


## Staff Briefing Papers

Meeting Date	Thursday, May 11, 2023		Agenda Item **2
Company	Xcel Energy		
Docket No.	E002/M-20-406 E002/CI-17-401		
	<b>In the Matter of Xcel Energy’s Annual Report on Safety, Reliability, and Service Quality and Petition for Approval of Electric Reliability Standards</b>		
	<b>In the Matter of a Commission Investigation to Identify and Develop Performance Metrics and, Potentially, Incentives for Xcel Energy’s Electric Utility Operations</b>		
Issues	What action should the Commission take on the Locational Reliability, Equity – Service Quality, and Equity – Reliability metrics and Xcel Energy’s associated map?		
Staff	Tera Dornfeld	tera.dornfeld@state.mn.us	651-201-2195
	Hanna Terwilliger	hanna.terwilliger@state.mn.us	651-201-2243

 Relevant Documents	Date
City of Minneapolis – Comments	January 6, 2023
Xcel Energy – Comments	January 6, 2023
Vote Solar & the Environmental Law and Policy Center – Comments	January 6, 2023
Department of Commerce – Reply Comments	January 20, 2023
Xcel Energy – Reply Comments	January 20, 2023
Vote Solar & the Environmental Law and Policy Center – Comments	January 20, 2023

To request this document in another format such as large print or audio, call 651.296.0406 (voice). Persons with a hearing or speech impairment may call using their preferred Telecommunications Relay Service or email [consumer.puc@state.mn.us](mailto:consumer.puc@state.mn.us) for assistance.

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.

## 1. Statement of the Issues

What action should the Commission take on the Locational Reliability, Equity – Service Quality and Equity – Reliability metrics and Xcel Energy’s associated map?

[Xcel’s Minnesota Electric Service Quality Interactive Map](#)<sup>1</sup>

## 2. Background

### A. Xcel Energy’s Locational Reliability, Equity – Service Quality, and Equity – Reliability Metrics and associated Map

In its September 18, 2019, Order,<sup>2</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>3</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>4</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>5</sup>

In its December 18, 2020, Order the Commission required Xcel to file additional information 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>6</sup>

---

<sup>1</sup> <https://xeago.maps.arcgis.com/apps/webappviewer/index.html?id=6b87f4d407864b939bcea05aad05bdd1>

<sup>2</sup> Docket E-002/CI-17-401

<sup>3</sup> ORDER ESTABLISHING PERFORMANCE METRICS issued September 18, 2019, Docket No. E-002/CI-17-401, p. 7-8

<sup>4</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>5</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.

<sup>6</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.

Commission staff hosted two technical workshops which served to (1) understand data currently collected<sup>7</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>8</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>9</sup> Though consensus was not reached, following the workshops Xcel agreed to make a demonstration map.<sup>10</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 MN service territory, including modifications made in response to stakeholder feedback.<sup>11</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>12</sup> As the third and final stakeholder meeting took place September 21, 2021, stakeholders have not yet been given a formal opportunity to comment on these newer additions to the map.

Xcel filed versions of its interactive map for its entire service territory in its two most recent SRSQ filings.<sup>13</sup> Along with demographic data, the map contains five metrics:

1. Customers Experiencing Lengthy Interruptions – 12 hours or longer (CELI-12);
2. Customers Experiencing Multiple Interruptions – 6 or more in a year (CEMI-6);
3. Percent of customers experiencing one or more involuntary disconnections in a year;
4. Conservation Improvement Program (CIP) low-income participation; and
5. Low-income energy assistance program participation.

---

<sup>7</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>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. Workshop Two held June 29, 2021.

<sup>9</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>10</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>11</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>12</sup> ORDER ACCEPTING REPORT AND SETTING ADDITIONAL REQUIREMENTS issued February 9, 2022, Docket No. E002/CI-17-401, para. 3 and 4.

<sup>13</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.

## B. Xcel's Performance Based Ratemaking

Minn. Stat. § 216B.16, subd. 9, allows regulated utilities to establish multiyear rate plans for a period of up to 5 years, and states that the Commission “may initiate a proceeding to determine a set of performance measures that can be used to assess a utility operating under a multiyear rate plan.” The Commission initiated Docket No. E002/CI-17-401, In the Matter of a Commission Investigation to Identify and Develop Performance Metrics, and Potentially, Incentives, for Xcel Energy's Electric Operations<sup>14</sup> (PBR Docket) following the Company's July 12, 2017, rate case Order in Docket no. E002/GR-15-826.

