BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Katie J. Sieben	Chair
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In the Matter of a Commission Investigation to Identify Performance Metrics, and Potentially, Incentives for Xcel Energy's Electric Utility Operation

ISSUE DATE: April 16, 2020

DOCKET NO. E-002/CI-17-401

ORDER ESTABLISHING METHODOLOGIES AND REPORTING SCHEDULES

PROCEDURAL HISTORY

On June 12, 2017, the Commission issued an order approving a multiyear rate plan for Northern States Power Company, d/b/a Xcel Energy (Xcel; the Company), and opening this docket to "identify and develop performance metrics and standards, and potentially incentives, to be implemented during the multi-year rate plan."[1]

On January 8, 2019, the Commission issued an order establishing a Performance Incentive Mechanism (PIM) Process.[2] The PIM process includes seven steps; the January 2019 order accomplished steps 1 ("articulate goals") and 2 ("identify desired outcomes").

On September 18, 2019, the Commission issued an order establishing performance metrics. The order also directed Xcel to work with interested parties to develop methods to calculate, verify, and report each of the metrics, and file the proposed methodologies and reporting schedule by October 31, 2019.[3] The September 18 order accomplished step 3 of the PIM process ("identify performance metrics") and established the schedule and process required by step 4 ("establish metrics and review").

[1] *In the Matter of the Application of Northern States Power for Authority to Increase Rates for Electric Service in the State of Minnesota*, Docket No. E-002/GR-15-826, Findings of Fact, Conclusions, and Order, at 23 (June 12, 2017).

[2] *In the Matter of a Commission Investigation to Identify and Develop Performance Metrics, and Potentially, Incentives for Xcel Energy's Electric Utility Operations*, Docket No. E-002/CI-17-401, Order Establishing Performance-Incentive Mechanism Process (January 8, 2019).

[3] *In the Matter of a Commission Investigation to Identify and Develop Performance Metrics, and Potentially, Incentives for Xcel Energy's Electric Utility Operations*, Docket No. E-002/CI-17-401, Order Establishing Performance Metrics (September 18, 2019).

On October 1, 2019, Xcel held a stakeholder meeting to discuss this matter. Stakeholders who attended or were represented at the meeting, or submitted comments, included:

- Vote Solar
- Office of the Attorney General (OAG)
- R Street Institute
- Department of Commerce (the Department)
- City of Minneapolis
- Xcel Energy Large Industrials (XLI)[4]
- Fresh Energy
- Citizens Utility Board (CUB)
- Minnesota Center for Environmental Advocacy
- Suburban Rate Authority (SRA)
- Xcel Energy
- American Council for an Energy-Efficient Economy (ACEEE)
- Center for Energy and the Environment (CEE)
- Midwest Co-Gen
- Public Utilities Commission staff (attended as observer only)

On October 31, 2019, Xcel filed the proposed methodologies and process schedule.

On November 1, 2019, the Commission issued a notice of comment period, seeking public comment on Xcel's proposal.

On November 12, 2019, Commission staff proposed to address the equity-reliability and locational reliability metrics in Xcel's annual Safety, Reliability, and Service Quality docket.[5]

On December 2, 2019, initial comments were filed by SRA, Fresh Energy, R Street Institute, XLI, the Department, and CEE.

On December 12, 2019, reply comments were filed by Fresh Energy, OAG, and Xcel.

On December 13, 2019, reply comments were filed by the Department.

On February 20, 2020, the Commission met to consider the matter.

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[4] XLI is an ad hoc consortium consisting of the following entities: Flint Hills Resources Pine Bend, LLC; Gerdau Ameristeel US Inc.; Marathon Petroleum Corporation; and USG Interiors Inc.

[5] In the Commission's January 28, 2020 order in the Service Quality docket, the Commission determined that it was reasonable to move the discussion around the equity-reliability and locational reliability metrics to that docket. Going forward, these metrics will be addressed in the Service Quality docket; consequently, they will be omitted from this order to the extent practicable. *See In the Matter of Xcel Energy's Annual Report on Safety, Reliability, and Service Quality for 2018; and Petition for Approval of Electric Reliability Standards for 2019*, Docket No. E-002/M-19-261, Order Accepting Reports, Establishing Reliability Standards, and Requiring Additional Filings, at 7, 9, and 11–12 (January 28, 2020).

