

—Via Electronic Filing—



April 28, 2023

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

Re: 2022 ANNUAL REPORT

PERFORMANCE METRICS AND INCENTIVES

DOCKET NO. E002/CI-17-401

Dear Mr. Seuffert:

Northern States Power Company, doing business as Xcel Energy, submits the enclosed Performance Metrics Annual Report for the period of January 1, 2022 to December 31, 2022 pursuant to the Minnesota Public Utilities Commission's April 16, 2020 Order Establishing Methodologies and Reporting Schedules and February 9, 2022 Order Accepting Report and Setting Additional Requirements in the above-noted docket.

We have electronically filed this document with the Commission, and copies have been served on the parties on the attached service list. Please contact Bridget Dockter at bridget.dockter@xcelenergy.com or (612) 337-2096 or Taige Tople at taige.d.tople@xcelenergy.com or (612) 216-7953 if there are any questions regarding this submission.

Sincerely,

/s/

Bridget Dockter Manager, Policy & Outreach

Enclosures cc: Service List

STATE OF MINNESOTA BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Katie Sieben Chair
Valerie Means Commissioner
Matthew Schuerger Commissioner
Joseph K. Sullivan Commissioner
John A. Tuma Commissioner

IN THE MATTER OF THE COMMISSION
INVESTIGATION TO IDENTIFY AND
DEVELOP PERFORMANCE METRICS AND
POTENTIALLY, INCENTIVES FOR XCEL
ENERGY'S ELECTRIC UTILITY OPERATIONS

DOCKET NO. E002/CI-17-401

ANNUAL REPORT

INTRODUCTION

Northern States Power Company, doing business as Xcel Energy, submits this Performance Metrics Annual Report (Report) for the period of January 1, 2022 to December 31, 2022 pursuant to the Minnesota Public Utilities Commission's April 16, 2020 ORDER ESTABLISHING METHODOLOGIES AND REPORTING SCHEDULES and February 9, 2022 ORDER ACCEPTING REPORT AND SETTING ADDITIONAL REQUIREMENTS in the above-referenced docket. This Report includes an evaluation of results on the 33 Commission-approved metrics tracked for calendar year 2022, provides updates on new metrics that we are continuing to develop, and reports on required stakeholder engagement.

The Company remains the only Minnesota utility operating under a multiyear rate plan pursuant to Minn. Stat. § 216B.16, subd. 19, which authorizes, in part, the Commission to require a "utility to provide a set of reasonable performance measures and incentives that are quantifiable, verifiable, and consistent with state energy policies." Pursuant to this authorization, the Commission initiated the present proceeding to gain a better understanding of how performance metrics and standards, and potentially incentives, in addition to those already in Xcel Energy's Quality Service Tariff,¹ could further align the Company's strategic priorities with the public interest.

During a robust and engaging stakeholder process, participating stakeholders considered calculations, verification, reporting, process schedules and progress updates, and agreed to revisit and re-assess any approved metrics later in the proceeding as needed. The

¹ Xcel Energy Minnesota Electric Rate Book – MPUC No. 2, Section 6, Sheets 7.1 to 7.11.

Commission ultimately adopted 33 metrics related to customer focus, utility performance and public policy.²

The Commission's February 9, 2022, Order in the present docket approved our 2020 first annual report with additional reporting requirements. Our 2021 annual report is currently pending review. The additional requirements are addressed in this 2022 Report and include:

- 1. Provide three years contextual data, where applicable or an established industry standard or state policy goal.
- 2. Provide three years of data before developing evaluation and benchmarking targets for the performance metrics.
- 3. Include information on the availability of data specific to our gas suppliers on upstream methane emissions; regulation of methane emissions upstream of the Company's distribution system, and the Company's position on such regulations; participation in voluntary initiatives to quantify and reduce methane from gas suppliers; any certified gas purchases; pilots with gas marketers to track and source gas with lower associated methane emissions; and any other actions the Company has taken to secure data on and/or reduce upstream methane emissions. No later than 2024, the Company will reevaluate data available on upstream methane to consider feasibility of reporting of methane emissions attributable to total natural gas purchases across the full fuel cycle (from drilling and extraction to the end-use).
- 4. Once the Commission has determined adequate data on upstream methane is available to support utility-specific reporting of such emissions, we must include in the annual report, methane emissions across the full fuel cycle in its calculation of greenhouse gas emissions avoided by electrification of buildings, agriculture, and other sectors.

We are pleased to provide this assessment of the Company's performance metrics tracking for 2022. This Report is organized as follows:

- Section I lists the Commission-approved metrics and reporting requirements;
- Section II discusses specific April 16, 2020 and February 9, 2022 Order points that require additional explanation beyond the information included in our spreadsheet;
- Section III summarizes stakeholder discussions and associated filing requirements.

² In the Matter of a Commission Investigation to Identify Performance Metrics, and Potentially, Incentives for Xcel Energy's Electric Utility Operation, Docket No. E002/CI-17-401, ORDER ESTABLISHING PERFORMANCE METRICS at 12-14 (September 18, 2019).

