



Protecting, Maintaining and Improving the Health of All Minnesotans

May 30, 2025

Will Seuffert
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, Minnesota 55101-2147

RE: Docket No. E002/M-25-27

In the Matter of Northern State Power Company d/b/a Xcel Energy –Electric’s 2024 Annual Safety, Reliability, and Service Quality Report

Dear Mr. Seuffert,

Thank you for providing the Minnesota Department of Health (MDH) with the opportunity to comment on PUC Docket No. E002/M-25-27, *In the Matter of Northern State Power Company d/b/a Xcel Energy –Electric’s 2024 Annual Safety, Reliability, and Service Quality Report*, filed by Xcel Energy (Xcel or the Company) on April 1, 2025.

MDH is providing this comment letter in support of the recommendations made by the Minnesota Department of Commerce (DOC) in section IV of their comment letter submitted on 5/09/2025 (Document ID 20255-218769-01¹). MDH specifically commends Recommendation A presented in DOC’s letter requiring Xcel to consult with the Minnesota Pollution Control Agency (MPCA) and MDH on further record development, as well as their references to public health concerns and the benefits of action throughout their comments.

The mission of MDH is to protect, maintain, and improve the health of all Minnesotans. The careful oversight of and collaboration with Minnesota’s public utilities, such as in this matter of initiating reconnections and suspending disconnections in instances of extreme heat and poor air quality, supports this mission and is an important step in ensuring healthy outcomes for Minnesotans in all policies.

Global climate change due to greenhouse gas emissions is increasing ambient temperatures and humidity in Minnesota. This, in turn, has resulted in Minnesotans experiencing more severe and prolonged extreme heat events.² Exposure to extreme heat can have dire human health consequences, including heat exhaustion and heat stroke; respiratory distress; pregnancy

¹ [EDockets - 20255-218769-01](#)

² [Climate and Health in Minnesota - MN Dept. of Health](#)

complications and adverse birth outcomes; exacerbation of underlying conditions, such as cardiovascular disease, asthma, COPD, kidney disease, and mental health conditions, including schizophrenia and bipolar disorder. Exposure to extreme heat can even result in death.³ Since 2010, Minnesota has averaged around 800 heat-related emergency department visits each year during summer months. Between 2000-2023, heat-related illness directly accounted for 77 deaths in Minnesota.⁴ According to the National Weather Service, extreme heat causes more deaths annually in the United States than all other weather hazards combined.⁵

The increased frequency and intensity of extreme heat due to climate change is also contributing to poor air quality in Minnesota. Hot, stagnant weather can trap harmful pollutants close to the ground, increasing human exposure to these contaminants. Temperatures above 90° F coupled with UV exposure will transform volatile organic compounds derived from fossil fuel combustion into ground level ozone. Exposure to ground-level ozone can cause harmful cardiopulmonary health effects, including lung irritation, breathing difficulties, reduced lung capacity, aggravated asthma, susceptibility to bronchitis, and increased risk of hospitalizations and death for conditions such as cardiovascular disease, respiratory diseases, and diabetes.⁶

Hot temperatures and dry conditions are also contributing to the increased frequency and intensity of wildfires. Over the past five years, Minnesota has experienced wildfires within our state borders and has been inundated with hazardous smoke, containing fine particulate matter (PM2.5), from wildfires in Canada and elsewhere. PM2.5 can carry a variety of harmful substances that can penetrate the lungs and enter the bloodstream. Once in the bloodstream, PM2.5 can trigger inflammation and worsen chronic lung disorders. This can lead to increased risk of heart attacks and strokes and has also been linked to various mental health conditions.⁷