The Commission's January 8, 2019, Order in the PBR Docket established the Performance Incentives Mechanism (PIM) process to guide stakeholders through the development of performance metrics and potentially incentives.<sup>15</sup> In that same Order, the Commission also established Goals, Outcomes, and Metric Design Principles for the PIM process.

In its next PBR Docket Order, issued September 18, 2019, the Commission determined performance metrics regarding what would be measured to evaluate utility performance under each outcome identified in the January 8, 2019, Order.<sup>16</sup>

In its April 16, 2020, Order the Commission approved Xcel's proposed methodology and reporting schedules from its October 31, 2019, report and reply comments, with several modifications from stakeholders' recommendations.<sup>17</sup> On April 30, 2021, Xcel filed its first annual performance-based ratemaking report (PBR Report) on 28 metrics tracked during 2020. On April 29, 2022, Xcel filed its second annual PBR Report on 33 metrics tracked during 2021. Xcel will have filed its third PBR Report in April 2023. The PIM process, as established for the existing PBR metrics, allows for stakeholder review of three years of baseline data based on the annual PBR Report and tasks stakeholders with determining the need to establish targets and, potentially, incentive mechanisms.

## C. Issue before the Commission on May 11, 2023

On December 2, 2022, the Commission issued a notice of comment seeking stakeholder input on the following topics:

1. Do the existing metrics (CELI 12, CEMI 6,<sup>18</sup> percent of customers experiencing one or more involuntary disconnection in a year, and low-income energy efficiency and energy

---

<sup>14</sup> Notice of Comment Period issued September 22, 2017, in Docket No. E002/CI-17-401.

<sup>15</sup> ORDER ESTABLISHING PERFORMANCE-INCENTIVE MECHANISM PROCESS issued January 8, 2019, Docket No. E002/CI-17-401

<sup>16</sup> ORDER ESTABLISHING PERFORMANCE METRICS issued September 18, 2019, Docket No. E-002/CI-17-401. Outcomes identified in the January 8, 2019, Order: affordability, reliability, customer service quality, environmental performance, and cost-effective alignment of generation and load.

<sup>17</sup> ORDER ESTABLISHING METHODOLOGIES AND REPORTING SCHEDULES, issued April 16, 2020, Docket No. E-002/CI-17-401

<sup>18</sup> CELI-12 (Customers Experiencing Lengthy Interruptions) is defined as any electric premise that had an outage with a duration of 12 hours or more in one year. CEMI-6 (Customers Experiencing Multiple Interruptions) is defined as any electric premise that had six or more sustained outages in one year.

bill assistance program participation)<sup>19</sup> and demographic data used adequately address the Commission's Order for the development of future metrics?<sup>20</sup> Are any modifications needed?

2. What methodology, if any, should be used to analyze metrics displayed on Xcel's map to allow for measurement of equity-focused metrics?<sup>21</sup> Alternatively, is it more appropriate for individuals to apply their own analysis of the map data to complement their recommendations in PBR and other dockets?<sup>22</sup>
3. Are there other issues or concerns related to this matter?

On January 6, 2023, Xcel Energy, the Environmental Law and Policy Center/Vote Solar (ELPC/VS), and the City of Minneapolis filed initial comments.

On January 20, 2023, Xcel Energy, ELPC/VS, and the Department of Commerce filed reply comments.

### 3. Initial Comments

#### A. Xcel Energy

Xcel stated it believes the current metrics displayed on the map addressed the Commission's Order in Docket No. 17-401 to develop "future metrics" related to reliability, service quality, and equity, and that no further modifications are necessary at this time. (**Decision Option 1**)<sup>23</sup>

Xcel explained that evaluation of the map's metrics should examine whether disparities existing relative to income and race. For example, Xcel listed the following potential areas of inquiry:

1. Do census block groups with lower income and/or higher proportions of people of color systematically have higher levels of CELI 12 or CEMI 6?
2. Do census block groups with a higher percent of residents with incomes below 185 percent of the federal poverty line – where in theory more households would likely qualify for low-income CIP and energy assistance programs – have lower than expected rates of participation in these programs?

---

<sup>19</sup> Xcel Energy April 1, 2022, Annual Report & Petition SERVICE QUALITY PERFORMANCE AND PROPOSED RELIABILITY MEASURES Docket No. E002/M-22-162, interactive map shared Part 1, p1 and Part 2, p26.

