

## Staff Briefing Papers: Volume 3/3

<b>Meeting Date</b>	<b>November 7, 2024</b>	<b>Agenda Item **1</b>
Company	Northern States Power Co. d/b/a Xcel Energy	
Docket No.	E-002/M-24-27	
	<b>In the Matter of Northern States Power Co. d/b/a Xcel Energy – Electric’s 2023 Annual Safety, Reliability, and Service Quality Report.</b>	
Issues	What actions should the Commission take in relation to Xcel Energy’s Interactive Service Quality Map and Equity Analysis?	
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### ✓ Relevant Documents

	<b>Date</b>
Xcel Energy 2023 Annual Report – Part 1 and Attachments C, E, F, & G	April 1, 2024
Xcel Energy 2023 Annual Report Errata	April 30, 2024
PUC Information Requests Nos. 1 and 2	April 25, 2024
Xcel Energy Responses to Information Requests Nos. 1 and 2	May 17, 2024
Xcel Energy Letter and Stakeholder Presentation	April 29, 2024
July 9, 2024 PUC Stakeholder Meeting Notes and Slides	August 26, 2024
PUC Information Requests Nos. 3 – 6	September 5, 2024
Xcel Energy Responses to Information Requests Nos. 3 – 6	September 26, 2024

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The attached materials are work papers of the Commission Staff. They are intended for use by the Public Utilities Commission and are based upon information already in the record unless noted otherwise.

✓ **Relevant Documents**

	<b>Date</b>
<b>PUC Notice of Comment Period</b>	<b>April 26, 2024</b>
Department of Commerce Initial Comments	June 14, 2024
Citizens Utility Board and Energy CENTS Coalition Joint Initial Comments	June 14, 2024
Fresh Energy Initial Comments	June 24, 2024
Grid Equity Commenters Initial Comments	June 24, 2024
Citizens Utility Board and Energy CENTS Coalition Joint Reply Comments	June 24, 2024
Grid Equity Commenters Reply Comments	June 24, 2024
Xcel Energy Reply Comments	June 24, 2024
<b>PUC Notice of Comment Period re: 24-27</b>	<b>July 26, 2024</b>
Department of Commerce Reply Comments	August 27, 2024
Office of the Attorney General – Residential Utility Division Initial Comments	August 27, 2024
Fresh Energy Reply Comments	August 27, 2024
Grid Equity Commenters Supplemental Comments	August 27, 2024
Sierra Club Comments	September 11, 2024
City of Minneapolis Comments	August 27, 2024
City of Edina Comments	September 6, 2024
Xcel Energy Supplemental Comments	August 27, 2024
<b>PUC Notice of Supplemental Comment Period re: 24-27</b>	<b>September 13, 2024</b>
Department of Commerce Second Supplemental Comments	September 23, 2024
Xcel Energy Second Supplemental Comments	September 23, 2024
Department of Commerce Third Supplemental Comments	October 14, 2024
Xcel Energy Third Supplemental Comments	October 18, 2024

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**I. Statement of the Issues**

What actions should the Commission take in relation to Xcel Energy's Interactive Service Quality Map and Equity Analysis?

**II. Acronyms and Definitions**

ABC	Automatic Bill Credit
ACP	Areas of Concentrated Poverty
CIP	Energy Conservation and Optimization
ACS	American Communities Survey
AMI	Advanced Meter Infrastructure
AQI	Air Quality Index
CAO	Consumer Affairs Office
CBG	Census Block Group
CELI	Customers Experiencing Lengthy Interruptions
CEMI	Customers Experiencing Multiple Interruptions
CUB	Citizens Utility Board
EAB	Emerald Ash Borer
EAP	Energy Assistance Program
ECC	Energy Cents Coalition
EMS	Emergency Medical Status
GEC	Grid Equity Commenters
HCA	Hosting Capacity Analysis
IDP	Integrated Distribution Plan
IEEE	Institute of Electrical and Electronics Engineers
IIJA	Infrastructure Investment and Jobs Act
ISQ Map	Interactive Service Quality Map
LIHEAP	Low-Income Home Energy Assistance Program
MPCA	Minnesota Pollution Control Agency
OAG	Office of the Attorney General
PBR	Performance Based Ratemaking
POC	People of Color
QSP	Quality of Service Plan
SRSQ	Safety, Reliability, and Service Quality

**III. Introduction**

The analysis and recommendations summarized in these briefing papers are the conclusion of a multi-year process that has included deep engagement from stakeholders and Xcel Energy (Xcel or Company). Development of the Interactive Service Quality (ISQ) Map began in 2020 and, from Staff's perspective, has been a collaborative, thoughtful, and careful process that has methodically examined what information was necessary to determine whether there are disparities in Xcel's delivery of reliable and equitable service. While not summarized in the present briefing paper, previous briefing papers for prior decisions in Docket E002/M-20-406 contain in-depth explanations of how stakeholders considered the data in the ISQ Map. This

formed the basis for two separate analyses, the Xcel-TRC Study, and the Pradhan-Chan Study, that used rigorous statistical analysis to come to the same conclusion: there are identifiable disparities in reliability and service quality throughout the Company's service territory. The focus of this briefing paper is on actions Xcel and stakeholders have proposed to alleviate these disparities. Staff believes there are four categories of decisions the Commission may make:

- 1) Immediate policy changes
- 2) Development of future proposals or programs
- 3) Enhanced reporting and data availability through the ISQ Map
- 4) Additional analyses to better determine the root cause of disparities and track progress

Staff has tried to subdivide the briefing paper into sections that align with the categories above, however there is some overlap in participant recommendations. As such, Staff has tried to point out where a recommendation is mirrored in a later section, especially as it pertains to additional analysis or additional reporting and information. Finally, Staff has provided a Deliberation Outline at the end of these briefing papers.

#### **IV. Background**

In its September 18, 2019, Order in the Performance Metrics Docket,<sup>1</sup> the Commission set out several "future metrics" that required further development. Relevant to the instant notice, the Commission directed Xcel and stakeholders to develop metrics to allow for measurement and reporting for the following:

- 1) Locational Reliability
- 2) Reliability- Equity – reliability by geography, income, or other relevant benchmarks
- 3) Customer Service Quality- Equity metric – customer service quality by geography, income, or other relevant benchmarks<sup>2</sup>

The Commission's January 28, 2020, Order in Xcel's 2019 Safety, Reliability, and Service Quality (SRSQ) report moved development of the "future metrics" to Xcel's next SRSQ report (Docket No. E002/M-20-406) due to the overlap with existing reliability and service quality reporting.<sup>3</sup> In that same Order, the Commission authorized a notice of comment period to facilitate such development by requesting comments on Staff's proposal.<sup>4</sup>

In its December 18, 2020, Order the Commission required Xcel to file additional information

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<sup>1</sup> Docket E-002/CI-17-401

<sup>2</sup> ORDER ESTABLISHING PERFORMANCE METRICS issued September 18, 2019, Docket No. E-002/CI-17-401, p. 7-8

<sup>3</sup> ORDER ACCEPTING REPORTS, ESTABLISHING RELIABILITY STANDARDS, AND REQUIRING ADDITIONAL FILINGS issued January 28, 2020, Docket No. E-002/M-19-261, p. 7. See also Staff's November 12, 2019, Notice- Staff Recommendation on Equity Metric filed in Docket No. E002/CI-17-401 which first contemplated moving the development of locational reliability and reliability-equity metrics to Xcel's Safety, Reliability, and Service Quality, annual report (SRSQ). Later, customer service quality-equity metric was also moved to SRSQ for discussion per the Notice of Comment Period issued April 20, 2020, in Docket No. E002/M-20-406.

<sup>4</sup> ORDER ACCEPTING REPORTS, ESTABLISHING RELIABILITY STANDARDS, AND REQUIRING ADDITIONAL FILINGS issued January 28, 2020, Docket No. E-002/M-19-261, staff's proposal was termed "Attachment C." See also Notice of Comment Period issued April 20, 2020, in Docket No. E002/M-20-406, Staff's proposal was termed "Attachment A" and is found on p. 4.

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pertaining to the locational reliability and reliability-equity metrics in its SRSQ report filed April 2021. More, the Commission ordered further record development through technical workshop(s) and ordered Xcel to collaborate with a workgroup to develop an interactive map.<sup>5</sup>

Commission staff hosted two technical workshops which served to (1) understand data currently collected<sup>6</sup> and (2) discuss which metrics should be used in mapping, appropriate and publicly available equity metrics, map scale, and period over which data would be shown.<sup>7</sup>

At the conclusion of workshops, metrics shown on Xcel's interactive map had not been agreed upon by all participants. For example, Staff's summary report acknowledged that, "consensus was not determined on a final set of demographic data to use."<sup>8</sup> Though consensus was not reached, following the workshops Xcel agreed to make a demonstration map.<sup>9</sup> The demonstration map was reviewed during a third and final virtual stakeholder workshop on September 21, 2021. On December 15, 2021, Xcel shared an updated map with its entire Minnesota service territory, including modifications made in response to stakeholder feedback.<sup>10</sup>

In its February 9, 2022 Order the Commission accepted Xcel's first Performance Based Ratemaking (PBR) report, and ordered Xcel, in filing its interactive map, to also display energy bill assistance and low-income energy efficiency program participation, overlaid with a map of Areas of Concentrated Poverty (ACPs) in its MN territory in future annual service quality reports.<sup>11</sup>

Xcel filed versions of its interactive map for its entire service territory in its two most recent SRSQ filings.<sup>12</sup> Along with demographic data, the map contains five metrics:

1. Customers Experiencing Lengthy Interruptions – 12 hours or longer (CELLI-12);
2. Customers Experiencing Multiple Interruptions – 6 or more in a year (CEMI-6);
3. Percent of Premises experiencing one or more involuntary disconnections in a year;
4. Energy Conservation and Optimization (ECO) low-income participation; and

<sup>5</sup> ORDER ACCEPTING REPORTS, REQUIRING ADDITIONAL FILINGS, AND ESTABLISHING WORKSHOP issued December 18, 2020, DOCKET NO. E-002/M-20-406, p5-6. See additional information as shown in Attachment A of the Order.

<sup>6</sup> WORKSHOP 1 AND 2 NOTES - EQUITY METRICS FOR RELIABILITY AND SERVICE QUALITY – Meeting Slides filed August 11, 2021, into Docket No. E002/M-20-406. Workshop One held June 23, 2021.

<sup>7</sup> WORKSHOP 1 AND 2 NOTES - EQUITY METRICS FOR RELIABILITY AND SERVICE QUALITY – Staff Proposal and Workshop Two Notes filed August 11, 2021, into Docket No. E002/M-20-406. Workshop Two held June 29, 2021.

<sup>8</sup> WORKSHOP 1 AND 2 NOTES - EQUITY METRICS FOR RELIABILITY AND SERVICE QUALITY – Staff Proposal and Workshop Two Notes filed August 11, 2021, into Docket No. E002/M-20-406. See page 2.

<sup>9</sup> 3 COMPLIANCE FILING – INTERACTIVE MAP UPDATE 2019 ELECTRIC SERVICE QUALITY REPORT Docket Nos. E002/M20-406, E002/M-21-237, and E002/CI-17-401 filed October 1, 2021.

<sup>10</sup> LETTER – INTERACTIVE MAP UPDATE ELECTRIC SERVICE QUALITY REPORT Docket Nos. E002/M-20-406, E002/M21-237, and E002/CI-17-401 filed December 15, 2021.

<sup>11</sup> ORDER ACCEPTING REPORT AND SETTING ADDITIONAL REQUIREMENTS issued February 9, 2022, Docket No. E002/CI-17-401, para. 3 and 4.

<sup>12</sup> Xcel Energy April 1, 2022, Annual Report & Petition SERVICE QUALITY PERFORMANCE AND PROPOSED RELIABILITY MEASURES Docket No. E002/M-22-162, map shared Part 1, p1 and Part 2, p26. Also, Xcel Energy March 31, 2023, 2022 Annual Report & Petition SERVICE QUALITY PERFORMANCE AND PROPOSED RELIABILITY MEASURES Docket No. E002/M-23-73, map shared Part 1, p1.

## 5. Low-income energy assistance program participation.

In its May 18, 2023 Order, the Commission determined that the metrics met the requirements of the September 18, 2019 and February 9, 2022 Orders to display low-income energy efficiency program participation and energy bill assistance program participation. While the development of metrics and targets for the data displayed on the ISQ Map was referred back to the PBR docket, the Commission determined it was important to examine disparities in the data displayed on the map as part of the SRSQ docket, and required Xcel to conduct an analysis that examines whether there is a relationship between poor performance for the five identified metrics displayed on the interactive map and equity indicators and file the analysis with its April 1, 2024 SRSQ report, along with any steps to rectify any disparities identified in the analysis.<sup>13</sup>

On April 1, 2024 Xcel filed its Service Quality and Demographics Analysis and next steps with its SRSQ report in Docket 24-27. Separately, in Xcel Energy's 2023 Integrated Distribution Plan (IDP) in Docket E002/M-23-452, the Grid Equity Commenters<sup>14</sup> (GEC) filed an analysis titled Racial and Economic Disparities in Electric Reliability and Service Quality in Xcel Energy's Minnesota Service Area as part of their March 1, 2024 Initial Comments.

On Tuesday, July 9, 2024 the Minnesota Public Utilities Commission held a stakeholder meeting to discuss Xcel Energy's Interactive Service Quality Map and Equity Analysis. At the meeting, participants identified areas for further comment based on the results of the analysis. Accordingly, Staff issued a notice for comment on July 26, 2024 on topics covered at the meeting.

## V. Summary of Disparities Analyses

On April 1, 2024, Xcel filed its Service Quality and Demographics Analysis and next steps with its 2023 SRSQ report in Docket E002/M-24-27. Separately, in Xcel's 2023 Integrated Distribution IDP, the GEC filed an analysis titled "Racial and Economic Disparities in Electric Reliability and Service Quality in Xcel Energy's Minnesota Service Area". Below Staff provides a high-level summary of the results from the two studies, both of which used regression analysis on data from the Company's ISQ Map and data from the American Communities Survey (ACS) at the Census Block Group (CBG) level for all of Xcel's service territory.

### A. TRC Study

Xcel commissioned Dr. Brett Close of TRC to perform the *Service Quality and Demographics Analysis* (TRC Study)<sup>15</sup> which examined whether there were disparities in reliability and service quality metrics in the Company's service territory. TRC's study used a prior 2022 analysis by Dr. Gabriel Chan from Xcel's 2021 rate case as the base for its analysis, and built on that study by adding additional variables<sup>16</sup> to correct for "omitted variable bias" and using a different

<sup>13</sup> May 18, 2023 ORDER, Docket E002/M-20-406

<sup>14</sup> Cooperative Energy Futures, Environmental Law & Policy Center, Sierra Club, and Vote Solar

<sup>15</sup> Docket No. 24-27 Xcel [SRSQ Report, Part II](#). TRC study results start at p. 106.

<sup>16</sup> For example, housing vintage, English proficiency, access to Company payment center, home computer, and internet access.

methodology (nonparametric kernel smoothing regressions). TRC explained this methodology does not require relationships among variables to be defined linearly, with a constant slope, but instead, “it allows relationships to be curved lines or curved surfaces.” The TRC study also examined additional criteria for evidence of disparities: outage duration (CELLI), outage frequency (CEMI), participation in the ECO Low Income programs, and participation in the Low Income Energy Affordability Programs.

The key findings from the TRC Study were:

- Disconnections were higher in neighborhoods (Census Block Groups) with a higher percentage of People of Color (POC) households. Percent POC had the strongest impact on disconnections (after controlling for other variables).
- Long outages (CELLI-12) were higher in neighborhoods with a higher percent of People of Color, but only in neighborhoods with older homes.
- After controlling for other variables, there was no clear pattern between CEMI and high POC census blocks.

## **B. Pradhan/Chan Study**

Dr. Gabriel Chan and Dr. Bhavin Pradhan of the University of Minnesota co-authored a study titled *Racial and Economic Disparities in Electric Reliability and Service Quality in Xcel Energy’s Minnesota Service Area*,<sup>17</sup> which was included in the GEC’s comments in Xcel Energy’s IDP and in the instant docket. The study was also peer reviewed and published the July 2024 edition of *The Electricity Journal*.

The study relied on four data sources capturing service quality, demographics, disadvantaged communities, and hosting capacity and used three methodologies (descriptive analysis, hypothesis testing, and regression models). The key findings were:

- There is a correlation between POC households and a higher number of disconnections.
- Disadvantaged communities and high POC neighborhoods have higher CELLI.
- There is a higher hosting capacity in disadvantaged and high POC communities.

At the July 9, 2024 Stakeholder Meeting Dr. Chan outlined key similarities and differences between the two studies. Both studies apply a form of regression analysis (smoothed regression in the case of the TRC study and linear regression in the case of the Chan/Pradhan study). Unlike the TRC Study, the Chan/Pradhan Study incorporates additional analysis of disparities between disadvantaged communities and non-disadvantaged communities (as defined by the Climate and Economic Justice Screening Tool) and analyzes census block groups in the top 10% of population of people of color compared to others using difference-in-means hypothesis testing.<sup>18</sup>

Both studies analyzed long-duration outages, multiple outages, and disconnections. The TRC

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<sup>17</sup> Pradhan, Bhavin; Chan, Gabriel. (2024). *Racial and Economic Disparities in Electric Reliability and Service Quality in Xcel Energy’s Minnesota Service Area*. Retrieved from the University Digital Conservancy, <https://hdl.handle.net/11299/261434>.

<sup>18</sup> Minnesota PUC, July 9, 2024 Stakeholder Meeting Notes, Docket E002/M-24-27, p. 3



Study also incorporated participation in affordability programs and the Chan/Pradhan Study incorporated analysis of hosting capacity. Despite methodological differences, both studies found very similar results where involuntary disconnections were conducted more frequently among census block groups with a higher proportion of people of color, both overall and within communities with similar income levels. Both studies also found that long-duration outages were more common in census block groups with a higher proportion of people of color. Finally, both studies did not find evidence of disparities in the experience of customers experiencing multiple outages.<sup>19</sup>

## VI. Studies to Address Disparities

Participants recommended a series of additional analyses to either monitor progress on reducing the identified disparities or to better understand the root cause of why the disparities exist:

- Repeat of TRC/Pradhan-Chan analysis at a regular interval (GEC, Department)
- Perform a root cause analysis identified disparities (Xcel)
- Hire an independent third-party with expertise in racial bias to investigate the Company's capital investment planning, outage restoration practices, and shutoff practices and policies. (Fresh Energy)

### 1. Repeat of prior analysis

GECs recommended Xcel perform an annual analysis similar to the TCR study and provide it with the SRSQ report in order to track progress in reducing disparities. They recommended using more years for the regression analysis, for example six or nine years, to be more comprehensive.<sup>20</sup> The Department also recommended an update of the reliability analysis using five years of data. It recommended the Company file them with the April 1, 2025 and April 1, 2026 SRSQ reports.<sup>21</sup>

Xcel supported performing repeated analysis to track its progress and identify which strategies were performing well or not. However, the Company recommended repeating the analysis at a three-year interval instead of on an annual basis for three reasons:

- The root cause of the disparities identified in the analysis are deeply entrenched in society and it will take time to reverse them, especially as new pilots and programs are rolled out. Allowing more time between analyses will give new policies time to take effect and indicate whether they are working.
- The ISQ Map relies on 3-year averages for reliability metrics, therefore a three-year analysis will have a refreshed data set for the analysis.
- There is a cost to perform the studies, with the current TRC study costing \$45,000. Future re-analysis could have higher costs as there may be new layers added to the map and additional data to analyze. Doing the re-analysis every three years would minimize

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<sup>19</sup> Minnesota PUC, July 9, 2024 Stakeholder Meeting Notes, Docket E002/M-24-27, p. 3

<sup>20</sup> GEC, Initial Comments, August 28, 2024, p. 17

<sup>21</sup> Department, Initial Comments, August 27, 2024, p. 20

costs and spread them out. Xcel noted it plans to seek recovery of study costs in a subsequent rate case.<sup>22</sup>

In Supplemental Comments the Department supported redoing the TRC analysis on a three-year cadence.<sup>23</sup>

Fresh Energy and the Department also recommended the Pradhan-Chan study be redone in two years using five years of weather data and be filed with the Company's April 1, 2026 SRSQ report.<sup>24</sup> Xcel explained that it would be up to the study's authors whether they perform the study again, and not the Company as it was not affiliated with the report.<sup>25</sup>

**Decision Options 54-55** would require ongoing analyses similar to the one already performed.

## 2. Xcel Proposed Analyses

Xcel proposed potential further analyses to better determine the causes of the inequities identified in the TCR study. Neither study fully explored the causes of disparities nor solutions to bring results. Xcel stated that disparities are part of larger, systemic problems.<sup>26</sup> The Company explained that the studies would be time and labor intensive and as such requested feedback from stakeholder on whether they would be helpful to pursue. Xcel requested "sufficient time to evaluate the viability of such analyses in terms of cost, time required, available data, and other considerations."<sup>27</sup>

The first analysis would evaluate disparities in reliability with Xcel conducting a in depth analysis on the causes of CELI-12 outages to determine what is impacting the higher CELI-12 rates in underserved CBGs. The Company explained this would help inform whether targeted underground would remedy the problem, or if other solutions would be more impactful.<sup>28</sup>

For evaluating disconnections disparities Xcel explained it could retain an independent consultant to conduct qualitative interviews with residents impacted by inequitable disconnection rates "to better understand perceived causes of disconnection, effective communications practices, and whether there are additional steps the Company could take."

