IR #8.

> (W)e referred to a portion of the AH&R budget for 2026-2030 as "placeholders" because specific projects have not yet been identified. While we do not generally use the term "placeholder" in our budgeting process, these amounts represent funding for working capital, blanket projects, and programs. These types of investments provide flexibility to address emerging reliability risks, unforeseen asset failures and evolving system needs ... (amounts) are determined based on historical investment levels, asset age and condition, and reliability performance data to anticipate future requirements. This approach ensures that funding is available while providing time to refine project scopes as more detailed information becomes available in future planning cycles. … Because these types of investments are not tied to specific projects at this stage, it is difficult to quantify how much of the AH&R budget falls into the "placeholders".[5]

Additionally, despite the intent of AH&R expenditures to "reduce outages" and "improve performance", Xcel does not forecast reliability metrics[6] or project the expected reliability improvement from its planned AH&R investments. This is unusual, as many utilities have developed such methodologies to support the need for proposed reliability spending. For example:

- DTE Electric's Reliability Model calculates expected circuit-level reliability improvements (with and without major storm impacts) for several of its major programs, including tree trimming, 4.8 kV conversions, pole and pole-top maintenance/modernization, and distribution automation. In its 2025 rate case proceeding, DTE Electric applied the model to demonstrate that its proposed spending, if approved, would improve all-weather SAIDI by 57% by 2029.[7]
- Ameren Illinois Corporation ("AIC") has developed a Right-Sizing Reliability Framework in response to the Illinois Commerce Commission's order for AIC to support the level and pace of its proposed reliability-related expenditures. The four-step framework begins by projecting expected outages for certain asset classes considering climate projections, historic performance, asset age and condition, and capacity needs.

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[5] Xcel Energy response to Fresh Energy IR #24.
[6] Xcel Energy response to DOC IR #72.
[7] Michigan Public Service Commission Case No. U-21860, April 24, 2025, Direct Testimony of Allen J. Kryscynski, pp. AJK-33 – AJK-40. https://mi-psc.my.site.com/sfc/servlet.shepherd/version/download/068cs00000lnlIwAAI

> AIC then translates outage projections into pre-investment risk by monetizing the likelihood and consequence of failure. AIC next identifies investments to address system needs through its standard planning and engineering processes, categorized as baseline (maintaining existing performance) or incremental (improving performance). Finally, the full portfolio is evaluated against performance targets to generate post-investment reliability projections. In its 2026 Grid Plan filing, AIC applied the framework to demonstrate that its planned expenditures will result in achievement of its 2028-2031 SAIDI performance targets.[8]

Fresh Energy recommends that the Commission require Xcel to provide more transparency into its methodology for prioritizing AH&R projects/programs and establishing associated budgets. We also recommend that the Commission require Xcel to develop a methodology for estimating the expected reliability improvements from its AH&R expenditures. Such a methodology will be valuable for Xcel as it expands the application of cost-benefit analyses, as discussed below.

**Capacity**

Xcel's second largest budget category is Capacity, defined as "investments designed to expand or upgrade the distribution system to support load growth from both existing and new customers."[9] Xcel has budgeted $1.2 billion for MN Capacity projects for 2026-2030, compared to $220 million of actual MN Capacity expenditures from 2021-2025.[10]

Xcel states that "The uptick in the Capacity budget category is driven by the Grid Reinforcement Program and several large discrete capacity projects, including new substations and transformer upgrades to support the forecasted load growth and reliability."[11] The Company further explains, "The Grid Reinforcement Program is designed to strengthen the distribution system to accommodate growing electrification, electric vehicle adoption, and distributed energy resources.

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[8] Illinois Commerce Commission Docket No. 26-0051, January 20, 2026, Ameren Exhibit 5.0 – Direct Testimony of Brian DeMent, pp. 17-30. https://www.icc.illinois.gov/docket/P2026-0051/documents/375155

[9] Xcel Energy's 2025 IDP, Chapter 6, p. 4.

[10] Xcel Energy's 2025 IDP, Attachment L - Tabular Data for Chap. 1-6-10, Fresh Energy analysis.

[11] Xcel Energy response to Fresh Energy IR #23.