<sup>20</sup> Metrics identified in the Commission's ORDER ESTABLISHING PERFORMANCE METRICS, ISSUED September 18, 2019, DOCKET NO. E-002/CI-17-401. See pages 7, 8, and ordering paragraphs 1(b)ii and 2(c) iv. Also, see Staff briefing paper Docket No. E-002/CI-17-401 filed December 16, 2021, p22. Staff explained, "Once development is complete, the equity metrics will return to this (PBR) docket."

<sup>21</sup> Choosing a method for analysis would be like PIM process step 4, "establish metrics and review," accomplished for the other metrics used in Xcel's PBR by stakeholders and established in ORDER ESTABLISHING METHODOLOGIES AND REPORTING SCHEDULES, issued April 16, 2020, DOCKET NO. E-002/CI-17-401.

<sup>22</sup> Choosing a method for analysis would be like PIM process step 4, "establish metrics and review," accomplished for the other metrics used in Xcel's PBR by stakeholders and established in ORDER ESTABLISHING METHODOLOGIES AND REPORTING SCHEDULES, issued April 16, 2020, DOCKET NO. E-002/CI-17-401.

<sup>23</sup> Xcel, Initial Comments, p. 2

3. In census block groups with higher disconnections, is there lower than expected participation in our low-income CIP programs and/or energy assistance programs?<sup>24</sup>

Based on the results of that analysis, Xcel indicated it could use the data from the map to inform actions to remedy identified inequities.

## B. City of Minneapolis

Minneapolis complimented Xcel's Service Quality Map as "an excellent resource, simple to use, and helpful for identifying locational differences in service." It described the map as a foundational step and requested the Commission require Xcel to add additional information to the map to better assess Xcel's efforts.<sup>25</sup> Minneapolis recommended the following data points be added to the map and displayed at the census block group level: (**Decision Option 8**)

1. Total low-income energy efficiency program funding for the year (\$)
2. Average program benefit (\$ per participant)<sup>26</sup>
3. CEMI-1 (Customers Experiencing Multiple Interruptions –1 or more interruptions per year)<sup>27</sup>
4. CELI-6 (Customers Experiencing Lengthy Interruptions – 6 hours or longer)<sup>28</sup>

Minneapolis shared reliability data from other metro area utilities that indicated reliability in Xcel's service territory is below what utilities such as Dakota Electric Association or Connexus Energy report for their own metro area customers. Therefore, Minneapolis recommended the Commission direct Xcel to close the reliability gap so that the customers on the poorest performing feeders are brought to the level of service that those on the highest performing feeders experience. (**Decision Option 9**)<sup>29</sup>

## C. ELPC/VS

ELPS/VS supported moving locational reliability/equity metrics back into the broader context of the PBR Docket, but then broadened the scope of its comments to contemplate how the map should inform Xcel's planning, investment, and operations outside of PBR.

ELPC/VS outlined actions taken in two other states to advance locational reliability/equity in utility planning proceedings. DTE Electric in Michigan planned to design a metric in its Distribution Grid Plan that would measure reliability in environmental justice communities but had yet to propose a metric at the time of ELPC/VS's comments.<sup>30</sup> ELPC/VS also summarized efforts by the Illinois Commerce Commission (ICC) to develop performance metrics plans for Commonwealth Edison. ELPC/VS highlighted the two reliability components of the plan: 1)

---

<sup>24</sup> Xcel, Initial Comments, p. 4

<sup>25</sup> Minneapolis, Initial Comments, p. 1

<sup>26</sup> Minneapolis, Initial Comments, p. 2

<sup>27</sup> Minneapolis, Initial Comments, p. 2

<sup>28</sup> Minneapolis, Initial Comments, p. 3

<sup>29</sup> Minneapolis, Initial Comments, pp. 4-5

<sup>30</sup> ELPC/VS, Initial Comments, pp. 5-6

overall reliability and 2) resilience based on System Average Interruption Duration Index (SAIDI), Environmental Justice (EJ), and Illinois' Restore, Reinvest, Renew (R3) communities' reliability and resilience. The second component includes baseline data and targets for SAIDI, System Average Interruption Frequency Index (SAIFI), CEMI-4, and CELI-12, with the opportunity to earn an incentive based on performance.<sup>31</sup>

Then, ELPC/VS explained that to compare reliability in equity communities on Xcel's map, three steps are necessary:

1. Expand data collection and reporting to include additional pertinent information
2. Define a metric calculation methodology
3. Establish baseline performance and reliability<sup>32</sup>

ELPC/VS noted that the existing map is a useful public facing tool to understand reliability but does not have enough data to conduct a more thorough analysis of equity/reliability. ELPC/VS suggested an additional reporting template that would contain 20 additional pieces of information (**See Decision Option 11**).