**Decision Options 56** would direct Xcel to develop the outlined analysis.

## 3. 3<sup>rd</sup> party Evaluation

Fresh Energy recommended that the Commission "require Xcel Energy to hire an independent third-party with expertise in racial bias to investigate the Company's capital investment planning, outage restoration practices, and shutoff practices and policies." Fresh Energy

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<sup>22</sup> Xcel, Reply Comments, September 12, 2024, p. 36-38

<sup>23</sup> Department, Supplemental Comments, September 23, 2024, p. 10-11

<sup>24</sup> Department, Initial Comments, August 27, 2024, p. 20

<sup>25</sup> Xcel, Reply Comments, September 12, 2024, p. 36-38

<sup>26</sup> Xcel, Reply Comments, September 12, 2024, p. 2.

<sup>27</sup> Xcel Energy, Initial Comments, August 27, 2024, p. 18

<sup>28</sup> Xcel Energy, Initial Comments, August 27, 2024, p. 18

recommended stakeholders be allowed to give input to the process through the third party, and that the Company be required to complete the study within one year and then take another year to find solutions.<sup>29</sup>

The OAG supported Fresh Energy's recommendation for further study, especially to identify the root causes of disparities in disconnections. The OAG agreed with Fresh Energy that there is not enough information to determine whether entrenched social issues are the cause of disparities or whether there are unintentional factors in the Company's own policies that exacerbate these inequities. The study therefore could assist in finding way to help remedy these causes.<sup>30</sup>

**Decision Option 56** would require Xcel to conduct a third-party study.

#### 4. Staff Analysis

Staff agrees that additional analysis would be useful both to better identify the cause of disparities, and to track progress toward reducing them.

Staff concurs with stakeholders that redoing a regression analysis like the TCR study on a regular basis would provide a reasonable way to track progress towards goals, while more in-depth qualitative analyses are necessary to determine why disparities exist and will assist in tailoring better solutions. Staff believes a three-year cycle is an appropriate timeframe for the reasons explained by the Company. Staff also notes that due to the review cycle in the regulatory process a yearly analysis would likely leave little time between Commission review and the due date for a subsequent analysis. Furthermore, Continuing to use three years of data for the analysis would provide the best comparison with the previous analysis. Staff believes requiring the Company to submit the next report on April 1, 2027 with its SRSQ report would line up with the three-year cycle. (**Decision Option 52**) While the analysis would be performed on a three year cycle the Company would continue to update the underlying data on an annual basis as part of the ISQ Map.

There was less coalescence around which other studies should be performed, however there is general agreement that more in-depth analysis of the root causes of the identified disparities is necessary. Staff suggests the Commission discuss with parties which studies they prefer from Decision Options 54 through 58.

#### VII. Disparities in Shutoffs

Following the studies conducted by TRC and Drs. Pradhan and Chan, the disparities in shutoffs are well-established. The below section displays various solutions to address those disparities.

A possible three-step plan has been proposed by many parties: 1) Begin a study; 2) While the study is being conducted, institute a temporary disconnection moratorium; and 3) Adopt other strategies to address disparities in shutoffs.

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<sup>29</sup> Fresh Energy, Initial Comments, August 27, 2024, p. 7

<sup>30</sup> OAG, Reply Comments, September 12, 2024, p. 6-7

All parties agreed upon conducting a new study to find viable solutions to address disparities in shutoffs and reliability. In the meantime, parties made many suggestions to decrease the number of disconnections until the study has been completed. The most drastic of these suggestions are a disconnection moratorium. Other ideas include but are not limited to:

- Adjusting or denying Xcel’s remote disconnection variance
- Outreach strategies
- Transparent payment arrangements and disconnection practices
- Using remote restoration to protect customers during extreme heat and poor air quality events
- Improvements to payment agreements and disconnection/reconnection procedures
- New assistance programs
- Improving internal processes at Xcel

All of the strategies to address shutoff disparities are detailed below.

#### **A. Docket 22-233 – Xcel’s Remote Disconnection Variance**

In Docket 22-233, Xcel requested utilizing remote disconnection and reconnection through its new Advanced Metering Infrastructure (AMI) system. The request required a Minn. Rule variance. Xcel says that the deployment of AMI “provides the Company the ability to remotely manage customer disconnections and reconnections.”<sup>31</sup> As of 2023, there were a total of 666,544 AMI installations and 1,158 AMI opt-outs.<sup>32</sup>

The Commission granted a one-year temporary variance to Minn. Rule 7820.2500, requiring the Company to file annual reports in its 2023, 2024, and 2025 electric service quality dockets (YR-27).<sup>33</sup> Xcel has agreed to file a report 30 days after one full year of AMI deployment.<sup>34</sup>

On August 29, 2023, Xcel discovered that the process to trigger a field visit when the Company is not able to reach a customer by phone was inadvertently not established. 1,161 customers were disconnected without a field visit between May 1 and August 28, 2023. Xcel suspended disconnections until the system was corrected. Xcel was unaware of any complaints related to this issue.<sup>35</sup>

#### *Customer Contact Procedure*

Minn. Rule 7820.2500 requires a utility representative to make personal contact with a customer at their address before disconnecting service.<sup>36</sup> After the Commission approved the

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<sup>31</sup> Xcel SRSQ report, April 1, 2024, p. 24.

<sup>32</sup> Xcel SRSQ report, April 1, 2024, Table 11, p. 32.

<sup>33</sup> Docket 22-233 Commission ORDER APPROVING PETITION AS MODIFIED AND REQUIRING FILINGS, March 22, 2023.

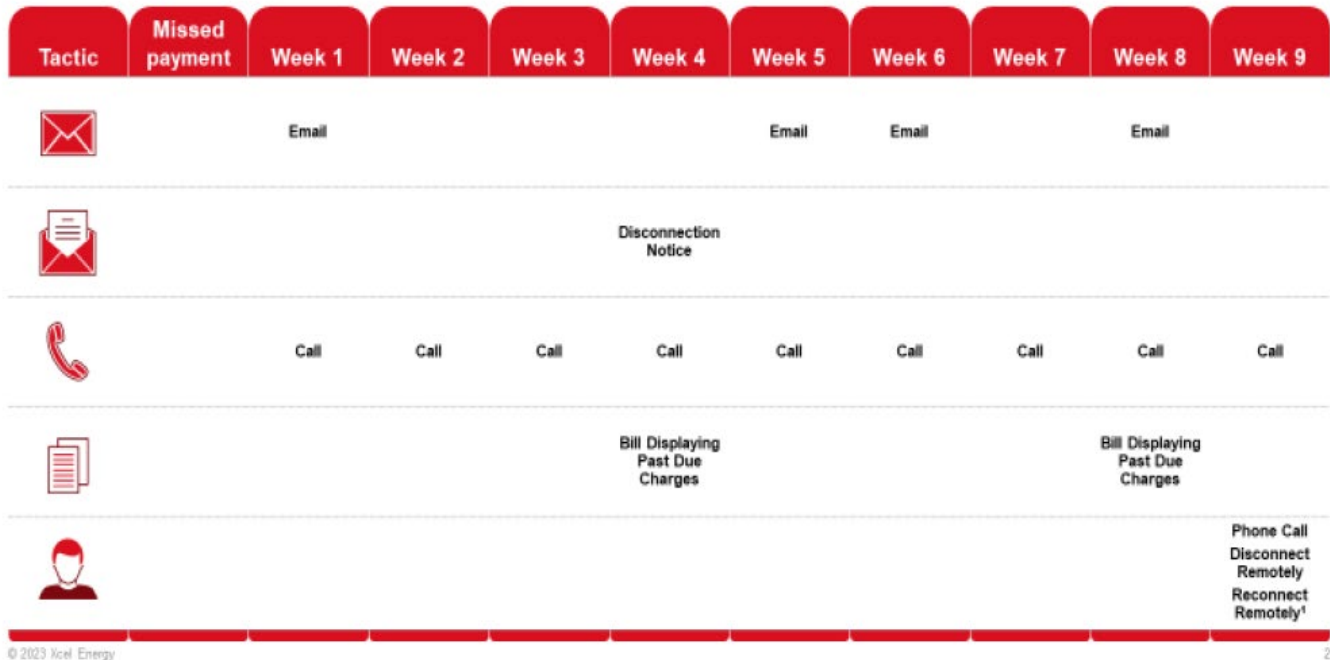
<sup>34</sup> Xcel SRSQ report, April 1, 2024, Table 11, p. 34.

<sup>35</sup> Xcel SRSQ report, April 1, 2024, p. 27.

<sup>36</sup> [Minn. Rule 7820.2500 Manner of Disconnection.](#)

variance request, Xcel adopted additional protections for customers with medical needs. Below is Figure 1, which displays Xcel’s customer contact procedure for AMI customers that are at-risk for disconnection.

**Figure 1: Procedure for Contacting Customers At-Risk for Disconnection<sup>37</sup>**



Xcel defined the “phone call” requirement as either speaking to the customer or leaving a voicemail. If Xcel has the ability to leave a voicemail, the Company considered this requirement to be sufficiently satisfied. Therefore, customers may not have direct contact with an Xcel Energy staff person before disconnection by eliminating field visits for the majority of customers. Note that if Xcel is not able to leave a voicemail, they will perform a field visit:

Our AMI remote disconnect/reconnect process requires that in lieu of the field visit, we establish successful contact with the customer via an additional call or voicemail. If we cannot establish this contact, the Company is to perform a field visit prior to disconnection.<sup>38</sup>

*Reconnection Times and Costs*

Service may be disconnected only in conjunction with a personal visit by a representative of the utility to the address where the service is rendered and an attempt to make personal contact with the customer at the address. If the address is a building containing two or more dwelling units, the representative shall make a personal visit to the door of the customer's dwelling unit within the building. If security provisions in the building preclude free access on the part of the representative, the representative shall attempt to gain access to the building from the caretaker, for the purpose of attempting to make personal contact with the customer. The representative of the utility shall at all times be capable of receiving payment, if nonpayment is the cause of the disconnection of service, or the representative shall be able to certify that the cause of disconnection has been remedied by the customer.

<sup>37</sup> Xcel comments, June 24, 2024, p. 6.

<sup>38</sup> Xcel SRSQ report, April 1, 2024, p. 26.

The Company provided a comparison of AMI and manual reconnection times.

**Table 1: Xcel Customer Reconnection Times – Remote vs. Manual<sup>39</sup>**

Customer Class	Average Remote Reconnection Hours	Average Manual Reconnection Hours
<b>Residential</b>	0.51	29.53 (1.23 days)
<b>Commercial</b>	0.74	64.99 (2.71 days)
<b>All Classes</b>	0.54	30.80 (1.28 days)

Xcel also provided the average cost to disconnect and reconnect service both remotely and manually. The below table shows a comparison between 2022 and 2023 costs. Xcel noted that most of its customers outside of the Metro area do not yet have AMI and must be disconnected remotely. Therefore, the cost for in-person visits reflects driving farther distances on average. However, as AMI deployment continues, the only long drive times in the future will be to reach customers that have opted-out of AMI.

**Table 2: Average Cost to Disconnect and Reconnect Service – Remote vs. Manual<sup>40</sup>**

	2022 Costs		2023 Costs	
	Remote	Manual	Remote	Manual
<b>Pre-lock Call Cost</b>	\$0.53	\$0.53	\$0.56	\$0.56
<b>Post-lock Call Cost</b>	\$3.74	\$3.74	\$3.95	\$3.95
<b>Field Personnel Costs – Disconnects</b>	\$8.46	\$59.75	\$14.76	\$104.28
<b>Field Personnel Costs – Reconnects</b>	\$1.08	\$35.85	\$1.88	\$62.57
<b>Total Cost</b>	<b>\$13.80</b>	<b>\$99.87</b>	<b>\$21.15</b>	<b>\$171.36</b>

The total difference in cost to perform a remote disconnect/reconnect vs. a manual disconnect/reconnect is \$150.21 in 2023.

### 1. Deny Variance

The GECs recommended that the Commission consider halting remote disconnections altogether until the Company has conducted a cost-benefit study of disconnections and has implemented potential disconnection policy improvements.<sup>41</sup>

The record number of disconnections appears to be correlated to Xcel's ability to remotely disconnect customers. The GECs wrote that:

At no point in the last two decades, even during the Great Recession, has the rate of residential disconnections approached the level seen in the three months since the end of Cold Weather Rule protections in 2024.<sup>42</sup>

<sup>39</sup> Xcel SRSQ report errata, April 30, 2024, Table 10, p. 29.

<sup>40</sup> Xcel SRSQ report, April 1, 2024, Table 10, p. 29.

<sup>41</sup> GEC comments, June 24, 2024, pp. 5.

<sup>42</sup> GECs comments, September 12, 2024, p. 3.

In its initial comments, Energy CENTS Coalition (ECC) and the Citizens Utility Board of Minnesota (CUB), filing together as the Joint Commenters, did not recommend granting the variance and recommended disallowing remote disconnections until issues around payment agreements and down payment requirements are resolved.

**Decision Option 10** denies Xcel's variance to Minn. R. 7820.2500.

## 2. Approve Variance

In regards to Xcel's Rule variance, the Company requested that the Commission approve a temporary, one-year variance request. In addition, Xcel requested that any approval extends until the Commission decides on the variance in the next SRSQ report and that the gap between expiration of the current variance and the next decision on the variance be retroactively approved.<sup>43</sup>

The Department wrote that "enforcement of the rule would pose an excessive burden" on Xcel, because it would be safer for field staff to perform in-person visits to the household.<sup>44</sup> Further, requiring Xcel to file another request to cover the period of the variance granted between the 2023 SRSQ report and the upcoming agenda meeting is also an excessive burden on the Company. Therefore, the Department supported the entirety of Xcel's request.

Originally, ECC-CUB only supported Xcel's remote disconnection variance if additional customer protections were made. After discussions with the Company, ECC-CUB no longer took issue with a one-year extension to the remote disconnection variance.<sup>45</sup>

**Decision Option 9** approves Xcel's variance to Minn. R. 7820.2500.

## 3. Eliminate Voicemail as a Permissible Form of Final Contact as a Condition of Extending the Variance

Originally, ECC-CUB supported eliminating voicemail as a permissible form of final contact as a condition of extending the variance, saying that voicemails do not provide an adequate opportunity for customers to take preventative measures to avoid disconnection. ECC-CUB spoke with Xcel and understood that the final calls are automated. Therefore, it was impossible to verify whether 1) the voicemail is being received by the intended recipient or 2) the phone is still associated with the residence being disconnected.<sup>46</sup> Even if a message is recorded to the proper number, Xcel does not know whether the customer listens to it.

ECC-CUB were "extremely concerned about this overarching trend in disconnections and remain wary of how remote metering capabilities are contributing to adverse customer impacts."<sup>47</sup> Poor financial circumstances lead to higher arrearage levels, and therefore, more

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<sup>43</sup> Xcel SRSQ report, April 1, 2024, p. 23.

<sup>44</sup> Department comments, June 14, 2024, p. 27.

<sup>45</sup> ECC/CUB comments, September 12, 2024, p. 4.

<sup>46</sup> ECC/CUB comments, June 14, 2024, p. 5.

<sup>47</sup> ECC/CUB comments, June 14, 2024, p. 4.

customers are eligible for disconnection than prior to the pandemic. They stated that May 2024 saw record disconnections within the past decade, and 80% of those were performed remotely.

Therefore, if the Commission grants Xcel the remote disconnection variance, ECC-CUB recommended that the Commission eliminate voicemail messages as a permissible form of final contact as a condition of extending the variance. ECC-CUB did not believe that voicemails were an adequate opportunity for customers to take preventative measures to avoid disconnection.<sup>48</sup> In its reply comments, ECC-CUB appreciated that there are additional costs associated with field visits but continued to recommend denial of the variance unless the Commission does not allow voicemails as the final customer contact before disconnection.<sup>49</sup>

Fresh Energy supported ECC-CUB' recommendation, saying that:

Requiring the Company to actually connect with the customer before ordering a remote disconnect could help the customer avoid a disconnection and enter into a payment arrangement.<sup>50</sup>

GECs also supported this suggestion.<sup>51</sup>

In the Company's reply comments, Xcel wrote that it continues to believe that its current nine-week customer contact process prior to disconnection is adequate. Xcel wrote about why its final call procedure provides adequate notice to customers before disconnection.

Customers simply do not answer their phones often when we call.<sup>52</sup>

77% of the time final calls to customers are left over voicemail.<sup>53</sup>

Between January and May 2024, 8% of customers answered the call from the Company. 77% of calls were delivered to voicemail. The Company said that calls are more convenient for working individuals. In response to ECC-CUB, Xcel could not determine if a customer has listened to a voicemail, but it can verify that the voicemail was delivered.

Xcel said that less customers answer the door during a field visit as compared to the past. Before COVID-19, approximately 10% of customers would answer the door. In 2024, 4% of customers have answered the door.<sup>54</sup> Further, Xcel stated that:

Customers must have accountability to pay for the service they are provided, and if they need help, they are offered multiple opportunities to make contact with the Company to establish a payment plan or seek assistance.<sup>55</sup>

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<sup>48</sup> ECC/CUB comments, June 14, 2024, p. 5.

<sup>49</sup> ECC/CUB comments, June 24, 2024, p. 5.

<sup>50</sup> Fresh Energy comments, June 24, 2024, p. 2.

<sup>51</sup> GEC comments, June 24, 2024, pp. 5-6.

<sup>52</sup> Xcel comments, June 24, 2024, p. 3.

<sup>53</sup> 24-27 (Xcel) reply comments, June 24, 2023, p. 3.

<sup>54</sup> 24-27 (Xcel) reply comments, June 24, 2023, p. 3.

<sup>55</sup> 24-27 (Xcel) reply comments, June 24, 2023, p. 4.



