

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

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In the Matter of Xcel Energy's 2023
Integrated Distribution Plan

Docket No. E-002/M-23-452

**REPLY COMMENTS OF GRID EQUITY COMMENTERS: COOPERATIVE ENERGY
FUTURES, ENVIRONMENTAL LAW & POLICY CENTER, SIERRA CLUB, AND
VOTE SOLAR**

April 12, 2024

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I. INTRODUCTION

The Commission's core objectives for utilities' integrated distribution plans (IDP) highlight the IDPs' role in increasing transparency and improving understanding of utility planning and investments, and specifically their benefits and costs. As energy policy evolves, the IDPs can serve as a critical tool to ensure that utilities, including Northern States Power Company d/b/a Xcel Energy (Xcel or the Company), appropriately incorporate identified priorities into distribution planning, which will be essential to realizing policy goals, including transitioning to clean, carbon-free energy and advancing energy equity. The IDPs can complement traditional mechanisms, in particular rate case prudence review. They allow the Commission and stakeholders an opportunity to better understand and influence utility planning prior to prudence review, and also give the Commission an opportunity to provide preliminary guidance to the utilities before they apply for cost recovery in rate cases. None of this is possible, however, without robust transparency and information-sharing with the requisite level of detail in the IDPs.

In these reply comments, the Grid Equity Commenters (GECs)¹ urge the Commission to ensure that the Xcel IDP meets its intended objectives, particularly with respect to transparency and information-sharing. The IDP is a central tool to enable DERs and move towards a more equitable and just clean energy transition. For the IDP to be effective, however, we emphasize that not only will Xcel need to provide the requisite transparency in its IDP, but the Commission will need to hold Xcel accountable to its IDP objectives and commitments when it seeks distribution cost recovery in its rate cases.

¹ As in our initial comments, the GECs are: Cooperative Energy Futures, Environmental Law & Policy Center, Sierra Club, and Vote Solar. Our engineering consultant through GridLab, Cody Davis, also contributed to these reply comments, as did Dr. Gabriel Chan and the Interstate Renewable Energy Council (IREC).

In addition to our recommendations in our initial comments, summarized in the introduction to those comments, we also recommend that the Commission:

- Reject Xcel’s recommendation to isolate consideration of the disparities identified by the Xcel Equity Analysis and the Chan/Pradhan analysis in the SRSQ Docket, and affirm that the IDP is the appropriate forum to evaluate and discuss distribution planning solutions to address these inequities.
- Take immediate action to address the pressing issue of racial disparities in involuntary disconnections by ordering a study of the costs and benefits of reinstating a moratorium on some or all utility disconnections. The GECs recommend that the Commission order this study now and then rely on it to inform Commission action to consider a moratorium on disconnections until Xcel can develop a more robust set of measures to eliminate racial disparities in disconnections.
- Related to the GECs’ proposal regarding stakeholder engagement on DERMS and Flexible Interconnection, ensure that any working group efforts on these issues are facilitated by a neutral party, such as a Commission-led working group, and are otherwise consistent with the GECs’ general stakeholder engagement recommendations in Section III.
 - With respect to Flexible Interconnection, the GECs suggest that the existing Distributed Generation Working Group (DGWG) could be an appropriate forum in which to have this discussion, and generate agreement on defining this use case and other relevant considerations, which could then be filed in the IDP proceeding.

- With respect to DERMS, the GECs suggest that the Commission consider either expanding the DGWG scope (and renaming the group) or creating a separate Commission-led working group to address DERMS use cases and implementation, and potentially other cross-proceeding and cross-utility issues, such as cost allocation.
- In addition to the GECs' IVVO recommendations, adopt Fresh Energy's recommendation: Xcel shall re-evaluate IVVO for its Minnesota service area (applying the new Minnesota Test for cost-effectiveness and updated assumptions informed by PSCo's experience with IVVO). As part of this analysis, Xcel shall identify feeders where IVVO is most cost-effective, discuss the potential for targeted deployment to these areas and/or in under-resourced communities, and report on its updated evaluation within 6 months of the Commission's order in this proceeding.
- Consistent with the GECs' recommendations related to cost-benefit analysis for discretionary investments, adopt Fresh Energy's proposal that Xcel collaborate with stakeholders on developing a benefit-cost methodology for the six specified program categories.

II. EQUITY AND ENERGY JUSTICE

Xcel begins its reply comment section addressing equity by calling the need to incorporate equity considerations into distribution system planning a “priority for the Company” and stating that its “goal is to integrate equity and environmental justice concerns into the design of a broad range of energy and workforce programs, reduce energy burden, enhance equitable access to renewable energy, and broaden participation in energy decisions.”² The Company goes

² Xcel Reply Comments at 4.

on to discuss the Chan/Pradhan disparity analysis provided in the GECs' initial comments, and to contrast it with the Company's own analysis ("Xcel Equity Analysis"), which has since been filed on April 1, 2024 in Docket No. 24-27 (Safety, Reliability, and Service Quality Docket or SRSQ Docket).³ The Chan/Pradhan analysis and the Xcel Equity Analysis draw consistent conclusions about the multi-year disparities in reliability and disconnections, as discussed further below. Disappointingly, however, the Company closes this initial equity section by recommending isolating consideration of these disparities in Docket No. 24-27. The GECs strongly disagree with Xcel's recommended approach and urge the Commission and Xcel to begin to address these disparities in the IDP where possible, in addition to continuing to explore other avenues to address them.

