STATE OF MINNESOTA

BEFORE THE PUBLIC UTILITIES COMMISSION

Katie Sieben	Chair
Joseph Sullivan	Vice-Chair
Hwikwon Ham	Commissioner
Audrey Partridge	Commissioner
John Tuma	Commissioner

In the Matter of Northern States Power Company d/b/a Xcel Energy's Electric 2024 Annual Safety, Reliability, and Service Quality Report	Docket No. E-002/M-25-27

Comments of the Citizens Utility Board of Minnesota, the Legal Services Advocacy Project, and the Energy CENTS Coalition

The Citizens Utility Board of Minnesota ("CUB"), the Legal Services Advocacy Project ("LSAP"), and the Energy CENTS Coalition ("ECC") respectfully submit these comments in response to the Minnesota Public Utilities Commission's ("Commission") Notice of Extended Comment Period issued on April 24, 2025 in the above-referenced matter.

I. Background

Northern States Power Company d/b/a Xcel Energy ("Xcel" or the "Company") is in the process of installing Advanced Metering Infrastructure ("AMI") throughout its service territory which, among other uses, enables the remote disconnection and reconnection of customers' utility service. In recognition of this capability, the Commission ordered Xcel in March 2023 to develop a method "for using . . . [AMI] to restore electric service to customers during periods of extreme heat."[1] Pursuant to that directive, Xcel proposed in its 2023 Annual Safety, Reliability, and Service Quality ("SRSQ") Report a process for restoring electric service to disconnected customers during heat-related events.[2]

CUB and ECC subsequently filed joint comments supporting this use of AMI technology and recommending the extension of remote reconnection protections to residential customers during unhealthy air quality events.[3] Both organizations engaged in fruitful conversations with Xcel in an

[1] *In the Matter of Northern States Power Company d/b/a Xcel Energy-Electric's Petition Requesting Approval of Changes to its Tariff and an Indefinite Variance to Commission Rules Regarding Disconnection of Service*, Docket No. E-002/M-22-233, Order Approving Petition as Modified and Requiring Filings at 9 (Mar. 22, 2023) (hereinafter "Order Requiring Extreme Heat Reconnection Proposal").

[2] *In the Matter of Northern States Power d/b/a Xcel Energy's 2023 Annual Safety, Reliability, and Service Quality Report*, Docket No. E-002/M-24-27, Xcel 2023 Annual SRSQ Report and Petition at 32-33 (Apr. 1, 2024) (hereinafter "Xcel 2023 SRSQ Report").

[3] *In the Matter of Northern States Power d/b/a Xcel Energy's 2023 Annual Safety, Reliability, and Service Quality Report*, Docket No. E-002/M-24-27, Initial Comments of CUB and ECC (Jun. 14, 2024); Reply Comments of CUB and ECC (Jun. 24, 2024); Reply Comments of CUB and ECC (Sep. 12, 2024).

effort to identify a reasonable pathway forward for protecting customers against poor air quality health impacts. In addition to discussing reconnection protections, the Company committed to providing customers with additional information about how to request medical protections if they are particularly vulnerable to poor air quality.[4]

On January 13, 2025, the Commission accepted these recommendations and required Xcel to file a second-proposed plan in its 2024 SRSQ Report for restoring power to involuntarily disconnected customers with AMI during "a heat advisory or excessive heat warning," or when "high air quality index alerts have been issued."[5]

On April 1, 2025, Xcel filed its 2024 SRSQ Report, together with its proposed approach for reconnecting customers during extreme heat and poor air quality events.[6] The Commission thereafter issued a Notice of Comment on April 7, 2025, requesting stakeholders to weigh in on the Company's proposals. An extension to that comment period was granted on April 24, 2025. CUB, LSAP, and ECC have continued to engage in discussions with Xcel in an attempt to reach a mutually agreeable method for implementing these protections.

II. Analysis

A. The Commission should accept Xcel's proposals to remotely reconnect disconnected customers during extreme heat events and air quality alerts, subject to modifications.

