

**STATE OF MINNESOTA  
BEFORE THE PUBLIC UTILITIES COMMISSION**

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| John Tuma          | Commissioner |

In the Matter of Xcel Energy's 2025  
Integrated Distribution Plan

MPUC DOCKET NO. E-002/M-25-142

**REPLY COMMENTS ON XCEL'S INTEGRATED DISTRIBUTION PLAN OF  
ENVIRONMENTAL LAW & POLICY CENTER, COOPERATIVE ENERGY  
FUTURES, AND VOTE SOLAR**

**April 23, 2026**

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## **I. INTRODUCTION**

In our initial IDP comments, Environmental Law & Policy Center, Cooperative Energy Futures, and Vote Solar (together, ELPC/CEF/VS) highlighted concerns about Xcel's large and growing distribution budget, as did several other parties. We pointed out that Xcel forecasts a significant increase in its distribution budget, from around \$436 million per year in the 2020-2024 period, to nearly \$900 million per year during the 2026 – 2030 period.<sup>1</sup> These affordability concerns motivated our recommendations, along with our interest in maximally leveraging distributed energy resources (DERs) and better integrating equity into distribution planning. In its reply, Xcel expressed some frustration with the volume of recommendations it received from us and others.<sup>2</sup> On the one hand, we understand the need to focus and be mindful of practicality, and we have worked internally and with other stakeholders to try to consolidate and refine our recommendations, as discussed further below. On the other hand, we emphasize that our recommendations identify key IDP elements to scrutinize in an effort to contain Xcel's distribution spending—and given the very high budgets Xcel anticipates, exploration of all possible options to reduce it and otherwise ensure adequate oversight seems warranted. This includes ensuring the Company appropriately considers all cost-effective alternatives, including DERs and other innovative solutions, like both static and dynamic flexible interconnection (FI). It also includes closer scrutiny of the Company's planning standards and other more technical decisions, many of which are discretionary and can have substantial impacts on its budgets.

ELPC/CEF/VS also note that, although we have appreciated the opportunity to engage with Xcel between IDPs, in many instances in this IDP, the Company has not substantively addressed stakeholder input. Several of the recommendations we have proposed regarding this

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<sup>1</sup> ELPC/CEF/VS Initial Comments at 22-23.

<sup>2</sup> Xcel Reply Comments at 2.

IDP are, in substance, reiterations of recommendations in the last IDP and recommendations made in interim stakeholder workshops. For example, as discussed further below and in our initial comments, ELPC/CEF/VS have given significant input regarding Xcel’s Planned Net Loading (PNL) methodology, but Xcel did not provide substantive discussion of this input or its next steps related to PNL in this IDP.<sup>3</sup> Similarly, although the Commission explicitly directed the Company to implement static FI based on the record in the prior IDP, Xcel has decided not to do so in this IDP, resurrecting the issue for further, repeated debate in this proceeding.<sup>4</sup>

In the following Section II, we respond to Xcel’s comments on several key topics. Then in Section III we summarize our recommendations, as revised from our initial comments. Specifically, we have revised some of our own recommendations and withdrawn some, including instances where we were able to combine our recommendation with another party’s recommendation. We have also indicated our support for certain other parties’ recommendations.

## II. REPLY COMMENTS

### A. Flexible Interconnection and Xcel’s Non-Compliance with the Commission’s 2024 IDP Order

Xcel’s reply comments further demonstrate the Company’s non-compliance with the Commission’s prior IDP Order on Flexible Interconnection. The Commission’s 2024 Order called for Xcel to make **both** Static Flexible Interconnection (“Static FI”) and Dynamic Flexible Interconnection (“Dynamic FI”) available. Specifically, the Order required Xcel to implement “static flexible interconnection **prior** to implementing full dynamic flexible interconnection,” and ordered Xcel to pursue “a staged approach” to Flexible Interconnection, DERMS, and

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<sup>3</sup> See ELPC/CEF/VS Initial Comments at 29; 2025 Xcel IDP Ch. 9, at 6-9; Xcel Reply Comments at Attachment A, at 9-10.

<sup>4</sup> Docket No. E-002/M-23-452, *In the Matter of Xcel Energy’s 2023 Integrated Distribution Plan*, Order Accepting 2023 Integrated Distribution Plan and Modifying Reporting Requirements, at 18, 26 ¶ 19 (Sept. 16, 2024) (“2023 Xcel IDP Order”); Xcel Reply Comments at Attachment A, at 22-23.

dynamic hosting capacity.<sup>5</sup> Xcel did not comply with the Commission's Order. It continues to take the position that static FI is not necessary and plans to prioritize dynamic FI instead.<sup>6</sup>

Xcel's position is that instead of implementing static FI as the Commission required, the Company could satisfy the Order by "evaluating" static FI and unilaterally concluding that dynamic FI would have more benefits.<sup>7</sup> However, Xcel's assessment of the relative advantages of static and dynamic FI failed to address several points raised by stakeholder comments. As ELPC/CEF/VS pointed out in our initial comments, some DER owners may prefer static FI because it provides more certainty as to power import and export schedules, and static FI provides a safe minimum fallback during times where communication outages impair dynamic FI.<sup>8</sup> Additionally, static FI can be implemented sooner than dynamic FI. Other than acknowledging that static FI is "technically feasible,"<sup>9</sup> Xcel's reply comments did not address stakeholder comments regarding applications where there are advantages to static FI over dynamic FI. Moreover, stakeholders, including ELPC/CEF/VS (commenting with Sierra Club as "Grid Equity Commenters") highlighted the benefits and importance of implementing static FI in Xcel's last IDP, which informed the Commission's decision to require implementation of static FI and a phased approach. As the Commission stated in its prior IDP Order:

For these reasons, the Commission agrees with the approach recommended by Grid Equity Commenters for developing and implementing flexible interconnection and DERMS. The phased approach will enable stakeholder involvement throughout the process and will allow Xcel to gain experience with these innovations as they are implemented. The Commission will therefore require Xcel to demonstrate its ability to integrate DERs with the tools available to it today and in the near term, including specifically through a) **implementing static flexible interconnection prior to implementing full, dynamic flexible interconnection**; and b) pursuing a

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<sup>5</sup> 2023 Xcel IDP Order at 18, 26 ¶ 19.