This includes upgrading service transformers, feeders, and conductors to meet planning criteria, reduce overload risk, and improve system reliability and flexibility."[12] Xcel has budgeted $108 million for the Grid Reinforcement Program from 2026-2030.[13]

As discussed further below, Xcel has developed a cost-benefit analysis ("CBA") for Grid Reinforcement. However, the CBA evaluates the cost-effectiveness of the Company's historical 2020-2024 Grid Reinforcement spending ($8 million total), not the planned $108 million from 2026-2030. Fresh Energy recommends that, in future IDPs or rate case applications, Xcel include a forward-looking CBA demonstrating that the customer benefits exceed the costs of its planned Grid Reinforcement expenditures.

Finally, Xcel prioritizes its Capacity expenditures using a Capacity Risk Scoring Framework, which includes an estimate of a project's reliability benefit based on avoided "overload customer minutes out (CMO)" [14] under normal ("system intact" or N-0) conditions. In other words, the Framework assumes that, when an equipment overload occurs under normal conditions, it directly results in customer outages. Fresh Energy disagrees with this assumption and requests that Xcel, in reply comments, explain the concept of an "overload CMO" and its application in the Risk Scoring Framework.

**Demand-Side Management ("DSM") and Flexible Load**

Fresh Energy has emphasized the importance of including DSM impacts in feeder and substation load forecasts in multiple IDPs, dating back to Xcel's initial IDP in 2018.[15] In comments addressing Xcel's 2023 IDP, we emphasized that it will become increasingly important for Xcel to be able to view DSM as a distribution-level load-modifying resource, and to be able to design DSM programs that the Company can rely on to address local distribution needs.[16]

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[12] *Id*.
[13] Xcel Energy response to Fresh Energy IR #26.
[14] Xcel Energy's 2025 IDP, Attachment D, p. 1.
[15] Fresh Energy Comments, February 22, 2019, Docket No. E002/CI-18-521, p. 4.
[16] Fresh Energy Initial Comments, March 1, 2024, Docket No. E002/M-23-452, p. 27.

Despite having 959 MW of controllable/flexible load in Minnesota through its demand response ("DR") programs[17] (14% of MN system peak), Xcel still does not account for DR in its feeder and substation load forecasts, nor is it able to fully utilize the DR resources for local peak load reductions.

Xcel explains, "We are currently unable to report distribution system locations for energy efficiency and DR programs due to the nature of our DSM offerings … Additionally, our DSM program systems are separate from those used for distribution system planning and operations."[18]

Below are excerpts from Xcel's current and previous IDPs, revealing that the Company has made little progress on this issue.

| 2023 IDP | 2025 IDP |
|---|---|
| "As we begin to refine our forecasting opportunities with updated forecasting tools, modeling software, and future AMI technology – we will gain a more granular view of the load impact of demand response. Today, without knowing the specific load shapes and comparing them to the precise capacity constrained areas, it is difficult to predict the impact to distribution. As these processes are refined, we hope to be able to match the needed load to active demand response programs and/or develop programs that can further meet these needs."[19] | "As we begin to refine our forecasting opportunities with updated forecasting tools, modeling software, and future AMI technology – we will gain a more granular view of the load impact of demand response. Today, without knowing the specific load shapes and comparing them to the precise capacity constrained areas, it is difficult to precisely predict the impact to distribution. As these processes are refined, we hope to be able to match the needed load to active demand response programs and/or develop programs that can further meet these needs."[20] |

In response to a DOC information request, Xcel further explains its challenges, stating:

> Many of the Company's DR programs can be deployed at a local level, either at a specific substation or an individual feeder—but this is not standard practice. While some programs can only be targeted at the substation level and others offer feeder level control, implementing local dispatch is a highly manual process that requires significant set up time and additional effort to restore normal configurations afterward. Program-specific rules and constraints must also be

[17] 2025 IDP, Attachment L - Tabular Data for Chap. 1-6-10, tab 'Figure 1-13', cell G4.
[18] 2025 IDP, Chapter 7, p. 19.
[19] 2023 IDP, Appendix A1, p. 42.
[20] 2025 IDP, Chapter 1, p. 48.