FINDINGS AND CONCLUSIONS

I. Xcel's Filing

Xcel's October 31 filing first described the stakeholder engagement process, including the October 1 meeting and a survey sent to stakeholders in preparation for the meeting. Xcel noted that all parties who commented on the docket were invited to participate in the meeting.

Next, Xcel discussed stakeholders' positions on the metrics. For each metric, Xcel listed its proposed calculation, proposed method of verification (if any), and whether the stakeholder group reached consensus on the methodology. If the stakeholder group did not reach consensus, Xcel noted concerns or additional information or discussion needed.

Finally, Xcel discussed metric reporting. Xcel proposed that an annual report be filed April 30 of each year for metrics from the previous calendar year, and that a majority of the metrics would be tracked starting January 1, 2020. The Company noted that there are three "new" or "future" metrics that the Company does not yet have the ability to fully report, but that updates on these metrics would be provided in each annual report until they are fully implemented.

Xcel noted two caveats to the metric reporting timeline. First, the Company stated that certain purchased power data affecting carbon emissions metrics would not be available until later in the year, so that data in the annual report would be an estimate. The Company also mentioned the possibility of a future public-facing online dashboard, and stated that if the Commission wants to investigate this more thoroughly in the future, the Company would be open to having those discussions.

II. Party Comments

A. The Department

The Department summarized the Commission-approved metrics and explained that in Xcel's October 31 filing, the Company indicated that it would be able to begin tracking on January 1, 2020 for 24 "current" metrics. The Department noted that the Company is currently providing data for seventeen of these metrics in another context, and assumed for purposes of this docket that those metrics had been sufficiently vetted.

The Department further discussed the seven new metrics that the Company does not already provide. In the affordability category, the Department discussed rates per kWh by customer class and all classes aggregated; and average monthly bill for residential customers. For both metrics, the Department recommended that Xcel provide comparisons to data averaged nationally or across similar utilities in order to increase transparency and give customers a point of reference.

In the customer service quality category, the Department discussed existing multi-sector metrics, including the American Customer Satisfaction Index (ACSI) and JD Power; and subscription to third-party customer satisfaction metrics. Regarding the existing multi-sector metrics, the Department stated that it believed Xcel's plan to report existing JD Power data and publicly-available ACSI data was not adequate; the Department noted that the Commission's order also directed Xcel to work with stakeholders to explore additional options for multi-sector metrics. Regarding subscriptions to third-party metrics, the Department suggested that Xcel's proposed methodology may be better suited for consideration in the annual Service Quality docket[6] and recommended that the metric be addressed in that proceeding.

In the environmental performance category, the Department discussed carbon dioxide emissions avoided by electrification of transportation; and carbon dioxide emissions avoided by electrification of buildings, agriculture, and other sectors. The Department noted that Xcel's proposed methodology involves comparing carbon emissions from different sources, and pointed out several questions about how the emissions would be calculated. The Department ultimately concluded that Xcel's metric for increased electrification was not fully developed.

The Department also discussed "future" metrics. The Department noted that Xcel identified eight future metrics that it would not be able to begin tracking on January 1, 2020. The Department did not object to Xcel's anticipated timeline for reporting Momentary Average Interruption Frequency Index (MAIFI) and power quality, and recommended that Xcel provide additional data on the load shaping, shifting, and shedding metrics before the methodologies are approved.

Finally, the Department discussed the future metric relating to workforce and community development, which the Department believed should be addressed in Xcel's annual Service Quality docket.[7] The Department noted that either of the methodologies identified by Xcel would appear to fulfill the goal of the metric.

In reply comments, the Department responded to parties' comments and recommendations; these responses are discussed below.

B. CEE

CEE filed comments largely in support of Xcel's proposed methodologies. CEE also recommended that the Commission develop criteria to evaluate good versus poor performance on each metric, but noted that this process should not delay Xcel's collection of data or the Commission's adoption of the methodologies. Additionally, CEE expressed support for a centralized, accessible online dashboard for communicating data to the public.

CEE also provided comments on specific metrics. CEE noted that it was working with other stakeholders on a study related to the future metric of workforce and community development impact, and stated that Xcel planned to hold a meeting to discuss the study by the end of the first quarter of 2020. CEE also stated that it believed additional customer satisfaction surveys should only be developed if the Commission determines that existing information is inadequate.