<sup>6</sup> Xcel Reply Comments at Attachment A, at 22.

<sup>7</sup> *Id.*

<sup>8</sup> ELPC/CEF/VS Initial Comments at 18.

<sup>9</sup> Xcel Reply Comments at Attachment A, at 23.

staged approach to implementation of flexible interconnection, DERMS, and dynamic hosting capacity.<sup>10</sup>

Xcel’s proposal for a limited, DERMS-dependent implementation of dynamic FI is no substitute for a broader rollout of static FI. In addition, in our initial IDP comments, we pointed out that the IDP failed to present key details about when and how dynamic FI will become available, especially on a system-wide basis. Xcel’s reply fails to provide any further clarity as to timing. The reply plans for a “limited DERMS deployment in Q3 2026, enabling dynamic FI on five to ten feeders selected for early use case validation.”<sup>11</sup> However, the reply does not give any additional detail as to when Xcel could feasibly implement dynamic FI on a system-wide basis. Based on the tentative timeline in Xcel’s IDP, it appears that Xcel will not even decide whether to expand dynamic FI beyond the initial pilot until 2029 at the earliest.<sup>12</sup> We note that the Commission ordered Xcel to integrate DERs “with the tools available to it today and in the near term” and contemplated the implementation of “full” dynamic FI.<sup>13</sup> A dynamic FI pilot on five to ten feeders may be a worthy pursuit and good first step, but does not come close to a “full” implementation of dynamic FI. And because Xcel’s dynamic FI pilot depends upon DERMS, it is vulnerable to cascading delays if the rollout of DERMS takes longer than planned. For this reason, the Commission should not credit Xcel’s argument that waiting for dynamic FI would be more “efficient” than developing static FI in parallel. Rather, relying solely on dynamic FI would risk delaying flexible interconnection for customers for many years.

Instead, the Commission should reaffirm what it decided in the 2024 Order and direct Xcel to implement static FI in parallel with dynamic FI. Such an approach reduces the

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<sup>10</sup> 2023 Xcel IDP Order at 18 (emphasis added).

<sup>11</sup> See Xcel Reply Comments at Attachment A, at 23.

<sup>12</sup> 2025 Xcel IDP at Ch. 7, at 5.

<sup>13</sup> 2023 Xcel IDP Order at 18, 26 ¶ 19.

development risks for both static FI and dynamic FI. Xcel has stated that static and dynamic FI share “foundational requirements.”<sup>14</sup> It stands to reason that, as ELPC/CEF/VS remarked in our initial comments, implementing static FI will allow Xcel to gain valuable experience and potentially ease the subsequent implementation of dynamic FI. That benefit would be lost by Xcel’s dynamic-only approach.

Our initial comments also recommended that the Commission order Xcel to file an interim update on their progress towards implementing static FI. That interim update remains necessary considering that Xcel continues to refuse to implement static FI and recommitted to that position in its reply comments. By failing to comply with the Commission’s 2024 Order, Xcel has already delayed static FI by two years, and the Company should not be allowed to further delay until the 2027 IDP cycle. Rather, the Commission should order Xcel to promptly implement static FI and clarify and explain its progress in the interim update. Additionally, Xcel should confirm in the interim update that it commits to implementing static FI.

While our positions on flexible interconnection remain the same as in our initial comments, ELPC/CEF/VS recognize that our recommendations overlapped with those of the Joint Solar Parties (JSP). We consulted with JSP to develop the combined, revised recommendation in Section III.

## **B. Distributed Energy Resource Management System (DERMS)**

ELPC/CEF/VS reaffirm our initial comments and recommendation regarding DERMS. We appreciate Xcel’s initial DERMS roadmap in this IDP as an important first step and suggest that the Commission should continue to require similar transparency in future IDPs during Xcel’s DERMS iterative implementation process, to ensure that Xcel’s investments are cost-

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<sup>14</sup> Xcel Reply Comments at Attachment A, at 23-24.

effective and that DERMS supports well-defined use cases that maximize their benefits to customers. The Company should coordinate with DER owners/operators to ensure that it integrates the needs and interests of DERs into its intended use cases for DERMS, such that these uses cases are actually feasible and realize their intended benefits.

In addition, we believe that the DERMS use cases that Xcel has identified may have value, but we continue to emphasize the need to develop implementation specifics. Regarding Grid DERMS and the flexible interconnection use case, we again reiterate the need for additional detail around Xcel's implementation of dynamic flexible interconnection, as discussed above and in our initial comments. In addition, we caution that while Grid DERMS may be effective at facilitating dynamic flexible interconnection, Xcel should not rely upon DERMS as a reason for forestalling static flexible interconnection. Regarding the Capacity\*Connect use case for Grid DERMS, ELPC/CEF/VS highlight that the Commission recently made its decision on Xcel's proposed program at its April 2, 2026 agenda meeting, although the written order has not yet been issued. The Commission approved Capacity\*Connect as a "learning phase," specifically requiring the Company to deploy program assets to optimize coincident distribution system benefits with bulk system benefits. To facilitate this goal, the Commission approved Xcel's deployment of a limited Grid DERMS, and also required various compliance evaluations and reports, including specifically around how DERMS dispatch decisions reflect tradeoffs between bulk and distribution system benefits. ELPC/CEF/VS look forward to continuing to engage in Capacity\*Connect as the Company rolls out the program and submits these required filings, and to exploring how the Capacity\*Connect resources can play a role in Xcel's distribution planning and investments. We also look forward to reviewing the filing related to distribution benefit value expected with Xcel's 2027 IDP.