CUB, LSAP, and ECC address the first two questions posed by the Commission together, as Xcel's proposals for extreme heat and air quality events mirror each other. We continue to strongly support the use of AMI to extend life-saving protections to customers throughout Xcel's service territory, and appreciate the Company's efforts to identify a process for implementing these provisions.

As previously detailed in CUB's and ECC's comments on Xcel's 2023 SRSQ Report, the prevalence and severity of heat- and air quality-related events has increased, amplifying the potential for residential Minnesotans to be negatively impacted.[7] Between 2000 and 2023, exposure to excessive heat resulted in 77 deaths in Minnesota and nearly 1,800 hospitalizations.[8] In 2023, the Minnesota Pollution Control Agency ("MPCA") also reported the highest number of air quality alerts in Minnesota history, with

[4] *In the Matter of Northern States Power d/b/a Xcel Energy's 2023 Annual Safety, Reliability, and Service Quality Report*, Docket No. E-002/M-24-27, Reply Comments of CUB and ECC at 6 (Sep. 12, 2024).
[5] *In the Matter of Northern States Power d/b/a Xcel Energy's 2023 Annual Safety, Reliability, and Service Quality Report*, Docket No. E-002/M-24-27, Order Accepting Reports and Setting Additional Requirements at 12-13 (Jan. 13, 2025) (hereinafter "Commission Order on Xcel's 2023 SRSQ Report").
[6] *In the Matter of Northern States Power d/b/a Xcel Energy's 2024 Annual Safety, Reliability, and Service Quality Report*, Docket No. E-002/M-25-27, Annual Report and Petition (Apr. 1, 2025) (hereinafter "Xcel 2024 SRSQ Report").
[7] *In the Matter of Northern States Power d/b/a Xcel Energy's 2023 Annual Safety, Reliability, and Service Quality Report*, Docket No. E-002/M-24-27, Initial Comments of CUB and ECC at 2-3 (Jun. 14, 2024).
[8] MINN. DEP'T OF HEALTH, *Heat-Related Deaths*, *https://data.web.health.state.mn.us/heat_deaths* (last updated May 2024); MINN. DEP'T OF HEALTH, *Heat-Related Hospitalizations*, https://data.web.health.state.mn.us/heat_hospitalizations#byyear (last updated July 2024),

heavy wildfire smoke resulting in quality alerts covering 52 days.[9] These trends are inextricably related, with rising temperatures contributing to higher concentrations of pollution.[10]

As with extreme heat, the negative health impacts of unhealthy air quality are significant. Short-term exposure to particle pollution can impair lung capacity, worsen asthma symptoms, and increase hospital admissions for cardiovascular and pulmonary diseases.[11] The American Lung Association further notes a clear relationship between unhealthy air quality and premature deaths.[12] These impacts are especially acute for certain populations, including children, older adults, individuals with chronic respiratory or cardiovascular diseases, and people experiencing low socioeconomic status.[13] Residents in low-income and Black, Indigenous, and People of Color ("BIPOC") communities often face higher pollution burdens as a result of longstanding systemic inequities, further exacerbating these disparate health effects.[14]

As the frequency of extreme heat and air quality events continues to rise, Xcel and the Commission can utilize the technological capabilities of AMI to ensure vulnerable populations are able to maintain or regain access to air conditioning and electric cooling systems to protect themselves from heat, smoke, and air pollution. Implementing these protections will serve the public interest and promote energy justice by safeguarding Minnesotans against harmful weather patterns and pollutants. For these reasons, we recommend that the Commission approve Xcel's proposals for suspending disconnections and reconnecting customers during extreme heat and poor air quality events, subject to the following modifications.

B. The Commission should establish a threshold AQI of 151 for both suspending disconnections and reconnecting customers during unhealthy air quality events.