Xcel offered more clarity on its disconnection procedures:

- A customer's balance would likely be 60 days past due before a disconnection.
- Xcel begins contacting the customer if they have a past due balance of at least \$50.
- The past due portion of a customer's bill must be at least \$150 before sending a disconnection notice.

Xcel does not support eliminating voicemail. Further, Xcel stated that eliminating voicemail as final disconnection contact would essentially eliminate the usefulness of AMI and would increase the following.<sup>56</sup>

- 1) **Staff:** Staffing would have to be increased significantly in order to resume field visits. The current rates of labor and travel will experience inflationary increases over time.
- 2) **Bad debt:** Xcel estimated the bad debt expense in 2025 at approximately \$2 million. This amount would be greater in 2026 and beyond after AMI has been fully deployed.
- 3) **Reconnection costs:** In 2023, 24,280 customers were disconnected. The cost to reconnect with a field visit would be \$886,220. This would be a recurring annual cost that would increase over time.

After offering that clarity, the Department said that AMI disconnections are a cost-saving measure and concluded that "customers receive an adequate number of opportunities to resolve their past due balance."<sup>57</sup>

ECC-CUB no longer believe that eliminating voicemail as the final form of contact is necessary. It says that telephone messaging results in more opportunities for customers to resolve arrears and maintain service as compared to field visits. Therefore, while they introduced the idea, ECC-CUB no longer recommend eliminating voicemail as the final contact method. Meanwhile, Fresh Energy and the GECs are still in support of the recommendation.

**Table 3: Successful Contact to Customers Eligible for Disconnection by Method<sup>58</sup>**

Method	Successful Contact
In-person visits	4.89%
Final phone calls	6.8%
All telephone messaging	72.2%

**Decision Option 11** eliminates voicemail messages as a permissible form of final contact before remote disconnection as a condition of extending the remote disconnection variance.

#### 4. Two Additional Methods of Electronic Communications

In lieu of eliminating voicemail, the Department recommended that Xcel increase the existing voicemail-only requirement to two methods of electronic communication. The other two methods are text and email. For Xcel to leave a voicemail and a text or email, the Department

<sup>56</sup> Xcel supplemental comments, Sept 23, 2024, pp. 5-6.

<sup>57</sup> Department reply comments, August 27, 2024, p. 11.

<sup>58</sup> Joint commenters supplemental comments, September 12, 2024, pp. 4-5.

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concluded that this would be a reasonable attempt at contacting the customer.<sup>59</sup>

After discussions with the Company, the ECC-CUB supported using the two methods of electronic communication in addition to the final voicemail, in which case, they supported Xcel's variance.

These supplemental methods of communication could result in higher engagement from customers if they are a preferred form of contact.<sup>60</sup>

The Company further offered to use an "additional electronic form of communication can be added for customers (1) who give us permission to do so, and (2) for whom we have correct contact information available."<sup>61</sup>

**Decision Option 12** requires Xcel to use additional means of contact for final communication.

## 5. Staff Analysis

### Benefits of AMI

It is clear from the record that AMI shows clear benefits for customers:

- Decreased reconnection fees
- Lower reconnection times
- The ability to temporarily reconnect customers during an emergency (which will be discussed later in the briefing papers)

### Effect of AMI on Increased Disconnections

Per its variance granted in 22-233, the Company does not have to send a field staff to perform a disconnection. Remote capable meters have made disconnections much simpler as Xcel confirmed that the widespread rollout of remote-capable meters has increased disconnections:

Prior to AMI, resource and time constraints meant that the Company was disconnecting only about 6 percent of customers eligible for disconnection. So far in 2024, the Company has disconnected about 16 percent of eligible customers.<sup>62</sup>

An idea that parties did not propose is setting a disconnection cap. Staff is unsure what an appropriate cap (the percentage of customers eligible for disconnection that the utility is allowed to disconnect) would be. However, Staff is concerned about the levels of disconnections for customers and the data showing impacts on POC customers.

Following the COVID-19 moratorium, 2023 was the first full year of disconnections. The below shows that 2023's disconnections are in line with pre-pandemic levels. Meanwhile, 2024 was the first year of widespread remote disconnections. After Cold Weather Rule season ended on

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<sup>59</sup> Department reply comments, August 27, 2024, p. 12.

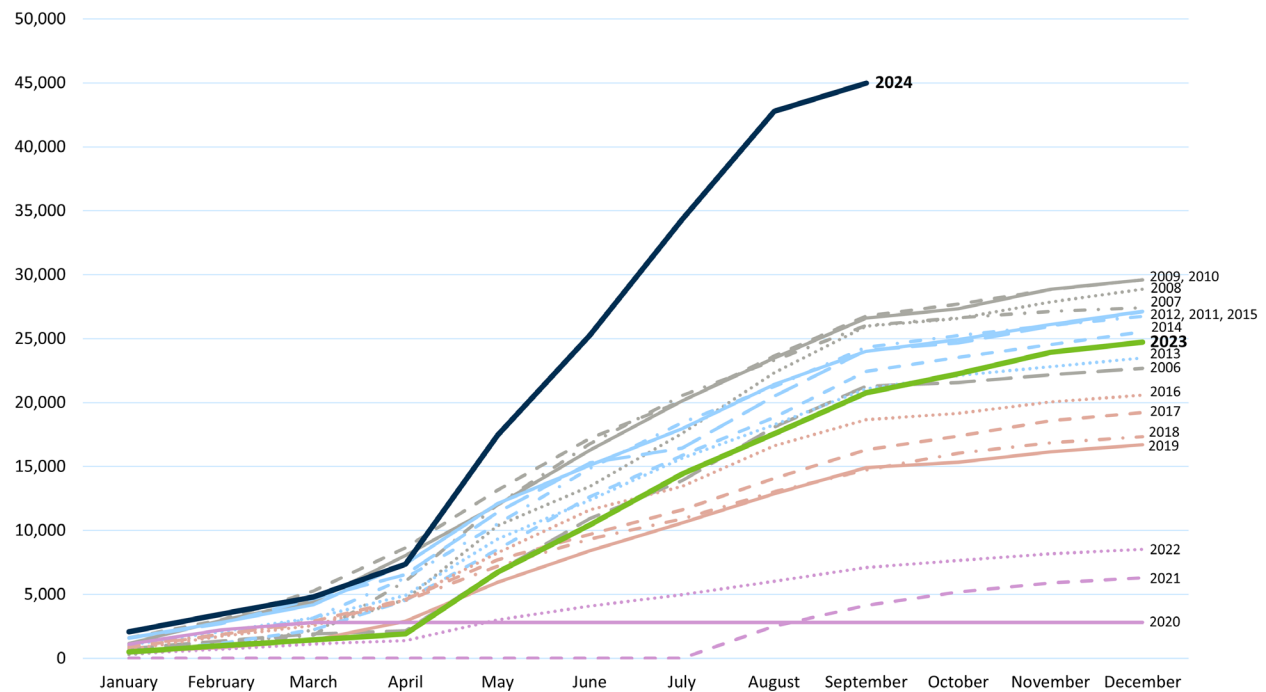
<sup>60</sup> ECC/CUB comments, September 12, 2024, p. 5

<sup>61</sup> Xcel comments, September 12, 2024, p. 16.

<sup>62</sup> Xcel supplemental comments, Sept 23, 2024, p. 9-10.

April 30, 2024, disconnections skyrocketed. Staff compiled Figure 2 with all disconnections from 2006 – 2024 by month.

**Figure 2: Cumulative Annual Disconnections (2006-2024)<sup>63</sup>**



Disconnections in 2024 are the highest they have been in nearly two decades. In its June 24, 2024 comments, the Company stated that it thought its 2024 disconnection numbers were projected to be in line with 2023. The figure above shows that at the end of July 2024, Xcel had conducted a record number of disconnections.

### Eliminating Voicemails and New Methods of Communication

As Xcel demonstrated, field visits are not as effective as calls (5%). However, final voicemails are only slightly more effective (7%). Adding additional methods of communication would be helpful to reach more customers, because more customers, especially younger individuals, are more likely to respond to electronic communication versus phone calls.

The Commission may want to consider the following ideas:

- To Staff's knowledge, customers do not currently have the option to set up payment plans online or over text and may only do so over the phone. Setting up payment arrangements over different forms of communication may be an idea to explore in the future.
- In discussion of field visits, it was well-established that customers frequently do not answer the door, often because they are not at home. One part of the former door

<sup>63</sup> Xcel's annual SRSQ and monthly YR-2 reports.

knock process that was not discussed are door tags. Formerly, the field staff would leave a paper door tag for customers up for disconnection. To Commission Staff's knowledge, Xcel no longer leaves door tags, which may be more effective than a series of voicemails.

- Final calls are automated in nature. Another idea is Xcel making the final calls manually by Xcel's customer service representatives. If a customer picks up a phone call to a live person, they may be more apt to set up a payment arrangement and avoid disconnection.

## **B. Disconnection Moratorium**

Parties suggested a disconnection moratorium to address growing service shutoffs, especially for people living in communities with a high percentage of POC. Under this proposal, Xcel would be prohibited from performing involuntary disconnections during the length of the moratorium. Some parties recommended a service territory-wide moratorium; others recommended a moratorium only for identified CBGs with a high percentage of POC and the lowest of incomes. This would ultimately be a temporary moratorium while more studies are conducted to determine the reasons behind the shutoff disparities and effective, actionable solutions.

### **1. Approve Moratorium**

The GECs supported Xcel's proposed strategies for greater transparency, accessibility, and flexible of payment plans. However, the GECs "d[id] not believe that these proposed actions alone are a sufficient response to 'rectify' the magnitude of disparities that have been identified in the record."<sup>64</sup>

The GECs recommended that during the disparity study, a moratorium on all disconnections territory-wide should be enacted. The moratorium should last until the study has been completed, and the Commission has reviewed it.<sup>65</sup> The GECs justified a disconnection moratorium with findings from the Pradhan-Chan study. Over the past six years, households in CBGs with more than 30% of POC were more than three times as likely to be disconnected for non-payment as compared to CBGs with less than 10% POC. This relationship exists even when controlling for income. The GECs stated that since disconnections have increased as of May 2024, this will have even greater impacts to POC populations.

Addressing Xcel's concerns over arrears, the GECs said that there is no evidence in the record that the current disconnection policies are helping customers, and instead, suspected that disconnections are having the opposite effect. Disconnections send customers deeper into poverty and can lead to child protective service investigations, mental health crises, and challenges obtaining food and medicine.

If the Commission wanted a narrow focus, Fresh Energy supported a moratorium for customers in very low-income census block groups with high concentrations of POC. A moratorium would

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<sup>64</sup> GECs comments, September 12, 2024, p. 4.

<sup>65</sup> GEC comments June 14, 2024, pp. 8-9.

help build trust between Xcel and communities of color. Fresh Energy justified its opinion as such:

Customers in these areas may be navigating challenging circumstances, including working multiple jobs, while caring for children and/or other relatives, and also being saddled with high energy bills due to living in older, less efficient housing.<sup>66</sup>

Fresh Energy said that a short-term moratorium would allow Xcel and stakeholders to review existing policies and make reforms based on the study. Fresh Energy believed that without a moratorium, disconnections will continue at unfair rates.

Fresh Energy believes that Xcel Energy should not be permitted to exacerbate existing racial disparities, and that this should take priority over the potential for financial loss.<sup>67</sup>

Fresh Energy said that Xcel has an obligation to provide equitable service to all of its customers. Shutoffs can trigger increased financial instability, health crises, and even homelessness. Communities of color are already facing broader inequities like lower incomes, higher unemployment rates, and reduced access to quality housing and healthcare.

Sierra Club supported a territory-wide moratorium, or at least, a targeted moratorium in communities with high concentrations of people of color.<sup>68</sup>

The OAG too supported a temporary moratorium. It is a viable short-term solution to prevent serious harm to Xcel's customers. The OAG said that equity in utility service and protection of all utility customers are fundamental in Minnesota law, quoting Minn. Stat. § 216B.03:

Every rate made, demanded, or received by any public utility, or by any two or more public utilities jointly, shall be just and reasonable. Rates shall not be unreasonably preferential, unreasonably prejudicial, or discriminatory, but shall be sufficient, equitable, and consistent in application to a class of consumers.<sup>69</sup>

The OAG said that Minnesota law prohibits utilities from subjecting customers to unreasonable disadvantages. However, they said that disconnection is a complete denial of utility service.

Regarding arrears, the OAG said:

...how manageable or unmanageable arrearages become is an issue directly under Xcel's control.<sup>70</sup>

**Decision Option 13** institutes a service territory-wide disconnection moratorium.

**Decision Option 14** institutes a targeted moratorium for low income high POC CBGs.

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<sup>66</sup> Fresh Energy comments, June 24, 2024, p. 3.

<sup>67</sup> Fresh Energy comments, August 27, 2023, p. 3.

<sup>68</sup> Sierra Club, September 11, 2024, p. 1.

<sup>69</sup> OAG comments, September 12, 2024, p. 4.

<sup>70</sup> OAG comments, September 12, 2024, p. 9.

## 2. Deny Moratorium

Xcel recognized that more customers were disconnected in 2023 as compared to 2022. An additional 16% of customers received a disconnection notice in 2023. Xcel gave the following reasons for higher disconnections:

- 1) Any extra federal Low-Income Home Energy Assistance Program (LIHEAP) funding was significantly cut in 2023, thereby decreasing assistance resources to its customers.
- 2) The technology capability of AMI meters allows for disconnections with less staff resources, and that “these disconnections may touch customers who have not or seldom been disconnect before due to resource constraints.”<sup>71</sup>

Xcel also wrote that the disconnection itself provides the opportunity to connect with customers who had not responded to the Company’s communication efforts before and may be able to guide them to resources and set them up on payment plans to prevent future disconnections. Xcel said that there has been an increase in restorations within 24 hours and attributed this to more customers contacting the Company to make payment arrangements. The Company believed that its 2024 disconnection numbers are “projected to remain consistent with 2023 levels” and are showing a decrease in past due customers and past due dollars.<sup>72</sup>

Xcel opposed a disconnection moratorium for these reasons:

- 1) While both studies identified disparities, neither found that the Company’s disconnection process causes disparities.
- 2) The COVID disconnection moratorium demonstrated that many customers were worse off afterwards. A customer is still charged for energy used, so arrears accrue. Customers accrued such large arrears that it became too large for them to pay off. Arrears for customers will pre-existing arrears before the moratorium increased by 50%. The moratorium also resulted in reduced interactions between the Company and its customers. Therefore, less customers took advantage of payment plans and affordability programs.
- 3) A disconnection moratorium may lead to increased costs passed on to all customers due to bad debt expense.<sup>73</sup>

Xcel preferred other options to reduce arrears and avoid disconnections for customers (**Decision Options 17-21 and 23-26**).

The Department opposed a disconnection moratorium, because there are ambiguities regarding the primary driver of disconnection disparities and the potential effects of the Automatic Bill Credit (ABC) Pilot Program.<sup>74</sup> Assuming that there is significant overlap between CBG eligible for the ABC proposal and the CBGs that are eligible for a limited proposed

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<sup>71</sup> Xcel reply comments, June 24, 2024, p. 8.

<sup>72</sup> Xcel reply comments, June 24, 2024, p. 9.

<sup>73</sup> Xcel comments, September 12, 2024, pp. 8-9.

<sup>74</sup> Department comments, September 23, 2024, pp. 7-8.

moratorium, a moratorium may skew the results of the ABC and make it more difficult to calculate its effectiveness.

Further, the Department wrote that it is also concerned about higher levels of disconnection among POC but does not believe that the Company is applying its disconnection practices differently between individuals. If different individuals have different payment habits, that falls outside the realm of economic regulation.

Rather, that would be an instance of individual actors making decisions regarding their personal finances.<sup>75</sup>

Instead of a moratorium, the Department made two recommendations:

- 1) Fresh Energy and Xcel work together to evaluate the impact of a moratorium on the ABC Pilot (**Decision Option 15**).
- 2) GEC and Xcel work together to evaluate the financial effects of a moratorium on disconnections over a two-year period (**Decision Option 16**).

### 3. Staff Analysis

#### History of Moratoriums

The Commission enacted a disconnection moratorium during COVID-19. To Staff's knowledge, this was the first ever utility disconnection moratorium in Minnesota. The moratorium lasted from March 25, 2020 to August 2, 2021 (17 months).

Also, LIHEAP funds in 2020 were limited. LIHEAP offered its recipients many more funds in 2021 and 2022, due to federal laws like the Infrastructure Investment and Jobs Act (IIJA). Energy Assistance Programs (EAP) were even entirely paying off customers' arrears balances. In 2023, however, those funds had run out and grant levels returned to pre-pandemic levels.

When the moratorium ended in August 2022, utilities returned to disconnecting customers. Disconnections were largely in line with pre-pandemic levels. No regulated utility disconnected customers at record levels in 2022 and 2023. For Xcel, its disconnections have greatly increased.

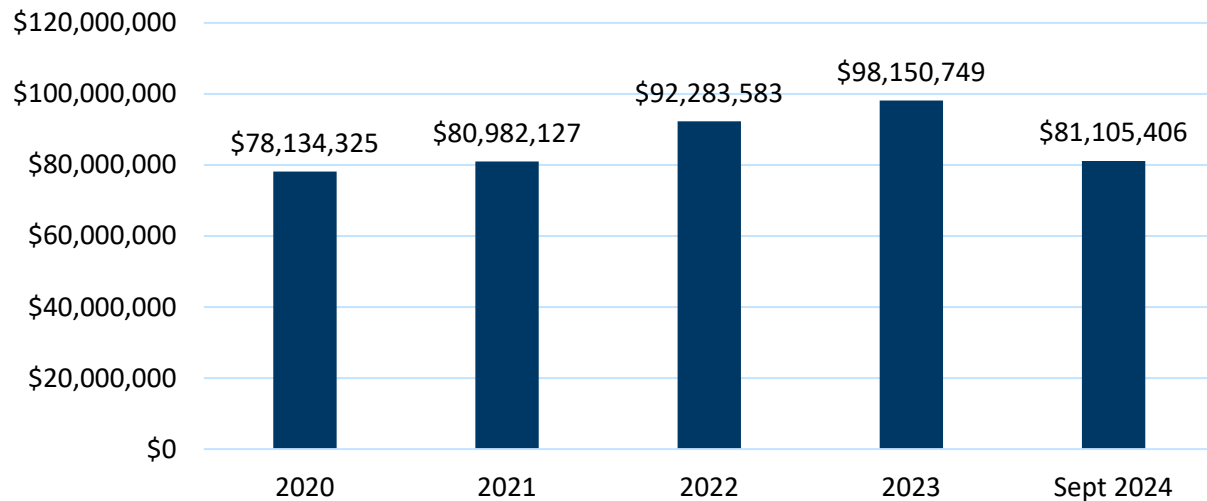
Therefore, Xcel had been attempting to work through a backlog of its customers' arrears. It utilized disconnections, payment plans, and other outreach efforts to assist its past due customers.

After the COVID-19 moratorium, Xcel's customers' arrears increased during the pandemic.

#### **Figure 3: Total Dollars Past Due for Residential Customers at Year End (2020-Sept 2024)<sup>76</sup>**

<sup>75</sup> Department comments, September 23, 2024, p. 9.

<sup>76</sup> YR-2 annual reports.



As of September 2024, Xcel’s residential customers’ arrears had returned to pre-pandemic levels. Xcel no longer needs to be working through its total past due amount. Staff questions why disconnection levels are so high if customer arrears are no longer the problem they were in 2022 and 2023.

Even during a moratorium, a customer is using energy, and therefore, must pay for that service at some point. Another disconnection moratorium will likely increase customers’ arrears again, which could place them at greater risk for disconnection from Xcel’s service once the moratorium is lifted.