ELPC/VS explained two next steps would be to define a methodology and conduct a quantitative analysis to determine the relationship between reliability, service quality, and equity. ELPC/VS suggested the Commission consider using a methodology proposed by the Environmental Defense Fund and Illinois Citizens Utility Board in the ComEd Performance metrics proceeding, which it summarized. ELPC/VS emphasized:

[t]he underlying premise of this entire conversation is to ensure that considerations of equity are fully incorporated into all the Company's planning and investment decisions, including about the distribution system. The locational reliability/equity effort that the Commission is pursuing in this docket is an important part of that overall effort to develop a systematic approach to understanding to what extent or whether disadvantaged communities have been disproportionately impacted by poor reliability, underinvestment in distribution systems, and/or other dimensions of distribution system performance such as hosting capacity or power quality.<sup>33</sup>

ELPC/VS suggested the Commission consider using a methodology proposed by the Environmental Defense Fund and Illinois Citizens Utility Board in the ComEd Performance metrics proceeding, which it summarized as follows:

1. Calculate the system-wide indexes for each of the selected reliability measures (the proposal uses SAIDI, SAIFI, CEMI-4, and CELID-12 with Major Event Days)
2. Calculate each index for each census block group in the service territory

---

<sup>31</sup> ELPC/VS, Initial Comments, pp. 7-8

<sup>32</sup> ELPC/VS, Initial Comments, p. 8

<sup>33</sup> ELPC/VS, Initial Comments, pp. 9-10



3. Compare the reliability indexes in non-Equity Investment Eligible Communities census block groups by county with Equity Investment Eligible Communities census block groups within the same county.<sup>34</sup>

ELPC/VS explained that to implement the metrics described above, the Commission would need to determine criteria for identifying “equity communities.” ELPC/VS offered two options:

1. The Climate and Economic Justice Screening Tool (CEJST) was recently released by the White House as Version 1 in December 2022
2. The Minnesota Pollution Control Agency has published a map entitled Understanding Environmental Justice in Minnesota<sup>35</sup>

**Decision Option 10** would adopt ELPC/VS’s position.

## 4. Reply Comments

### A. Xcel Energy

In reply comments, Xcel indicated that it plans to “retain an experienced third-party consultant to assist us in developing a systematic approach to understanding whether, and to what extent, communities with higher levels of poverty and/or higher proportion of people of color face disparities in reliability, disconnections, or participation in low-income energy assistance and/or energy efficiency programs.”<sup>36</sup> Xcel indicated that the consultant could help determine whether additional data is necessary for the assessment and if modifications to existing programs and processes are warranted.<sup>37</sup>

In response to Minneapolis’s and ELPC/VS’s requests for more data, Xcel indicated it would be premature to order more data to the map now, and instead recommended focusing on an evaluation of the existing metrics. Xcel explained that consistent with the PBR Docket, the Company was focused on collecting three years of baseline data for the five identified metrics. However, the Company indicated that if its analysis did reveal disparities in reliability, service quality, and low-income program participation it would act immediately to address the problems.<sup>38</sup>

Xcel provided information in response to Minneapolis’s request for additional data on low-income energy efficiency program funding, pointing out that the data was available in its annual Clean Energy Partnership Reports provided to the city. Xcel explained that due to how program spending is currently tracked it would be difficult to break down the data requested from Minneapolis at the scale represented on the map, and that the duplication of this data would not necessarily provide additional transparency to program funding.<sup>39</sup> In response to

---

<sup>34</sup> ELPC/VS, Initial Comments, p. 10

<sup>35</sup> ELPC/VS, Initial Comments, p. 11

<sup>36</sup> Xcel, Reply Comments, pp. 1-2

<sup>37</sup> Xcel, Reply Comments, p. 2

<sup>38</sup> Xcel, Reply Comments, pp. 2-3

<sup>39</sup> Xcel, Reply Comments, pp. 3-4



Minneapolis's recommendations related to auto enrollment in affordability and energy efficiency programs, Xcel indicated that it is already working on implementing similar solutions.<sup>40</sup>