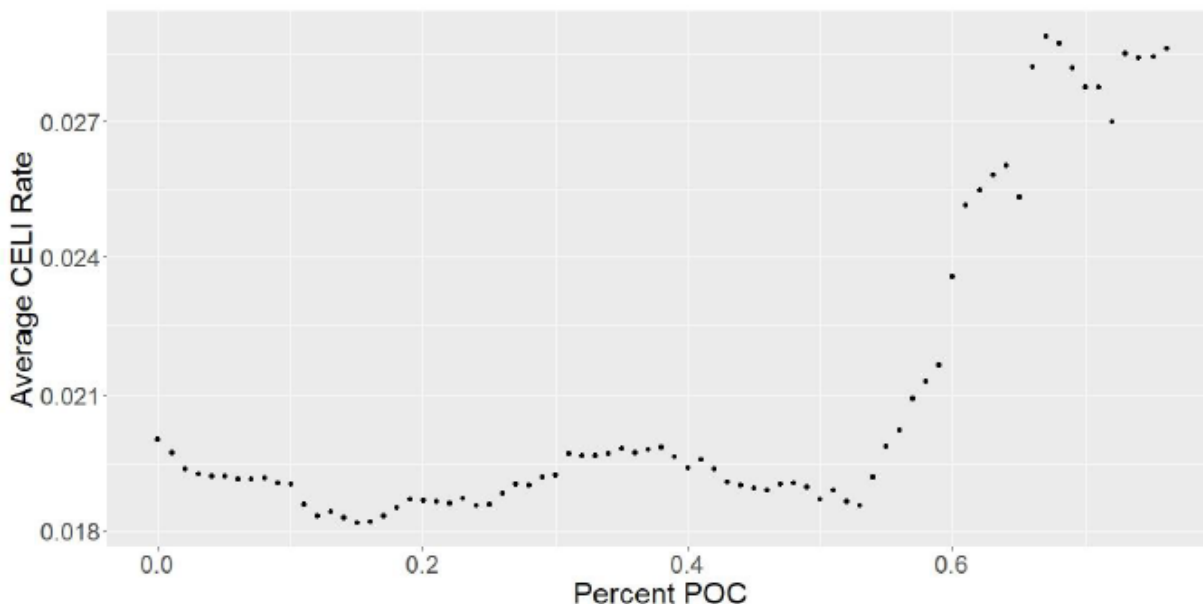
A. Reliability (Long-Duration Outages)

The Xcel Equity Analysis examines the relationship between long-duration outages, as measured by the percent of customers experiencing outages greater than 12 hours over a 3-year period (CELI-12), and a neighborhood's percent people of color (POC). The Xcel Equity Analysis finds that "CELI is relatively flat with increasing percent POC for values less than about 50% POC and then rises."⁴ The figure below is replicated from the Xcel Equity Analysis to reinforce this finding.

³ Xcel Reply Comments at 4-9; *In the Matter of Northern States Power Company's Annual Report on Safety, Reliability, and Service Quality for 2023; and Petition for Approval of Electric Reliability Standards for 2024*, Docket No. E002/M-24-27, Annual Report and Petition, Att. Q: TRC, Xcel Energy: Service Quality Report (April 1, 2024) ("Xcel Equity Analysis"); *see also id.* at 106-13 (discussing Xcel Equity Analysis).

⁴ Xcel Equity Analysis at 10.

Figure 2. Average CELI vs. Percent POC



This finding is highly consistent with the Chan/Pradhan finding that “from 2020-2022, the 10% of communities with the highest population of people of color were 47% more likely to experience an extended outage than other communities (46.4 households per 1,000 vs. 31.6 households per 1,000).”⁵

Where the Xcel Equity Analysis and the Chan/Pradhan analysis differ is in the interpretation of this finding. The Xcel Equity Analysis concludes that “once controlling for other variables... we can see that this increase is isolated primarily within Census block groups with older housing.”⁶ The Xcel Equity Analysis conducts a regression analysis that includes additional variables to “reduc[e] omitted variable bias” which the study claims reduces bias because “leaving out the additional key variables that we added leads to a bias in modeling known as omitted variable bias, where the estimated impact of included variables is biased due to their correlation with important variables that are left out. In this case, the extent to which

⁵ GECs Initial Comments at 12.

⁶ Xcel Equity Analysis at 11.

percent POC is correlated with other relevant factors will bias the results regarding the impact of percent POC on disconnections and other key metrics.”⁷

The GECs contend that this is an incorrect critique of omitted variable bias that does not recognize the systemic inequities caused by racialized systems across housing policy and other domains. Racial disparities in housing policy and access have been recognized by, for example, Minnesota Housing,⁸ Twin Cities Habitat for Humanity,⁹ the Federal Reserve Bank of Minneapolis,¹⁰ and the National Low Income Housing Coalition.¹¹ It is inappropriate to draw conclusions about the relationship between race and outcomes, such as electric reliability, by controlling for housing quality because housing quality is so strongly impacted by race. In fact, rather than reducing omitted variable bias, as the Xcel Equity Analysis contends, controlling for an intermediating variable such as housing quality, introduces new bias into the conclusions of the Xcel Equity Analysis about racial disparities in electric reliability. By controlling for housing in its analysis and emphasizing conclusions derived from a segmentation analysis by housing age, the Xcel Equity Analysis ignores the compounding of multiple systemic racialized dynamics.