For this reason, Staff cautions against a disconnection moratorium as it may hurt more customers than it would help.

That being said, Staff does agree with the reasoning parties presented in support of a moratorium. Disconnections can trigger evictions when lease agreements require tenants to keep their energy on, child protective services investigations, public health concerns, and more. All of these are extremely disruptive customers, who are already disadvantaged in other areas of their lives.

Fresh Energy cited a study from the University of Michigan – the “Energy Equity Report.” It said that utility shutoffs have life and death ramifications during extreme weather events or for individuals with disabilities and chronic health conditions.

Shutoffs represent the greatest threat to life and well-being within the energy system.<sup>77</sup>

Fresh Energy also brought up the “Minnesota Paradox” wherein the State’s majority White population enjoys a high quality of life while black and brown communities simultaneously experience some of the worst racial disparities that exist in the country. The disparities extend across employment, educational outcomes, home ownership, arrest rates, incarceration rates,

<sup>77</sup> Fresh Energy reply comments, August 27, 2024, p. 2.



and even drowning.<sup>78</sup>

## C. Outreach

### 1. Targeted Outreach

In early comments, Xcel proposed to perform targeted outreach to customers who have not received assistance and have arrears with the intention of lower disconnection rates in high-percent POC neighborhoods and report on the efforts in its 2025 SRSQ report or another docket.<sup>79</sup> The targeted outreach would include:

- Utilizing its existing map
- Working with community-based organizations that help bring assistance to the neighborhoods that Xcel serves
- Using social media, telephone, email, and direct mail
- Sent at least 30-45 days prior to the beginning of the LIHEAP season and lasting throughout the 2024-2025 heating season

Originally, the Department supported Xcel's proposal to identify customers that need targeted outreach to prevent disconnections.<sup>80</sup>

**Decision Option 17** would approve Xcel's proposal to identify customers who could benefit from additional outreach on affordability programs.

### 2. Outreach to All Customers

The City of Edina supported outreach but would like it to not be geographically limited.

Geographic limitations avoid engagement with customers at high-risk of disconnection living in areas that do not meet typical geographic indicators, such as concentrated poverty.<sup>81</sup>

The GECs supported broad outreach to customers that have bad debt to increase participation in affordability programs that relieve bad debt.<sup>82</sup>

Ultimately, Xcel supported outreach across the Company's service territory. This would benefit customers outside of the identified CBGs, but also targeted outreach based on race may create a possible legal challenge for Xcel.<sup>83</sup>

**Decision Option 18** requires Xcel to implement additional service territory-wide outreach.

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<sup>78</sup> Fresh Energy reply comments, August 27, 2024, p. 2.

<sup>79</sup> Xcel reply comments, June 24, 2024, p. 14.

<sup>80</sup> Department initial comments, June 14, 2024, p. 55.

<sup>81</sup> City of Edina comments, September 6, 2024, p. 1.

<sup>82</sup> GECs comments, August 27, 2024, p. 7.

<sup>83</sup> Xcel comments, September 12, 2024, p. 4.

### 3. Outreach Conducted by People of Color

Fresh Energy wrote that there is “no evidence that this outreach will be effective,” largely because Xcel’s workforce is primarily White, and outreach by these employees may not be effectual in communities of color.<sup>84</sup> Fresh Energy stated that outreach may be part of the solution, but that there will be no changes to structural issues around shutoffs without more changes to Xcel’s policies and practices.

Sierra Club supported Fresh Energy’s idea that outreach be conducted by people of color to communities to color. This would build trust and ensure culturally-relevant communication and engagement.<sup>85</sup>

Xcel responded to Fresh Energy and Sierra Club, stating that it is diversifying its workforce but that the makeup of its workforce should not prevent the Company from providing outreach.

Xcel stated that it works with community-based organizations to perform face-to-face outreach and will continue to look for opportunities to do so.

### 4. Staff Analysis

The Department provided information about Xcel’s Diversity, Equity, and Inclusion (DEI) report in its August 27, 2024 comments. The Company ranked highly for its percentage of BIPOC employees in its Minnesota-based workforce. Staff concurs that this speaks to the suitability of Xcel to conduct outreach by people of color.

Outreach is part of the solution. However, as Fresh Energy has stated, “outreach is unlikely to resolve the structural issues.”<sup>86</sup> Outreach has often been ordered in Gas Affordability Program (GAP) dockets, however Staff notes that it has not noticeably increased GAP participation.

That being said, Staff does support all of the outreach proposals in this docket, both targeted and across Xcel’s service territory. Outreach is important to publicize protections or programs that have yet been publicized, even changes. For example, Xcel is proposing changes to its Emergency Medical Status program like a “direct submit” button. It will be helpful to notify medical professionals that they will be able to utilize this change to the process.

#### D. Policy Transparency

##### 1. Transparency in Payment Agreement and Disconnection Practices with Customers

In ECC-CUB’s reply comments, they recommend that Xcel be required to include information on its website detailing its disconnection practices and direct customers to other assistance

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<sup>84</sup> Fresh Energy comments, August 27, 2024, p. 2.

<sup>85</sup> Sierra Club comments, September 11, 2024, p. 2.

<sup>86</sup> Fresh Energy comments, August 27, 2024, p. 2-3.

options to avoid disconnection and seek reconnection.<sup>87</sup> It is ECC-CUB's understanding that the Company is receptive to this and already plans on updating its website. ECC-CUB believe that this will help educate customers on their options and give them more resources.

Xcel states that it already provides customers with resources within one click of its homepage.<sup>88</sup>

ECC-CUB do not believe that this goes far enough, saying that it does not inform customers of their statutory rights or indicate that customer service could be contacted to negotiate the terms of the payment agreement based on household circumstances.<sup>89</sup> Xcel has agreed with ECC-CUB to provide the following information on its website:

- 1) Under Minnesota law, Xcel customers are entitled to a payment agreement for the payment of arrears. This payment agreement must consider a customer's financial circumstances and any extenuating circumstances of the household.
- 2) If the payment agreement terms offered online are not affordable for you, or if your household is facing financial or extenuating circumstances, you should contact an Xcel customer account representative at 800-895-4999.
- 3) If you are unable to reach a mutually agreeable arrangement with a customer account representative, you may appeal the decision with the Minnesota Public Utilities Commission's Consumer Affairs Office. The Consumer Affairs Office can be contacted 651-296-0406 or 800-657-3782, or by email at [consumer.puc@state.mn.us](mailto:consumer.puc@state.mn.us).

The Department supports this recommendation.<sup>90</sup> The GECs believe ECC-CUB's suggested improvements should help increase the number of customers that avoid disconnection or have service restored by entering into affordable and accessible payment plans.<sup>91</sup>

Xcel will be making the recommended changes.<sup>92</sup>

**Decision Option 19** requires Xcel to publish its disconnection and payment agreement policies and practices on its website.

## **2. Regularly File Payment Agreement and Disconnection Practices with Commission**

ECC-CUB say that the Company has also committed to filing its current disconnection policies and practices in this docket and YR-02 (Cold Weather Rule reporting). Xcel will also periodically submit compliance reports in YR-02 when there are changes to policies and practices.<sup>93</sup>

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<sup>87</sup> ECC-CUB reply comments, June 24, 2024, p. 3.

<sup>88</sup> [Energy Assistance | Billing & Payment | Xcel Energy](#).

<sup>89</sup> ECC-CUB supplemental comments, September 12, 2024, p. 4.

<sup>90</sup> DOC comments, August 27, 2024, p. 2.

<sup>91</sup> GECs comments, September 12, 2024, p. 4.

<sup>92</sup> Xcel comments, September 12, 2024, p. 6.

<sup>93</sup> ECC-CUB supplemental comments, September 12, 2024, pp. 4-5.

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The Department supports this proposal.<sup>94</sup> Xcel says that it will be making the recommended filings.<sup>95</sup>

**Decision Option 20** requires Xcel to make filings with the Commission detailing its current disconnection policies and practices and when there are changes to those policies and practices.

### 3. Staff Analysis

Historically, neither the Commission nor customers have been notified of the exact details of a utility's internal disconnection policies, such as the dollar amount or number of months of payments missed that trigger the disconnection process. Staff believes that Xcel providing greater transparency regarding its internal policies will be helpful for stakeholders, customers, and Commission Staff, especially the Consumer Affairs Office (CAO).

#### E. Other Strategies to Address Shutoff Disparities

Other strategies to decrease the number of disconnections, especially for POC, are discussed below. They are:

- Restoring service during heat events
- Restoring service during air quality alerts
- Reducing down payments
- Flexible payment arrangements
- Tiered payment arrangements
- Minimum arrearage amount before disconnection
- Extending the amount of time between sending a disconnection notice and disconnection of service
- Setting the reconnection fee to \$0
- Eliminating late payment fee interest payments or donating interest payments to low-income programs
- Whether Xcel is following Minn. R. 7820.1400 (Landlord's failure to pay)
- Increase POC customers receiving weatherization assistance or energy efficiency
- A potential Hot Weather Rule
- Educating employees on racial disparities in shutoffs

#### 1. Remote Restoration of Service to Protect Customers from Extreme Weather

##### Restoring Service during Heat Events

Xcel proposed temporarily restoring power for AMI customers during a heat advisory or excessive heat warning issued by the National Weather Service (NWA), which allows them to leverage its AMI technology.<sup>96</sup> Xcel noted that historically heat events happen approximately

<sup>94</sup> DOC comments, August 27, 2024, p. 2.

<sup>95</sup> Xcel comments, September 12, 2024, p. 6.

<sup>96</sup> Xcel SRSQ report, April 1, 2024, pp. 32-22.

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15 times per year.

Xcel already follows Minn. Stat. § 216B.0975, which requires utilities to halt all disconnections during Excessive Heat Watches, Heat Advisories, and Excessive Heat Warnings.<sup>97</sup>

Once AMI is fully deployed and Xcel works through its new billing system, Xcel could build the capacity to query all disconnected AMI-capable customers, contact them to let them know they will be restored for the duration of the heat event, and reconnect them remotely. Xcel did not yet have a cost estimate for restoring service remotely during heat events.

The Department supported Xcel's proposal<sup>98</sup>, as did ECC-CUB who stated that the proposal would extend life-saving protections against extreme heat and counteract negative health impacts.<sup>99</sup>

The GECs supported the proposal as well, reasoning that access to air conditioning is critical for public health and safety.<sup>100</sup>

**Decision Option 21** approves the Company's proposal to restore service to involuntarily disconnected customers during Heat Events.

#### Restoring Service during Air Quality Alerts

ECC-CUB were concerned about the increasing prevalence of air quality index (AQI) alerts in Minnesota. A color code is assigned to demarcate the level of AQI. The Minnesota Pollution Control Agency (MPCA) reported that there were a record 22 alerts over 52 days in 2023, mostly caused by Canadian wildfires. 14 of those were "red" alerts, which means that there are unhealthy levels of pollution. ECC-CUB stated that red alerts can less to serious health effects for sensitive populations or people that have been exposed longer.<sup>101</sup> Additionally, air quality alerts will increase in prevalence due to climate change.

Minnesotans have been advised to stay inside with the windows closed and the air conditioning on, but this is not possible for customers whose service is currently disconnected without overheating. It was the Joint Commissioners understanding that customers with existing medical conditions can apply for Emergency Medical Status (EMS), but even customers without particular sensitivities are at-risk for health issues during high AQI events.

ECC-CUB recommended that the Commission require Xcel to reconnect disconnected AMI-capable customers during the duration of AQI alerts of 151 (red) or higher.<sup>102</sup> ECC-CUB

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<sup>97</sup> [Minn. Stat. § 216B.0975 Disconnection During Extreme Heat Conditions.](#)

A utility may not effect an involuntary disconnection of residential services in affected counties when an excessive heat watch, heat advisory, or excessive heat warning issued by the National Weather Service is in effect. For purposes of this section, "utility" means a public utility providing electric service, municipal utility, or cooperative electric association.

<sup>98</sup> Department comments, September 23, 2024, p. 5.

<sup>99</sup> Joint Commenters comments, June 14, 2024, p. 3.

<sup>100</sup> GEC comments, June 24, 2024, p. 6.

<sup>101</sup> CUB/ECC comments, June 14, 2024, p. 3.

<sup>102</sup> 24-27 (Xcel) Joint Commenters comments, June 14, 2024, pp. 3-4.

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proposed that their recommendation could operate the same as Xcel’s proposal for extreme heat events, involving querying its AMI customers before contacting and reconnecting them. Since MPCA issues an air quality forecast two days in advance, the Company would have ample time to complete the process.

The GECs supported ECC-CUB proposal, stating that both extreme heat events and poor air quality are more likely to occur due to climate change.<sup>103</sup>

The Company instead preferred to protect its air quality-sensitive customers through its EMS program. If a customer is sensitive to air quality, they may request EMS to protect themselves from credit action.<sup>104</sup>

The Department noted possible health benefits of the air quality proposal but requested that Xcel provide a range of cost estimates, an estimate of the public health benefits, and an estimate of the frequency of unhealthy air quality events for a year.<sup>105</sup> Xcel was not able to provide a cost-benefit analysis to the Department at this time due to its complexity but do not oppose further study.<sup>106</sup>

ECC-CUB have been in talks with Xcel. The Company “offered to provide additional information to customers about how to request medical protections if they are particularly vulnerable to poor air quality.”<sup>107</sup> ECC-CUB agreed that this additional outreach was a strong intermediate step while the Company underwent additional analysis on the feasibility of remote reconnections during air quality events.

Given that ECC-CUB no longer supported reconnections during Air Quality events, the Department opposed it as well.<sup>108</sup>

**Decision Option 24** would require the Company’s to restore service to involuntarily disconnected customers during Air Quality Events.

**Decision Option 27a** would require Xcel to file an analysis of reconnections during Air Quality Events.

## 2. Improvements to Payment Arrangements

### Reducing Down Payments

Currently, if a customer is establishing a payment arrangement, they must make a down payment. (Enrollment in a payment plan as associated with affordability programs do not require a down payment).<sup>109</sup>

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<sup>103</sup> GEC comments, June 24, 2024, p. 6.

<sup>104</sup> Xcel comments, September 12, 2024, p. 10.

<sup>105</sup> DOC comments, August 27, 2024, p. 3.

<sup>106</sup> Xcel comments, September 23, 2024, pp. 3-4.

<sup>107</sup> ECC-CUB comments, September 12, 2024, p. 6.

<sup>108</sup> DOC comments, September 23, 2024, p. 8.

<sup>109</sup> Xcel reply comments, August 27, 2024, p. 8.

The Company's current policy is to take a 50% down payment of a customer's arrears balance. On average, the Company actually receives 26% down. Xcel said that lower payment arrangement down payments could cause the Company to incur up to \$1 million in bad debt. ECC-CUB understand that unpaid balances/arrears may lead to bad debt. Xcel requested that it be able to track bad debt expense increases due to requiring lower amounts down. However, per Table 4, Xcel will now be accepting 10% down.

Xcel worked with ECC-CUB to create the below graduated payment agreement guidelines:

**Table 4: Proposed Graduated Down Payment Structure for Payment Plans<sup>110</sup>**

	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>
<b>Normal Payment Agreements</b>	10% down	25% down	35% down	50% down	50% down	50% down
<b>Extenuating Circumstances Payment Agreements</b>	10% down	15% down	25% down	40% down	50% down	50% down

The payment arrangements will be set based on self-reported financial circumstances, not formal income data. If a customer breaks an arrangement, they will be required to pay a larger percentage down when entering into an arrangement again. Customers will be able to enter into six payment arrangements within a rolling 12-month period. However, Xcel stated that "where household-specific circumstances warrant, the Company's personal accounts representatives may accept lower amounts."<sup>111</sup> Xcel said that if overly small down payments over a longer time are allowing customers to fall behind, it may work with stakeholders to modify Table 4.

#### Flexible Payment Arrangements

Fresh Energy requested that Xcel evaluate the amount of down payment and the amount needed to remain on a payment plan and consider reducing both amounts.<sup>112</sup>

Both CUB and ECC had heard from Xcel customers that had trouble entering into payment arrangements. CUB heard from a customer that was asked to pay \$1,000 down to restore service. The customer offered a lower amount, which Xcel rejected despite the customer not being able to pay such a large up-front cost due to their household circumstances. ECC as well receives calls weekly from customers "being asked to pay thousands of dollars to be reconnected – amounts they cannot afford."<sup>113</sup>

ECC-CUB pointed out a requirement in Minn. Stat. § 216B.098, Subd. 3:

Payment agreements must consider a customer's financial circumstances and any extenuating circumstances of the household.<sup>114</sup>

<sup>110</sup> Xcel comments, September 12, 2024, Table 1, p. 12.

<sup>111</sup> Xcel comments, September 12, 2024, p. 12.

<sup>112</sup> Fresh Energy initial comments, June 24, 2024, p. 3.

<sup>113</sup> CUB/ECC reply comments, June 24, 2024, p. 2.

<sup>114</sup> [Minn. Stat. § 216B.098, Subd. 3 Payment agreements.](#)

ECC-CUB said that broad interpretation of the statute requires utilities to rely on the customer's self-attestation of a need for flexibility. They disagreed with the Department's arguments that "financial circumstances" only refers to annual household income.<sup>115</sup> ECC-CUB made the point that although income may factor into ability to pay, it is not the only factor. Others may include a high past due balance or extenuating circumstances, which may include job loss, serious illness or injury, military service, or a death in the family. Xcel had confirmed that this is not an exhaustive list and will consider other circumstances on a case-by-case basis. The Department also offered an alternative definition of "financial circumstances" – a customer's credit rating. However, ECC-CUB said that qualifying customers by their credit rating is banned by Minn. Rule 7820.4700.<sup>116</sup>

ECC-CUB noted that customers wanting to enter into payment agreements may be unable to submit a substantial down payment.

Xcel has said the following:

Generally speaking, our experience has shown that the lower the initial payment or the longer the payment plan, the less progress a customer makes towards successful payment plan completion.<sup>117</sup>

However, after conversations between Xcel and ECC-CUB, the Company agreed to provide flexible payment arrangements so long as customers commit to paying their current month's bill plus a predetermined amount towards their arrears.

**Decision Option 23** requires Xcel Energy to reduce its down payment requirements and modify its disconnection and payment agreement practices to include consideration of individual household financial circumstances.

### 3. Disconnection/Reconnection Procedures

#### Minimum Arrearage Before Disconnection

The GECs recommended that Xcel establish a minimum arrearage amount a customer may hold before they are disconnected. They provide examples of two states. In Arizona, a customer must have a minimum arrearage of \$300 before disconnection. In New Jersey, a customer must have a minimum arrearage of \$200 or be three months in arrears before disconnection.<sup>118</sup>

Xcel proposed to not send disconnection notices until balances exceed \$180 or more and to not disconnect service until balances reach \$300 year-round.<sup>119</sup> ECC-CUB supported this change.<sup>120</sup>

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<sup>115</sup> Department comments, August 27, 2024, p. 4.

<sup>116</sup> [Minn. Rule 7820.4700 When Deposit or Payment Guarantee Impermissible.](#)

No utility shall use any credit reports other than those reflecting the purchase of utility services to determine the adequacy of a customer's credit history without the permission in writing of a customer.

<sup>117</sup> 02-2034 and 12-383 Xcel comments, May 31, 2024, p. 6.

<sup>118</sup> GECs comments, June 24, 2024, p. 8.

<sup>119</sup> Xcel comments, August 27, 2024, p. 6.

<sup>120</sup> ECC-CUB comments September 12, 2024, p. 4.