Xcel disagreed with Minneapolis and ELPC/VS's request to add CEMI-1 to the map and set of metrics, indicating that it did not believe CEMI-1 to be useful in identifying service quality inequities.<sup>41</sup> The Company responded to Minneapolis's recommendation that the Commission order Xcel to improve performance on the poorest performing feeders, stating it has a Feeder Performance Improvement Program (FPIP) that addresses this issue, and the Company reports on the program in the annual Service Quality, Safety, and Reliability reports filed April 1.<sup>42</sup>

The Company supported keeping consideration of the locational reliability/equity metrics in the SQSR proceedings instead of having it be part of the larger performance metrics process. However, Xcel was open to discussions about moving the metric back to the PBR Docket if the Commission reopens the PBR process after the third year of data is filed on April 30, 2023.<sup>43</sup>

Xcel responded to ELPC/VS's suggestion to add SAIDI and SAIFI to the map and metric calculation, stating while it could be possible, there were limitations to using SAIDI/SAIFI at a highly granular level that would limit usefulness. Xcel explained:

SAIDI and SAIFI results for smaller groups like census block groups may appear inconsistent and therefore difficult to draw reliable conclusions as the calculation averages have a much smaller denominator than in typical use. For instance, two interruptions in a 12-month period for a neighborhood is not an uncommon occurrence but would result in a SAIFI of 2.0 which is nearly double the Xcel Energy system average.<sup>44</sup>

Xcel noted using CEMI and CELI can “focus attention to census block groups that are in greatest need of service improvements even if it is not a large enough group to show up in a system average type metric.”<sup>45</sup>

Xcel questioned whether adopting a new data template as proposed by ELPC/VS was necessary to comply with the Commission's Order directing development of the Interactive Map. Instead, Xcel believed it was reasonable to determine what additional data may be necessary to perform its analysis of the metrics in coordination with its consultant. Xcel also noted cybersecurity concerns with providing the level of detail requested by ELPC/VS.<sup>46</sup>

---

<sup>40</sup> Xcel, Reply Comments, p. 4

<sup>41</sup> Xcel, Reply Comments, p. 5

<sup>42</sup> Xcel, Reply Comments, p. 5

<sup>43</sup> Xcel, Reply Comments, p. 6

<sup>44</sup> Xcel, Reply Comments, p. 7

<sup>45</sup> Xcel, Reply Comments, p. 8

<sup>46</sup> Xcel, Reply Comments, p. 8

## B. ELPC/VS

In reply comments, ELPC/VS reemphasized that the Commission should establish targets for the five metrics displayed on the map. ELPC/VS contented that while “the maps provide a useful basis for visualizing these important equity dimensions, the map in and of itself does not provide any basis for a metric to measure performance. A map is not a metric. A map is a visualization of data: a metric is quantitative measure that compares one thing against another, whether it is a comparison of one thing versus another, or one thing versus a standard.”<sup>47</sup>

ELPC/VS agreed with Xcel’s approach to using the results of the analysis to inform its planning processes and encouraged the Commission to formalize using an equity-focused approach to evaluating the Company’s proposals.<sup>48</sup>

## C. Department of Commerce

The Department of Commerce submitted reply comments only, responding to initial comments and making suggestions for further Commission actions.

The Department agreed with Xcel’s assessment that the five metrics displayed on the map along with the demographic data “adequately address the Commission’s Order.”<sup>49</sup> (**Decision Option 1**) The Department also agreed with ELPC/VS that conducting additional quantitative analysis is necessary to better understand whether there is a link between poor reliability performance and low-income areas. Therefore, the Department recommended the Commission require Xcel to “develop an analysis that tests the hypothesis whether service reliability for low-income areas is lower than it is for the relevant work center.” (**Decision Option 4**) The Department explained this would assist the Commission in determining whether Xcel had identified a valid performance metric.<sup>50</sup>

The Department did not support ELPC/VS’s proposal for the Commission to adopt metrics from ComEd’s proceedings, stating that it would be inefficient to consider the *ad hoc* adoption of a performance metric developed outside of a Minnesota specific regulatory construct. Instead, the Department suggested modifying Xcel’s existing performance-based mechanism, the Quality-of-Service Plan (QSP). The QSP contains service territory wide metrics and targets such as SAIDI, SAIFI, number of customer complaints, and others that the Company must meet each year or risk an underperformance payment of \$1 million. The Department recommended the Commission request that Xcel work with stakeholders to develop new reliability/equity and service quality/equity targets that could be introduced into the QSP. (**Decision Option 7**)<sup>51</sup>