> managed separately for these targeted events. It is also important to note that the Company's existing DR programs were primarily designed as tools to support bulk system reliability, not localized grid needs. Shifting a program's use toward more local and targeted deployment would require the Company to evaluate customer agreements and contractual obligations to ensure compliance with established program terms.[21]

Xcel is anticipating significant local peak load growth over the next ten years, with the aggregate total of non-coincident feeder peak demands in Minnesota expected to increase from around 8.5 GW today to over 9.3-10 GW by 2035.[22] As explained above, Xcel is planning a significant increase in Grid Reinforcement expenditures to address anticipated distribution capacity constraints. However, DSM solutions can offer faster, less expensive, more flexible, and lower-risk alternatives to conventional utility capacity additions.[23]

Fresh Energy recommends that the Commission require Xcel to prioritize the integration of its DSM and distribution planning/operations systems and processes to more easily utilize DSM resources to address local capacity constraints.

**Non-Wires Alternatives ("NWA")**

In 2024, Fresh Energy expressed concerns about the feasibility of Xcel's NWA approach and the likelihood of a successful solicitation.[24] Specific concerns we raised included the following:

- To minimize the amount Xcel would pay for an NWA solution (and to increase the NWA's cost-effectiveness from Xcel's perspective), the Company is intending to compensate developers a pro-rated amount reflecting only the DER output used to address the hours of the load reduction requirement (called the Avoided Revenue Requirement or ARR split).

  Xcel acknowledges that the "actual, total cost to install the DER would be considerably higher," and assumes that "the owner of the DER asset would be willing to install the

[21] Xcel Energy response to DOC IR #97.
[22] 2025 IDP, Chapter 1, p. 73.
[23] Specian, Mike, and Alex Aquino. 2026. Faster and Cheaper: Demand-Side Solutions for Rapid Load Growth. Washington, DC: ACEEE. aceee.org/research-report/u2601.
[24] Fresh Energy Reply Comments, April 12, 2024, Docket No. E002/M-23-452, pp. 2-3.

DER at their own cost with the Company contributing only the (ARR split)."[25] Xcel further assumes that an "NWA solution could potentially be used by an NWA developer for other use cases during times when there is no load reduction requirement."[26]

Fresh Energy is not convinced that NWA developers would be willing to install DER at their own cost with Xcel contributing only the "ARR split" while relying on undefined "other use cases" for additional revenue.

- Using a similar approach, Public Service Company of Colorado ("PSCo") conducted an unsuccessful NWA solicitation in 2023, receiving zero developer proposals. PSCo requested its consultant to conduct a review of the NWA process and recommend potential changes for improvement.[27]

  Through Xcel's 2023 IDP comment process, Fresh Energy asked the Company to explain, based on PSCo's 2023 experience, what changes the Company plans to make to its NWA process to increase the likelihood of a successful solicitation. Xcel did not respond to our request.

Our previous concerns are reinforced by the fact that the Company received zero responses from developers to its 2025 RFI seeking feedback on its proposed NWA approach.[28]

Despite the lack of developer interest, Xcel intends to proceed with an NWA RFP for projects with the following prescribed "optimal" solar/storage solutions.

| | **Reinforce Parkers Lake Feeders**[29] | **Reinforce Coon Creek CNC TR1 to 50 MVA**[30] |
|---|---|---|
| Solar PV (MW) | 7.0 | 31.2 |
| Battery Storage (MW/MWh) | 2.0 / 8.5 | 8.12 / 88.28 |

[25] Xcel Energy's 2023 IDP, Appendix F, pp. 24-25.
[26] *Id.*, p. 15.
[27] DNV, *Xcel Energy NWA Independent Evaluator Recommendations for NWA Process Improvements*, September 27, 2023, https://www.dora.state.co.us/pls/efi/efi_p2_v2_demo.show_document?p_dms_document_id=1006427&p_session_id=
[28] Xcel Energy's 2025 IDP, Chapter 8, p. 18.
[29] *Id.*, Chapter 8, pp. 8-9.
[30] *Id.*, Chapter 8 (errata), p. 11.