⁷ Xcel Equity Analysis at 6-7.

⁸ <https://www.mnhousing.gov/about-us/equity-.html#:~:text=While%20Minnesota%20has%20one%20of,%2C%20the%20rate%20is%2013%25> (“While Minnesota has one of the highest rates of homeownership across the nation, a closer look at the racial demographics of homeowners tells a different story.”).

⁹ <https://www.tchabitat.org/race> (“Minnesota has some of the widest racial disparities in the nation—in education, health, economics, criminal justice, and especially housing. And all of them can be tied back to discriminatory housing practices used throughout the 20th century. As a community, we need to be as intentional in closing these disparities as we were in creating them.”).

¹⁰ <https://www.minneapolisfed.org/article/2021/systemic-racism-haunts-homeownership-rates-in-minnesota> (“Minnesota’s racial and ethnic homeownership gap—that is, the disparity between the White homeownership rate and the homeownership rate of households of color and Native American households—is the fourth-largest in the nation. This persistent—and, for some racial and ethnic groups such as Black Minnesotans, increasing—gap has resulted from a series of racist policies and practices.”).

¹¹ <https://mhponline.org/race-equity-and-housing> (“Research shows that housing influences outcomes across many sectors. Students do better in school when they live in stable, affordable homes. People are healthier and can more readily escape poverty and homelessness. Yet, people of color are significantly more likely than white people to face systemic barriers to quality, accessible, and affordable homes”).

Instead, analysis of racial disparities should focus on the direct association of race with electric reliability, as emphasized in the Chan/Pradhan analysis and in Figure 2 of the Xcel Equity Analysis copied above. This direct analysis shows a clear racial disparity in long-duration outages that should be addressed through affirmative investments in distribution grid improvements that improve reliability in disadvantaged communities and communities that experience disparities in other domains, including housing policy. In other words, the fact that communities of color are more likely to be disadvantaged and impacted by other racialized systems, such as housing policy and other barriers to building inter-generational wealth, make the current observed racial disparities in electric reliability even more urgent to address through prioritized distribution system investments.

Regarding the most appropriate metric to analyze disparities in electric reliability, Xcel notes that “CEMI-6 reflects reoccurring or repeated reliability issues, we believe it is a more meaningful metric to analyze disparities than CELI-12.”¹² The GECs disagree with this conclusion because long-duration outages are more representative of the types of outages that cause harm to disadvantaged households. Long-duration outages can harm medically vulnerable populations that rely on electrically powered equipment; long-duration outages can cause a refrigerator full of food to spoil; and long-duration outages can cause temperature stress for populations in extreme temperatures. Therefore, we contend that the incidence of long-duration outages is the more relevant metric to assess energy justice.

Notably, in response to the identification in the Xcel Equity Analysis of “more long-duration outages in high percent POC communities that also have older housing vintage,” Xcel suggests that “[t]here may be an opportunity to assess vegetation management practices in those

¹² Xcel Reply Comments at 6.

neighborhoods or assess distribution equipment vintage that could lead to longer outages.”¹³ Regarding “distribution equipment vintage,” the Company goes on to say that “targeted undergrounding may be a solution to bring stronger reliability to older vintage homes served by an older vintage of our distribution network.”¹⁴ The Company also notes that its analysis of the incremental costs associated with achieving IEEE first quartile results, separately required by the Commission in Docket No. 23-73, “can act as a guidepost to consider distribution equipment upgrades like undergrounding wires, including in these specific communities. The distribution lines identified for undergrounding in our [Docket No. 23-73] Order Point 5 analysis also serve the same areas identified by in the TRC analysis as having longer outages in areas of higher POC (North Minneapolis, South Minneapolis, and surrounding downtown St. Paul).”¹⁵

The IDP is the logical and appropriate place to have such discussions around these and other distribution system investments and strategies, as part of Xcel’s broader distribution planning. These discussions could include, for example, comparing the benefits and costs of undergrounding wires versus other solutions that could address these reliability concerns, including potentially the use of DERs. Although the Commission has used the SRSQ docket in the past to address specific deficiencies in utility performance, such as poor reliability in particular work regions, it remains primarily a reporting and metrics docket. While the GECs would support ongoing tracking and reporting related to CELI-12 and other disparities in the SRSQ docket, the IDP is the place for evaluating utility distribution strategy, planning, and investments to address them. The IDP can then later aid the Commission in understanding

¹³ *In the Matter of Northern States Power Company’s Annual Report on Safety, Reliability, and Service Quality for 2023; and Petition for Approval of Electric Reliability Standards for 2024*, Docket No. E002/M-24-27, Annual Report and Petition, at 108 (April 1, 2024).

¹⁴ *Id.* at 111.

¹⁵ *Id.*

shorter-term investments proposals in rate cases in the context of the broader strategic vision developed in the IDP. As we have consistently argued, we believe the Company and the Commission should view all spending and investment decisions in light of the broader strategic objectives of safety, reliability, affordability, and equity.¹⁶ Later rate case review allows the Commission to ensure that Xcel's actual distribution investments align as much as possible with its IDP commitments and objectives. Equity-driven distribution investments, including specifically any in response to the disparities revealed by Xcel's Equity Analysis and the Chan/Pradhan analysis, should be part of the IDP discussion, which the Commission can then reference when Xcel requests cost recovery for those and the rest of its distribution investments. The GECs request that the Commission reject Xcel's recommendation to isolate consideration of the disparities identified by the Xcel Equity Analysis and the Chan/Pradhan analysis in the SRSQ Docket, and instead affirm that the IDP is the appropriate forum to address distribution planning solutions to address these inequities.