CUB, LSAP, and ECC respectfully disagree with Xcel's proposal to employ different air quality index ("AQI") values in determining when to suspend disconnections or reconnect customers with AMI. Under Xcel's current methodology, disconnections would be suspended if AQIs exceed 150, while remote reconnection protections would only be triggered when AQIs are above 200. We continue to support our prior recommendation to remotely reconnect customers once an "Unhealthy" AQI of 151

[9] MPCA, *After Record Number of Air Quality Alerts, Even More Hazy Days Expected* (Sep. 6, 2023), https://www.pca.state.mn.us/news-and-stories/air-quality-alerts-record; *see also* MPCA, *Understanding the Air Quality Index (AQI)*, https://www.pca.state.mn.us/air-water-land-climate/understanding-the-air-quality-index-aqi (last visited Apr. 11, 2025) (noting that air quality alerts are issued when an AQI reading exceeding 100 is recorded).
[10] Beatriz Cardenas et al., *What Happens When Extreme Heat and Air Pollution Collide*, WORLD RESOURCES INST. (Sep. 10, 2024) (citing INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC), SIXTH ASSESSMENT REPORT (2023).
[11] AM. LUNG ASSOC., STATE OF THE AIR 27-28 (2024).
[12] *Id*. at 27-29.
[13] MINN. DEP'T OF HEALTH, *Wildfire Smoke*, https://www.health.state.mn.us/communities/environment/emergency/natural/wildfires.html (last visited Apr. 22, 2025).
[14] MINN. DEP'T OF HEALTH, LIFE AND BREATH: TWIN CITIES METRO (2022); MINN. DEP'T OF HEALTH, LIFE AND BREATH: GREATER MINNESOTA (2022).

or higher is reached.[15] Xcel's proposal for reconnecting customers at the higher "Very Unhealthy" AQI threshold of 201 would severely limit the applicability of these protections.

As explained by the Minnesota Pollution Control Agency, 2021 was the first year in which the state exceeded an AQI of 200.[16] Since then, only five days have met the "Very Unhealthy" threshold, with each instance of high AQIs occurring at a maximum of two monitoring sites.[17] Although Xcel originally estimated five days would reach this threshold each year, the Company admits its assumptions surrounding the anticipated number of events were incorrect; no reconnections would have been carried out in 2023 under the current proposal.[18]

In contrast, AQIs exceeding 150 were recorded on 25 days since 2021.[19] Notably, air quality reporting takes place throughout the entirety of the state, and not all air quality events occurred in Xcel's service territory. CUB, LSAP, and ECC are concerned that setting the remote reconnection threshold at an AQI of 201 would result in few customers receiving these protections.

Employing an appropriate AQI threshold for remote reconnections is essential for protecting Minnesotans from the devastating health effects of poor air quality. AQIs of 151 or higher can cause a variety of symptoms, including "irritated eyes, nose, and throat, coughing, chest tightness, or shortness of breath."[20] The severity of health impacts increases exponentially for sensitive populations such as children, the elderly, and individuals who are pregnant or have respiratory or cardiovascular conditions.[21] For these customers, as well as those that are exposed for longer periods of time, an AQI of 151 or higher could "worsen[] . . . existing heart or lung disease . . . possibly leading to an asthma attack, heart attack, or stroke."[22] Minnesotans are advised to "stay inside with windows closed and air conditioning on" to protect themselves against these risks.[23]

We recommend the Commission adopt an AQI of 151 as the threshold for both reconnecting customers and suspending disconnections.

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[15] *In the Matter of Northern States Power d/b/a Xcel Energy's 2023 Annual Safety, Reliability, and Service Quality Report*, Docket No. E-002/M-24-27, Initial Comments of the Joint Commenters at 3-4 (Jun. 14, 2024).

[16] MPCA, *Air Quality Trends and Data*, https://www.pca.state.mn.us/air-water-land-climate/air-quality-trends-and-data (last visited Apr. 10, 2025).

[17] MPCA, *Air Quality Index Application*, https://webapp.pca.state.mn.us/aqistats/calendar (last visited Apr. 10, 2025). MPCA's application shows a total of 5 days reached an AQI greater than 200 between January 2021 and March 2025 across seven monitoring sites. Two AQI events occurred in July 2021, spread out across a total of four locations. In May 2022, August 2023, and September 2023, a single monitoring location in the state recorded an AQI rising to the "Very Unhealthy" level.

[18] *See* Xcel Response to Minnesota Department of Commerce Information Request No. 005 (attached as DOC-005).

[19] MPCA, *Air Quality Index Application*, https://webapp.pca.state.mn.us/aqistats/calendar (last visited Apr. 10, 2025).