---

<sup>47</sup> ELPC/VS, Reply Comments, p. 4

<sup>48</sup> ELPC/VS, Reply Comments, p. 4

<sup>49</sup> Department, Reply Comments, p. 3

<sup>50</sup> Department, Reply Comments, pp. 3-4

<sup>51</sup> Department, Reply Comments, pp. 5-6

In response to Minneapolis's recommendation that the Commission direct Xcel to close the gap in feeder performance, the Department indicated it would discuss the issue in its comments in Xcel's 2023 SQSR report.<sup>52</sup>

## 5. Staff Analysis

Staff wishes to emphasize the work and collaboration by Xcel and stakeholders to create the initial interactive map and set of data that display the metrics identified by the Commission in the PBR Docket. Staff believes this has been a particularly successful collaborative effort where there is broad alignment among the participants on the importance of assessing equity, reliability, and service quality. While there are some differences on how exactly to perform the analysis, all participants recognize the importance of ensuring equitable delivery of electric service in terms of reliability and service quality. Participants also agree that further quantitative analysis is required to fully determine the relationship between reliability, service quality, and equity. Below, Staff provides additional context around the various procedural options and suggests a potential path forward that balances the interests of the various participants to the docket while allowing the Commission flexibility to continue this important work, depending on the direction of the PBR Docket.

### A. Terminology

Staff believes there is some confusion between Xcel and ELPC/VS on the definition of "metrics" vs "targets." In the PBR Docket, the Commission has established metrics to measure various important public policy areas, such as carbon emissions, reliability, and the size of electric bills. The Commission is currently collecting three years of baseline data for these metrics. In that essence, what stakeholders have developed in this docket are the metrics, or measures, of locational reliability, service quality, low-income participation, and equity. A metric on its own is useful as it guides which measurements will be collected but a metric does not necessarily contain a value judgement about whether it is "good" or "bad." A metric becomes meaningful when compared to established targets and baseline data so stakeholders can understand whether a utility is meeting its goals. In the PBR Docket the Commission has determined that Xcel will provide three years of data before considering whether to set targets for the metrics.<sup>53</sup> ELPC/VS has proposed that the Commission begin development of a *target* for the locational reliability/equity metric, which would jump ahead of the established PIMs process in the PBR Docket. Staff suggests the Commission take no action on ELPC/VS's request to establish a target and consider the matter when it decides whether to set targets in the PBR Docket. Staff notes the third year of data was recently filed on April 30, 2023, so the matter will be in front of the Commission in the coming months.

### B. PBR Docket

The Department and Xcel concluded that the metrics displayed on the map largely meet the Commission's order to develop "future metrics" for locational reliability, service quality, low-

---

<sup>52</sup> Department, Reply Comments, p. 7

<sup>53</sup> Order para 5, February 9, 2022, Order Accepting Report and Setting Additional Requirements.

income program participation and equity. Staff agrees. The metrics displayed on the map provide a foundational understanding of the variations in reliability, service quality, and low-income program participation across Xcel's service territory. While additional data shown at this level of granularity may allow for additional analyses, Staff believes it may diminish the accessibility of the map to a broader audience.

The Department and ELPC/VS recommended that consideration of the locational reliability, service quality, and equity metrics be moved back to the PBR Docket. Staff agrees. The PBR Docket is about to conclude its third year of data collection, at which point the Commission may consider next steps including whether to set targets. Moving any additional changes to the map, and consideration of possible targets, back to the PBR Docket coincides with these developments.

Staff notes that the PBR Docket is designed to measure Xcel's performance over time on identified metrics. It is not currently a docket where Xcel would propose discrete solutions or programs that will allow the utility to improve performance on specific metrics. For example, if the Commission sets a target for carbon emissions reductions, Xcel could designate actions to meet that target in its integrated resource plan.

To that extent, Staff agrees that any discussions concerning the metrics themselves and data collection should take place in the PBR Docket. However, there is value in continuing the conversation around the results of Xcel's analysis and the actions the Company may take, especially to remedy any found inequities, in the annual service quality docket and other related proceedings, such as Xcel's Equity Stakeholder Advisory Group (ESAG) or Integrated Distribution Plan (IDP).