B. Involuntary Disconnections

The Xcel Equity Analysis and the Chan/Pradhan analysis find consistent results regarding disparities in involuntary disconnections. As Xcel notes, "the number of disconnections is higher in identified lower-income areas and increases when the proportion of people of color increases within an income group."¹⁷ Xcel states that it has several programs in place to mitigate disconnections, such as payment arrangements, discounted energy bills, and bill forgiveness programs, which are additional to the state-administered Energy Assistance Program.¹⁸ However, all of these programs have been in place for many years, including the years in which the data

¹⁶ See, e.g., GECs Initial Comments at 45-47.

¹⁷ Xcel Reply Comments at 7.

¹⁸ Xcel Reply Comments at 7.

informing the Xcel Equity Analysis and Chan/Pradhan analysis were collected. So, while these programs may be reducing potential disparities, racial disparities in disconnections within income groups persist.

We emphasize that there are ongoing and meaningful racial disparities in the rate of disconnections that are above and beyond what is being mitigated by existing Xcel and state programs, and above and beyond what can be explained by income disparities. And the disparities identified in the Chan/Pradhan analysis have been reaffirmed in the Xcel Equity Analysis. We believe that these disparities are an urgent and significant matter of concern. We recommend that the Commission prioritize any and all measures it could order to address these disparities.

In our initial and reply comments on this IDP, the GECs have offered recommendations to the Commission that can help create more robust pathways for communities and individuals to own or otherwise benefit from DERs, which can improve affordability and therefore reduce the chance of disconnections in the medium-term as DERs are adopted. We further recommend that the Commission take immediate action to address this pressing issue by ordering a study of the costs and benefits of reinstating a moratorium on some or all utility disconnections.¹⁹ The GECs recommend that the Commission order this study now and then rely on it to inform Commission action to consider a moratorium on disconnections until Xcel can develop a more robust set of measures to ensure that racial disparities in disconnections can be eliminated.

¹⁹ The Just Solar Coalition made a similar recommendation in Xcel's most recent rate case, relying on analysis and testimony from Dr. Chan. *See, e.g., In the Matter of the Application of Northern States Power Company, dba Xcel Energy, for Authority to Increase Rates for Electric Service in the State of Minnesota*, Docket No. E-002/GR-21-630, Initial Brief of the Just Solar Coalition, at 37-40 (Jan. 11, 2023).

C. Hosting Capacity and Access to DERs

Xcel notes that hosting capacity is generally higher in lower-income and/or higher POC communities according to both the Chan/Pradhan analysis and the Xcel Equity Analysis.²⁰ While the data show this is true on average, the GECs encourage Xcel and the Commission to develop more detailed and accurate hosting capacity data to refine energy justice assessments by highlighting the disparities in access to DERs. As stated in our initial comments: “More granular data would enable utilities to pinpoint underserved areas for targeted grid improvements, or even target areas with a high availability of hosting capacity to integrate DERs. Such data-driven strategies can inform strategies to address unique community barriers to DER adoption, facilitating a more inclusive and justice-focused energy transition.”²¹ Moreover, to the extent customers in communities with higher hosting capacity wish to subscribe to community solar gardens located in areas with more constrained hosting capacity, efforts to improve hosting capacity in those constrained areas could also advance equity.

In addition, as discussed in our initial comments, the GECs suggest that these hosting capacity results may be related to the relative lack of DER adoption in these communities to date and/or the co-location of large customers in these communities that have required significant infrastructure investments.²² This potential correlation speaks in turn to the necessity of advancing DER-enabling policies outside of the IDP, in addition to efforts within the IDP to expand hosting capacity and otherwise facilitate DER adoption.

Xcel describes its efforts to address equitable access to renewable energy emerging from its Equity Stakeholder Advisory Group (ESAG), and other efforts to improve equitable access to

²⁰ Xcel Reply Comments at 7-9.

²¹ GECs Initial Comments at 19.

²² GECs Initial Comments at 35.

small DER and CSG participation.²³ While the GECs generally support efforts to advance equity in these other forums, including through improving customer DER access and ownership, we underscore the need to do so in the IDP, as well. In discussing its ESAG efforts, Xcel highlights that ESAG participants ranked initiatives to address hosting capacity and interconnection relatively lower than other strategies to address equitable access to renewable energy.²⁴ While GECs understand that ESAG participants ranked these ideas lower when asked to choose from a set of fourteen diverse strategies, to the extent they are relevant to distribution planning, solutions to improve equity in hosting capacity and interconnection are appropriate to discuss and consider in the IDP. We also note that, since ESAG participants ranked these solutions as fourth and fifth out of fourteen, they could be considered “high priority” for that group, despite not being in the top three strategies discussed. The GECs emphasize that advancing equity and energy justice will require a variety of different policies across proceedings, and urges the Commission to resist Xcel’s efforts to isolate or otherwise limit these discussions to particular forums.