[20] MPCA, *Air Quality Alert Issued Immediately Due to Wildfire Smoke for All of Minnesota* (May 12, 2024), https://www.pca.state.mn.us/news-and-stories/air-quality-alert-issued-immediately-due-to-wildfire-smoke-for-all-of-minnesota.

[21] *Id*.; *see also* AM. LUNG ASSOC., STATE OF THE AIR 29 (2024).

[22] *Id*.

[23] Chloe Johnson, *How to protect yourself from wildfire smoke when it returns to Minnesota this summer*, STAR TRIBUNE (June 8, 2023) (quoting Jesse Berman, Assistant Professor at University of Minnesota's School of Public Health).

C. The Commission should require Xcel to file an outreach and communications plan detailing how it intends to inform customers of extreme heat and air quality protections.

CUB, LSAP, and ECC recognize that implementing the proposed policy changes will require communication efforts to ensure customers, stakeholders, and organizations are informed of extreme heat and air quality protections. We envision this process proceeding in an incremental manner, with various steps taken by Xcel to maximize customer awareness. We recommend that Xcel be required to submit a compliance filing within 60 days of the publication of the Commission's Order detailing how the Company intends to inform customers of the new protections.

We suggest that Xcel's communications and outreach strategy should include community engagement, annual notices, website revisions, and direct customer contact. Information on extreme heat and air quality protections should be made available in multiple languages and outreach materials should be distributed through channels trusted by underserved communities to mitigate disparities in awareness. Providing clear, accessible materials to community groups, nonprofits, affordability program providers, and state agencies can help ensure households know what to expect when an event occurs.[24] Annual notices or bill inserts—potentially sent at the beginning of summer, when these events are most likely to be triggered—would also provide an effective means of customer communication. Lastly, Xcel should be required to include on its website an overview of extreme heat and air quality protections, and the steps customers must take to secure reconnection of service.

Apart from advanced outreach strategies, Xcel will need to develop a process for communicating with impacted customers when an extreme heat or air quality event is forecasted to occur. As contemplated by the Company, this will require identifying impacted households on a county-by-county basis and recording scripts for customer contact.[25] Once contact has been made, Xcel indicates it will need to receive confirmation that circuit breakers have been turned off before reconnecting service.[26] In addition to telephone messaging, CUB, LSAP, and ECC recommend Xcel communicate with customers via a second form of contact—whether that be text or email—whenever permission has been granted to do so. Employing a secondary form of communication is consistent with the Commission's recent order regarding final outreach activities prior to commencing disconnection.[27] The Company can detail in its messaging the steps customers must take—and who to contact—prior to reconnection, or even develop a process for digitally confirming safety precautions have been

[24] MPCA and the Minnesota Department of Health provide information on air quality and extreme heat, respectively, and would be well-situated to inform Minnesotans of these protections. *See, e.g.,* MPCA, *Air Quality and Health*, https://www.pca.state.mn.us/air-water-land-climate/air-quality-and-health (last visited Apr. 16, 2025); MINN. DEP'T OF HEALTH, *Extreme Heat Events*, https://www.health.state.mn.us/communities/ environment/climate/extremeheat.html (last visited Apr. 16, 2025).

[25] Xcel 2024 SRSQ Report, Part III at 98.

[26] *Id*.

[27] Order Accepting Reports and Setting Additional Requirements at 12; *see also In the Matter of Northern States Power d/b/a Xcel Energy's 2023 Annual Safety, Reliability, and Service Quality Report*, Docket No. E-002/M-24-27, Xcel Comments at 7 (Aug. 27, 2024) (agreeing to offer alternative forms of outreach).

taken. Providing multiple avenues of communication will bolster customers' awareness of protections and increase opportunities to facilitate reconnection.

In addition to providing notification of upcoming heat or air quality alerts, Xcel's pre-event communications should also inform customers of what to expect after the conclusion of those events. As indicated by the Company, households reconnected during extreme weather will be disconnected after the event unless the customer establishes a payment arrangement.[28] Customers must be adequately informed of this possibility and should be provided with resources on how to remain reconnected. Because Xcel's event communications establish an effective touchpoint for contacting payment-troubled customers, we recommend including information about assistance resources and how to set up payment arrangements in those outreach materials.