The MPCA issues air quality alerts for areas in the state when the Air Quality Index (AQI), a scale that assigns values to thresholds of air pollutants based on potential health risk, exceeds 101. This value indicates health risk to sensitive populations, including people with underlying heart or lung conditions, older adults, children, and people exerting themselves in outdoor activities.⁸ In 2021, the AQI in Minnesota exceeded 200 for the first time in recorded history during an unprecedented 9 days of poor air quality due to Canadian wildfires, a level indicating severe health risk for everyone. In 2023, Minnesota experienced a record 52 air quality alert days -- 16 of these alerts were due to fine particles from wildfire smoke, and nine reached the red AQI

³ Bell, M. L., Gasparrini, A., & Benjamin, G. C. (2024). Climate Change, Extreme Heat, and Health. *New England Journal of Medicine*, 390(19), 1793–1801. <https://doi.org/10.1056/NEJMr2210769>; Ebi, K. L., Capon, A., Berry, P., Broderick, C., Dear, R. de, Havenith, G., Honda, Y., Kovats, R. S., Ma, W., Malik, A., Morris, N. B., Nybo, L., Seneviratne, S. I., Vanos, J., & Jay, O. (2021). Hot weather and heat extremes: Health risks. *The Lancet*, 398(10301), 698–708. [https://doi.org/10.1016/S0140-6736\(21\)01208-3](https://doi.org/10.1016/S0140-6736(21)01208-3)

⁴ Heat-related Illness: MN Public Health Data Access - MN Dept. of Health - MN Data

⁵ [Weather Related Fatality and Injury Statistics](#)

⁶ [Minnesota Extreme Heat Toolkit](#)

⁷ [Minnesota Extreme Heat Toolkit](#)

⁸ [Understanding the air quality index \(AQI\) | Minnesota Pollution Control Agency](#)

category (151 – 200), the threshold at which everyone may begin to experience adverse health effects.⁹

Climate projection trends indicate that Minnesota will continue to grow warmer. By 2045, these projections suggest that parts of our state may reach a heat index of 135° F for multiple days in summer. Poor air quality events are also likely to increase in frequency and intensity, as research from the United Nations Environment Program suggests that climate change and land use changes are worsening wildfires, and they are expected to increase even in areas previously unaffected.¹⁰ Access to residences with adequate insulation, air conditioning, and air filtration is a critical measure to protect human health from extreme heat and air pollution.

Considering these critical threats to public health, MDH expresses support for the following comments submitted by DOC in their 5/09/2025 letter (Document ID 20255-218769-01¹¹):

Section III.A. “The Department recommends the Commission require Xcel to consult with Minnesota Pollution Control Agency (MPCA), MN Department of Health and parties to (1) establish common terminology and definitions regarding poor air quality and extreme heat, and (2) establish appropriate thresholds related to poor air quality and extreme heat.”

As MDH continues to collect and analyze data on these growing threats in real time, the department commits to partner with the MPCA, PUC, and industry, to establish terminology and definitions regarding extreme heat and poor air quality, and appropriate thresholds for initiating electrical power reconnections and suspending disconnections.

Current MN statute **216B.0975 DISCONNECTION DURING EXTREME HEAT CONDITIONS** dictates,

“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.”¹²

Notably, the thresholds to define extreme heat vary based on regional climate patterns, historical temperature norms, and local environmental factors. Generally, extreme heat is defined as weather that is substantially hotter and/or more humid than average, based on exceeding the 95th percentile of average local climatology (i.e., average minimum and maximum temperatures and humidity). The National Weather Service provides heat advisory threshold categories for the 7-County Metro Area, Central Minnesota, and Northeast Minnesota that reflect these regional differences.¹³ Thus, rather than setting one standard

⁹ [MPCA meteorologists forecast another summer of increased air quality alerts for Minnesota | Minnesota Pollution Control Agency](#)

¹⁰ [Spreading like Wildfire: The Rising Threat of Extraordinary Landscape Fires | UNEP - UN Environment Programme](#)

¹¹ [EDockets - 20255-218769-01](#)

¹² [Sec. 216B.0975 MN Statutes](#)

¹³ [Minnesota Extreme Heat Toolkit](#)

threshold for initiating electrical power reconnections and suspending disconnections, it will be important to set these thresholds based on the best available data that represents local conditions at the community level.