In sum, the GECs encourage the Commission to take a comprehensive approach to advancing equitable grid access. While the Xcel Equity Analysis and the Chan/Pradhan analysis found that hosting capacity is generally higher in disadvantaged communities and areas with a high percentage of people of color, this metric alone does not provide a complete picture of the quality and accessibility of electric service in these communities. The GECs propose that the Commission and the Company adopt a more holistic view of utility performance in disadvantaged areas, considering not only raw hosting capacity but also reliability, safety, affordability, and the capacity to accommodate future load growth and DERs. This approach

²³ Xcel Reply Comments at 9-11.

²⁴ Xcel Reply Comments at 9-10.

would involve analyzing a range of metrics, such as the frequency and duration of outages, the prevalence of safety incidents, the energy burden faced by low-income households, and the ability of the grid to support the adoption of clean energy technologies and the electrification of transportation and buildings. By taking this multifaceted view of equitable grid access, the Commission and the Company can identify and prioritize investments and initiatives that will meaningfully improve the quality of service and the economic opportunities available to disadvantaged communities.

III. REPLIES TO XCEL'S AND OTHER PARTIES' RESPONSES TO COMMISSION QUESTIONS

Prior to addressing responses to specific topics, the GECs note that there are a few instances in which parties, including Xcel, have recommended additional stakeholder engagement on particular issues. Generally, the GECs support such engagement in that it can enhance transparency. Moreover, such efforts can allow the utility and stakeholders to collaborate and make progress on contested issues more effectively than in a formal proceeding, which can be more oppositional. With these benefits in mind, the GECs have recommended stakeholder engagement on DERMS and Flexible Interconnection, as discussed further below and in our initial comments. We also discuss below our support for other stakeholder engagement proposals, including regarding cost allocation/proactive upgrades.

On the other hand, if not well implemented, stakeholder engagement can be time- and resource-intensive without achieving meaningful results or intended outcomes, which is especially challenging for smaller organizations and non-profits like ours with limited resources. We highlight the following “emerging best practices” for the Commission’s consideration in evaluating the various proposals in this proceeding, drawn from a 2021 report by the National

- *Commissions select a neutral facilitator who is familiar with the regulatory process.*

Some issues identified in the IDP for stakeholder engagement may lend themselves to direct collaboration between a party or parties and the Company. Others are more complex, may interest many stakeholders, including those not participating in this IDP, and may involve topics relevant across multiple proceedings or multiple utilities, and therefore could warrant more robust discussion in a working group format. As an alternative to a third-party facilitator, the GECs suggest that the Commission could also serve as a neutral facilitator in the IDP context.

- *Facilitators establish clear boundaries, goals, and ground rules with participants.*

These practices can help ensure that the Commission and stakeholders achieve identified objectives efficiently, without getting side-tracked or stuck in the process.

- *Commissions prioritize receiving actionable input from stakeholders to make a decision and clearly communicate this priority to the facilitator.* The GECs understand this to mean specifying clear end products or deliverables and next steps in order to make progress on identified issues. We suggest that any working group sessions or workshops should culminate in a report with specific policy and/or process recommendations. This practice is especially important given the asymmetric information and resources that exist between utilities and most non-utility stakeholders. The GECs highlight that this practice is important whether Xcel

²⁵ Available at: <https://pubs.naruc.org/pub/7A519871-155D-0A36-3117-96A8D0ECB5DA>.

collaborates independently with a party or parties, or engages with stakeholders in a broader working group.

- *Set clean intentions for how stakeholders will contribute and give input to the development of interim and final process products.* Doing so can help ensure that all participants can engage effectively on identified topics and mitigate the imbalance in power between the utility and non-utility participants, particularly smaller, lower-resourced entities.

16. Feedback, comments, and recommendations on the following areas of Xcel’s IDP:

b. Grid modernization plans, including but not limited to a Distributed Energy Resource Management System (DERMS), Virtual Power Plants (VPP), Integrated Volt-Var Optimization (IVVO), and Distributed Intelligence (DI)

i. Distributed Energy Resource Management System (DERMS)

DERMS Roadmap. In its reply comments, Xcel opposes the GECs’ recommendation that the Commission require the Company to provide a detailed DERMS roadmap, including answers to specific questions outlined in our initial comments, prior to any DERMS investment approval or implementation.²⁶ Contrary to Xcel’s characterization, the GECs do not request that the Company “demonstrate prudence for any DERMS investments in the IDP.”²⁷ Rather, the GECs are seeking greater transparency regarding Xcel’s DERMS use cases, planning, and opportunities for stakeholders to provide input and the Commission to provide guidance, *before* Xcel files for certification or cost recovery, when the Company is likely to have already made crucial decisions. Our recommendations are fully consistent with the Commission’s stated goals for the IDP, in particular the goal to “[p]rovide the Commission with the information necessary to

²⁶ Xcel Reply Comments at 23-25; *see also* GECs Initial Comments at 28-30.

²⁷ Xcel Reply Comments at 25.

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.” DERMS also has the potential to enable “efficient, cost-effective, accessible grid platforms for new products, new services, and opportunities for adoption of new distributed technologies,” another Commission IDP goal. Xcel has not yet provided sufficient information to understand its short- and long-term goals for DERMS, much less the benefits and costs and ratepayer value. By adopting the GECs’ DERMS roadmap recommendation and related stakeholder engagement recommendation, the Commission can begin to assess and guide the development of Xcel’s DERMS investments now and garner input from impacted stakeholders, rather than waiting until the Company applies for certification or cost recovery, at which point Xcel may have spent time and money moving in a direction that raises concerns or otherwise does not realize the full benefits of DERMS.