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The Department said that it is generally not in favor of deciding the details of a disconnection policy and that it is instead “preferable to have the individuals who do the work determine the details of those processes.”<sup>121</sup> However, the Department said that in this instance there is a large backlog of past due customers that the Company has to work through. The proposed threshold will have little effect on Xcel’s efforts and may keep some customers from being disconnected. Therefore, the Department supported the recommendation.

**Decision Option 24** sets the threshold for a disconnection notice at \$180 past due.

**Decision Option 25** sets the threshold for disconnection at \$300 past due.

#### Increasing the Time between Issuing Notice and Disconnection

In its reply comments, Xcel said that it would immediately extend the minimum time between issuing a disconnection notice and actual disconnection from five days to ten days, year-round.<sup>122</sup> ECC-CUB were in agreement.<sup>123</sup> The Department supported this proposal.<sup>124</sup>

**Decision Option 26** changes time from notice to disconnection to 10 days.

#### Setting Reconnection Fee to \$0

The GECs recommended studying whether the Company should set the reconnection fee to \$0.<sup>125</sup> In response, Xcel stated:

While the Company is willing to evaluate this proposal further, the current reconnection cost to customers is based on actual costs and would therefore require a recovery mechanism to cover the cost impact of removing the reconnection fee.<sup>126</sup>

No other participants commented on the GECs’ proposal.

**Decision Option 27b** would require an evaluation of a \$0 reconnection fee.

#### Eliminating or Donating Interest Payments

The GECs recommended studying eliminating interest payments on late bill payment fees or requiring Xcel to donate the interest payments on customers’ past due bills to low-income customer assistance programs. Xcel is already using the latter approach in Colorado.<sup>127</sup>

In 2007, Xcel began charging its residential customers in Colorado a 1% per month late payment fee to be used for bill payment assistance for low-income customers. At that time, the Company was required by the Colorado Public Utilities Commission to donate the entire

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<sup>121</sup> DOC comments, September 23, 2024, p. 5.

<sup>122</sup> Xcel comments, June 24, 2024, p. 7.

<sup>123</sup> ECC-CUB comments, June 24, 2024, p. 3.

<sup>124</sup> DOC comments, September 23, 2024, p. 5.

<sup>125</sup> GEC comments, June 24, 2024, p. 7.

<sup>126</sup> Xcel supplemental comments, August 27, 2024, p. 9.

<sup>127</sup> GEC reply comments, June 24, 2024, p. 8.

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amount to Energy Outreach Colorado (similar to Minnesota’s EAP), the statewide fuel fund, until rates for the Company’s next rate case went into effect. This process was extended in the last two rate cases, and no expiration of the transfer of residential late payment fees to Energy Outreach Colorado was set in Xcel Colorado’s most recent case. The amount of funding from residential late payment fees from Xcel Colorado is \$5 million to \$6 million annually.<sup>128</sup>

The OAG supported the GECs’ proposal and encouraged Xcel to find creative crisis funding solutions like this.

**Decision Option 27c** requires an evaluation of this proposal.

#### Landlord’s Failure to Pay

The GECs asked that Xcel verify that it manages disconnections that happen due to a landlord’s failure to pay. Minn. R. 7820.1400 requires that where a landlord is the customer of the utility and disconnection of a landlord would result in disconnection of the tenant, the utility must not disconnect service until the Company has offered service to the tenant in their own name and may not recover unpaid bills of the landlord from the tenant.<sup>129</sup>

No other parties commented on this proposal. To Staff’s knowledge, Xcel is properly following Minn. R. 7820.1400.

**Decision Option 28** requires Xcel to verify it is complying with Minn. R. 7820.1400

## 4. Additional Assistance Programs

#### Increase Customers Receiving Weatherization/Energy Efficiency

Fresh Energy recommended that Xcel develop a proposal to increase the number of customers receiving pre-weatherization, weatherization, and energy efficiency improvements, including deep retrofits to create greater energy savings, in areas within the Company’s service territory with high concentrations of people of color being disconnected. Fresh Energy recommended that the proposal should have year-over-year targets designed to increase the number of people receiving energy efficiency measures.<sup>130</sup>

The City of Minneapolis too supported increasing participation in energy efficiency programs in very-low-income communities.<sup>131</sup> Minneapolis also noted deep retrofitting through the Weatherization program.

In its September 12<sup>th</sup> comments, Xcel said that it agrees with Fresh Energy’s recommendation, noting related discussions in ESAG about implementing block-by-block energy efficiency pilot(s) to increase participation in areas of very high energy burden, including working in collaboration

<sup>128</sup> [Colorado Expands PIPP to Electric Customers, Continues EOC Donations | The LIHEAP Clearinghouse.](#)

<sup>129</sup> [Minn. Rule 7820.1400 Landlord-Tenant Rule.](#)

<sup>130</sup> Fresh Energy comments, June 24, 2024, p. 3.

<sup>131</sup> City of Minneapolis comments, August 27, 2024, p. 4.

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with community-based organizations for outreach and program delivery. Xcel plans to continue discussions with the Environmental Justice Accountability Board.<sup>132</sup>

The Department supported Fresh Energy's recommendation.<sup>133</sup>

**Decision Option 27d** requires Xcel to develop an energy efficiency proposal.

### Hot Weather Rule

The GECs proposed implementing "a more robust hot-weather rule to prevent disconnections in months with the highest cooling energy burden."<sup>134</sup> The GECs also pointed out Minn. Stat. § 216B.0975, which establishes a prohibition on disconnections during extreme heat conditions. They also stated that it was not well-publicized by Xcel.<sup>135</sup>

Xcel proposed adding the costs and impacts of creating an off-season LIHEAP program to the proposed study in this docket. Xcel mentioned that this could look like helping "income-qualified residents clear[ing] their arrears by self-attesting to their income level."<sup>136</sup>

Similarly, ECC-CUB are currently "in discussions with Xcel about legislative opportunities to provide additional Energy Assistance to qualified families, the potential for customers to self-attest income eligibility for affordability programs, and various other questions and concerns."<sup>137</sup>

**Decision Option 27e** requires Xcel to develop a Hot Weather Rule.

**Decision Option 27f** requires Xcel to develop an off-season LIHEAP program.

## 5. Internal Processes for Xcel

### Educate Employees on Racial Disparities

Fresh Energy proposed that Xcel educate affected personnel on racial disparities in service. Fresh Energy said that this could potentially lead to improved decision-making, increased sensitivity, solution-identification, and/or advocacy for internal reforms. Fresh Energy also proposed that Xcel report to the Commission on who they informed and what information they provided to its employees.

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<sup>132</sup> Xcel comments, September 12, 2024,

<sup>133</sup> Department comments, September 23, 2024, p. 7.

<sup>134</sup> GECs comments, June 24, 2024, p. 9.

<sup>135</sup> Note that the PUC website provides information about the statutory requirement for utilities to not disconnect service during hot weather events. (<https://mn.gov/puc/consumers/shut-off-protection/>)

<sup>136</sup> Xcel supplemental comments, August 27, 2024, p. 18.

<sup>137</sup> ECC-CUB comments, September 12, 2024, p. 8.

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The Company had no objection to Fresh Energy’s recommendation. Xcel already has provided information to some employees. Xcel said it would be “open to further detail from Fresh Energy on how they would like to see this information shared.”<sup>138</sup>

The Department supported this recommendation.<sup>139</sup>

**Decision Option 29** requires Xcel to educate employees on disparities and file an annual report.

*Allow an Adjustment Request to Xcel’s Revenue Requirement re: Bad Debt Expense in Next Rate Case*

ECC-CUB and Xcel agreed that the Company may request an adjustment to its revenue requirement related to bad debt expense due to implementing some of the strategies to address disparities in shutoffs in its new general rate case filing.<sup>140</sup>

ECC-CUB addressed Xcel and the Department’s modified payment agreement structure may increase the Company’s bad debt expense. ECC-CUB agreed that Xcel’s next rate case would be an appropriate place to address this. In the interim, ECC-CUB are amenable to additional tracking as needed.<sup>141</sup>

The Department opposed the recommendation, because it is unnecessary. While tracking is a generally acceptable regulatory concept, Xcel may always propose new financial tracking mechanisms in its general rates cases.<sup>142</sup>

**Decision Option 30** allows Xcel to track additional bad debt and request an adjustment in its next rate case.

## 6. Staff Analysis

*Restoration of Service during Air Quality Alerts*

Xcel and ECC-CUB did not support this proposal and instead said that it prefers customers acquiring EMS if they are sensitive to poor air quality. Staff finds two issues with relying on EMS:

- 1) Many customers do not know about EMS nor know that they could be eligible due to respiratory concerns.
- 2) 16% of Xcel’s EMS applicants in 2023 were not granted it.

However, Xcel is currently making improvements to its EMS as described in Vol. 2 of the briefing papers, such as adding a “direct submit” to its website for medical professionals to submit the certification form. Staff supports including the viability of utilizing remote

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<sup>138</sup> Xcel comments, September 12, 2024, p. 39.

<sup>139</sup> Department comments, September 23, p. 12.

<sup>140</sup> Xcel comments, September 12, 2024, p. 13.

<sup>141</sup> ECC-CUB comments, September 12, 2024, p. 8.

<sup>142</sup> Department comments, September 23, p. 5.

reconnections to protect customers from poor air quality in the proposed study.

### Improved Payment Plans

On June 29, 2023, CAO staff met with representatives from Xcel Energy. In that discussion, Xcel asked CAO for a reasonable alternative to the 75% threshold; CAO replied 30%,<sup>143</sup> citing Minn. Stat. § 216B.098, subd. 3, which states that a utility must take a customer's financial circumstances into account when setting a payment arrangement.<sup>144</sup>

Following that meeting, consumers reported being asked for between 30% and 50% of the past due balance in order for the Company to agree to a payment plan. CAO staff met with Xcel representatives again on September 21, 2023 and was advised that the collection policy was now at 50% of the past due balance.

Staff believes that requiring 50% of a customer's total past due as a downpayment to be too stringent. If a customer is \$3,000 past due, it is unlikely that they will have \$1,500 on hand to make a down payment. Therefore, Staff greatly appreciates greater flexibility in payment plans with terms that customers can afford.

If the tiered payment plan guidelines as proposed in Table 4 is adopted and implemented by the Company, Staff recommends that when a customer enters into a payment arrangement, the customer service representative provide details about the next tier if the customer breaks the payment plan.

Successful payment plans are extremely helpful. However, payment plans are not fail-proof. If they were, we would not be seeing the high number of disconnections. Not every individual with arrears has a payment plan set up. Customers may not know that they can set up a payment arrangement. Customers may not be able to come to agreement with the utility on a payment arrangement. Xcel has noted to Staff at an EAP Policy Advisory Council meeting that approximately 75% of payment arrangements are broken.<sup>145</sup> Therefore, Staff supports continued efforts to improve payment plans like the tiered payment plans and make them more flexible.

### Staffed Office

In Xcel's September 23, 2024 comments, the Company brought up an idea discussed with the ESAG – potentially setting up a staffed office focused on energy affordability, efficiency, and

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<sup>143</sup> Note that this was not ex parte communication but from a CAO business meeting.

<sup>144</sup> [Minn. Stat. § 216B.098 Residential Customer Protections](#).

Subd. 3. **Payment agreements.**

A utility shall offer a payment agreement for the payment of arrears. Payment agreements must consider a customer's financial circumstances and any extenuating circumstances of the household. No additional service deposit may be charged as a consideration to continue service to a customer who has entered and is reasonably on time under an accepted payment agreement.

<sup>145</sup> Notes are available upon request.

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careers. This would be a permanently-staffed office called an “Energy Experience Center.”<sup>146</sup>

No other parties commented, and there is no decision option to represent this concept.

Since this conceptual office already has a name, Staff wonders whether Xcel operates Energy Experience Centers in other states that it provides service to.

## VIII. Disparities in Reliability

In its April 1, 2024 initial filing Xcel outlined two potential programs it could develop to remedy disparities in customers experiencing lengthy outages: an enhanced vegetation management program and a targeted undergrounding proposal. Xcel also noted that there was substantial overlap between areas that were impacted by lengthy outages and two severe storms during the period examined by the TRC Study. Stakeholders had mixed reactions to the proposals in general and recommended further analysis prior to the Company developing and submitting programs for Commission approval.

### A. Vegetation Management and Undergrounding

#### Enhanced Vegetation Management

As described in the TRC Study, another option to address lengthy outages would be a targeted vegetation management program in impacted neighborhoods. Xcel explained it could examine hazard trees that are located outside the standard vegetation management clearance thresholds. The Company also contemplated looking at whether the impacts from emerald ash borer infestations were higher in the impacted neighborhoods due to homeowner inability to treat or remove infected trees. Further development and scoping of a program would be necessary before any Commission approvals.<sup>147</sup>

**Decision Option 32** would require Xcel to file an enhanced vegetation management plan.

#### Targeted Undergrounding

Xcel noted that it had developed an estimate for the cost to improve the Company’s overall reliability results in line with 1<sup>st</sup> quartile performance based on the Institute of Electrical and Electronics Engineers (IEEE) benchmarking, which provides a basis for a potential targeted undergrounding proposal to alleviate CELI-12 disparities.<sup>148</sup> In that estimate, Xcel explained the costs associated with undergrounding are extremely variable based on location (urban or rural) and range from \$500,000 to \$5 million per mile. An undergrounding program that would bring its entire service territory to IEEE first quartile performance could be expected to cost between \$1 billion and \$2 billion in total but would need significant refinement before approval. The Company also estimated the average value from undergrounding to amount to \$350 per customer interruption. Avoiding the 300,000 customer interruptions per year would be valued at \$105 million per year. Xcel also noted that there would be operational savings due to lower operations and maintenance costs. Based on the 1,157 miles of undergrounding, the Company

<sup>146</sup> Xcel Energy, Supplemental Comments, September 23, 2024, p. 2.

<sup>147</sup> Xcel Energy, Initial Filing, April 1, 2024, p. 110

<sup>148</sup> Xcel Energy, Initial Filing, April 1, 2024, p. 111

estimated they would reduce routine vegetation management costs by several million dollars per year, save \$5 million from avoided storm damage, and reduce pole inspections and replacement costs by \$3 million.<sup>149</sup> While a targeted undergrounding proposal would take time to scope and implement, Xcel explained it could file a plan if the Commission is interested in pursuing a pilot.<sup>150</sup>

**Decision Option 34** would require Xcel to file targeted undergrounding proposal plan.

### 1. Department of Commerce

The Department felt that five years of data would provide a better data set for evaluating the full set of the Company's system and customer characteristics. Because the targeted undergrounding and enhanced vegetation management proposals related directly to disparities in outage durations findings in the TCR Study, the Department recommended additional analysis before the Commission has a sufficiently robust record to determine if the Company's proposals (and associated costs) are warranted. (**Decision Option 36, 37**) The Department preferred using 5 years of data to reperform the TCR Study before initiating the analysis needed for the proposals.<sup>151</sup>

Due to this recommendation, the Department also recommended the Commission require Xcel to update its Interactive Map such that it includes an additional year of data and then re-visit the consultant's reliability analysis with the larger data set in its annual SRSQ reports files in 2025 and 2026 (**Decision Options 40, 52a**). The Department believed the analysis will help confirm the initial findings from TRC and the extent to which the additional data influences the various reliability metrics.<sup>152</sup>

### 2. Office of the Attorney General

The OAG felt the enhanced vegetation management and targeted undergrounding programs are not tailored to reduce the duration of customer outages while carrying the risk of costs vastly outweighing the benefits Xcel suggested the program may accrue. The OAG believed the Commission should require more information from Xcel regarding the cause of the disparities in CELI-12 outages before moving forward with the proposals. The OAG also recommended requiring Xcel to explore alternatives to the proposals that may be better tailored to reducing the long-duration outages disparities.<sup>153</sup>

The OAG pushed back against the belief that vegetation management would correct the disparities in CELI-12 outages as Xcel's argument for vegetation management is focused on aggregate outage minutes, not CELI-12. The OAG disagreed with Xcel's assertion that privately owned infested trees are causing the identified disparity as the OAG has not seen any

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<sup>149</sup> Xcel Energy, Initial Filing, April 1, 2024, p. 98

<sup>150</sup> Xcel Energy, Initial Filing, April 1, 2024, p. 111

<sup>151</sup> Department, Initial Comments, August 27, 2024, p. 15

<sup>152</sup> Department, Initial Comments, August 27, 2024, p. 15

<sup>153</sup> OAG, Initial Comments, August 27, 2024, pp. 1-2

corroboration via data of this assertion.<sup>154</sup>

The OAG asserted that Xcel did not capture the extent to which vegetation causes CELI-12 outages, nor did Xcel provide enough support as to why its vegetation management proposal would reduce CELI-12 outages beyond the Company's existing Vegetation Management Program. From a review of the Company's major causes of outages the OAG noted that a large percentage of outages are due, at least in part, to equipment failure.<sup>155</sup> The OAG asserted that while vegetation may be the cause of some of the problems in these specific neighborhoods it does not explain why vegetation would be the issue in these specific areas versus the Company's service territory at large.<sup>156</sup>

The OAG disagreed with Xcel's assumption that enhanced vegetation management could mitigate the heightened risks to overhead distribution lines from emerald ash borer, stating the Company did not provide any supporting data for this claim. The OAG highlighted that the Department of Agriculture maintains significant data regarding the presence of emerald ash borer (EAB) throughout the state via a map identifying known locations.<sup>157</sup> The OAG noted the map does not show significant concentrations of infected trees in the Census Block Groups (CBGs) most impacted by lengthy duration outages.<sup>158</sup> Therefore, the OAG recommended Xcel use its CBG data with the Department of Agriculture data to determine if or to what extent infected trees overlap with the CBGs experiencing disparate rates of CELI-12 outages as well as study whether the areas with identified CELI-12 disparities correlate to higher levels of tree canopy than other areas before proceeding with an enhanced vegetation management proposal (**Decision Option 33a-c**).<sup>159</sup> The OAG acknowledged that reducing outages in general from increased vegetation management, even if not the extended duration outages, is beneficial and more likely to be cost effective than Xcel's other proposal: targeted undergrounding.<sup>160</sup>

The OAG expressed concern that the enormous costs of undergrounding would far surpass any resulting benefits from improved system reliability. Due to the wide range in estimated costs the OAG believed it was not possible to determine if the improvements justify the costs with current information. Furthermore, the OAG noted that Xcel did not identify the percent of customers experiencing CELI-12 outages served by the overhead distribution line miles slated for undergrounding. The OAG also highlighted that the benefits of undergrounding are largely related to reducing outage frequency from vegetation and this program therefore suffers from the same limitations of Xcel's enhanced vegetation management program to solve the CELI-12 outage disparity.<sup>161</sup> Due to this the OAG questioned whether it would be a good use of

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<sup>154</sup> OAG, Initial Comments, August 27, 2024, p. 6

<sup>155</sup> OAG, Initial Comments, August 27, 2024, pp. 8-9

<sup>156</sup> OAG, Initial Comments, August 27, 2024, p. 11

<sup>157</sup> Minnesota Department of Agriculture, Emerald Ash Borer Status map, <https://mnag.maps.arcgis.com/apps/webappviewer/index.html?id=63ebb977e2924d27b9ef0787e cedf6e9> (last visited Aug. 26, 2024).

<sup>158</sup> OAG, Initial Comments, August 27, 2024, p. 11

<sup>159</sup> OAG, Initial Comments, August 27, 2024, pp. 15-16

<sup>160</sup> OAG, Initial Comments, August 27, 2024, p. 16

<sup>161</sup> OAG, Initial Comments, August 27, 2024, p. 17



resources to require Xcel to file a more formal plan, and recommended the Company file revised cost estimates tailored to their service territory of the cost per mile before making a decision on whether to develop a more formal plan (**Decision Option 35**).<sup>162</sup> If, however, the Commission decides to proceed with further scoping of a targeted undergrounding proposal, the OAG recommended any program include an assessment of whether undergrounding would reduce the identified disparities (**Decision Option 34b**).