Finally, CEE expressed support for a performance incentive mechanism for investments in demand response. CEE stated that demand response is an important and emerging tool as utilities transition to a cleaner electric supply mix, noting that demand response can help align customer load with inexpensive and carbon-free resources and also reduce peak demand, leading to cost savings for the utility system and for customers.

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[6] *In the Matter of Xcel Energy's Annual Report on Safety, Reliability, and Service Quality for 2018; and Petition for Approval of Electric Reliability Standards for 2019,* Docket No. E-002/M-19-261.

[7] *Id.*

CEE recommended that the Commission approve the Company's proposed methodologies and reporting timeline, and direct the Company to (1) work with stakeholders to develop evaluation criteria and file proposed evaluation criteria with the Commission, (2) explore and develop options for an online utility performance dashboard, and present those options to the Commission, and (3) work with the Department and other stakeholders to file a demand response financial incentive proposal for the Commission's consideration.

In its reply comments, the Department disagreed with CEE's position on using existing customer service surveys and stated that the Department supports development of a new customer survey tool. The Department also opposed development of a financial incentive for demand response at this time.

C. SRA

SRA filed comments focusing on three metrics – locational reliability; reliability by geography, income, or other relevant benchmarks; and customer service quality by geography, income, or other relevant benchmarks. SRA noted Commission staff's proposal to move locational reliability to the annual Service Quality docket,[8] and pointed out that the latter two metrics have significant subject-matter overlap with locational reliability. SRA questioned whether it is inefficient to keep the latter two metrics in the present docket while moving only locational reliability to a different docket, since many of the same parties will be interested in all three metrics and will need to follow two separate dockets.

In its reply comments, the Department expressed support for SRA's position.

D. R Street Institute

R Street first noted its opinion that the overall number of metrics should be reduced, and the metrics should focus on utility behavior in order to incentivize action.

As to particular methodologies, R Street first addressed average monthly bills for residential customers, and stated that this metric should also consider whether customers' bills are reflective of the economy as a whole. In reply comments, the Department disagreed with this position and reasoned that because rates are based on the cost of service, income or general price levels are not relevant.

R Street next discussed its concerns with several customer service quality metrics, noting that since Xcel is a regulated monopoly, it has a captive customer base and therefore no competitive pressure in the area of customer service. Finally, R Street supported broadening the use of demand response metrics and better defining the Commission's view of demand response goals. The Department noted in its reply comments that it shared some of R Street's concerns with the customer satisfaction metrics and recommended that the Commission require Xcel to provide additional data.

R Street also stated that it believed the customer complaint metric and the customer service equity metric could benefit from better information sources or additional program development. In reply comments, the Department noted that it had spent considerable time working with

[8] *Id.*

Commission staff on the customer complaint metric and recommended that Commission staff explain the Commission's consumer affairs process before additional work is started.

E. XLI

XLI filed comments primarily highlighting its concern that if the metrics in this docket incentivize behavior that Xcel is already motivated to do for other reasons, this is "essentially over-compensating the utility at the ratepayers' expense."[9] XLI noted its concern that Xcel was seeking overlapping incentives through its current rate case and several other proposed new performance incentive mechanisms.

F. Fresh Energy

Fresh Energy recommended specific modifications to the proposed methodologies for three metrics. In the category of cost-effective alignment of generation and load, Fresh Energy first recommended a modification to the unit of measurement for the demand response capacity available. Fresh Energy recommended changing the Commission's September 18, 2019 order to require Xcel to report on both MW and MWh per year.[10] In its reply comments, the Department supported this proposal.

Fresh Energy also recommended a clarification to the metric measuring the overall effectiveness of the three types of demand response. Fresh Energy recommended using the "load factor for load net of variable generation," also referred to as "net load factor." In its reply comments, the Department supported this proposal.

In the category of environmental performance, Fresh Energy recommended a modification to the metric measuring carbon dioxide emissions avoided by electrification of buildings, agriculture, and other sectors. Fresh Energy proposed including fugitive emissions from fossil fuel delivery infrastructure, particularly related to natural gas. In its reply comments, the Department supported this proposal in concept, but recommended the use of a different loss factor to calculate the fugitive emissions.

G. OAG

The OAG submitted brief reply comments addressing two issues. First, the OAG stated that the Commission should follow the existing PIM process and not adopt financial incentives at this stage; the OAG noted that development of the metrics and targets should be finished before committing ratepayer money to incentives.