Xcel's reply did not respond to several questions we raised regarding Aggregator DERMS use cases. We asked Xcel to elaborate on the scalable DER management use case and whether it would only apply to demand response resources. We also asked how the Aggregator DERMS use cases would relate to control of behind-the-meter solar arrays, electric school bus or vehicle-to-grid power injection on the generation side, and electric vehicle charging on the load side.<sup>15</sup> Consistent with our recommendation regarding ongoing transparency around DERMS plans and investments, we encourage the Commission to require Xcel to address these questions—either in a future cost recovery proceeding or its next IDP—prior to approving cost recovery for Aggregator DERMS investments. We also note that initial comments from the Center for Energy and Environment (CEE) identify a specific potential use case for Aggregator DERMS via a Dual-fuel Load Control pilot.<sup>16</sup> ELPC/CEF/VS view this as a concrete, promising way to explore use of Aggregator DERMS to leverage the benefits of heat pumps in utility operations.

In addition, ELPC/CEF/VS highlight that a behind-the-meter (BTM) distributed power plant (DPP) program would be another critical use case for Aggregator DERMS.<sup>17</sup> We discussed the potential benefits of a BTM DPP in our initial comments, and described its relationship to the IDP and how it could complement to Xcel's front-of-the-meter Capacity\*Connect program, which the Commission has now approved.<sup>18</sup> Moreover, as we have emphasized in Xcel's pending rate case, a BTM DPP would also allow Xcel to better leverage existing investments—primarily its Advanced Grid Intelligence and Security initiative (AGIS), but also its Advanced

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<sup>15</sup> ELPC/CEF/VS Initial Comments at 39.

<sup>16</sup> CEE Initial Comments at 5-13.

<sup>17</sup> Distributed Power Plant (DPP) and Virtual Power Plant (VPP) are interchangeable terms. We used DPP in our initial comments in this docket and in our Capacity\*Connect comments and therefore use it here, although we have used VPP in other proceedings, including Xcel's pending rate case. In all cases, we refer to the same concept.

<sup>18</sup> See ELPC/CEF/VS Initial Comments at 11-12.

Metering Infrastructure (AMI)—to provide additional ratepayer benefits.<sup>19</sup> A BTM DPP program would harness customer and third-party capital investments to deliver capacity and, where sited and dispatched appropriately, distribution-system value—reducing the pool of needs that Xcel would otherwise meet through its own capital-intensive infrastructure. Given the near-doubling of Xcel’s annual distribution budget from the 2020–2024 period to the 2026–2030 period, the Commission should be particularly attentive to cost-effective alternatives that leverage resources ratepayers are not paying to build. A BTM DPP program is among the most promising of those alternatives.

ELPC/CEF/VS recognize that in the Capacity\*Connect proceeding the Commission decided only to require Xcel to submit a report on the progress of its Colorado Aggregator Virtual Power Plant Program (AVPP) and its relevance to Minnesota with its 2027 IDP. However, given the potential of a BTM DPP to serve as a cost-effective alternative for distribution investments, we urge the Commission to reconsider requiring the Company to file a BTM DPP program proposal in a separate docket by July 1, 2027, as recommended by many parties in the Capacity\*Connect proceeding. Xcel emphasized in its reply comments that the IDP is not the appropriate forum to develop such a DPP program and we agree.<sup>20</sup> Nonetheless, a BTM DPP is inherently interrelated with both distribution and resource planning, and a successful program could help mitigate both distribution and capacity costs for ratepayers. Considering that Xcel’s very large proposed distribution budgets are now front and center in this

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<sup>19</sup> Docket No. E002/GR-24-320, *In the Matter of the Application of Northern States Power Company for Authority to Increase Rates for Electric Service in Minnesota*, Initial Brief of Joint Intervenor, at 50-54 (Jan. 28, 2026); Docket No. E002/GR-24-320, *In the Matter of the Application of Northern States Power Company for Authority to Increase Rates for Electric Service in Minnesota*, Direct Testimony of William D. Kenworthy on Behalf of the Joint Intervenor, at 39-44 (Aug. 22, 2025).

<sup>20</sup> Xcel Reply Comments at Attachment A., at 34.

proceeding, we encourage the Commission to reassess its position and to act more proactively to require Xcel to pursue a BTM DPP offering alongside Capacity\*Connect.

### **C. Integration of Equity Considerations**

In our initial comments, ELPC/CEF/VS recommended that Xcel deliberately and transparently integrate equity considerations into its distribution planning and investment prioritization processes.<sup>21</sup> In addition to our specific recommendations related to developing such planning mechanisms and describing them in the 2027 IDP, we also recommended that Xcel track its progress within Xcel's Safety, Reliability, and Service Quality (SRSQ) reports. We offered concrete examples of utilities that have implemented such a paradigm, namely Consumers Energy and DTE in Michigan,<sup>22</sup> which Xcel could learn from and adapt to its own particular systems and processes.

In reply, Xcel characterized our recommendations as "insufficiently defined."<sup>23</sup> We disagree and note the specificity of what we have asked the Company to develop and the specific examples we have identified for its reference at other utilities. From our perspective, the Company is best suited to develop the implementation details of any equity prioritization criteria and process the Commission may order. ELPC/CEF/VS would welcome the chance to collaborate with the Company on such an effort. Xcel went on to point to its other equity-related efforts, including the Environmental Justice Accountability Board (EJAB).<sup>24</sup> While ELPC/CEF/VS appreciate the importance of these efforts, they do not address the ongoing need to integrate equity considerations into planning to address the underlying processes that have led to existing, demonstrated disparities which are the subject of ongoing tracking and discussion

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<sup>21</sup> ELPC/CEF/VS Initial Comments at 43.

<sup>22</sup> ELPC/CEF/VS Initial Comments at 44.