D. Xcel should immediately suspend disconnections when AQIs exceed 150 and implement remote reconnection protections as soon as possible, and by May 1, 2026 at the latest.

CUB, LSAP, and ECC respectfully disagree with Xcel's proposed start date of 16 months from the Commission's Order for implementing extreme heat and air quality reconnections. The Commission directed the Company to prepare its initial proposal for extreme heat reconnections more than two years ago, on March 22, 2023.[29] On April 1, 2024, Xcel then presented a methodology for remotely reconnecting customers in its 2023 SRSQ, and the Commission directed the Company to develop a process for extending those protections to air quality events at the beginning of 2025.[30] Assuming a Commission Order is issued on this matter by mid-year 2025, the Company's proposed 16-month timeline would result in protections being rolled out at the start of 2027.

While we acknowledge there are steps that must be taken prior to implementing these practices, we believe Xcel's proposed timeline is excessive. Delaying implementation until 2027 would prolong the amount of time customers remain without life-saving protections.

We strongly recommend that Xcel be immediately ordered to suspend disconnections during unhealthy air quality events with an AQI of 151 or higher. System enhancements are not necessary for these protections.

The Company should likewise be directed to implement reconnection provisions for extreme heat and unhealthy air quality as soon as feasible. While we would prefer that these protections be available during the upcoming summer months, we recognize that upgrading the Company's internal systems and communications processes will take time, and such an expedient turnaround may not be possible. Nonetheless, we recommend that Xcel be required to upgrade its systems to enable the remote reconnection of extreme heat and air quality-affected customers by May 1, 2026, at the latest.

[28] Xcel 2024 SRSQ Report, Part III at 98.
[29] Order Requiring Extreme Heat Reconnection Proposal at 13.
[30] Xcel 2023 SRSQ Report at 32-33; Commission Order on Xcel's 2023 SRSQ Report at 12-13.

This would ensure the protections are in place prior to the 2026 summer months, when extreme heat and air quality events are most likely to occur.

E. The Commission should require Xcel to update its tariffs and report on the number of customers receiving protection.

In its tariff sheets on customer rights, Xcel includes a provision detailing the statutory requirement that utilities not disconnect residential customers from service "when an excessive heat watch, heat advisory, or excessive heat warning . . . is in effect."[31] CUB, LSAP, and ECC recommend that these tariffs be updated to include language about the expanded protections ultimately adopted by the Commission.

It is also important that Xcel informs the Commission and stakeholders about the effectiveness of its extreme heat and air quality protections. It is our understanding that the Company will be able to track the number of customers qualifying for reconnection, as well as the number of reconnections ultimately carried out. This data should be provided both in aggregate and at the county level. If feasible, Xcel should also include more granular data in its service quality map detailing where these protections are triggered. We recommend Xcel be required to file this information annually in its SRSQ reports, together with a description of how many events were called and how many disconnections were suspended.

III. Conclusion

CUB, LSAP, and ECC strongly support Xcel's proposal to implement residential customer protections during extreme heat and air quality events, subject to the above modifications. Consistent with that support, we make the following recommendations:

1. Approve Xcel's proposal to remotely reconnect disconnected customers during extreme heat events, and require remote reconnection protections to be implemented by May 1, 2026 at the latest.
2. Approve Xcel's proposal to remotely reconnect disconnected customers during air quality events, subject to the following modifications:
    a. Require Xcel to reconnect disconnected customers when air quality exceeds an AQI of 150.
    b. Require Xcel to implement remote reconnection protections by May 1, 2026 at the latest.
3. Require Xcel to immediately begin suspending residential customer disconnections when air quality exceeds an AQI of 150.

[31] Northern States Power Company, Minnesota Electric Rate Book: Customer Rights, Sheet 11-3 (effective date Jan. 26, 2010); *see also* Minn. Stat. § 216B.0975 (detailing disconnection protections during extreme heat conditions).

4. Require Xcel to submit a compliance filing within 60 days of the publication of this Order detailing its communication and outreach strategies for informing customers of extreme heat and air quality protections.

