



ENVIRONMENTAL LAW & POLICY CENTER
Protecting the Midwest's Environment and Natural Heritage

August 19, 2020

Will Seuffert
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101

RE: Initial Comments of the Environmental Law & Policy Center and Vote Solar

Docket No. E002/M-20-406
Docket No. E015/M-20-404
Docket No. E017/M-20-401

Dear Mr. Seuffert,

Please find enclosed the *Initial Comments of the Environmental Law & Policy Center and Vote Solar*. These documents have been electronically filed and served through the eFiling system.

Please feel free to contact me with any questions you may have regarding this filing.

Respectfully submitted,

/s/ Nikhil Vijaykar

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

Katie Sieben)	Chair
Valerie Means)	Commissioner
Matthew Schuerger)	Commissioner
John Tuma)	Commissioner
Joseph K. Sullivan)	Commissioner
)	
In the Matter of Minnesota Power,)	PUC Docket Nos.
Otter Tail Power, and Xcel)	E017/M-20-401
Energy’s Compliance with Annual)	E015/M-20-404
Safety, Reliability, and Service)	E002/M-20-406
Quality Metrics for 2019)	

**COMMENTS OF
THE ENVIRONMENTAL LAW & POLICY CENTER AND VOTE SOLAR**

August 19, 2020

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I. INTRODUCTION AND SUMMARY OF RECOMMENDATIONS

The Environmental Law & Policy Center and Vote Solar submit these comments and recommendations in response to the Minnesota Public Utility Commission's Notice of Comment Period concerning utilities' safety, reliability and service quality reports for 2019.

Specifically, with respect to Staff's Proposal (Attachment A), ELPC-VS recommend that:

- The Commission adopt Staff's proposal, with certain modified requirements:
 - Require Xcel Energy to report on the Commission's recommended metric with respect to the locational impact of grid modernization investments on reliability;
 - Require the Company to report, by feeder, the number of and geographic distribution of involuntary disconnections, and customer accounts participating in energy assistance and energy efficiency programs;
 - Require the Company to provide a more robust analysis of poor-performing feeders;
- The Commission further require that Xcel make locational data available in a downloadable .csv file in order to allow stakeholders to overlay that data with other relevant data;
- The Commission also require that the Company present locational reliability *and* service quality information in a map using GIS, and:
 - That such map include accessible layers that overlay income and other demographic data.
 - That such map provide not only current reliability and service quality data but also a comparison to previous period data, as well as a scoring system that benchmarks performance on any particular feeder to the Company's systemwide performance; and
 - That Xcel regularly update that map.

II. JOINT COMMENTERS

The Environmental Law & Policy Center (ELPC) is a not-for-profit public interest environmental organization that works to achieve cleaner air, advance clean renewable energy and energy efficiency resources, improve environmental quality, protect clean water, and preserve natural resources in Minnesota and throughout the Midwest. Several of ELPC's members live and work in Minnesota and in Xcel Energy's service territory.

Vote Solar (VS) is an independent 501(c)3 nonprofit working to repower the U.S. with clean energy by making solar power more accessible and affordable through effective policy advocacy. Vote Solar seeks to promote the development of solar at every scale, from distributed rooftop solar to large utility-scale plants. Vote Solar has over 90,000 members nationally, including over 2,500 members in Minnesota. Vote Solar is not a trade organization nor does it have corporate members.

ELPC and Vote Solar (ELPC/VS) are actively involved in a number of ongoing dockets before the PUC, several of which implicate, in some manner, the planning of and investment in distribution grids in Minnesota, and utility performance related to their distribution systems. Moreover, ELPC/VS are actively engaged in stakeholder-informed metric development and distribution planning efforts in several states in the Midwest beyond Minnesota, including in Michigan, Illinois, Ohio, and Iowa. ELPC/VS believe their expertise and experience in the area of utility ratemaking, performance-based regulation, distributed energy resources and distribution system planning may aid the Commission in this proceeding – in particular in its evaluation of Staff’s proposal for locational reliability reporting.