Second, the OAG expressed its support for ongoing development of customer satisfaction metrics. OAG noted that R Street had opposed the use of customer satisfaction metrics because the Company is not subject to competitive pressure to improve customer satisfaction. However, OAG stated that this is precisely the reason that customer satisfaction is an important metric.

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[9] XLI comments, at 2 (December 2, 2019).

[10] *See In the Matter of a Commission Investigation to Identify and Develop Performance Metrics, and Potentially, Incentives for Xcel Energy's Electric Utility Operations*, Docket No. E-002/CI-17-401, Order Establishing Performance Metrics, Ordering Paragraph 1(e)(i), at 13 (September 18, 2019).

H. Xcel

In its reply comments, Xcel discussed party comments on the metrics and proposed methodologies, performance dashboard, and performance incentives.

Xcel provided further explanation and discussion for a number of metrics, including the following. First, the Company noted that it would be amenable to Fresh Energy's proposed clarifications in the category of cost-effective alignment of generation and load.

Regarding the environmental performance metrics, the Company discussed the Department's comments on carbon dioxide emissions avoided through electrification, and proposed an additional calculation method for emissions in the transportation sector. The Company noted that it had included this calculation in earlier comments, but through stakeholder discussion, ultimately proposed alternative approaches for its October 31 filing. However, the Company stated that if the Commission prefers to directly quantify carbon dioxide avoidance rather than using certain EV charging data as a proxy, it may be appropriate to use the original three-step calculation.

Xcel also discussed Fresh Energy's suggestion to include an estimate of fugitive methane emissions from the natural gas system. The Company did not support this proposal, noting that fugitive emissions upstream from the local natural gas distribution grid are beyond the Company's control; furthermore, the Company stated that the level of methane leakage proposed by Fresh Energy was too high.

Regarding the cost-effective alignment of generation and load, Xcel noted that it is actively exploring programs to fill the gap between its current demand response portfolio (namely, shedding resources) and additional demand response programs that could shape or shift loads in the future.

Finally, regarding customer satisfaction surveys, Xcel disagreed that another new study was necessary and noted that it had already taken action to expand its existing Customer Experience Satisfaction program.

Xcel also stated that it believed it was not yet time to set benchmarks for comparison or develop evaluation criteria for good versus poor performance; rather, appropriate comparison data should be developed at a later stage, after Xcel has consistently provided reports of existing data.

Regarding the proposed utility performance dashboard, Xcel noted that it would be happy to research development options if the Commission wishes, but cautioned that it would be important to weigh the costs of website development and maintenance against the benefits, including consideration of who would use the dashboard and for what purpose.

Finally, regarding performance incentives, Xcel noted that although incentives may be appropriate in certain areas, it did not intend to get ahead of the Commission's established process. The Company stated that although it had proposed performance incentives in its general rate case, it anticipated that because of the timing of the two dockets, the various incentives would ultimately be well-aligned.

III. Commission Action

The Commission will approve Xcel's proposed methodology and reporting schedules from its October 31 report and reply comments, with several modifications based on recommendations from stakeholders.

First, the Commission will accept Fresh Energy's proposed changes to the demand response metrics, including the use of megawatt hours per year in addition to megawatt hours for the "demand response capacity available" sub-metric and megawatts (MW) as well as megawatt hours (MWh) for the "amount called" sub-metric; and changing the "Calculation Proposed: Load factor or load net of variable renewable generation" to "Calculation Proposed: Load factor for load net of variable renewable generation." These are reasonable clarifications supported by the Department and the Company.

The Commission will also direct Xcel to provide data and examples of the shape and shift metrics to all interested parties, along with a timeline for implementing these metrics in the future. The Commission agrees with the Department that additional information and development is needed before these future metrics can be implemented.

In its October 31 filing, Xcel proposed to submit annual reports on the metrics included in this docket by April 30 of each year; the Commission believes that annual reporting is appropriate and will approve the proposal.

In Xcel's first annual report, the Commission will direct the Company to include a discussion on fugitive emissions of methane as part of the "carbon dioxide emissions avoided by electrification of buildings, agriculture, and other sectors" environmental performance metric, and propose a reporting methodology. Various stakeholders suggested different methane leakage rates that could be used as part of the calculation of fugitive emissions. The Commission believes that fugitive emissions of methane may be a valuable metric and wishes to explore it further; however, there is not enough data currently in the record to choose an appropriate methodology at this time.