Fresh Energy remains concerned that Xcel's proposed NWA projects are not feasible or attractive to developers. For example, Xcel did not consider land availability as a constraint when prescribing its "optimal" DER solutions.[31] Assuming 7 acres per MW, the prescribed Parkers Lake NWA solution would require an available 49 acres for the solar PV alone. The prescribed Coon Creek NWA solution would require at least 218 available acres plus land to accommodate the long-duration storage.

If Xcel receives no responses to its NWA RFP, we recommend that the Commission require Xcel to work with stakeholders and developers to reconsider its approach to NWAs.

**Cost/Benefit Analyses (CBAs)**

Fresh Energy is pleased that Xcel has included CBAs for two programs in this IDP (Breaker End-of-life Replacement or ELR and Grid Reinforcement), a good first step in providing necessary transparency into the customer costs and benefits of its AH&R spending. We applaud the Company for its willingness to engage stakeholders on this issue. We recommend the following enhancements for future CBAs:

- **[BEGIN TRADE SECRET]** [redacted]

[redacted]

[31] *Id.*, Chapter 8, p. 37.

[redacted] **[END TRADE SECRET]**

- We recommend that Xcel expand the development of CBAs to additional categories of AH&R expenditures, including its Line Equipment Renewal, Pole Related Renewal, and Cable Replacement programs.

## III. Mobile battery certification

Fresh Energy appreciates the Company's proposal of a mobile battery as a grid modernization solution and is generally supportive of the idea. However, we ask the Company to provide additional information on how it would prioritize deployment before we recommend the Commission certify the project. Specifically, Fresh Energy is interested in better understanding how the Company plans to decide where the battery will be deployed in instances where multiple feeders or substations are experiencing constraints that could be alleviated by the battery. We would also like to better understand whether the battery will prioritize serving constraints created by new customers or existing congestion issues. We understand the Company may not have a fully developed framework for prioritizing mobile battery deployment, but we are interested in

[32] Xcel Energy's 2019 IDP, Attachment M5, p. 8.
[33] Att M- ELR - CBA 2025 TRADE SECRET IN ENTIRETY, [redacted]
[34] Att N- Grid Reinforcement - CBA 2025 TRADE SECRET IN ENTIRETY, [redacted]

understanding the factors the Company will weigh in making these determinations. We ask that the Company use its reply comments to further articulate its proposed approach to mobile battery deployment.

## IV. Summary of recommendations

Fresh Energy's recommendations to the Commission are:

1. Accept Xcel Energy's 2025 IDP as in compliance with IDP reporting requirements.
2. Require Xcel to provide more transparency into its methodology for prioritizing AH&R projects/programs and establishing associated budgets.
3. Require Xcel to develop a methodology for estimating the expected reliability improvements from its AH&R expenditures.
4. In future IDPs or rate case applications, require Xcel to include a forward-looking CBA demonstrating that the customer benefits exceed the costs of its planned Grid Reinforcement expenditures.
5. Require Xcel to prioritize the integration of its DSM and distribution planning/operations systems and processes to more easily utilize DSM resources to address local capacity constraints.
6. If Xcel receives no responses to its NWA RFP, require the Company to work with stakeholders and developers to reconsider its approach to NWAs.
7. **[BEGIN TRADE SECRET]** [redacted] **[END TRADE SECRET]**
8. Require Xcel to expand the development of CBAs to additional categories of AH&R expenditures, including its Line Equipment Renewal, Pole Related Renewal, and Cable Replacement programs.

Fresh Energy also requests that Xcel, in reply comments, explain the concept of an "overload CMO" and its application in the Risk Scoring Framework. We also ask that Xcel respond to the following questions related to its mobile battery certification request in its reply comments:

- How will the Company prioritize where to deploy the battery when multiple feeders or substations have congestion constraints?
- Could the mobile battery be deployed to address reliability or service quality issues in low-income or otherwise disadvantaged areas?
- Will the mobile battery be deployed to serve new customers or to address existing congestion issues?

We appreciate the opportunity to submit these comments and look forward to continuing to engage with Xcel and other stakeholders in subsequent comment rounds.

Respectfully submitted,

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