### **C. Equity designations**

Staff notes that one area that could benefit from Commission clarity is how to measure and designate equity, and specifically how to identify areas where there would be higher levels of concern when there is below average reliability or service quality performance.

Xcel's map currently uses the Minnesota Pollution Control Agency's "areas of increased concern for environmental justice,"<sup>54</sup> which was also suggested by ELPC/VS. MPCA uses three criteria to determine areas of concern:

1. Census tracts that have at least 40% of people reported income less than 185% of the federal poverty level
2. Census tracts that have 50% or more people of color
3. Federally recognized Indian Tribes

ELPC/VS identified another source of potential equity metrics, the Climate and Economic Justice Screening Tool (CEJST) developed by the Council on Environmental Quality at the direction of President Biden. This tool was developed to identify disadvantaged communities that will

---

<sup>54</sup> <https://mpca.maps.arcgis.com/apps/MapSeries/index.html?appid=f5bf57c8dac24404b7f8ef1717f57d00>  
(Accessed 4/19/2023)

benefit from programs included in the Justice40 Initiative.<sup>55</sup> The tool uses a wider variety of criteria than those listed above, including data on climate, health, housing, energy, transportation, legacy pollution, water and wastewater, workforce development, and federally recognized tribes.<sup>56</sup>

Also, since the close of comment period in this docket, [House File 7](#) was enacted which includes a definition for “Environmental Justice Areas,” defined as areas that meet one or more of the following criteria based on the most recent Census Bureau data:

1. 40 percent or more of the area's total population is nonwhite;
2. 35 percent or more of households in the area have an income that is at or below 200 percent of the federal poverty level;
3. 40 percent or more of the area's residents over the age of five have limited English proficiency; or
4. the area is located within Indian country, as defined in United State Code, title 18, section 1151.

Staff suggests that continuing to use the MPCA’s environmental justice areas of concern designation for the preliminary round of analysis is appropriate, given the new language in House File 7 and consideration that Justice40 initiatives in IJA and IRA funding rollouts are still under development. Broadly, the Commission may wish to consider whether establishing equity criteria to use across dockets could be useful to ensure consistency.

#### D. Next Steps

Based on the record in this docket and the status of the PBR Docket, Staff makes the following proposal for the next steps in this process. Staff believes this solution balances the interests of docket participants and incorporates their suggested next steps in a way that does not presuppose outcomes or solutions.

1. Determine that the metrics displayed on the interactive map meet the Commission’s September 18, 2019, Order. (**Decision Option 2**)<sup>57</sup>
2. Refer the matter of any additional metric development, including whether to set targets, back to the PBR Docket and take it up when the Commission considers next steps overall in that docket. (**Decision Option 3**)
3. Require Xcel to conduct an analysis that examines whether there is a relationship between poor performance on the five identified metrics displayed on the interactive

---

<sup>55</sup> Climate and Economic Justice Screening Tool, <https://screeningtool.geoplatform.gov/en/about>; accessed April 19, 2023.

<sup>56</sup> Climate and Economic Justice Screening Tool, <https://screeningtool.geoplatform.gov/en/methodology#13.09/44.89703/-93.27884>; accessed April 19, 2023.

<sup>57</sup> September 18, 2019, Order Establishing Performance Metrics requirement to develop “future metrics” on Locational Reliability, Equity – Reliability, and Equity – Service Quality and the Commission’s February 9, 2022, Order Accepting Report and Setting Additional Requirements to display low-income energy efficiency program participation and energy bill assistance program participation.

map and demographic data. Staff suggests having Xcel file this analysis with its next service quality report due April 1, 2024. **(Decision Option 5)**

4. If Xcel's analyses determine there are disparities in any of the five metrics on the map, require Xcel to identify preliminary steps it could take to rectify the disparities and, if Commission approval is required, where and when the Company would expect to file solutions. This should also include an analysis of whether modifications to Xcel's Quality of Service Plan are necessary to address any identified disparities. **(Decision Option 6)**

Staff wishes to recognize ELPC/VS for the analysis and work they have dedicated to the development of the reliability/equity metric and associated analysis. Considering their continued interest in the topic, Staff suggests that Xcel work in partnership with ELPC/VS as the Company conducts its analysis, along with any other interested stakeholders. Staff notes this is not a call for a formal stakeholder process, but rather informal collaboration and input.