<sup>23</sup> Xcel Reply Comments at Attachment A, at 10.

<sup>24</sup> Xcel Reply Comments at Attachment A, at 10.

within Xcel's SRSQ proceedings. We continue to support Xcel's tracking of potential disparities in the SRSQ process, but the IDP is the appropriate forum to directly address planning and process issues holistically. Therefore, we reaffirm our recommendations from initial comments.

#### **D. Targeted Undergrounding Proposal**

Integrating equity considerations is particularly salient for Xcel's targeted undergrounding program. ELPC/CEF/VS reiterate our initial comments regarding Xcel's targeted undergrounding proposal and emphasize the need for Xcel to consider equity when deciding which targeted undergrounding projects to prioritize. While we are encouraged by Xcel's plans to have a third-party perform an independent evaluation of equity considerations, we would like Xcel to present more concrete details as to how it will incorporate the equity study into the selection of targeted undergrounding projects. As we pointed out in our initial comments, the IDP gives few specifics on how the third-party evaluation will be used besides strengthening informational community outreach to underserved or historically disadvantaged areas.<sup>25</sup> It does not explain how (or if) the third-party evaluation will play a role in choosing which feeders will be undergrounded.

Xcel's reply comments responded that "[b]ecause targeted undergrounding is a capital-expenditure program, the Company must also adhere to the Commission-ordered third-party equity study before modifying its approach."<sup>26</sup> Even if that is case, the Commission's order does not preclude Xcel from formulating a plan with specific steps for how it plans to use the third-party study, and indeed, the third-party study will be most effective if Xcel has an implementation plan ready when the third-party study results are released.

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<sup>25</sup> ELPC/CEF/VS Initial Comments at 33-34; *see also* 2025 Xcel IDP at Ch. 2, at 20, 24.

<sup>26</sup> Xcel Reply Comments at Attachment A, at. 28.

In addition, Xcel responded in its reply comments to ELPC/CEF/VS's recommendation to explore use of the Interruption Cost Estimate (ICE) 2.0 methodology from Lawrence Berkeley National Laboratory (LBNL)<sup>27</sup> to identify and prioritize investments in low-income and other vulnerable communities. We made this recommendation for targeted underground projects specifically as well as for distribution investments more generally.<sup>28</sup> Xcel stated, "The Company finds these recommendations vague and notes that the ICE tool inherently favors higher-usage, higher-income communities, limiting its usefulness for equitable prioritization."<sup>29</sup> To clarify what we mean, in estimating costs of interruptions module of the tool, the ICE Calculator 2.0 allows users to vary the percentage of residential customers in different income levels. This feature would allow the Company to reflect the disproportionate impact of outages on lower income customers as expressed in cost per event as a percentage of daily household income (CPE-PDHHI). ELPC/CEF/VS continue to recommend the Commission require the Company to explore use of this tool for identifying and prioritizing distribution investments generally and for targeted undergrounding projects specifically.

#### **E. Planning Standard Review**

ELPC/CEF/VS support continued inquiry into Xcel's planning standards and whether adjustments may be warranted. In initial comments, the Department of Commerce (Department or DOC) recommended both cyclical and ad hoc planning standard review processes.<sup>30</sup> As the Department explained, it "prefers a nuanced review of Xcel's planning standards, in coordination with Xcel engineers, to weigh the costs and benefits of Xcel's capacity planning standards

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<sup>27</sup> <https://icecalculator.com/>

<sup>28</sup> ELPC/CEF/VS Initial Comments at 34, 46, 49-50.

<sup>29</sup> Xcel Reply Comments at Attachment A, at 27.

<sup>30</sup> DOC Initial Comments at 19-26 (recommendations C.5-C.9).

regarding cost and the increased risk of outages.”<sup>31</sup> ELPC/CEF/VS agree and support the Department’s recommendations. They are consistent with the Commission’s direction in the last IDP to review Xcel’s Planned Net Loading (PNL) methodology (discussed in our initial comments and in subsection II.F below) and our recommendations in initial comments related to N-1 contingency planning and use of emergency ratings.<sup>32</sup>

We strongly disagree with Xcel’s position that IDP proceedings can only review how Xcel’s planning standards are applied, and that reviewing or discussing adjustments to the planning standards themselves should be off limits.<sup>33</sup> Xcel argues for deference by asserting that its planning standards are developed through a “carefully refined and highly technical engineering process.”<sup>34</sup> But even if the planning standards are technical in nature, Xcel should be able to explain its engineering judgment to the Commission and articulate why the planning standards should remain as they are. Boilerplate assertions of engineering expertise are not sufficient, especially given that planning standards affect when capital investments in capacity are triggered and how they are justified, which directly impacts budgets and spending. Nor can Xcel argue categorically that any Commission review of Xcel’s planning standards would go beyond “regulatory oversight” and compromise Xcel’s “application of engineering judgment.”<sup>35</sup> Engineering-based judgments must still be reasonable and prudent. Reliability and safety are paramount, and at the same time it is appropriate to scrutinize the Company’s planning standards, especially given their impact on distribution budgets and, in turn, affordability.

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<sup>31</sup> DOC Initial Comments at 23.

<sup>32</sup> ELPC/CEF/VS Initial Comments at 27-32.

<sup>33</sup> Xcel Reply Comments at Attachment A, at. 1.

<sup>34</sup> Xcel Reply Comments at Attachment A, at 1.

<sup>35</sup> Xcel Reply Comments at Attachment A, at. 1.

Moreover, Xcel's application of its own planning standards shows that the Company does tolerate variances from those standards when it sees fit. As the Department of Commerce pointed out in its initial comments, 27% of Xcel's existing feeders are currently exceeding the load limit set by Xcel's N-0 planning standard.<sup>36</sup> Xcel's reply comments did not respond to the Department of Commerce's example, and did not explain why the Company had allowed such a large proportion of feeders to exceed the N-0 planning standard.