Similarly, establishing a single threshold AQI value for initiating electrical power reconnections and suspending disconnections in cases of non-payment during the summer months may be inadequate for protecting public health, particularly in the case of wildfire smoke. Research is emerging to indicate that wildfire smoke may be as much as 10 times more toxic than air pollution from fossil fuel combustion,¹⁴ and many states are considering reevaluating AQI thresholds used to indicate dangerous conditions, especially for outdoor workers.¹⁵

MDH desires to reinforce the point raised by DOC in section III. B7 of their comments¹⁶:

“The Department emphasizes the importance of limiting the impacts of poor air quality and extreme heat on the most vulnerable populations of Xcel’s customers.”

While extreme heat and poor air quality carry health risks for everyone, there are certain populations that are more vulnerable, including adults over age 65, pregnant people, children, people with preexisting health conditions, and people with disabilities. It is also critically important to recognize that communities that have been historically marginalized due to systemic racism and health inequities have been and continue to be disproportionately impacted by cumulative exposure to pollution and other environmental hazards.¹⁷ These communities may also experience income disparities making them more vulnerable to the cost burdens of electric power, and thus, more likely to benefit from policies initiating electrical power reconnections and suspending disconnections during extreme heat and poor air quality events.

MDH launched an extreme heat campaign on May 30, 2025, focused on raising awareness of the dangers of heat, and co-occurring poor air quality, and how Minnesotans can prevent heat-related illness and deaths. Accessing air-conditioned spaces is one of the key safety tips in the campaign and our new Minnesota Extreme Heat Toolkit.¹⁸ The 2022 report of the Lancet Countdown on Health and Climate Change estimated that in 2019, access to air conditioning averted over 195,000 deaths among people age 65 and older.¹⁹ Air conditioning access has also been shown to protect against mortality and cardiovascular and respiratory hospitalizations

¹⁴ <https://news.stanford.edu/stories/2025/01/assessing-wildfire-health-risks>

¹⁵ <https://insideclimatenews.org/news/19052025/california-wildfire-air-pollution-farmworker-safety/>

¹⁶ [EDocket: 20255 - 218769-01](#)

¹⁷ [The Air We Breathe report | Minnesota Pollution Control Agency](#)

¹⁸ [Minnesota Extreme Heat Toolkit](#)

¹⁹ Romanello M., et al. (2022). The 2022 report of the Lancet Countdown on health and climate change: health at the mercy of fossil fuels. The Lancet, 400(10363), 1619-1654. [https://doi.org/10.1016/S0140-6736\(21\)01787-6](https://doi.org/10.1016/S0140-6736(21)01787-6)

MAY 30, 2025

from exposure to air pollution.²⁰ Protecting access to electrical power, and thus air conditioning and air filtration, during extreme heat and poor air quality events is a critical public health measure.

Health starts where we live, learn, work, and play. To create and maintain healthy Minnesota communities, we must think in terms of health in all policies. Thank you again for the opportunity to provide comments on this matter. Feel free to contact Kristin Raab at (651) 201-4893 or Kristin.Raab@state.mn.us if you have any questions regarding this letter.

Sincerely,

A handwritten signature in black ink, appearing to read "Myra Kunas", written in a cursive style.

Myra Kunas
Assistant Commissioner
Minnesota Department of Health
PO Box 64975
St. Paul, MN 55164-0975

²⁰ Bell, Michelle L.^a; Ebisu, Keita^a; Peng, Roger D.^b; Dominici, Francesca^b. Adverse Health Effects of Particulate Air Pollution: Modification by Air Conditioning. *Epidemiology* 20(5):p 682-686, September 2009. | DOI: 10.1097/EDE.0b013e3181aba749