5. Require Xcel to use two methods of electronic communication—including text or email, in addition to telephone messaging—when informing impacted customers of reconnection protections in advance of extreme heat or air quality events, subject to the Company receiving customer consent to do so.

6. Require Xcel to include in future annual SRSQ reports (1) the number of extreme heat and air quality events called; (2) the number of customers eligible for extreme heat and air quality protections during each event; and (3) the number of customers whose disconnections were suspended or who were ultimately reconnected during each event. Such information will be provided both in aggregate and by county, and be incorporated into the Company's service quality map to the extent feasible.

Sincerely,

May 9, 2025

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Xcel Energy		Information Request No.	5
Docket No.:	E002/M-25-27		
Response To:	Minnesota Department of Commerce		
Requestor:	John Kundert		
Date Received:	April 25, 2025		

Question:
Topic: Heat Advisory/High Air Quality Index (AQI) Disconnection/Reconnection Plan
Reference(s): Part 3, 2024 SRSQ Annual Report, page 101, Assumptions

1. Provide all analytical support for the Company's assumption that annual frequency of heat events covered by the Heat Advisory Reconnection/Disconnection plan will be 5 per cooling season.

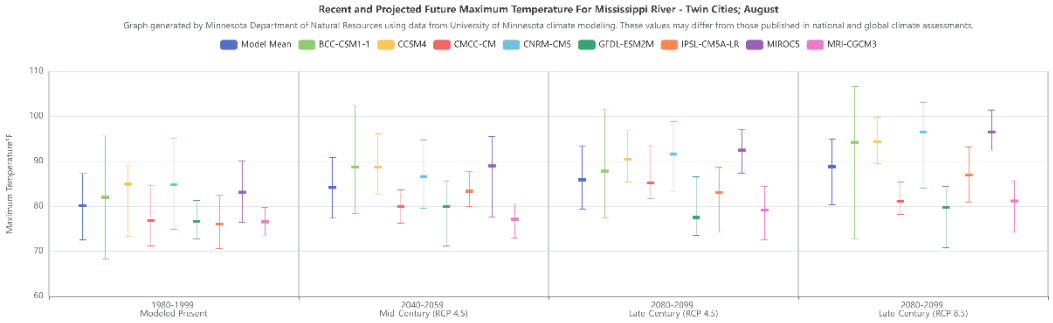
2. Provide all analytical support for the Company's assumption that annual frequency of poor air quality events covered by the High AQI Reconnection/Disconnection plan will be 5 per season.

Response:

1. We estimated the annual frequency of five heat events per cooling season based on data from the National Weather Service (NWS) website[1] and the average of Xcel Energy heating events for the years 2021-2023. We recognize that this historical average may not be a predictor of future events and that with global climate change, the number of annual events may be greater than five. Various State-developed resources suggest this could be the case; see for example the Minnesota DNR's climate trends tools at Climate trends | Minnesota DNR and the Minnesota Climate Explorer at Minnesota Climate Explorer. The latter tool shows that most climate models predict an increasing trend in maximum August temperatures for the Twin Cities region, as shown in the figure below, which could result in more heat advisory and extreme heat days when the Company would be pausing disconnections and reconnecting disconnected customers.

Figure 1. Historical and future projected maximum temperatures in the Twin Cities region, from Minnesota Climate Explorer.

[1] National Weather Service



2. We estimated that there would be five poor air quality events annually covered by the High AQI Reconnection/Disconnection Plan (Plan) based on data from the Minnesota Pollution Control Agency's website [2] which indicates that there were five Unhealthy days with an AQI of 151 or greater in Minnesota in 2023. This represents the number of days that disconnections would have occurred under the Plan that would then need to be reconnected on days with Very Unhealthy days with an AQI of 201 or greater. We now recognize that this assumption was incorrect. Looking at 2023 data, there were five Unhealthy days but no Very Unhealthy Days so while under the Plan disconnections would have been suspended on five separate days, there would have been no reconnections required by the Plan.

In addition, we recognize that this history is not always a great predictor of future events and that with global climate change, the number of annual events may be greater than five.

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[2] Workbook: Minnesota air quality index