For these reasons, we support the Department of Commerce proposals to establish an eight-year review cycle of Xcel's planning standards (DOC C.6), to establish an ad hoc system planning standard review process (DOC C.7, as modified by the Department's reply comments), and to order Xcel to disclose all changes to its system planning standards in its IDP (DOC C.8). In addition, we have worked with the Department to modify its recommendation for the first cycle of capacity planning standard review in Xcel's 2027 IDP (DOC G.1) to incorporate our recommendation in our initial comments related to N-1 contingency planning and use of emergency ratings. We now support this Department recommendation G.1 as modified and withdraw our N-1 recommendation from initial comments.

#### **F. Updated Planned Net Loading (PNL) Methodology**

We reiterate our comments that Xcel's 2025 IDP needs to provide more details on its proposed seasonal dependability factors for the PNL. Xcel has failed to substantively describe the results of its evaluation of alternative PNL methodologies. The Commission should not allow Xcel to delay and defer its response until the next IDP cycle. Xcel's reply comments on the 2025 IDP are telling: the Company insists that it should not have to present seasonal DF<sub>PV</sub> values until the 2027 IDP, but does not give any justification besides asserting that "accelerating

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<sup>36</sup> DOC Initial Comments at 19-20.

implementation is not feasible given the timing and structure of the current cycle” and that interim filings would amount to “duplicative reporting requirements.”<sup>37</sup> Xcel fails to explain why it is not feasible to immediately present seasonal DF<sub>PV</sub> values. Proposing specific seasonal DF<sub>PV</sub> values is only the first step in their implementation, and as we pointed out in our initial comments, Xcel already has month-by-month solar generation output data and presented it in the IDP.<sup>38</sup> Xcel has given no reasoning for why it needs another **eighteen months** to perform a straightforward calculation. The Commission should require Xcel to present DF<sub>PV</sub> values by December 31, 2026, so that stakeholders can begin engaging with the Company on its proposed DF<sub>PV</sub> values sooner, rather than allowing Xcel to delay discussions until 2028.

We also point out that, like the IDP, Xcel’s reply fails to substantively describe the results of its evaluation of alternative PNL methodologies. The only alternative PNL methodology discussed by Xcel’s reply are the seasonal DF<sub>PV</sub> values.<sup>39</sup> The reply does not offer any substantive evaluation of the other methodologies identified in our initial comments and prior workshops, such as solar generation profiles based on geographic region or calculating PNL based on more granular, hourly generation profiles.<sup>40</sup> We would echo the Department of Commerce’s guidance that a rigorous evaluation of alternatives should perform a sensitivity analysis.<sup>41</sup> Here, Xcel could have modeled metrics for different alternative PNL methodologies, such as the number of nodes (feeders or substations) that would be overloaded, but did not do so in the 2025 IDP. Xcel has said that it will “continue engaging with stakeholders as we enhance

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<sup>37</sup> Xcel Reply Comments at Attachment A, at 9.

<sup>38</sup> ELPC/CEF/VS Initial Comments at 29-30.

<sup>39</sup> Xcel Reply Comments at Attachment A, at 9-10.

<sup>40</sup> Xcel Reply Comments at Attachment A, at 9-10; ELPC/CEF/VS Initial Comments at 28.

<sup>41</sup> Department of Commerce Initial Comments at 16.



PNL assumptions and tools.”<sup>42</sup> The Commission should reinforce that engagement process by ordering Xcel to demonstrate that it has substantively evaluated alternative PNL methodologies.

**G. Proposed Cost-Benefit Analyses and Investigation into Value of Reliability**

We agree with the Department of Commerce in principle that cost-benefit analysis can be an appropriate tool to protect affordability for ratepayers and target grid investments in a cost-effective manner. We view such analysis as a complementary tool to the planning standard review process the Department has proposed, which we support as discussed above. Reasonable reliability is expected for standard electric service, so there is an essential role for standards to ensure individual customers do not experience repeated and/or significant disruptions simply because mitigation measures would be deemed economically inefficient under a cost-benefit analysis. This is primarily impactful when considering individual capital investments to address conditions such as frequent or long-duration outages. From a portfolio perspective, however, cost-benefit analysis provides a useful understanding of the overall impact on customers more broadly. Cost-benefit analyses, in combination with impacts to high-needs areas, combine to form a more complete picture of the impact and necessity of reliability investments over a given time period.

We share the Department of Commerce’s concerns that when Xcel presents justifications for new spending, those justifications can lack transparency and methodological rigor. We would add our concerns that Xcel runs into the same problem when it dismisses alternatives without fully considering the benefits of the alternatives, such as Xcel’s refusal to implement static flexible interconnection and failure to move forward with alternative PNL methodologies. We agree with the Department of Commerce that where possible, Xcel needs to provide “proof,” or

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<sup>42</sup> Xcel Reply Comments at Attachment A, at 10.

some form of quantitative evidence, that it has chosen the best possible alternative.<sup>43</sup> We agree that vague, qualitative, or “generic” assertions about the efficacy of a chosen alternative are not sufficient. Going forward, we would encourage Xcel’s future IDP submissions to rigorously analyze and quantify the benefits, where feasible, of Xcel’s preferred course of action as well as the alternatives.

More specifically, for those reasons, we support the Department’s recommendation to investigate the value of reliability. As the Department states: “While no one wants power outages, no one wants their power bills to go up either. The benefits of reliability must be weighed against the costs to obtain that reliability. There may be circumstances in which the increased risk of outages is preferrable to significant capital expenditures to abate them.”<sup>44</sup> While the Department initially requested additional information from Xcel related to the value of reliability,<sup>45</sup> it now proposes that the Commission require a docketed investigation of this issue, and we support this recommendation.