III. COMMENTS

A. Background on Equity in Distribution System Planning and Investment

1. Performance Metrics Dockets

The consideration of equity as it relates to electric utility distribution systems has evolved rapidly over the past two years in a number of dockets, especially in the context of establishing performance metrics for Xcel and in the context of Xcel’s distribution system planning process. While parties raised the topic of equity metrics in Xcel Energy’s performance metric docket (17-401), the Commission found it appropriate to move discussion of equity to this docket. ELPC/VS concur that this service quality docket is an appropriate place to develop locational reliability and equity metrics, but have taken and continue to take the position that the Commission and utilities apply an equity lens not just in reporting but also in planning and implementation dockets.

ELPC and Vote Solar (as well as certain other intervenors in Commission proceedings) have consistently advocated that equity should be an integral consideration in dockets related to the utility’s distribution grid and that utilities and the Commission should expressly consider equity in several proceedings related to the distribution system. In its initial comments on performance metrics in Docket 17-401, for instance, Vote Solar advocated for inclusion of “Energy Poverty Metrics” that would measure the availability of and tracking of data on progress in achieving reductions in energy poverty across the service territory. Similarly, in their initial comments in Docket 17-401, Fresh Energy proposed an energy poverty heat map that would show:

- Census tract with income/electricity rate
- Site energy use intensity
- Conservation Improvement Program investment

Vote Solar also joined the City of Minneapolis and Fresh Energy in supporting an energy poverty heat map to visualize the distribution of energy burden in Xcel’s service territory. In addition, the City of Minneapolis recommended combining and expanding two areas of metrics around affordability—the Energy Poverty Heat Map and Participation in Affordability Programs—into a new category called Energy Poverty and Public Health.

The City of Minneapolis also recommended that Xcel produce a publicly available, online map that includes layers showing the following information:

- Site energy use intensity;
- Participation in energy assistance programs;
- Prevalence of service disconnections;
- Key demographics, including race and income;
- Key public health metrics relevant to the energy performance of homes, including mortality, incidences of asthma, and incidences of black mold; and
- Participation levels in regulated residential energy efficiency programs, including home energy audits and particular upgrades.

2. *Integrated Distribution Planning Dockets*

More recently, ELPC/VS advocated that Xcel Energy provide, as a part of its annual (now biennial) Integrated Distribution Plan (IDP), a map that illustrates the reliability of the Company's distribution system at a feeder level, and explain how its proposed reliability investments will (1) prioritize those portions of its system with poor reliability performance, and (2) advance equity across its service territory. Specifically, ELPC and Vote Solar advocated for the following proposed IDP filing requirement:

3F (new): Locational Reliability and Equity.

1. Xcel shall provide a map that illustrates the reliability of the Company's distribution system at a feeder-level.
2. Xcel shall describe how its proposed reliability investments will prioritize those portions of its system with poor reliability performance.
3. Xcel shall explain how its proposed reliability investments will advance equity across its service territory.¹

ELPC/VS continue to believe that there is merit in targeted reliability spending to address poor performing areas of Xcel's distribution system and an opportunity to advance equity by targeting investment to particularly vulnerable customers within Xcel's service territory. Towards this end, ELPC/VS believe that the development of robust locational performance and reporting metrics is an important and worthwhile starting point.

In its description of the Parties' Comments in the Briefing Papers prior to the Commission's May 29, 2020 meeting considering the IDP, the Staff accurately characterized our position that the IDP – not the service quality report docket– is the appropriate forum for the Company to explain how planned investments will not only improve system-wide reliability but also address specific poor-performing areas. Staff observed that the Department of Commerce agreed with our position in concept but that expected the Commission to consider locational reliability and equity metrics in the Company's annual service quality reports. Staff recommended that "it may be appropriate to revisit how locational reliability and equity fit into the 2021 IDP filing, after

¹ Initial Comments of the Environmental Law & Policy Center and Vote Solar at 14, Docket No. 19-666, March 17, 2020.

metrics have been developed in the Company’s SQSR docket.” Staff Briefing Papers for Docket No. E002/M-19-666 at 24.

B. Topics Open for Comment in this Proceeding

In its September 18, 2019 Order Establishing Performance Metrics in Docket 17-401, the Commission directed the development of metrics that looked at both reliability and service quality from a spatial and distributional perspective (reliability and service quality by geography, income, or other relevant benchmarks).