Stakeholder Engagement. In addition to a DERMS roadmap, the GECs also recommended that the Commission require Xcel to engage with stakeholders, in particular DER owners/operators, regarding its DERMS plans and intended use cases, including specifically Flexible Interconnection.²⁸ The GECs conceived of this engagement as an ongoing, informal effort by the Company to discuss its DERMS plans with impacted parties, including specifically DER owners/operators. We supplement our initial comments to state that DERMS, as well as Flexible Interconnection, could also benefit from broader discussion within a working group. Consistent with our comments at the beginning of this Section III, we recommend any such working group should be facilitated by a neutral party, such as a Commission-led working group. With respect to Flexible Interconnection, the GECs suggest that the existing Distributed

²⁸ GECs Initial Comments at 30.

Generation Working Group (DGWG) could be an appropriate forum in which to have this discussion, and generate agreement on defining this use case and other relevant considerations, which could then be filed in the IDP proceeding. With respect to DERMS, however, the current DGWG mandate appears too limited to encompass that broader discussion. The GECs suggest that the Commission consider either expanding the DGWG scope (and renaming the group) or creating a separate Commission-led working group to address DERMS use cases and implementation and other cross-proceeding and cross-utility issues, such as cost allocation.

Staged Approach to DER Integration. Prior to Xcel’s implementation of a “Grid DERMS,” as Xcel defines it in its reply comments, the GECs suggest a staged approach to DER integration that fully leverages existing and near-term technologies. Specifically, the GECs recommend implementing static Flexible Interconnection prior to fully dynamic Flexible Interconnection.²⁹ We also recommend use of various other technologies and approaches in three tiers in advance of full DERMS implementation in Tier 4. Despite describing our recommendation as a “fundamental mischaracterization,” it appears from its reply comments that Xcel actually already intends to take a phased approach, with the initial “no regrets step” of “Aggregator DERMS” followed by implementation of “Grid DERMS.”³⁰ Although Xcel provided some limited additional detail regarding its phased approach to DER integration and DERMS in its reply comments, the GECs continue to urge the Commission to require the Company to expand its use of other strategies to integrate DERs with the specific recommendations provided in our initial comments.

To be clear, the GECs do not necessarily oppose Xcel’s investment in DERMS. Rather, we seek to ensure that: Xcel maximizes and optimizes its use of existing and near-term

²⁹ GECs Initial Comments at 24-26.

³⁰ Xcel Reply Comments at 24-25.

technologies; Xcel clearly articulates the use cases and programs that the DERMS will enable or support; and any DERMS investment incorporates stakeholder input and benefits from robust planning and oversight to ensure it achieves its potential. The GECs suggest that Commission guidance and stakeholder engagement are necessary now, to ensure that, in the next few years, Xcel does not approach the Commission with a “fully baked” DERMS proposal for certification or cost recovery that elicits significant concern and opposition. As we emphasized at the top of this subsection and discuss later in response to Question 18, the Commission has made clear that the IDP is the appropriate forum for such transparency around planning and investments. Although potentially a costly investment, a fully operational “Grid DERMS” holds great potential, including reducing costs elsewhere through better leveraging DERs, however Xcel will not realize that potential without deliberate planning and stakeholder engagement, particularly with impacted customers and DER providers. Commission guidance and oversight now, via requiring a detailed roadmap, stakeholder engagement, and a staged approach, can help ensure that Xcel moves down a path towards a successful future DERMS proposal.

ii. Integrated Volt-Var Optimization (IVVO)

Xcel recognizes that both the GECs and Fresh Energy recommended that Xcel reevaluate IVVO. Rather than responding to the substance of our recommendations, Xcel briefly reiterated its justification in its IDP for declining to reevaluate IVVO.³¹ The GECs stand by our initial comments³² and also support Fresh Energy’s recommendation: Xcel shall re-evaluate IVVO for its Minnesota service area (applying the new Minnesota Test for cost-effectiveness and updated assumptions informed by PSCo’s experience with IVVO). As part of this analysis, Xcel shall identify feeders where IVVO is most cost-effective, discuss the potential for targeted deployment

³¹ Xcel Reply Comments at 49-50.

³² GECs Initial Comments at 30-32.

to these areas and/or in under-resourced communities, and report on its updated evaluation within 6 months of the Commission’s order in this proceeding.³³ The GECs continue specifically to recommend that the Commission direct Xcel to explore ways in which IVVO could be deployed in a targeted way within “environmental justice areas,” as defined in Minn. Stat. § 216B.1691, Subd. 1(e), to reduce customer bills.

c. Forecasted distribution budget

Investment Prioritization. In response to the GECs’ recommendation that Xcel incorporate equity and hosting capacity into its prioritization of distribution system investments, Xcel reiterates its current four objectives for such investments and states: “Incorporating non-traditional goals into our prioritization process would be resource intensive and it would likely be more effective to treat non-traditional goals as separate categories with their own prioritization criteria based on specific criteria for feasibility, costs, and benefits.”³⁴ The GECs disagree. Xcel’s response underscores the need for the Commission to require the Company to consider modifications to its current process.