In addition, ELPC/CEF/VS clarify that we did not make the recommendations Xcel attributes to our initial comments. In its reply comments, Xcel states: “CEF/ELPC/VS recommended that we continue and deepen stakeholder work to define ‘discretionary,’ enumerate benefits, and develop program level CBA methods.”<sup>46</sup> However, in our initial comments, we only referenced the Commission’s prior order on these points and generally supported use of such cost-benefit analyses as a tool. We indicated we may comment further in these reply comments. Now, along with the Department’s recommendation described above, we also support Fresh Energy’s recommendations related to cost-benefit analyses, which we

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<sup>43</sup> Department of Commerce Initial Comments at 14.

<sup>44</sup> Department Initial Comments at 36.

<sup>45</sup> Department Initial Comments at 36.

<sup>46</sup> Xcel Reply Comments at Attachment A, at 14.

understand Fresh Energy has revised in its reply comments.<sup>47</sup> Fresh Energy has suggested using ex-ante or forward-looking cost-benefit analyses and estimating the customer costs and benefits of planned program expenditures, as well as reflecting the present value of costs and benefits over the life of assets. ELPC/CEF/VS agree with Fresh Energy's framing of these recommendations as "enhancements" for future CBAs, building off the changes Xcel has already begun to make in this 2025 IDP. In addition, we support the Department's recommendation that, for large investments (>\$25 million), the Commission should require Xcel to perform a cost-benefit analysis given the outsize importance of the cost-effectiveness of such proposals.

## **H. Wildfire Mitigation Plan**

In reply comments, Xcel states that it "remains committed to transparent, risk-based planning and to strengthening wildfire mitigation practices through the forthcoming WMP [Wildfire Mitigation Plan]."<sup>48</sup> ELPC/CEF/VS appreciate this commitment and are hopeful that the Company will address our recommendation related to a Minnesota-specific risk assessment in the WMP. We note that we have coordinated with the Department to integrate our recommendation into its wildfire-related recommendation. We now support DOC H.2 and H.3 as modified by the Department and withdraw our original recommendation, including for a 2026 risk assessment filing.

## **I. Forecasting Results and Methodology**

ELPC/CEF/VS generally agree with DOC's recommendations concerning retrospective forecast and project reporting. Specifically, we agree with the Department that future IDPs should retrospectively analyze the accuracy of Xcel's load forecasts (DOC recommendation F.1)

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<sup>47</sup> Fresh Energy Initial Comments at 12-13.

<sup>48</sup> Xcel Reply Comments at Attachment A, at 27.

and compare the forecasted versus actual outcomes of large new spending projects that have a five-year budget over \$25 million (DOC recommendation C.3).

We disagree with Xcel's position that retrospective analysis of forecast accuracy is an unnecessary exercise.<sup>49</sup> Xcel's objections to the contrary miss the point. While it is true that forecasts will inevitably differ from actual load due to factors such as weather variability and customer behavior, over the long run, forecasts need to be recalibrated if they **systematically** overestimate load year-by-year. This is particularly impactful when considered alongside the Proactive Distribution Upgrade Framework, which relies on forecast accuracy to an even greater extent.<sup>50</sup> Xcel's reply comments focus on random variation in load, but fail to address DOC's contention that its forecasts may be skewed.<sup>51</sup> The load forecast is important enough, and has a large enough impact on distribution planning, that Xcel should find it worthwhile to invest resources into confirming its accuracy.

Similarly, we believe it would be beneficial to compare the forecasted versus actual outcomes of large spending projects. For instance, if Xcel were to spend \$25 million on a particular grid construction project to reduce customer outages, it would make sense to compare Xcel's forecasted reduction in CMOs versus actual changes. We understand that large projects are affected by changes in operating conditions and customer needs, and we do not expect projects to conform to original designs or achieve targeted outcomes 100% of the time. But measuring the overall forecast accuracy and looking for any consistent skew is important.

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<sup>49</sup> Xcel Reply Comments at Attachment A, at 7.

<sup>50</sup> *In the Matter of a Commission Inquiry into a Framework for Proactive Distribution Grid Upgrades and Cost Allocation for Xcel Energy*, Docket No. E-002/CI-24-318, Order Establishing Framework for Proactive Distribution Grid Upgrades (Sept. 2, 2025) (for instance, criterion E.5 requires proactive upgrades to be based upon forecasted need, and criterion G.7 considers the forecast's degree of certainty).

<sup>51</sup> Xcel Reply Comments at Attachment A, p. 7; Department of Commerce Initial Comments at 38-39.

### III. CONCLUSION AND SUMMARY OF RECOMMENDATIONS

ELPC/CEF/VS summarize our recommendations below. This list should take the place of the recommendations in our initial comments. After discussing with other commenting parties, we have revised or withdrawn several of our original recommendations. In addition, after reviewing initial comments and discussions with parties, we support several recommendations from other parties.

#### **ELPC/CEF/VS recommend that the Commission:**

- Accept Xcel Energy's Integrated Distribution Plan, contingent on the recommendations for additional information and next steps detailed in these reply comments and our initial comments.
- *Revised to integrate ELPC/CEF/VS with JSP:* Enforce 2024 IDP Order Point 19 and require Xcel to:
  - A. Revise its Flexible Interconnection proposal to develop and implement Static FI in the near term, prior to or in parallel with implementing full, Dynamic FI.
  - B. Order Xcel to file, by December 31, 2026, a report on their FI efforts and plans in this docket, and include a specific update on their progress towards implementing static FI including elements such as technical standards, customer-facing documentation, and enablement timelines;
  - C. Order Xcel to include updated information on Flexible Interconnection in its 2027 IDP, including the number of new load and DER connections utilizing static FI, the capacity made available as a result, and progress towards dynamic FI rollout;
  - D. Require Xcel to incorporate and otherwise address discussions and learnings from the DGWG process in its 2026 and 2027 filing; and,
  - E. Require Xcel to review materials from Ameren and CHARGED, who have worked extensively on Flexible Interconnection and present key considerations. We recommend that Xcel incorporate these considerations into its program design and address these materials in its 2026 report and 2027 IDP.
- Order Xcel to rectify PNL deficiencies during the current IDP cycle. Specifically, ELPC/CEF/VS recommend that the Commission:
  - A. Order Xcel to file, by December 31, 2026, an interim update that: (1) demonstrates that it has given due consideration to the alternative PNL methodologies presented by stakeholders and substantively evaluates those methodologies; (2) provides specific details about the seasonal dependability factors, including the percentages it plans to use and which months would apply

to each season; and (3) analyzes the impacts of those seasonal dependability factors; and,