With respect to equity in customer service quality, the Commission ordered:

Finally, the Commission will direct Xcel to propose, in consultation with stakeholders, metrics relating to equity in customer service quality. Although stakeholders proposed several metrics relating to equity, it is unclear whether Xcel has the technical ability to implement those metrics. The Commission understands that it is important to carefully choose well-developed metrics and will allow more time for Xcel and stakeholders to work out details in this area. Xcel and stakeholders are directed to determine an appropriate method to measure and report on equity, which could include geography, income, or other benchmarks relevant to customer service quality.²

The Commission established an equity metric for reliability as a future metric:

The Commission will also direct Xcel and stakeholders to develop metrics to measure equity as it relates to reliability. Although the proposed metrics in this area did not specifically relate to equity, the Commission believes that equity in service reliability is an important topic that should be addressed in Xcel’s performance metrics. Xcel and stakeholders are directed to determine an appropriate method to measure and report on equity, which could include geography, income, or other benchmarks relevant to reliability.³

In Xcel’s 2018 Service Quality Report (Docket No. 19-261), the Commission directed Staff to solicit comments on a reporting proposal to inform the development of a locational reliability metric. Accordingly, Staff has prepared a reporting Proposal—included as Attachment A to the April 20, 2020 Notice of Comment Period in this proceeding. ELPC/VS focus comments on Staff’s Proposal, below.

C. Staff Proposal for Locational/Equity Reliability Reporting

Staff’s proposal, under Item 1, directs Xcel to provide a list of sustained outages greater than 5 minutes in length, and provide several data points (including feeder affected, primary cause and outage duration) associated with each outage. Under Item 2, Staff’s proposal directs Xcel to provide, for each feeder, several data points including reliability metrics. Finally, under Item 3,

² Docket 17-401, Order Establishing Performance Metrics at 8, September 18, 2019.

³ *Id.* at 7.

Staff's proposal directs Xcel to provide a publicly available online map showing reliability by feeder, and allowing interested individuals to zoom in to a neighborhood level and obtain reliability values.

1. Please provide feedback on the staff proposal for locational reliability reporting (Attachment A).

Taken as a whole, Staff's proposal, if adopted, would be a good step towards helping the Commission and interested stakeholders understand—and easily view—whether there are certain portions of Xcel's distribution system (in particular, feeders) experiencing poor reliability.⁴ This information, in turn, would help Xcel (and the Commission and interested stakeholders, as a part of Xcel's distribution planning process) assess the areas on the Company's distribution system that would benefit from targeted investment to address reliability concerns and bolster resilience. ELPC/VS recommend that:

- Any publicly available map displaying reliability by feeder be regularly updated;
- The map display not only current reliability data but also a comparison to previous period reliability data (to help stakeholders understand locational reliability trends);
- The map includes accessible layers that overlay service quality, income and other demographic data (discussed below in subsection C.2 and C.3 of these comments); and
- The map display not only traditional reliability metrics (SAIDI, SAIFI, etc.) but also a simplified “scoring” system that benchmarks reliability on any particular feeder to the Company's systemwide reliability performance. This functionality would help users understand how their feeder of interest performs in relation to other areas on the Company's distribution system without requiring a sophisticated familiarity with reliability metrics.

ELPC/VS further recommend that the Company be required to report, under Item 2 of the Staff's proposal, the impact of the Company's grid modernization investments at a feeder level. Order Point 3 of the Commission's January 28, 2020 Order in Docket No 19-261 required the Company to consider the following metric that measures the impact of the Company's grid modernization investments:

Provide a comparison of the reliability (SAIDI, SAIFI, CAIDI, MAIFI, normalized/non-normalized) of feeders with grid modernization investments, such as Advanced Metering Infrastructure (AMI) or Fault Location, Isolation, and Service Restoration (FLISR), to the historic 5-year average reliability for the same feeders before grid modernization investments.⁵

⁴ Indeed, Xcel acknowledges, in its Service Quality Report, potentially concerning disparities – at least between customer classes. At page 12 of its Service Quality Report, the Company states: “In 2017, we found that feeders primarily serving commercial customers in general had a SAIDI value that was significantly better than the feeders serving primarily residential customers. The 2018 data showed a similar result. Although not studied, this is likely due to several items including: less vegetation in industrial and commercial areas, shorter feeders due to higher load density resulting in less exposure to the environment, and higher percentage of customers with underground service. We do not expect this general performance to vary much from year to year.”