By isolating equity and hosting capacity objectives from its traditional objectives, Xcel implies that more traditional investments cannot also result in improvements to equity or hosting capacity. In reality, when Xcel makes, for example, reliability-driven investments, like upgrading a substation, this investment also increases hosting capacity and, depending on the location, could also advance equity by improving reliability (and hosting capacity) in an environmental justice area. Instead, based on the way Xcel has framed the situation, improvements to hosting capacity or equity would require separate budgets and presumably more money, increasing total costs. In other words, by not taking these additional objectives and impacts into account when

³³ See Fresh Energy Initial Comments at 7.

³⁴ Xcel Reply Comments at 38; see also GECs Initial Comments at 41.

considering and prioritizing its distribution investments, and instead suggesting that they have separate categories and prioritization criteria, Xcel misses an opportunity for more efficient system investments and potentially a decreased total budget.

In addition, the GECs highlight the Commission's Order Point No. 121 in Xcel's most recent rate case (Docket No. 21-630), finding that tenets of Energy Justice are relevant to setting rates. For the Commission to consider equity and Energy Justice in Xcel's future rate cases, Xcel and the Commission should likewise integrate equity and Energy Justice in the IDP, where Xcel describes distribution planning and spending objectives, prioritization, and decisions. In other words, these objectives should be part of the advance planning process within the IDP, rather than an ex-post assessment of whether Xcel's traditional prioritization resulted in advancing equity and Energy Justice.

The GECs appreciate that changing the traditional process is challenging and may require up-front Company resources, but nonetheless urge the Commission to adopt our recommendation to require Xcel to incorporate both hosting capacity and equity considerations into its distribution budget prioritization process. The GECs emphasize that we do not recommend that the Company prioritize these non-traditional goals above its traditional goals, but rather that Xcel integrate them into its existing process.

Incorporation of Rate Design and Demand Response into IDP Forecasts. Xcel characterizes as premature the GECs recommendation that the Commission require it to incorporate TOU rate impacts into its IDP forecasts and resulting investments.³⁵ Although Xcel's TOU proposal is currently pending before the Commission, it may be in place before the next IDP. The Commission has an opportunity now to clarify its expectations for Xcel's treatment of

³⁵ Xcel Reply Comments at 45; *see also* GECs Initial Comments at 35-37.

the distribution impacts of rate design—whether Xcel’s current TOU proposal or other future rate design changes—within its forecasts and planning, such that Xcel can make these changes in the next iteration of its IDP.

Xcel similarly dismisses the GECs recommendation that Xcel continue to refine its incorporation of demand response and load flexibility programs into its forecasts in a more granular manner.³⁶ While the Company states it plans to “continue to monitor demand response and load flexibility opportunities and will forecast them as additional data is available,”³⁷ the GECs continue to suggest, for the reasons discussed in our initial comments, that Commission should make clear its expectation that Xcel incorporate the impacts of these programs into its forecasts.³⁸

Technical System Limitations. In its reply comments, Xcel responded to questions from Fresh Energy related to the impact of changes in system planning thresholds on its identification of risks and resulting budgets.³⁹ Xcel states: “Therefore, it is not expected that the quantity of risks would significantly change due to the change in threshold; only the number of projects that need to be funded in the budget would increase.”⁴⁰ Xcel’s explanation highlights the role of its system-wide technical limitations in increasing its distribution budgets—its system is not experiencing higher risks that warrant additional investment, but rather it has made blanket policy decisions that have significant budgetary impacts. The GECs urge the Commission to exercise careful oversight over these technical limitations and requirements, which are not purely technical but also policy decisions, especially in light of their ultimate effects on customer costs.

³⁶ Xcel Reply Comments at 45.

³⁷ Xcel Reply Comments at 45.

³⁸ GECs Initial Comments at 37, 53-54.

³⁹ Xcel Reply Comments at 37-38.

⁴⁰ Xcel Reply Comments at 38.

d. Planned Net Load (PNL) Methodology and 15% Dependability Factor

Xcel did not address the substance of our concerns and recommendations regarding Xcel's PNL methodology and 15% dependability factor, except to say that the Company disagrees that its 15% dependability factor is overly conservative, and that further consideration of increasing it or using seasonal/differentiated dependability factors is unnecessary.⁴¹ The GECs stand by our initial comments and recommendation. In addition, while we recommended that Xcel consider our recommendations internally and explain any decisions to change or not to change its methodology in its next IDP, the GECs would also support requiring broader stakeholder engagement on this topic, consistent with our comments regarding effective stakeholder engagement at the top of this Section III.

17. What guidance should the Commission give on budgets and cost allocation for distribution system upgrades to accommodate distributed energy resources (DER), including but not limited to: (a) Solar sited with customer load; (b) Solar sited in front of the meter; (c) Energy storage devices; (d) Electric Vehicles; (e) Space heating, water heating, and other electrification use cases; (f) Proactive grid upgrades in anticipation of future DER growth

The GECs agree with Xcel and other parties that additional discussion on cost allocation and proactive upgrades is necessary, however we do not support the two-workshop proposal from Xcel.⁴² We do not believe a utility-led process, in which the utility produces a final product based on its interpretation of stakeholder input, with no clear implementation path for that final product, is sufficient given the complexity and importance of these issues. Moreover, while Xcel appears most interested in developing a process to identify hosting capacity upgrades for its placeholder budget category, the GECs suggest that a broader conversation about cost allocation

⁴¹ Xcel Reply Comments at 45-47.