### 3. Fresh Energy, GEC, Edina, Minneapolis

Minneapolis recommends the Commission accept Xcel's offer to develop a targeted undergrounding plan and enhanced vegetation management plan.<sup>163</sup>

Fresh Energy recommended a comprehensive study to investigate the cause of the disparities before determining whether either of Xcel's proposals was appropriate.<sup>164</sup>

GECs believed the IDP is the more appropriate place for evaluating utility distribution strategy, planning, and investments to address the CELI-12 disparity.<sup>165</sup>

In reply comments, the GECs noted they shared many of the concerns highlighted by the OAG and Fresh Energy regarding enhanced vegetation management and targeted undergrounding, highlighting the need for a comprehensive evaluation of disconnections.<sup>166</sup>

City of Edina supported additional years of outage data collection to better understand the cause and disparities of outages as proposed by the Department. The City also supported more specific cost estimates by Xcel for their undergrounding proposal as recommended by the OAG. The City expressed concern regarding their city-led initiatives to preserve and enhance tree canopy across public and private lands as a tool to combat extreme heat. The City requested the enhanced vegetation management proposal incorporate and balance city-led initiatives to avoid public and private investment in canopy expansion in areas identified for tree trimming and vegetation management. The City also requested Xcel incorporate municipal, county, and state capital improvement plans to align major infrastructure investments with these efforts to help reduce costs and service disruptions for all parties.<sup>167</sup>

### 4. Xcel Reply

Xcel highlighted that to address CELI-12 disparities will require a multipronged approach that is not just vegetation management, undergrounding, or asset replacement but some combination of the three.<sup>168</sup>

The Company pushed back upon the assertion by Fresh Energy and the City of Edina that

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<sup>162</sup> OAG, Initial Comments, August 27, 2024, p. 17, 19

<sup>163</sup> Docket 24-27, City of Minneapolis Letter, p. 3

<sup>164</sup> Docket 24-27, Fresh Energy Comment, p. 6

<sup>165</sup> Docket 24-27, GECs Comment, p. 12

<sup>166</sup> Docket 24-27, GECs Reply Comment, p. 7

<sup>167</sup> Docket 24-27, City of Edina Comment, p. 2

<sup>168</sup> Docket 24-27, Xcel Reply, p. 17

removal of tree limbs significantly decreases canopy cover and worsens heat island effects. Xcel noted that rarely does vegetation management require tree removal and does so only in the case of “hazard” trees (e.g. sick trees that threaten lines). Xcel believes trimming, not removal, would remain the more prevalent practice.

The Company pushed back on the OAG’s suggestion to use Department of Agriculture maps of Emerald Ash Borer as out of date data as the maps show the invasive beetle in the Hennepin and Ramsey counties are not the frontier or EAB spread. The Company believes it would not provide useful guidance for their enhanced vegetation management program as they state that EAB is pervasive in both CBGs with higher CELI-12 and CBGs with lower CELI-12.<sup>169</sup> The Company agreed that it should not begin implementing enhanced vegetation management without considerable additional analysis of costs, benefits, and ways to avoid exacerbating urban heat island effects, all of which would be considered during the development of a proposal. Xcel explained it could file the proposal in a future rate case or IDP, depending on the timing.<sup>170</sup>

With regards to their targeted undergrounding proposal, the Company disagreed with the OAG’s hypothesis that the benefits of undergrounding are related to reducing outage frequency from vegetation, not duration. The Company stated that based on their data, underground lines experience both fewer overall outages and a lower proportion of lengthy outages. The Company noted that from the last five years, approximately 3.6% of sustained customer service interruptions related to overhead distribution lines and equipment met or exceeded the CELI-12 threshold. The Company proposed to make a filing in a future rate case or IDP proceeding consistent with stakeholder comments, so would not begin targeted undergrounding without significant added analysis including costs, benefits, effectiveness in reducing CELI-12 disparities, and a comparison to alternatives.<sup>171</sup>

## **B. Operational Changes**

Fresh Energy proposed that the Company should create a rapid response structure that is specifically tasked with quickly addressing outages in communities that have historically faced reliability challenges. When outages occur, these areas would be prioritized for service restoration, and thereby, minimize the duration of the outages in the short term.<sup>172</sup>

Sierra Club supported Fresh Energy’s proposal.<sup>173</sup>

Similarly, the OAG noted that a limited number of technicians restoring outages would explain why CELI-12 outages are high due to large weather events, but not why they are higher in areas with high POC and older housing vintages. This causes the OAG to be concerned about the possibility of problematic prioritization of restoration. The OAG recommended that Xcel propose potential operational changes in its response efforts that would ensure more equitable

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<sup>169</sup> Docket 24-27, Xcel Reply, p. 19

<sup>170</sup> Docket 24-27, Xcel Reply, pp. 19-20

<sup>171</sup> Docket 24-27, Xcel Reply, p. 21

<sup>172</sup> Fresh Energy comments, August 27, 2024, p. 5.

<sup>173</sup> Sierra Club – North Star Chapter comments, September 11, 2024, p. 2.

distribution of repair efforts such as work crews being assigned in a more equitable fashion and increased field crew workstations in high-impact areas. The OAG recommended to Xcel that they should be mindful to not propose operational changes that simply move resources from one impacted community to another.<sup>174</sup>

The Company pushed back on the concept that communities experiencing CELI-12 disparities are receiving lower priority for restoration, stating the conclusion had no support in the record. The Company noted neither the TRC Study nor the Pradhan/Chan Study suggested the disparities are caused by Company prioritization of dispatch crews to areas other than high-POC communities, calling the assertion pure speculation.<sup>175</sup> Xcel stated that the current outage restoration process prioritizes crews to the areas where 1) the highest number of customers are affected and 2) restoration will return the largest number of customers to service most quickly.

We prioritize restoring substations and feeders first, since those serve a large number of customers, followed by progressively lower levels of the distribution system, feeder tap segments, transformers, down to individual premises.<sup>176</sup>

Xcel believed that its current procedure aligns with industry practices. Also, changes to dispatch crews based on identified disparities would likely lead to longer outages for more customers across the service territory and could result in legal challenges. The Company had concerns about prioritizing areas of its territory based on race following the Supreme Court's 2023 decision in *Students for Fair Admissions*, which found that race-based preferences in affirmative action programs violated the Equal Protection Clause of the Fourteenth Amendment.<sup>177</sup>

After further review of the comments in the record regarding a preferential dispatch outage restoration program, the Department opposed the OAG's and Fresh Energy's recommendation.<sup>178</sup>

**Decision Option 38** would require Xcel to make operational changes for outage restoration. **Decision Option 39** would require Xcel to create a rapid response team for outages.

### C. Distribution Equipment Vintage

In addition to their comments on the enhanced vegetation management and undergrounding proposals, the OAG commented on a discussion from the TRC Study that indicated there may be an opportunity for Xcel to assess distribution equipment vintage in communities experiencing CELI-12 disparities. The OAG interpreted this as an implication that older-vintage distribution equipment may be concentrated in high POC communities with older housing stock. The OAG requested further information from Xcel on this topic of concern to help identify alternative methods that could better target CELI-12 disparities. The OAG requested

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<sup>174</sup> OAG, Initial Comments, August 27, 2024, pp. 20-21

<sup>175</sup> Docket 24-27, Xcel Reply, pp. 23-24

<sup>176</sup> Xcel comments, September 12, 2024, p. 24.

<sup>177</sup> Xcel comments, September 12, 2024, p. 4.

<sup>178</sup> Docket 24-27, Department Supplemental Comment, p. 10

the Commission direct Xcel to study and report on any viable alternatives.<sup>179</sup>

With regards to an equipment replacement program that proactively replaces older vintage distribution equipment, Xcel noted that in recent years most distribution investments in the Asset Health and Reliability budget category have been reactive, replacing failed parts and poles.<sup>180</sup> Xcel noted replacing older equipment is not always the answer to addressing outages as there are multiple reasons for CELI-12 outages. The Company stated they would be open to developing a program that would specifically address assets and CELI-12 outages, looking at feeders and root outage causes holistically and address them accordingly. If there is support, the Company would need to seek significant incremental funding for such a program so as not to reallocate funding from their other critical distribution system investments (non-discretionary reactive upgrades and system expansion via load growth and economic development).<sup>181</sup> Xcel also noted that the Commission is convening a Proactive Grid Upgrade Workgroup. While that group is primarily focused on upgrades to accommodate forecasted capacity needs for distributed generation and electrification, the Company noted there could be a discussion of how the age of equipment and the need for an upgrade could play in to any prioritization of investments.

**Decision Option 54a** requires Xcel to analyze the impact of equipment vintage on outages.

#### **D. Staff Analysis**

Overall stakeholders agree that more analysis is necessary before implementation of a targeted undergrounding or enhanced vegetation management program. There is disagreement however on whether that analysis should happen in conjunction with a pilot proposal, or before the Company begins development of any programs.

Staff notes that it is difficult to evaluate reliability proposals in isolation from other Company reliability initiatives and especially difficult to evaluate any proposals without the context of Xcel's overall reliability budget, both forecasted and historical. While the Company describes its high-level reliability initiatives in the SRSQ reports, its reliability budgets and specific projects are discussed in the IDP and rate cases, making evaluation of the costs and benefits of various methods to reduce outages difficult.

For example, Xcel provides data on how many miles of overhead distribution have completed vegetation management for a given year in its SRSQ, along with the total spent, but the approved amount of spending for vegetation management is outlined in the rate case. Table 5, created by Staff, compares the two numbers, indicating the Company has come in below budget for vegetation management for the past three years. This indicates there may be room in the existing vegetation management budget and additional funding may not be necessary.

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<sup>179</sup> OAG, Initial Comments, August 27, 2024, pp. 19-20

<sup>180</sup> Docket 24-27, Xcel Reply, p. 21

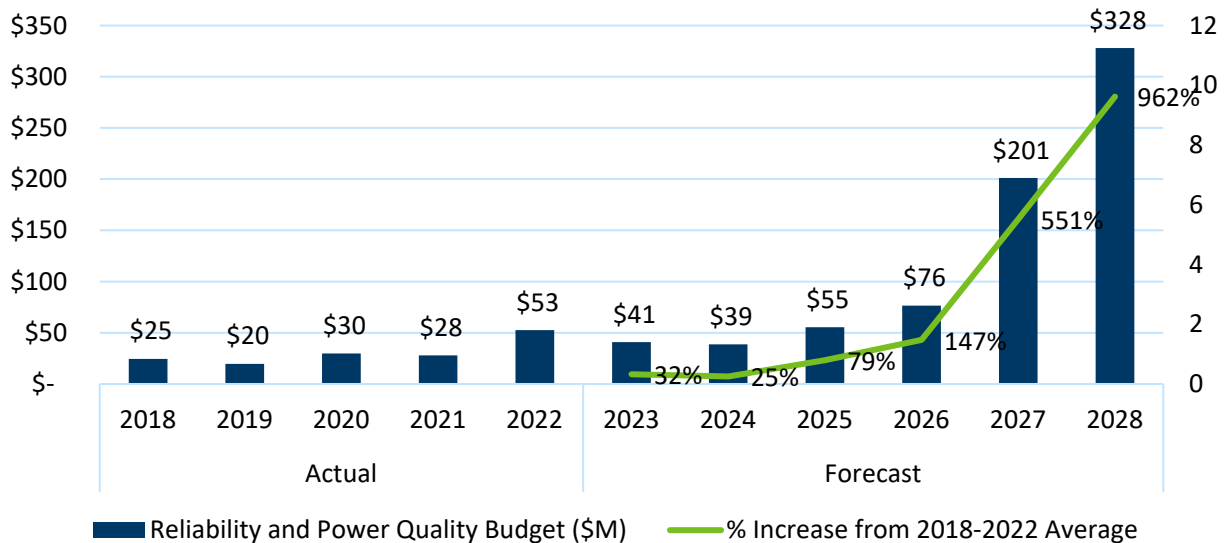
<sup>181</sup> Docket 24-27, Xcel Reply, p. 23

**Table 5: Forecast vs Actual Vegetation Management Spend (\$M)**

	2021	2022	2023
Rate Case Forecast <sup>182</sup>	\$41.2	\$43.4	\$46.0
Actual Spend <sup>183</sup>	\$29.9	\$35.5	\$27.1
Difference	-\$11.3	-\$7.9	-\$18.9

If the Commission decides to have Xcel develop a full proposal for either vegetation management or targeted undergrounding, Staff believes it may be helpful to do so in the context of other distribution spending efforts. As noted in its 2023 IDP, Xcel’s distribution budget is growing exponentially, especially the Company’s budget for upgrades for reliability and power quality, as evidenced in Figure 4 which indicates a 962% increase from the prior five-year average by 2028.

**Figure 4: Annual Xcel Reliability and Power Quality Distribution Budget (\$M)**



With the anticipated increase in spending, Staff wonders if there is an opportunity to target existing dollars to areas with poor reliability outcomes, rather than committing additional dollars.

There are multiple options for the Commission to contemplate:

- Require Xcel to file proposed pilot programs with analysis as outlined by stakeholders above.
- Require Xcel to file additional analysis prior to developing pilot programs.
- Require Xcel to file analysis of how it could use existing budgets/forecasts to target reliability reductions.

As discussed further in Section X. Future Analyses, Reporting, and Processes, Staff believes

<sup>182</sup> Distribution only. Xcel Energy, Bloch Direct, October 25, 2021, Docket E002/GR-21-630, p. 128

<sup>183</sup> Distribution and Transmission. Xcel Energy, Annual Report and Petition, April 1, 2024, Attachment J, p. 4

bridging the information gap between the SRSQ reports, IDPs, and rate cases will be critical in evaluating the Company's reliability initiatives going forward. Therefore, Staff suggests the Commission require any next steps for reducing disparities in reliability be filed with the Company's next IDP on November 1, 2025, so as to better view additional information or program filings within the broader distribution system context. Within the IDP the Commission could either approve a policy-focused program that fits within the context of the Company's existing distribution budget or direct any cost recovery of an approved program in a future rate case.

Fresh Energy and the OAG also recommended additional studies or operational changes. Staff shares the concern of the Company and Department about being overly prescriptive with dictating a utility's outage response policies, especially during mass outage events. An alternative option could be to increase the number of staff available to respond to outages across the Company's service territory. This could also potentially alleviate increasing wait times for service extension requests noted in Volume 2, as Staff understands that the same line workers respond to both types of work calls. The Commission could require Xcel to include a discussion of increasing line worker staffing resources in its next SRSQ report, as discussed in Volume 2, and how that could contribute to multiple reliability and service quality objectives.

Finally, the OAG recommended further analysis of whether the age of distribution equipment contributes to higher proportions of outages. Staff notes the topic of distribution equipment age was brought up as an additional ISQ Map layer in Section IX ISQ Map Modification and could also be included Xcel's proposed analysis of lengthy outage causes discussed in Section X Future Analyses. Staff believes that if the Commission is interested in the OAG's recommendation, it would make sense to combine it with Xcel's proposed analysis of the root causes of lengthy outages (**Decision Option 54a**).

## **IX. ISQ Map Modifications**

During the July 9, 2024 Stakeholder Meeting participants indicated additional data on the ISQ map would aid future analysis. The July 26, 2024 Notice asked whether there were any additional pieces of data to add to the ISQ Map. Stakeholders proposed twenty new data points to add to the map.

Staff has categorized the requests for additional data points and map additions into three categories – demographic information, reliability and grid data, and service quality data. Staff notes that stakeholders used different terms to describe customers (household, premise, customer, residential, customers, etc.) throughout their comments. Staff confirmed with Xcel that all existing data on the ISQ map is displayed at the "premise" level regardless of customer class within a CBG. To avoid confusion and to ensure that any new data added to the map is consistent with the existing data, Staff has standardized terminology across this section to be at the premise level for all customers within a CBG for data collected by the Company. Staff confirmed with Xcel and participants that this was acceptable and did not change the merits or substance of their requests nor would it impact their ability to do future analyses.

## A. Demographic information

The ISQ Map currently contains four pieces of demographic information:

- Median household income
- Census block groups where 40 percent or more of the population is at or below 185 percent of the federal poverty level
- Census block groups Neighborhoods where the population of POC is 50 percent or more
- Federally recognized tribal entities

The City of Edina requested two additional pieces of information be added to the map:

- Municipal Boundaries
- Electric premise counts by census block group

### Municipal Boundaries

Edina explained that adding municipal boundaries to the map would assist municipalities in navigating which data is within their boundaries.<sup>184</sup> Xcel did not object to adding a selectable layer that showed the outlines of municipalities but did not support any requirement to recalculate all existing metrics at a municipality level.<sup>185</sup>

**Decision Option 41a** would add municipal boundaries to the map.

### Electric Premise Counts by Census Block

Edina requested that electric premise counts by census block be included in the data attribute table and in the pop ups, but not as an independent map layer, to understand the number of electric premises impacted and the scale of impact.<sup>186</sup> Xcel agreed that adding this information to the map would be useful and had no technical objections.<sup>187</sup>

**Decision Option 41b** would add premise counts to the data set.

## B. Reliability/Grid Data

The ISQ Map currently contains two pieces of grid and reliability data at the census block group level:

- Percentage of premises experiencing long outages of 12 or more hours (CELLI-12)
- Percentage of premises experiencing 6 or more outages (CEMI-6)

Stakeholders and Xcel proposed adding eight additional layers to the map at the census block group level:

- Average age of infrastructure (years).
- Average age of homes.
- Percentage of underground electric assets.
- Capital investment and O&M (dollars).

<sup>184</sup> Edina, Initial Comments, September 6, 2024, p. 2

<sup>185</sup> Xcel Energy, Reply Comments, September 12, 2024, p. 34

<sup>186</sup> Edina, Initial Comments, September 6, 2024, p. 2-3

<sup>187</sup> Xcel Energy, Reply Comments, September 12, 2024, p. 34

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- Number of premises in each census group block group served by voltage of secondary distribution circuit and whether such circuits are (1) radial or networked, and (2) overhead or underground.
- Average outage duration (minutes).
- Extreme heat indicators such as extreme heat days, daily average temperature in summer months, or average surface temperatures.
- Average hosting capacity available to premises.

#### Average age of homes

#### Average age of infrastructure

Fresh Energy and GEC recommended adding information about the age of the distribution system to the map. They hypothesized that that older infrastructure may result in more frequent and lengthy outages, and that being able to analyze whether this is the case and whether low-income neighborhoods have a higher prevalence of older infrastructure would assist in identifying the root cause of disparities.<sup>188</sup> Xcel agreed that being able to look at the age of infrastructure is an important component in determining the cause of outages. However, the Company explained that trying to add the average age of distribution infrastructure would be difficult as large infrastructure such as substation transformers, do not align with census block group boundaries.<sup>189</sup> Instead, the Company proposed to use the age of housing stock as a proxy for the age of the distribution system, as TCR did in its analysis. Xcel explained that housing stock data is available through the ACS and would be manageable to add to the map.<sup>190</sup>

**Decision Option 42** would add the average age of housing stock to the map.

**Decision Option 43** would add the average age of infrastructure to the map.

#### Percentage of underground electric assets

Xcel recommended adding the percentage of underground electric assets to the map, as undergrounding is a key practice that impacts reliability. The Company noted it already has and maintains this data.<sup>191</sup> GEC also recommended adding the number of premises served by overhead versus assets as part of a broader data layer, discussed below.