⁵ Docket 19-261, Order at 8, January 28, 2020.

The Company indicates that it is “interested in learning about the reliability improvements gained through their grid modernization efforts and will be working to track the improvements to the extent possible.”⁶ However, the Company also cautions about several factors that could skew the data, especially the timing of the rollout of particular investments in years with unusual weather patterns. In particular, the Company proposed an alternative metric for the Commission’s consideration for measuring the impact of Fault Location, Isolation and Service Restoration (FLISR):

An alternative metric for the Commission’s consideration is to instead have the Company provide data on individual feeder level outages with feeder level events and provide data showing reductions in customers impacted by an event and the estimated restoration time improvements due to the sectionalizing and lowered patrol time for three years after 20 feeders have had FLISR devices installed for at least one year.

ELPC/VS are supportive of the Commission’s recommended metric over the Company’s recommended “alternative metric” for measuring the impact of grid modernization investments, especially in light of the Commission’s subsequent July 23, 2020 Order in the Integrated Distribution Plan (19-666), in which it declined to certify FLISR. ELPC/VS believe that the Commission’s recommended metric will help stakeholders understand the benefits of the Company’s significant grid modernization investments and hold the Company accountable for delivering those benefits.

2. *What are the appropriate pieces of data to collect to gauge locational customer service quality?*

ELPC/VS recommend that the Company report, by feeder, for the calendar year (as additional data required under Item 2 in Attachment A):

- Involuntary disconnections (absolute number and as a percentage of customers);
- Customer accounts participating in energy assistance programs (absolute number and as a percentage of customers); and
- Customer accounts participating in utility energy efficiency programs (absolute number and as a percentage of customers).

ELPC/VS recommend that the Company include locational service quality data as a layer in the publicly available map discussed above and in Item 3 of Staff’s Proposal, and, consistent with our recommendations above, recommend that locational service quality data be:

- Regularly updated;
- Compared to previous period data; and
- Benchmarked to systemwide performance.

3. *What are the appropriate pieces of information to overlay with reliability and customer service quality data to gauge equity?*

First, ELPC/VS recommend that Xcel provide locational reliability and service quality data by feeder AND census tract or zip code and provide that data as a downloadable .csv file. This

⁶ Xcel Service Quality Report at 16.

would allow stakeholders to overlay locational reliability and service quality data with other readily available data.

Second, ELPC/VS recommend that Xcel provide a basic analysis of poor-performing feeders. For each locational metric, Xcel should identify a threshold for poor performance, identify feeders exceeding that threshold, and benchmark data corresponding to those feeders against the population of feeders with similar proportions of residential customers.

Finally, with respect to *data presentation*, ELPC/VS observe that as a part of the Company's hosting capacity analysis, Xcel uses Geographic Information Systems (GIS) to develop and display a data-rich map of its distribution system. ELPC/VS recommend that the Company correlate safety, reliability and service quality to equity considerations by providing a web-accessible, dynamic map that incorporates locational service quality and reliability metrics overlaid on Census tract data layers utilizing GIS mapping capabilities.

IV. CONCLUSION

ELPC/VS appreciate this opportunity to comment on Xcel Energy's 2019 Safety, Reliability and Service Quality Metrics Report, and the Minnesota PUC Staff's Proposal for locational reliability reporting. We look forward to working with Xcel Energy, Staff, and other stakeholders to develop safety, reliability and service quality metrics that can, over time, improve distribution system planning, investment, and outcomes for Xcel's customers.

Respectfully submitted,

August 19, 2020

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CERTIFICATE OF SERVICE

Docket No. E002/M-20-406; E017/M-20-401; E015/M-20-404

I, Rebecca Lazer, hereby certify that I have this day, served a true and correct copy of the *Initial Comments of the Environmental Law & Policy Center* to all persons at the addresses listed on the attached service list by electronic filing, electronic mail, or by depositing the copy with postage paid in the United States Mail at Chicago, Illinois.

August 19, 2020

/s/ Rebecca Lazer

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