⁴² Xcel Reply Comments at 36-37.

approaches is necessary, and that goals/purpose of proactive upgrades, appropriate budget, and how to allocate associated costs would be part of that conversation.

The GECs believe these issues could benefit from further record development in this and future IDPs, and/or stakeholder engagement via a working group. We find that Fresh Energy’s initial comments on this topic, particularly around framing cost allocation vis-à-vis proactive/reactive construction, offer a helpful starting point for identifying topics to discuss.⁴³ In addition, the CEGs’ initial comments serve as a useful resource on proactive upgrades and planning for electric vehicles specifically, including how best to allocate costs for such upgrades. Should the Commission pursue a working group process, consistent with our comments at the top of this Section III, the GECs suggest that it should be led by the Commission or neutral third party, and not the Company, and ensure that the goals, process, expected end products, and next steps are as clear as possible.

18. What decisions should the Commission make in the IDP to provide Xcel guidance in aligning distribution spending with forthcoming rate cases?

Xcel repeatedly attempts to frame recommendations for additional information and transparency by the GECs and other parties, including the Department of Commerce, as requests for prudence review, more appropriate for a rate case or possibly a certification request.⁴⁴ The GECs find Xcel’s position especially frustrating, since in its most recent rate case, Xcel repeatedly pushed back on proposals relevant to both the IDP and rate case, stating that they were more properly discussed in the IDP.⁴⁵ The GECs suggest the Company’s response

⁴³ Fresh Energy Initial Comments at 15-22.

⁴⁴ See, e.g., Xcel Reply Comments at 25 (“We request that the Commission decline the GECs’ recommendations regarding our implementation of and roadmap for DERMS and for the Company to demonstrate prudence for any DERMS investments in the IDP.”).

⁴⁵ See, e.g., *In the Matter of the Application of Northern States Power Company, dba Xcel Energy, for Authority to Increase Rates for Electric Service in the State of Minnesota*, Docket No. E-002/GR-21-630, Initial Brief of Northern States Power Company d/b/a Xcel Energy, at 239-40 (Jan. 11, 2023) (“Many of the DER topics that were

highlights the need for the Commission to reaffirm its expectations for the IDP and the role the IDP plays in later prudency review in a rate case. As we discussed in response to Question 16(b)(i) above regarding our DERMS roadmap proposal, the Commission has identified a core goal of the IDP as providing “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.” Xcel should use its IDP to provide critical transparency with respect to its planning and decision-making. In a rate case, the Commission then has an opportunity to hold Xcel accountable to its IDP objectives and plans, while also taking into account the detailed benefits-cost analyses and other information Xcel provides in justifying the prudency of its investments and its associated cost recovery requests. Without the necessary transparency and information, the IDP cannot fulfill its intended role. Similarly, if Xcel does not address full range of factors relevant to rate-setting, including in particular equity and energy justice, in its distribution planning and IDP, the IDP cannot fully inform and support the Commission’s later evaluation in the rate case. The GECs reiterate our request that the Commission reaffirm that it will rely on the IDP when reviewing utility distribution investments in rate cases; and that if a rate case proposal is inconsistent with the utility’s IDP, then the bar for Commission approval is significantly higher.

raised in direct testimony are topics that the Company has addressed or is addressing in other dockets, such as the Company’s most recent IDP (Docket No. E002/M-21-694). Nonetheless, the Company responded to the specific recommendations of Mr. Davis and Mr. Volkmann in rebuttal testimony, noting where the Company disagrees with a recommendation because the topic is being or will be addressed in another docket, the recommendation is outside of the scope of this proceeding, or the recommendation is related to a topic such as distribution system or capacity planning that may have already occurred in the past or will occur in the future and simply does not relate to the Company’s cost recovery request for current projects in this case.”).

19. Should the Commission require cost-benefit analysis for discretionary distribution system investments?

The GECs support Fresh Energy’s proposal that Xcel collaborate with stakeholders on developing a benefit-cost methodology for the six specified program categories,⁴⁶ which is consistent with our initial recommendations that the Commission should: (1) clarify that Xcel should evaluate applying cost-benefit analyses to program-level investments; and (2) require Xcel to explain how it would define “discretionary” spending in this context and to explain its cost-benefit methodology, including specifically its identification of benefits.

IV. CONCLUSION

The GECs respectfully request that the Commission adopt our recommendation in our initial comments and these reply comments prior to approving Xcel’s IDP.

⁴⁶ Fresh Energy Initial Comments at 22-24.

Respectfully Submitted,

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CERTIFICATE OF SERVICE

**RE: In the Matter of Xcel Energy's 2023 Integrated Distribution Plan
Docket No. E-002/M-23-452**

I, Erica S. McConnell, hereby certify that on the 12th day of April 2024, I e-filed *REPLY COMMENTS OF GRID EQUITY COMMENTERS: COOPERATIVE ENERGY FUTURES, ENVIRONMENTAL LAW & POLICY CENTER, SIERRA CLUB, AND VOTE SOLAR* with the Minnesota Public Utilities Commission and served a true and correct copy of the same upon all parties listed on the attached service list by e-mail and/or electronic submission.

/s/ Erica S. McConnell

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