**Decision Option 41c** would add the percent of underground assets to the map

#### Capital investment and O&M (dollars)

Fresh Energy and GEC recommended adding distribution capital investment and O&M to the map in order to “determine whether certain communities—particularly communities of color—are receiving less investment” which may contribute to poorer reliability outcomes.<sup>192</sup> Xcel opposed adding this information to the map. Similar to attempts to determine the average age of distribution infrastructure by CBG, the Company explained that trying to attribute investments that occur in one CBG but serve other surrounding areas would be difficult. Xcel also explained that because investments are made on varying cycles there would be lumpiness to the data that could impact the value of any analysis.<sup>193</sup>

<sup>188</sup> GEC, Initial Comments, August 28, 2024, p. 13; Fresh Energy, Initial Comments, August 28, 2023, p. 6-7

<sup>189</sup> Xcel Energy, Reply Comments, September 12, 2024, p. 26

<sup>190</sup> Xcel Energy, Initial Comments, August 27, 2024, p. 14-15

<sup>191</sup> Xcel Energy, Initial Comments, August 27, 2024, p. 14-15

<sup>192</sup> GEC, Initial Comments, August 28, 2024, p. 13-14; Fresh Energy, Initial Comments, August 28, 2023, p. 7

<sup>193</sup> Xcel Energy, Reply Comments, September 12, 2024, p. 27-28



**Decision Option 46a** would add distribution capital investment and O&M spending to the map

*Number of premises in each census group block group served by voltage of secondary distribution circuit and whether such circuits are (1) radial or networked, and (2) overhead or underground.*

GEC recommended adding this information to better understand the grid characteristics of areas with poor reliability.<sup>194</sup> Xcel opposed adding information on radial vs networked circuits as it did not believe this data would better assist in understanding disparities in reliability. The Company explained that for the secondary system radial circuits make up the majority of its geographic service area except for the core Minneapolis-St. Paul downtowns. According to Xcel, a secondary networked system is “highly complex and costly to both build and maintain.” However, Xcel did not oppose adding information on overhead vs underground systems, as noted above.

**Decision Option 46c** would add data on networked vs radial circuits

*Average outage duration (minutes)*

Fresh Energy, GEC, and Edina recommended adding the average duration of outages by census block group.<sup>195</sup> Fresh Energy explained that “longer outage durations in certain areas can indicate that the infrastructure in those communities is less resilient or outdated”<sup>196</sup> while Edina stated that “understanding typical outage duration will help map users understand the average length of outages in addition to the CEMI 6 dataset.”<sup>197</sup> Xcel did not oppose adding average outage duration to the ISQ Map, but questioned if there would be any added value in explaining disparities in reliability beyond CELI-12. Given the limited amount of data layers the Company can add to the existing ISQ Map, Xcel recommended focusing on other data points.<sup>198</sup>

**Decision Option 46b** would add data on average outage duration

*Extreme heat indicators such as extreme heat days, daily average temperature in summer months, or average surface temperatures*

Fresh Energy and Edina recommended adding data on extreme heat indicators to the ISQ Map. Fresh Energy explained that knowing what areas are at risk of urban heat island effect may assist in better tailoring mitigation measures for reliability disparities.<sup>199</sup> Edina added extreme heat data could lead “to a better understanding of the public health and social impacts of outages and service disconnections.”<sup>200</sup> Xcel opposed adding heat indicators to the ISQ map for three reasons: first, the Company did not believe it would assist in better understanding the disparities in disconnections; second, the heat indicators are easily accessible from other public sources and given the map’s limited capacity for additional data, stakeholders could access it from those sources for analysis; and third, heat data is collected at the city or zip code level,

<sup>194</sup> GEC, Initial Comments, August 28, 2024, p. 13

<sup>195</sup> GEC, Initial Comments, August 28, 2024, p. 14

<sup>196</sup> Fresh Energy, Initial Comments, August 28, 2023, p. 7

<sup>197</sup> Edina, Initial Comments, September 6, 2024, p. 3

<sup>198</sup> Xcel Energy, Reply Comments, September 12, 2024, p. 28-29

<sup>199</sup> Fresh Energy, Initial Comments, August 28, 2023, p. 7

<sup>200</sup> Edina, Initial Comments, September 6, 2024, p. 3

which does not align with the existing geographic breakdown by CBG on the ISQ Map.<sup>201</sup>

**Decision Option 46d** would add extreme heat indicators to the map

*Average hosting capacity available to premises.*

GEC recommended adding available hosting capacity to the ISQ Map at the CBG level as it would “enable more granular analysis of hosting capacity and reveal any disparities, and also inform distribution planning and investments as well as DER program development and deployment.”<sup>202</sup> Xcel opposed adding Hosting Capacity Analysis (HCA) availability to the ISQ Map for three reasons. First, the Company already has a granular HCA map and adding a layer to the ISQ Map would overwhelm the mapping platform. Second, as with other distribution data points, Xcel explained it would be difficult to depict HCA information by CBG due to challenges with single pieces of equipment serving multiple CBGs. Finally, Xcel expressed uncertainty about why HCA would be included on the ISQ Map, especially as the Pradhan-Chan study did not identify disparities in HCA availability.<sup>203</sup>

**Decision Option 46e** would add HCA at the CBG level to the ISQ Map

### C. Service Quality

The ISQ Map currently contains three pieces of service quality data at the census block group level:

- Percentage of premises disconnected
- Percentage of premises participating in the Energy Assistance Program, and
- Percentage of premises participating in Conservation Improvement Program Low Income Programs.

Stakeholders and Xcel proposed adding ten additional layers to the map at the census block group level:

- Number of electric premises (1) disconnected once, twice, or three or more times and (2) reconnected once, twice, or three or more times.
- Percent of electric premises disconnected for 24 hours or more.
- Percent of electric premises receiving a disconnection notice.
- Total dollars past due of premises.
- Total dollars past due of disconnected premises.
- Total dollars received from LIHEAP.
- Number of disconnected premises that were enrolled in Energy Assistance Programs.
- Average amount of arrears for disconnected premises.
- Average age of arrears for disconnected premises.
- Per premise energy costs.

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<sup>201</sup> Xcel Energy, Reply Comments, September 12, 2024, p. 35

<sup>202</sup> GEC, Initial Comments, August 28, 2024, p. 14

<sup>203</sup> Xcel Energy, Reply Comments, September 12, 2024, p. 29-30

*Number of premises (1) disconnected once, twice, or three or more times and (2) reconnected once, twice, or three or more times.*

GEC recommended adding premises with multiple disconnections to the map to better determine whether there are disparities in premises that experience more than one disconnection in a year.<sup>204</sup> Xcel opposed adding this data point, stating that detailed information on disconnections and reconnections, including by zip code, is filed in Docket 24-02 making it a lower priority for the ISQ Map. The Company also explained that it does not have this information readily available and would need conduct a resource intensive manual review of customer accounts and assign them to CBGs.<sup>205</sup>

**Decision Option 46f** would add premises experiencing multiple disconnections to the map.

*Percent of electric premises disconnected for 24 hours or more.*

GEC recommended adding the number of premises disconnected 24 hours or more to the map as lengthy disconnections have a more significant impact on families.<sup>206</sup> Xcel supported adding this information to the map as it could better inform stakeholders as to which areas are facing the longest disconnections.<sup>207</sup>

**Decision Option 41d** adds data on premises disconnected 24 hours or more to the map.

*Percent of electric premises receiving a disconnection notice.*

GEC requested adding the percent of premises receiving disconnection notices to the ISQ Map, noting Xcel reports this information in aggregate in the YR-2 dockets. According to GEC, having additional information on disconnection notices could assist in determining whether there are disparities in how premises are being contacted prior to being disconnected.<sup>208</sup>

Xcel opposed adding this information to the map, stating that adding information on disconnection notices would be of limited value given “receiving a disconnection notice is not an indication of an actual disconnection and provides no information as to why a notice was received (other than that the customer had a past due balance over \$180) or how disconnection was avoided.” Therefore, Xcel recommended focusing on actual disconnections rather than disconnection notifications for the map.<sup>209</sup>

**Decision Option 46g** adds data on disconnection notices to the map.

*Total dollars past due of premises.**Total dollars past due of disconnected premises.**Average amount of arrears for disconnected premises*

Xcel and GEC recommended adding information on the amount of arrears for premises to the ISQ Map conduct better analysis on how bad debt impacts disconnections, but differed on what metric should be displayed. GEC recommended depicting total dollars past due for all premises

<sup>204</sup> GEC, Initial Comments, August 28, 2024, p. 14

<sup>205</sup> Xcel Energy, Reply Comments, September 12, 2024, p. 30

<sup>206</sup> GEC, Initial Comments, August 28, 2024, p. 14-15

<sup>207</sup> Xcel Energy, Reply Comments, September 12, 2024, p. 30-31

<sup>208</sup> GEC, Initial Comments, August 28, 2024, p. 15-16

<sup>209</sup> Xcel Energy, Reply Comments, September 12, 2024, p. 31-32

and for disconnected premises,<sup>210</sup> while Xcel recommended displaying average dollars past due for disconnected premises as the focus of the map was on disparities in disconnection.<sup>211</sup>

**Decision Option 44** adds total dollars past due for premises.

**Decision Option 44** adds total dollars past due for disconnected premises.

**Decision Option 45** adds average dollars past due for disconnected premises.

#### Average age of arrears for disconnected premises.

Xcel recommended adding the average age of arrears for disconnected premises to better identify areas where additional outreach is needed. No other stakeholder commented on this proposal.

**Decision Option 41e** adds the average age of arrears to the map.

#### Total dollars received from LIHEAP

GEC recommended adding total dollars received by LIHEAP to the map to determine whether LIHEAP funds are being distributed equitably throughout Xcel's service territory. Xcel explained that the ISQ Map already contains information on Energy Assistance Participation statistics which includes LIHEAP participation.<sup>212</sup> Xcel opposed adding a specific breakdown of LIHEAP dollars as the Company does not receive granular information by CBG due to it being a program administered by the Department of Commerce. Xcel also explained that not all premises who are enrolled in LIHEAP receive energy assistance from the Company's programs, therefore total LIHEAP dollars would not provide a complete picture of energy assistance by CBG.<sup>213</sup>

**Decision Option 46h** adds LIHEAP dollars by CBG to the map.

#### Number of disconnected premises that were enrolled in Energy Assistance Programs

GEC requested adding this information to the map to "inform a more rigorous analysis of the relationship of affordability programs to customer disconnections and any related disparities."<sup>214</sup> Xcel noted that the map already shows disconnected premises and enrollment in energy assistance programs as separate layers, and that should be sufficient for analysis.<sup>215</sup>

**Decision Option 46i** adds disconnected premises enrolled in energy assistance to the map.

#### Per premise energy costs

Edina requested adding per premise energy costs to the map to help better understand disparities in energy burden. Xcel explained it could add average per premise energy cost for any CBG except those where there were less than 15 premises (to protect customer privacy).<sup>216</sup> The Company noted that neither the TCR nor Pradhan-Chan study showed disparities in per-premise energy costs but did not oppose adding this layer if it is a priority for stakeholders.<sup>217</sup>

<sup>210</sup> GEC, Initial Comments, August 28, 2024, p. 14

<sup>211</sup> Xcel Energy, Initial Comments, August 27, 2024, p. 15; Xcel Energy, Reply Comments, September 12, 2024, p.31

<sup>212</sup> GEC, Initial Comments, August 28, 2024, p. 16

<sup>213</sup> Xcel Energy, Reply Comments, September 12, 2024, p. 32-33

<sup>214</sup> GEC, Initial Comments, August 28, 2024, p. 16

<sup>215</sup> Xcel Energy, Reply Comments, September 12, 2024, p. 33-34

<sup>216</sup> Edina, Initial Comments, September 6, 2024, p. 3

<sup>217</sup> Xcel Energy, Reply Comments, September 12, 2024, p. 34-35

**Decision Option 41f** adds per premise energy costs to the map.

#### **D. Timing and Map Update Considerations**

Xcel requested that any new data added to the ISQ Map coincide with its existing update to the map which occurs on April 1 annually. The Company also noted that going forward, it is limited in how much historical data it can display on the ISQ Map without the platform becoming bogged down. Xcel proposed continuing to provide 3-year historical data, but on a rolling basis. The Company explained that “Under this proposal, on April 1, 2025, the 2021 data would be archived and removed from the ISQ Map; the 2022 and 2023 data would remain for the existing eight data layers; and any new data layers that the Commission finds useful would be added from 2024 onward.” Xcel would keep the retired data and it would be available to stakeholders via an information request.<sup>218</sup>

GEC agreed that limiting data on the map to three years was reasonable, however it was concerned that needing to obtain historical data via an information request would be overly burdensome. Instead, GEC recommended the Commission require Xcel to make the data available for download via its website.<sup>219</sup>

Xcel responded that it could work with GEC on the request to have information available via a download on its website, subject to technical feasibility.<sup>220</sup>

#### **E. Staff Analysis**

Based on the record, Staff’s understanding is no participant objects to the addition of the following data layers to the map:

- Municipal Boundaries
- Premise counts by census block group
- Percentage of underground electric assets.
- Percent of electric premises disconnected for 24 hours or more.
- Average age of arrears for disconnected premises.
- Per premise energy costs.

The Commission could adopt **Decision Option 41a-f** today if it wishes to expand the information available on the ISQ Map.

For the following data layers participants recommended similar data points, and to avoid duplication the Commission may choose one or the other if it would like to add the information to the ISQ Map.

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<sup>218</sup> Xcel Energy, Initial Comments, August 27, 2024, p. 15-16

<sup>219</sup> GEC, Reply Comments, September 12, 2024, p. 8

<sup>220</sup> Xcel Energy, Supplemental Comments, September 23, 2024, p. 10

Average age of homes (DO 42)**OR**Average age of infrastructure (years) (DO 43)

Both options seek to measure the impact of aging distribution system infrastructure on reliability. Staff leans towards using average housing stock age as a proxy for the age of the distribution system at this time. Given the large volume of distribution infrastructure and uncertainty about which portions (transformer age, pole age, etc) contributes most to poor reliability, the time and effort to determine the average age per census block group may outweigh using a simpler proxy like average age of housing stock for the analysis proposed in this proceeding. Staff believes discussions around more information about data on the age of distribution infrastructure could be discussed in the Distribution Data Workgroup for Xcel in Docket 23-452.

Total dollars past due of premises and total dollars past due of disconnected premises. (DO 44)**OR**Average amount of arrears for disconnected premises. (DO 45)

All three options are related to the amount past due, however they differ in using total vs average and whether to include total past due for all premises or just for disconnected premises. Staff believes that any would be reasonable, but slightly prefers using average over total as it would provide better context as it would be normalized for the number of individuals in a CBG when looking at the map.

Xcel opposed or saw limited value in adding the following layers to the map, which are contained in **Decision Option 46a-i**.

- Reliability/Grid Data
  - Capital investment and O&M (dollars).
  - Average outage duration (minutes).
  - Number of premises in each census group block group served by voltage of secondary distribution circuit and whether such circuits are (1) radial or networked, and (2) overhead or underground.
  - Extreme heat indicators such as extreme heat days, daily average temperature in summer months, or average surface temperatures.
  - Average hosting capacity available to premises.
- Service Quality Data
  - Number of premises (1) disconnected once, twice, or three or more times and (2) reconnected once, twice, or three or more times.
  - Percent of electric premises receiving a disconnection notice.
  - Total dollars received from LIHEAP.
  - Number of disconnected premises that were enrolled in Energy Assistance Programs.

Staff notes that for the list above it may be helpful to distinguish between what data is necessary for the ISQ Map, and what additional information may be useful for additional analysis but may not add value to the map. For example, capital investment and O&M may be helpful from an analysis standpoint, but of limited value for display on a public facing map. Staff suggests that additional conversations around the data points Xcel opposed may be helpful. For

the contested reliability and grid data options, Staff suggests the Commission take no action at this time but that continued discussions about providing some of this information could continue as part of the Distribution Grid Data workgroup in Docket 23-452 where similar topics are under discussion. For the Service Quality and Affordability data, Staff suggests that discussions could take place in the workgroup recommended in the next section.

Regarding map timing and data availability, Staff supports the Company working to make archived data accessible on its website. In the intermediary, a solution could also be for the Company to file a spreadsheet of the archived map data in eDockets with the annual SRSQ report filing.

## **X. Reporting and Processes**

### **A. Reliability Reporting**

During the July 9, 2024 stakeholder meeting participants raised concerns about the difficulty in tracking matters throughout various proceedings.<sup>221</sup> This concern was also raised in the IDP by GEC, who noted the constant back and forth of where to discuss disparities in reliability made it difficult to track where to provide its analysis. Accordingly in the notice for Comment Staff asked whether some portions of the reliability report should be moved to the IDP to reduce these identified difficulties.

Xcel and the Department expressed concerns with moving portions of the reliability report to the IDP and did not recommend any changes.<sup>222</sup> Xcel believed that any metrics related to reliability should be exclusively reported in the annual SRSQ docket, as “separating metrics between dockets will make it difficult to carefully determine what conclusions can be drawn from them.”<sup>223</sup>

#### **1. Staff Analysis**

As noted above in the Staff analysis section, there is a disconnect between reliability metrics reported in the SRSQ and the information on a utility’s reliability investments and budgets that are reported in the IDP and rate case. This has created confusion for stakeholders who are unsure of where to raise questions or concerns about Xcel’s proposed reliability investments. For example, in its review of Xcel’s 2022 SRSQ report the Commission requested information on how much it would cost to improve the Company’s reliability to first quartile IEEE performance. Xcel filed the information with its 2023 SRSQ report stating it would cost between one and two billion dollars but did not provide context on its extensive reliability spending contemplated in the IDP (see Figure 4 above). Staff’s intent with asking the question was to better synchronize this type of analysis, however Staff acknowledges that this could have been clearer in the notice. Instead of making any decisions in the present proceeding, Staff recommends this point be discussed as part of the Distribution Data Reporting Workgroup established in Xcel’s IDP.

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<sup>221</sup> July 9, 2024 Stakeholder Meeting Notes, Docket 24-27, p. 8

<sup>222</sup> Department, Initial Comments, August 28, 2024, p. 15

<sup>223</sup> Xcel Energy, Initial Comments, August 27, 2024, p. 12

## B. Service Quality

The GECs recommended that either the Commission or Xcel create a compiled list of all disconnection-related reporting on a single website or proceeding to facilitate access. They also recommended that all disconnection data be broken out by gas and electric.<sup>224</sup>

Minneapolis also recommended tracking the disparity identified between income level and participation in low-income programs (**Decision Option 47**).

In prior comment periods both GEC and Fresh Energy requested additional data on several service quality related topics during prior comment periods in either the present docket or in related dockets, such as the Company's 2023 IDP (Docket 23-452).

### 1. Staff Analysis

Staff notes that GEC and Fresh Energy made substantively similar requests for new map layers in the instant comment period which are discussed in the prior section. To avoid duplication Staff does not repeat those requests here, however, Staff recommends creating a workgroup to discuss streamlined affordability reporting and requests for any omitted data could be discussed there.

Unlike distribution and grid data, which is reported in the IDP, there is no location where unified data and reporting on affordability and disconnections are filed and analyzed holistically. Staff also offers that the Service Quality portion of the SRSQ docket could serve as the location for this information, with expanded crossover reporting from other affordability dockets. While no reporting would be permanently moved to SRSQ, having summary information (similar to what is reported in the IDP from various distribution programs) of reporting that occurs in other dockets could give a more complete picture of the status of affordability programs, disconnections, and other matters related to service quality and equity. Staff recommends using a workgroup process like that established in utility IDPs for distribution data (**Decision Option 51**):

Delegate authority to the Executive Secretary to work with Xcel and stakeholders to develop a proposal for what affordability and associated service quality data is reported in SRSQ report and what data continues to be reported in other dockets. The goal of the process is to develop a comprehensive list of existing affordability data reporting requirements and to identify which, if any, pieces of information are missing and should be included in future SRSQ reports.