B. Order Xcel to address its implementation of these topics in its 2027 IDP.

- Require Xcel to integrate equity considerations explicitly and transparently into its targeted underground program from the start to ensure that communities facing disparities in reliability appropriately benefit in a timely manner. In addition, the Commission should require the Company to explore using the ICE 2.0 Calculator from Lawrence Berkeley National Laboratory to inform this integration. To the extent the ongoing third-party study provides additional insights, Xcel should incorporate those, as well; however, there is no reason to delay consideration of equity when the Company has already identified disparities in reliability and targeted undergrounding as a solution.
- Require Xcel to report annually on its targeted undergrounding program. We suggest these reports should include the following data: number of undergrounding projects; number of projects in Environmental Justice areas; actual undergrounding project costs; drivers for projects (engineering, equity, other); and description of community engagement efforts.
- Require Xcel to continue to describe its DERMS plans, use cases, and stakeholder engagement in its Integrated Distribution Plans.
- *New recommendation:* Direct Xcel to collaborate with stakeholders to develop and file in a separate docket a proposal for a complementary market-driven behind-the-meter Distributed Power Plant (or Virtual Power Plant) program by July 1, 2027.
- Require Xcel, before filing its next IDP on November 1, 2027, to:
  - A. Establish equity-informed prioritization criteria for distribution investments. The Commission should require Xcel to develop and implement systematic criteria that prioritize investments addressing documented service disparities. The Company should weight these criteria appropriately in its distribution project scoring and prioritization processes.
  - B. Integrate equity requirements into the IDP process. The Commission should require Xcel to demonstrate in its IDP filings how it will systematically and transparently incorporate equity considerations into distribution planning and investments. We note that this may mean that the Company would prioritize system upgrades in communities that would bear disproportionately greater impacts from outages, such as spoiled food or medicine, including low-income and otherwise vulnerable communities.
  - C. Implement transparent reporting on equity outcomes. The Commission should require Xcel to report on reliability improvements and infrastructure investments by environmental justice area, income level, and racial composition in its Safety, Reliability, and Service Quality annual reports, just as the Company reports on reliability or other dimensions of utility performance. This reporting should demonstrate whether rate-funded investments are systematically addressing documented disparities or perpetuating inequitable service patterns.

Xcel should discuss its implementation of these requirements in its 2027 IDP.

- Require Xcel to explore use of the Interruption Cost Estimate 2.0 methodology from Lawrence Berkeley National Laboratory to identify and prioritize investments in low-income and other vulnerable communities.

**ELPC/CEF/VS support the following recommendations from other stakeholders.** If there are any discrepancies in the text of the recommendations below, ELPC/CEF/VS defer to the original authors of the recommendations. Regarding recommendations DOC C.4 through C.9 and the two new DOC recommendations, ELPC/CEF/VS worked with the Department and other stakeholder groups to develop these as joint recommendations.

- DOC C.3. – The Department recommends the Commission order all new Xcel spending projects with a five-year budget over \$25 million, that were approved for cost recovery since 2021, report five years of actual outcomes compared to forecasted outcomes in the IDP.
- DOC C.4. – The Department recommends that the Commission create a new filing requirement which states: All new distribution spending projects and programs with an estimated historical or forecasted five-year budget of \$25 million or greater shall, at minimum, address the following:
  - A. Estimated cost or range for the project/program;
  - B. Consideration of feasible alternatives to the proposed spending;
  - C. Quantitative estimation of expected outcomes; and
  - D. Sensitivity analysis of cost and outcome assumptions.
- *Revised* DOC C.5. – The Department recommends the Commission create a formal workgroup and planning standard review process that shall:
  - A. Identify the main system planning standards that Xcel uses for each Commission-approved review topic;
  - B. Select one or more planning standards, in agreement with intervenors, to review before the next IDP;
  - C. Set alternative system planning scenarios to analyze, in agreement with intervenors;
  - D. Perform a quantitative analysis of alternative system planning standards that measure estimated costs and benefits of alternative system planning standards;
  - E. Require Xcel to present the results of steps A-D in the next IDP cycle; and
  - F. Request comments to approve, modify, or reject the revised system planning standards for each Commission-approved review topic.

- *Revised* DOC C.6. – The Department recommends the Commission establish the following system planning standard review schedule, with each phase to repeat every eight years:
  - A. 2027: Capacity
  - B. 2029: Reliability and Asset Health
  - C. 2031: Grid Modernization, Distributed Energy Resources, and Operation and Maintenance
  - D. 2033: Budgeting
- *Revised* DOC C.7.– The Department recommends the Commission establish an ad hoc system planning standard review process that shall:
  - A. Allow any intervenor to request a planning standard review;
  - B. Set the parameters that shall be reviewed;
  - C. Require the Commission to approve, modify, or reject the request for a planning standard review, limited to one such planning standard review per IDP cycle;
  - D. Require Xcel to present the results of the planning standard review in its next IDP; and
  - E. Request comments to approve, modify, or reject Xcel’s system planning standard.
- DOC C.8. – The Department recommends the Commission order Xcel to disclose all changes to its system planning standards in its IDP.
- *Revised* DOC C.9. – The Department recommends the Commission order the Distribution Data Reporting Work Group to identify IDP filing requirements that Xcel and intervenors agree can be removed.
- DOC F.1. – The Department recommends the Commission create a new IDP filing requirement to provide a comparison of forecast accuracy for each vintage and scenario (IDP Low, Medium, High) in Xcel’s LoadSEER forecasts compared to actuals.
- *Revised* DOC G.1.– The Department recommends the Commission order a review of the following capacity planning standards, to be presented in Xcel’s 2027 IDP:
  - A. Capacity forecasting and accuracy
  - B. N-0 forecast uncertainty margin and the use of AMI or other actual data
  - C. N-1 probability of coincident peak load and N-1 contingencies
  - D. N-1 screening based on cost effectiveness
  - E. Equipment ratings during N-1 emergencies
  - F. Sizing new assets for future load growth
  - G. Capacity Risk Framework
  - H. Project Prioritization
- DOC H.2. – The Department recommends that future (outside of the current rate case’s test and planning years) wildfire mitigation proposals be filed with the Commission as a