In conclusion, Staff reemphasizes the broad alignment of participants in this docket. All participants agree that tracking and evaluating reliability, service quality, low-income program participation, and equity are important. All participants agree that further, in-depth analysis is needed to assess whether there are links between poor performance and demographic indicators. All participants agree that if disparities are found, action should be taken to address the disparities immediately. While there may be different preferred paths to these outcomes, the end goal of all participants is the same: to arrive at equitable reliability and customer service outcomes.

## 6. Decision Options

1. Conclude the existing metrics and demographic data largely address the Commission's Order for the development of future equity-related service reliability and service quality metrics. (Department, Xcel)

**[OR]**

2. Determine that the metrics displayed on the interactive map meet the requirement of the Commission's September 18, 2019, Order Establishing Performance Metrics to develop "future metrics" on Locational Reliability, Equity – Reliability, and Equity – Service Quality and the requirements of the Commission's February 9, 2022, Order Accepting Report and Setting Additional Requirements to display low-income energy efficiency program participation and energy bill assistance program participation. (Staff modification of Department, Xcel)
3. Refer the matter of any additional metric development, including whether to set targets, back to Docket No. E002/CI-17-401 and take it up when the Commission considers next steps overall in that docket. (Staff)

*Staff note: The Commission could choose to adopt DO 4 or DO 5. DO 4 only requires an analysis on reliability, DO 5 encompasses all the metrics displayed on map. The Commission could also adopt DO 6 with DO 4 or 5 to require Xcel to identify preliminary solutions to any discovered disparities.*

4. Request Xcel perform a quantitative analysis with the goal to determine if service reliability in low-income areas is significantly lower than in the Company's work centers on average. (Department)

**[OR]**

5. Require Xcel to conduct an analysis that examines whether there is a relationship between poor performance on the five identified metrics displayed on the interactive map and equity indicators. Require Xcel to file this analysis with its next service quality report due April 1, 2024. (Staff proposal based on Department, ELPC/VS, Xcel)

**[AND]**

6. If Xcel's analysis determines there are disparities in any of the five metrics displayed on the map, require Xcel to identify preliminary steps it could take to rectify the disparities and if Commission approval is required, where and when it would expect to file solutions. This should include an analysis of whether modifications to Xcel's Quality of Service Plan are necessary to address any identified disparities. Require Xcel to file this preliminary plan with its next service quality report due April 1, 2024. (Staff proposal based on Department, ELPC/VS, Xcel)
7. Require Xcel to work with stakeholders to propose a methodology whereby it modifies Xcel's existing QSP tariff to incorporate the potential equity-related performance metrics and targets. (Staff modification of Department)
8. Require Xcel add the following data for each census block group in the next version of the map:
  - A. total low-income energy efficiency program funding (\$)
  - B. average program benefit (\$ per participant).
  - C. CEMI-1
  - D. CELI-6(Staff modification of Minneapolis)
9. Direct Xcel to close the reliability gap so that the customers on the poorest performing feeders are brought to the level of service that those on the highest performing feeders experience. (Minneapolis)



10. Require Xcel to adopt a methodology to determine performance targets for the equity/reliability metric that aligns with the methodology outlined by ELPC/VS in their initial comments. (Staff interpretation of ELPC/VS)
11. Require Xcel to file an additional template with the following data points for each census block group:
  - A. Census Block Group GEOID (12-digit GEOD provided by the US Census)
  - B. Disadvantaged Community (as defined by the Climate and Economic Justice Screening Tool)
  - C. Meter Reading Factor (% AMI)
  - D. # of Customer meters in the census block group
    - i. Residential
    - ii. Commercial
    - iii. Industrial
    - iv. Other
    - v. Total
  - E. # of unique feeders that service customers in the census block group
  - F. Primary region or work center
  - G. Miles of Lines (approximate)
    - i. Overhead
    - ii. Underground
  - H. Blue Sky Reliability (including MEDs)
    - i. SAIDI
    - ii. SAIFI
    - iii. CELI-12
    - iv. CEMI-6
  - I. Adjusted Reliability (MEDs per SRSQ)
    - i. SAIDI
    - ii. SAIFI
    - iii. CELI-12
    - iv. CEMI-6
  - J. Percent of customers experiencing one or more involuntary disconnections in a year
  - K. Low-income energy efficiency participation
  - L. Energy bill assistance program participation(Staff interpretation of ELPC/VS)