## C. New docket on equity

The GECs recommended that after the proposed study is complete, a new docket is opened to consider the study's results. The new docket would examine "whether to make changes to the Company's policies, rules, and regulations to reduce involuntary customer disconnections,

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<sup>224</sup> GEC, Initial Comments, August 28, 2024, p. 16



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including specifically customers of color.”<sup>225</sup>

Fresh Energy said that opening a new docket focused on racial disparities may be the most appropriate course of action. Fresh Energy recommends that the Company should provide regular reporting on its plans to address disparities and regular updates to the Commission to monitor the Company’s progress on addressing these disparities.<sup>226</sup>

Xcel did not have a strong position on the GECs’ proposal. It did not object to opening a new docket but said that this seems to run counter to other parties’ recommendation to not create additional dockets for resource-constrained community-based organizations to track.<sup>227</sup>

The Department does not oppose the recommendation.<sup>228</sup>

**Decision Option 57** delegates authority to the Executive Secretary to open a new docket.

### 1. Staff Analysis

As noted in the prior section, Staff recommends creating a workgroup to discuss affordability reporting as part of the SRSQ going forward. Staff requests feedback from GEC and Fresh Energy on whether modifications or additions to the existing SRSQ reporting would be sufficient rather than opening a new docket. Staff shares the concern of Xcel about having multiple dockets to track, and wonders if enhancing the existing SRSQ docket could accomplish GEC’s and Fresh Energy’s goals.

## XI. Deliberation Outline

Stakeholders have offered numerous potential solutions, reporting, and future analysis in the instant docket, many of which overlap with each other. Throughout the record, Staff has attempted to combine decision options that are substantively similar, especially where there are calls for further analysis or information reporting. In the interest of transparency Staff has filed Appendix A to the briefing paper of each participant’s original recommendations.

At the outset of this briefing paper, Staff offered four categories of actions the Commission could take in the present docket. Here Staff classifies the actions described into those four categories and the associated decision options:

- Immediate policy changes
  - Remote disconnection rule variance: Decision Options 9 through 12
  - Disconnection Moratorium: Decision Options 13 through 16
  - Outreach: Decision Options 17 through 18
  - Transparency about Company policies: Decision Options 19 through 20
  - Internal processes for Xcel: Decision Options 28 through 30
  - Disconnection/Reconnection procedures: Decision Option 23 through 26

<sup>225</sup> GECs, Initial Comments, June 14, 2024, p. 9.

<sup>226</sup> Fresh Energy, Reply Comments, August 27, 2024, p. 5-6.

<sup>227</sup> Xcel Energy, Supplemental Comments, September 12, 2024, p. 38.

<sup>228</sup> Department, Supplemental Comments, September 23, 2024, p. 12.

- Restoration during heat events: Decision Option 21, 27e
- Development of future proposals or programs
  - Restoration during air quality events: Decision Option 22 or 27a
  - Improvements to payment arrangements: Decision Options 27b through 27c
  - Additional assistance programs: Decision Options 27d, 27f
  - Targeted Undergrounding Proposal: Decision Options 34 through 37
  - Enhanced Vegetation Management Program: Decision Options 32 through 33
  - Operational changes to outage response: Decision Options 38 through 39
- Enhanced reporting and data availability through the ISQ Map
  - Decision Options 40 through 46
- Additional analyses to better determine the root cause of disparities and track progress
  - Track progress towards reducing disparities through replication of the TRC and/or Pradhan/Chan studies: Decision Options 52 through 53
  - Deeper dive into the causes of identified disparities and potential solutions: Decision Options 54 through 57
  - Additional Reporting: Decision Options 47-51

## **XII. Decision Options**

1. Accept Xcel Energy, Minnesota Power, and Otter Tail Power Company's 2023 Safety, Reliability, and Service Quality Reports. (*Xcel, MP, OTP, Department*)

### **Volume 1 Decision Options**

*Staff note: a supplemental filing is required after the IEEE benchmarking data is posted, as that does not happen until after the April 1 filing deadline. This is consistent with last year's reports and included in the decision options setting each utility's benchmarking standards for 2024. Decision Options 2-4 maintain the same IEEE benchmarking comparisons (e.g. second quartile and utility size) for the utilities' reliability standards.*

2. Set Minnesota Power's 2024 statewide Reliability Standard at the IEEE benchmarking second Quartile for medium utilities. Set Minnesota Power's work center reliability standards at the IEEE benchmarking second quartile for small utilities. Require Minnesota Power to file a supplement to its 2024 SRSQ report 30 days after IEEE publishes the 2023 benchmarking results, with an explanation for any standards the utility did not meet. (*Minnesota Power, Department*)
3. Set Otter Tail Power's 2024 statewide Reliability Standard at the IEEE benchmarking second Quartile for medium utilities. Set Otter Tail's work center reliability standards at the IEEE benchmarking second quartile for medium utilities. Require Otter Tail Power to file a supplement to its 2024 SRSQ report 30 days after IEEE publishes the 2023 benchmarking results, with an explanation for any standards the utility did not meet. (*Otter Tail Power, Department*)
4. Set Xcel Energy's 2024 statewide Reliability Standard at the IEEE benchmarking second Quartile for large utilities. Set Xcel Energy's Southeast and Northwest work center

reliability standards at the IEEE benchmarking second quartile for medium utilities. Set Xcel's Metro East and Metro West work center reliability center standards at the IEEE benchmarking second quartile for large utilities. Require Xcel Energy to file a supplement to its 2024 SRSQ report 30 days after IEEE publishes the 2024 benchmarking results, with an explanation for any standards the utility did not meet. (*Xcel, Department*)

5. Direct Minnesota Power and Otter Tail Power to include a discussion on alternative approaches to reliability standard setting in their 2024 SRSQ Reports. (Department)
  - a. Direct Minnesota Power and Otter Tail Power to include a discussion on the IEEE reporting sample size and data exclusion challenges from this year. (Staff)
  - b. Direct Minnesota Power and Otter Tail power to include a discussion of using the EIA 861 data to benchmark utility reliability performance. (Staff)
6. Direct Otter Tail Power to include in its 2024 SRSQ report performance data for 2024 from both its Interruption Monitoring System (IMS) and their Outage Management System (OMS), if available. (Department)
7. Direct MP to include a discussion on the impact of its new OMS on reporting metrics and a comparison of data from its existing OMS system and its new OMS data, as available, in its 2024 SRSQ Report. (*Department*)

## Volume 2 Decision Options

8. Accept Xcel Energy's compliance report on metrics regarding its Emergency Medical Account as ordered in Docket No. E-002/M-22-233. (*Xcel, Department*)

## Volume 3 Decision Options

### Disparities in Service Quality

#### *Disconnection Variance*

9. Grant Xcel Energy's request for a temporary extension of the variance to Minn. Rule 7820.2500 regarding AMI disconnection as approved in the Commission's March 22, 2023 Order in Docket No. E-002/M-22-233. (*Xcel, Department, ECC/CUB*)
  - a. Extend the variance until the Commission issues a decision on the variance request as presented in the 2024 SRSQ report.
  - b. Apply the extended variance retroactively starting from the expiration of the previous variance on April 22, 2024.
10. Deny Xcel Energy's request to extend its variance and perform remote disconnections. (*GECs*)
11. As a condition of extending the remote disconnection variance, eliminate voicemail messages as a permissible form of final contact before remote disconnection for Xcel Energy. (*GECs, Fresh Energy*)

12. Increase the existing threshold of final contact for disconnection to require Xcel Energy to use two methods of electronic communication, including either text message or email in addition to voicemail. *(Xcel, Department, ECC/CUB)*

#### *Disconnection Moratorium*

13. Require Xcel Energy to halt all disconnections until Xcel has implemented a plan to address disparities and has specifically demonstrated that remote disconnection does not increase the disparities. *(GECs, Sierra Club, OAG)*
14. Require Xcel Energy to halt all disconnections for customers in very low-income census block groups with high concentrations of POC until Xcel has implemented a plan to address disparities and has specifically demonstrated that remote disconnection does not increase the disparities. *(Fresh Energy, alternative to service territory disconnection)*
15. Require Xcel Energy to work with interested stakeholders to evaluate the impact of a moratorium on the Automatic Bill Credit Pilot. *(Department)*
16. Require Xcel Energy to work with interested stakeholders to evaluate the financial effects of a moratorium on disconnections over a two-year period. *(Department)*

#### *Outreach*

17. Approve Xcel Energy's proposal to identify customers throughout its service territory that have not received LIHEAP assistance and are carrying past due balances, and approve the Company's proposal to perform targeted outreach to the identified customers. *(Xcel, Department)*
18. Require Xcel Energy to perform additional outreach throughout its service territory with the goal of increasing participation in affordability programs that reduce bad debt. *(Staff interpretation of Edina, Xcel, GECs)*

#### *Policy Transparency*

19. Require Xcel to publish its disconnection and payment agreement policies and practices on its website. Subject to technical feasibility, Xcel shall make the edits discussed in ECC/CUB's September 12, 2024 comments to its payment agreement webpage. *(Xcel, Department, ECC/CUB)*
20. Require Xcel to make a filing in the instant docket and Docket E,G-999/PR-24-02 detailing its current disconnection policies and practices, and require Xcel to submit additional filings in Docket E,G-999/PR-24-02 when there are changes to those policies and practices within 20 days of the Order. *(Xcel, Department, ECC/CUB)*

#### *Additional Strategies*

21. Approve Xcel Energy's proposal to restore power for involuntarily disconnected

customers with AMI during the duration of a heat advisory or excessive heat warning issued by the National Weather Service. *(Xcel, Department, CUB/ECC, GECs)*

22. Require Xcel Energy to restore power for involuntarily disconnected customers with AMI when AQI alerts of 151 or higher have been issued. *(GECs)*
23. Require Xcel Energy to reduce its down payment requirements and modify its disconnection and payment agreement practices to include consideration of individual household financial circumstances. *(Xcel, CUB/ECC, Fresh Energy)*
24. Prohibit Xcel Energy from sending disconnection notices until a customer's balance reaches \$180 past due. *(Xcel, Department, CUB/ECC, GECs)*
25. Prohibit Xcel Energy from disconnecting customers with a past due balance below \$300. *(Xcel, Department, CUB/ECC, GECs)*
26. Require Xcel Energy to wait at least 10 days after sending a disconnection notice before disconnecting a customer. *(Xcel, Department, CUB/ECC)*
27. Require Xcel to evaluate implementing the following policies and to file the evaluation by [insert date] in [insert docket]. *(Staff interpretation of GECs, Xcel)*
  - a. Restoring power to involuntarily disconnected customers with AMI when AQI alerts of 151 or high have been issued.
  - b. Setting the reconnection fee at \$0. The evaluation shall include an estimate of the costs of waiving reconnection fees and how the Company would propose to recover those costs. *(Staff interpretation of GECs and Xcel)*
  - c. Elimination of interest payments on late bill payment fees or donation of those fees to low-income customer assistance programs, similar to the approach used by Xcel in Colorado. *(GECs)*
  - d. A proposal to increase the number of customers receiving pre-weatherization, weatherization, and energy efficiency improvements, including deep retrofits to create greater energy savings, in areas within the Company's service territory with high concentrations of people of color being disconnected. The proposal should include year over year targets designed to increase the number of people receiving energy efficiency measures. *(Fresh Energy)*
  - e. A more robust hot-weather rule to prevent disconnections in months with the highest cooling energy burden. *(Staff interpretation of GECs)*
  - f. Creating an off-season LIHEAP program to help income-qualified residents clear their arrears by self-attesting to their income level. *(Xcel)*
28. Require Xcel to verify that it manages disconnections due to a landlord's failure to pay consistent with the requirements in Minn. R. 7820.1400. *(GECs)*
29. Require Xcel Energy to inform affected personnel of racial disparities in electric service. Require Xcel to file a compliance report with its annual SRSQ filing on which employees received the training and what information was provided. *(Fresh Energy)*

30. Allow Xcel to track increased bad debt from any adopted proposals and request an adjustment to its revenue requirement in its next rate case. *(Xcel, ECC/CUB)*
31. Where not otherwise noted, require Xcel to file any necessary revised tariff changes within 30 days of the Commission's Order. *(Staff)*

### Reliability

32. Require Xcel Energy to file an enhanced vegetation management plan for areas disparately impacted by long duration outages. *(Xcel, City of Minneapolis)*
  - a. Require Xcel to file the proposal with its IDP due November 1, 2025. *(Staff)*
33. Require Xcel to file an enhanced vegetation management plan with a cost-benefit analysis with its IDP due November 1, 2025. In its filing, Xcel shall explain its analysis of the following to determine whether insufficient vegetation management was a causal factor in the identified disparities: *(OAG)*
  - a. Whether it found a correlation of CELI-12 problem areas with the location of infected trees using the Company's data combined with Department of Agriculture data.
  - b. Whether the areas identified CELI-12 disparities correlate to higher levels of tree canopy than other areas.
  - c. Whether vegetation outages caused the larger number of outages in the identified clusters of CELI-12 outages.
34. Require Xcel Energy to file a proposal to develop a targeted undergrounding plan for portions of North Minneapolis, South Minneapolis, and the area surrounding downtown St. Paul. *(Xcel, City of Minneapolis)*
  - a. Require Xcel to file the proposal with its IDP due November 1, 2025. *(Staff)*
  - b. Require Xcel to include an assessment of whether undergrounding would reduce the identified disparities. *(OAG, if approved)*
35. Require Xcel to file revised and specific cost estimates tailored to Xcel's service territory of the cost per mile for targeted undergrounding in areas disparately impacted by long duration outages. *(OAG)*
  - a. Require Xcel to file the updated estimates with its IDP due November 1, 2025. *(Staff)*
36. Deny Xcel Energy's proposal to develop a targeted undergrounding plan for portions of North Minneapolis, South Minneapolis, and the area surrounding downtown St. Paul. *(DOC)*
37. Require Xcel to perform additional analysis as outlined in Decision Options 54 prior to developing a proposal for targeted undergrounding or enhanced vegetation management. *(Staff interpretation of DOC)*

### Operational Changes

38. Require Xcel to propose potential operational changes in its outage-response efforts that would ensure more equitable distribution of repair efforts with its IDP due November 1, 2025. *(OAG)*
39. Require Xcel Energy to establish a rapid response team that will service outages in communities that are disparately impacted by long duration outages. *(Fresh Energy)*

### ISQ Map

40. Require Xcel Energy to update its Interactive Service Quality Map to include two additional years of data. *(DOC)*
41. Require Xcel Energy to add the following data to its Interactive Service Quality Map by Census Block Group by April 1, 2025. *(Xcel, Edina, Fresh Energy, GEC)*
  - a. Municipal Boundaries
  - b. Premise counts by census block group
  - c. Percentage of underground electric assets.
  - d. Percent of electric premises disconnected for 24 hours or more.
  - e. Average age of arrears for disconnected premises.
  - f. Per premise energy costs.
42. Require Xcel Energy to add to its Interactive Service Quality Map the average age of homes by Census Block Group by April 1, 2025. *(Xcel)*  
**OR**
43. Require Xcel Energy to add to its Interactive Service Quality Map the average age of infrastructure in years by Census Block Group by April 1, 2025. *(Fresh Energy, GEC)*
44. Require Xcel Energy to add to its Interactive Service Quality Map total dollars past due of premises and total dollars past due of disconnected premises by April 1, 2025. *(GEC)*  
**OR**
45. Require Xcel Energy to add to its Interactive Service Quality Map the average amount of arrears for disconnected premises by April 1, 2025. *(Xcel)*
46. Require Xcel Energy to add the following data to its Interactive Service Quality Map by Census Block Group by April 1, 2025.
  - a. Capital investment and O&M (dollars). *(Fresh Energy, GEC)*
  - b. Average outage duration (minutes). *(Fresh Energy, GEC, Edina)*
  - c. Number of premises in each census group block group served by voltage of secondary distribution circuit and whether such circuits are (1) radial or networked, and (2) overhead or underground. *(GEC)*
  - d. Extreme heat indicators such as extreme heat days, daily average temperature in summer months, or average surface temperatures. *(Fresh Energy, Edina)*
  - e. Average hosting capacity available to premises. *(GEC)*
  - f. Number of premises (1) disconnected once, twice, or three or more times and (2) reconnected once, twice, or three or more times. *(GEC)*
  - g. Percent of electric premises receiving a disconnection notice. *(GEC)*

- h. Total dollars received from LIHEAP. *(GEC)*
- i. Number of disconnected premises that were enrolled in Energy Assistance Programs. *(GEC)*

### **Future Analyses, Reporting, and Processes**

- 47. Require Xcel Energy to monitor and report on progress toward eliminating the racial disparities among customers who are involuntarily disconnected in future SRSQ reports. *(City of Minneapolis)*
- 48. Require Xcel Energy to monitor and report on disparities identified between income level and participation in low-income programs in future SRSQ reports. *(City of Minneapolis)*
- 49. Require Xcel Energy to report on discrepancies between the number of customers that have applied for and been enrolled in its medical protection programs in future SRSQ reports. *(CUB/ECC)*
- 50. Require Xcel Energy to file a cost-benefit analysis of combining the annual affordability reports and the SRSQ report in its April 1, 2025 SRSQ report in future SRSQ reports. *(DOC)*
- 51. Delegate authority to the Executive Secretary to work with Xcel and stakeholders to develop a proposal for what affordability and associated service quality data is reported in SRSQ report and what data continues to be reported in other dockets. The goal of the process is to develop a comprehensive list of existing affordability data reporting requirements and to identify which, if any, pieces of information are missing and should be included in future SRSQ reports. *(Staff)*

### **Future Analysis**

- 52. Require Xcel Energy to conduct a study similar to the TCR Service Quality and Demographics Analysis on a three-year cycle with the next report due on April 1, 2027 with its SRSQ Report. *(Staff interpretation of Xcel, Department)*
  - a. Require Xcel to use five years of data for future analyses. *(Department)*
- 53. Require Xcel Energy to conduct a study similar to the TCR Service Quality and Demographics Analysis on an annual basis with the next report due on April 1, 2025 with its SRSQ Report. *(Staff interpretation of GEC)*
- 54. Require Xcel Energy to develop its data collected on causes of CELI-12 outages to inform which causes predominantly affect CBGs currently showing increased CELI-12. Require Xcel Energy to then analyze whether the primary causes emerging in CBGs with increased CELI-12 are caused by overhead assets. *(Xcel)*
  - a. Require Xcel to provide an analysis of distribution equipment vintages in the affected CELI-12 communities and analyze whether upgrading this equipment would be cost effective. *(OAG, Department, Xcel)*



55. Require Xcel Energy to hire an independent consultant to conduct qualitative interviews with residents in CBGs with higher disconnection rates to better understand perceived causes of disconnection, effective communications practices, and whether there are additional steps the Company could take to adjust its programs to help customers avoid disconnections. (*Xcel*)
56. Require Xcel Energy to hire an independent third-party evaluator with expertise in evaluating racial disparities to conduct a one-year study that will evaluate Xcel's practices and policies related to capital investment planning, outage restoration practices, and shutoff practices to better understand the causes of these discrepancies in shutoff rates and service reliability. Require Xcel Energy to engage interested stakeholders to participate and collaborate with the independent third-party evaluator. (*Fresh Energy*)
57. Delegate authority to the Executive Secretary to open a new docket focused on disparities identified in the TRC and Pradhan/Chan studies and Xcel Energy's efforts to reduce them. (*Staff interpretation of GEC and Fresh Energy*)