comprehensive Wildfire Mitigation Plan. The Department recommends the Company's Wildfire Mitigation Plan be filed as an attachment or supplement to its IDP.

- *Revised DOC H.3.*— The Department recommends the Commission require Xcel to include the following in its Wildfire Mitigation Plan:
  - A. A description of the intent of the Company in mitigating wildfire risk (i.e. mitigating utility-caused wildfires/minimizing liability or mitigating fire damage to utility assets),
  - B. A definition of “wildfire” as it is used for utility identification, planning and mitigation.
  - C. A discussion of its risk modelling, mapping and prioritization process within its Wildfire Mitigation Plan.
  - D. Quantification of actual wildfire risk in Xcel's territory based on the probability and size of a fire, and land use.
  - E. Xcel's Minnesota wildfire risk should be compared to other reliability and safety risks experienced by Xcel in Minnesota as well as the wildfire risk experienced in Xcel's other jurisdictions.
  - F. Quantification of wildfire damages by event size, including Xcel-owned and other property damage, applicable liability, and any other costs Xcel deems reasonable to include.
  - G. The most recent version of its wildfire risk map with a narrative explanation of the highest risk areas, and any changes from the last iteration of the Wildfire Mitigation Plan.
  - H. Reporting on the number and locations of wildfires experienced in its territory over the last ten years, the number of outages caused by wildfire, and the average length of wildfire-related outage.
  - I. Reporting on the efficacy of its wildfire mitigation strategy in reducing wildfire-related outages (i.e. After deployment of the rate-case-approved wildfire mitigation measures, wildfire-related outages in Xcel's territory decreased 50 percent; the number of wildfires in Xcel's service territory decreased from 100 to 50 since the filing of the Company's last IDP resulting in approximately 10 fewer outages.)
  - J. Discussion of its use of its Public Safety Power Shutoff Program, including the number of PSPS outages, cause of the PSPS outage, average length of a PSPS outage, if/how notice was provided to customers, and measures the Company employs to protect customers that are medically dependent on electric service.
  - K. Provide the Wildfire Safety Operations Playbook, the PSPS Playbook, and the PSPS Communications Playbook as attachments or provide the location where the Playbooks can be accessed.
  - L. A full cost benefit analysis of any proposals.

- *New DOC 1* – The Department recommends the Commission order the creation of a single proceeding to be noticed in each IDP docket to discuss the appropriate value of reliability. The comment period should address:
  - A. The valuation of the cost of unserved energy;
  - B. The use of price caps for the cost of unserved energy;
  - C. Forecasting methodologies for reliability benefits;
  - D. Appropriate uses cases for the value of reliability; and
  - E. The potential to employ different values of reliability by customer class.
- *New DOC 2* - Department recommends the Commission order either A or B:
  - A. Xcel file its IDP, TEP, and IDP-related ad hoc filings in odd-numbered years. MP, DEA, and OTP file their IDP and TEP in even-numbered years, with the next filing due in 2028
  - B. All IDPs are filed in odd-numbered years. All TEPs and IDP-related ad hoc filings are filed in even-numbered years, with the next filing due in 2028.
- *Revised Fresh Energy 7* – Require Xcel to make the following changes to its CBAs:
  - a. Use ex-ante or forward-looking CBAs and estimate the customer costs and benefits of planned program expenditures.
  - b. Reflect the present value of costs (measured as revenue requirements) and benefits over the life of the assets in CBAs.

**ELPC/CEF/VS withdraw the following recommendations made in our initial comments:**

- For future Proactive Upgrade Proposals, require Xcel to conduct an integrated, coordinated analysis of alternatives, including use of Flexible Interconnection, potentially in tandem with DSRUP.

*ELPC/CEF/VS made a similar recommendation in our Proactive Upgrade Proposal comments in this docket and withdraw it here to avoid duplication.*

- Direct Xcel to engage stakeholders regarding modifications to its risk analysis and planning methodologies to improve cost-effectiveness while still maintaining safety and reliability, including consideration of: (1) application of CMO calculation to planning for N-1 scenarios; and (2) use of emergency ratings in planning for N-1 conditions. In its next IDP, Xcel should discuss its stakeholder engagement efforts and explain any changes it has made in response and/or why it has not incorporated stakeholder recommendations.

*This recommendation is addressed in revised DOC G.1 above.*

- Require Xcel to provide a supplementary filing in this docket by December 31, 2026, that includes: (1) a detailed, Minnesota-specific wildfire risk assessment; and (2) evaluates wildfire risk both (a) in relation to Xcel's other jurisdictions, such as Colorado and Texas,

where urgent mitigation investments may be more pressing, and (b) relative to other safety and reliability risks in Minnesota's distribution system. This supplementary filing should also include discussion of how these analyses support Xcel's specific investment proposals.

*This recommendation is addressed in revised DOC H.2 and H.3 above.*

Respectfully submitted,

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