The Commission will also direct Xcel to explore and develop options to employ an online utility performance dashboard and present those options to the Commission in the first annual report. Many stakeholders have expressed interest in an online dashboard to make the metric data more transparent and accessible to the public, and the Commission agrees that public access to data is an important goal. However, the Commission needs more information before it can determine whether to require the development and use of an online dashboard. The Commission will direct Xcel to further develop this idea in consultation with interested stakeholders, including a fair and complete discussion of the costs that may be involved.

Furthermore, the Commission will direct Xcel to work with stakeholders and the Department to develop a demand response financial incentive, and to file a proposal for Commission consideration by the end of the first quarter of 2021. Demand response is an important resource for keeping the evolving grid efficient and reliable, and it can reduce peak demand, resulting in cost savings for customers and for the utility. It is important to begin the process of researching and considering financial incentives to encourage achievements in demand response when such achievements would be beneficial to the utility system and to customers.

Similarly, the Commission will direct Xcel to work with stakeholders to develop evaluation criteria and benchmarks and file them at a later date. The Commission will wait until the appropriate step in the PIM process to decide on criteria for good versus bad performance, and establish benchmarks against which to measure Xcel's performance; however, the process of evaluating such criteria and benchmarks is likely to be complex and time-consuming, and the Commission will direct Xcel and stakeholders to begin that process.

The Commission will also direct Xcel to use a standardization method consistent with the Commission's most recent order in the annual Service Quality docket.[11] This will help ensure consistency with other utility reporting, and will capture transmission level outages, giving a more complete view of Xcel's system reliability.

Finally, the Commission notes that Xcel proposed different calculations for carbon dioxide emissions avoided through electrification in its October 31 filing and its reply comments. Because the methodologies provide slightly different information and both appear to be useful in different ways, the Commission will approve both the original proposal and the calculations proposed in the reply comments and direct Xcel to include both in its annual reports. Specifically, the Commission approves, for purposes of this docket, Xcel's original three-step proposal to calculate carbon dioxide emissions avoided by electrification of transportation using Xcel-specific average carbon dioxide intensity per kWh, in addition to the two alternative approaches in its reply comments: the percent of EVs participating in managed charging or time-of-use rates, and the percent of EV charging occurring in off-peak hours.

ORDER

1. Xcel's proposed methodology and reporting schedules, as detailed in the October 31, 2019 proposed methodologies and process filing and December 12, 2019 reply comments, are approved, with the following modifications:

   a. Include megawatt hours per year in addition to megawatt hours for the demand response capacity available sub-metric and MW as well as MWh for the amount called sub-metric;

   b. Change the "Calculation Proposed: Load factor or load net of variable renewable generation" to "Calculation Proposed: Load factor for load net of variable renewable generation;"

   c. Provide data and examples of the shape and shift metrics to all interested parties, along with a timeline for implementing these future metrics;

   d. Include a discussion of fugitive emissions of methane in the first annual report, including a proposed methodology for reporting fugitive emissions for methane in the "Carbon dioxide emissions avoided by electrification of

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[11] *In the Matter of Xcel Energy's Annual Report on Safety, Reliability, and Service Quality for 2018; and Petition for Approval of Electric Reliability Standards for 2019*, Docket No. E-002/M-19-261, Order Accepting Reports, Establishing Reliability Standards, and Requiring Additional Filings (January 28, 2020).

buildings, agriculture, and other sectors” metric under environmental performance;

e. In direct consultation with interested stakeholders, explore and develop options to employ an online utility performance dashboard and present those options to the Commission in the first annual report, including a fair discussion of the costs involved;

f. In consultation with the Department and interested stakeholders, develop and file a demand response financial incentive for Commission consideration by the end of the first quarter of 2021;

g. Work with stakeholders to develop evaluation criteria and benchmarks and file them at a later date; and

h. Use a standardization method consistent with the Commission’s most recent Order in the Annual Service Quality, Safety, and Reliability docket in reporting their System Average Interruption Duration Index (SAIDI), System Average Interruption Frequency Index (SAIFI), Customer Average Interruption Duration Index (CAIDI), Customers Experiencing Long Interruption Duration (CELID), Customers Experiencing Multiple Interruptions (CEMI), and Average Service Availability Index (ASAI) within this docket.

2. The Commission delegates authority to the Executive Secretary to issue notices setting schedules for any follow up filings required as a part of this Order.

3. This order shall become effective immediately.

BY ORDER OF THE COMMISSION

Will Seuffert
Executive Secretary

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