2022 PERFORMANCE METRICS

I. ESTABLISHED OUTCOMES AND METRICS

Table 1 below lists the 33 metrics approved by the Commission on April 16, 2020, by Outcome, provides reference to the corresponding line in Attachment A, and notes any attachments specific to that metric. Most metrics are reported in Attachment A, unless they required additional discussion.

A. Approved Metrics

Table 1 Commission-Approved Metrics by Outcome

#	Outcome / Metric Description	Corresponding Row in Attachment A	Reporting Status	Associated Report Attachment
	Affordability			
1	Rates per kWh based on total revenue, reported: (1) by customer class and (2) with all classes aggregated	1	Began 2020 PBR Report	n/a
2	Average monthly bills for residential customers	2	Began 2020 PBR Report	n/a
3	Total disconnections for nonpayment for residential customers	3	Reported Prior to PBR	n/a
4	Total arrearages for residential customers	4	Reported Prior to PBR	n/a
	Reliability			
5	System Average Interruption Duration Index (SAIDI)	1	Reported Prior to PBR	n/a
6	System Average Interruption Frequency Index (SAIFI)	2	Reported Prior to PBR	n/a
7	Customer Average Interruption Duration Index (CAIDI)	3	Reported Prior to PBR	n/a
8	Customers Experiencing Long Interruption Duration (CELID)	4	Reported Prior to PBR	n/a
9	Customers Experiencing Multiple Interruptions (CEMI)	5	Reported Prior to PBR	n/a
10	Average Service Availability Index (ASAI)	6	Reported Prior to PBR	n/a
11	Momentary Average Interruption Frequency Index (MAIFI)	7	Reported Prior to PBR, but not with AMI technology. Propose and Tracking in 2026, Report in 2027	n/a

#	Outcome / Metric Description	Corresponding Row in Attachment A	Reporting Status	Associated Report Attachment
12	Power Quality	8	New, once AMI capabilities are determined. Propose and Tracking in 2026, Report in 2027	n/a
	Customer Service Quality			
13	Existing multi-sector metrics, including ACSI and J.D. Power (NSPM)	1	Began in 2020 PBR Report	В
14	Call center response time	2	Reported Prior to PBR	n/a
15	Billing invoice accuracy	3	Reported Prior to PBR	n/a
16	Number of customer complaints	4	Reported Prior to PBR	n/a
	Environmental Performance			
17	Total carbon emissions by: (1) utility-owned facilities and PPAs and (2) all sources	1	Began in 2020 PBR Report	n/a
18	Carbon intensity (emissions per MWh) by: (1) utility-owned facilities and PPAs and (2) all sources	2	Began in 2020 PBR Report	n/a
19	Total criteria pollutant emissions	3	Began in 2020 PBR Report	n/a
20	Criteria pollutant emission intensity (criteria pollutant emissions per MWh)	4	Began in 2020 PBR Report	n/a
21	CO2 emissions avoided by electrification of transportation – Alternative & Original approach a. Percent of Electric vehicles in Xcel Energy's Minnesota service territory participating in managed charging programs or on whole house rates	5(a)	Began in 2020 PBR Report	n/a
	 Percent of managed charging customers residential electric vehicle charging load occurring during off-peak hours 	5(b)		
	 c. CO2 avoidance calculated from electric vehicle charging 	5(c)		
22	CO2 emissions avoided by electrification of buildings, agriculture, and other sectors	6	Began in 2020 PBR Report	n/a
23	Discussion of methane emissions, including proposed methodology for reporting	7	Began in 2020 PBR Report	n/a

#	Outcome / Metric Description	Corresponding Row in Attachment A	Reporting Status	Associated Report Attachment
24	Availability of data specific to its gas suppliers on upstream methane emissions; regulation of methane emissions upstream of the Company's distribution system, and the Company's position on such regulations; participation in voluntary initiatives to quantify and reduce methane from gas suppliers; any certified gas purchases; pilots with gas marketers to track and source gas with lower associated methane emissions; and any other actions the Company has taken to secure data on and/or reduce upstream methane emissions. No later than 2024, the Company will re-evaluate data available on upstream methane to consider feasibility of reporting of methane emissions attributable to total natural gas purchases across the full fuel cycle (from drilling and extraction to the end-use).	8	Began in 2021 PBR Report	C
25	Methane emissions across the full fuel cycle in its calculation of greenhouse gas emissions avoided by electrification of buildings, agriculture, and other sectors.	9	New/TBD	n/a
	Cost Effective Alignment of Generation and Load			
26	Demand response, including (1) capacity available (MWh) and (2) amount called (MW, MWh per year)	1	Reported Prior to PBR	n/a
27	Amount of demand response that SHAPES customer load profiles through price response, time varying rates, or behavior campaigns.	2	New/TBD	n/a
28	Amount of demand response that SHIFTS energy consumptions from times of high demand to times when there is a surplus of renewable generation.	3	New/TBD	n/a
29	Amount of demand response that SHEDS loads that can be curtailed to provide peak capacity and supports the system in contingency events: a. For available load b. For actual load reduction c. Metrics that measure the effectiveness and success of (a & b) individually and in aggregate	4(a) 4(b) 4(c)	Began in 2020 PBR Report	n/a
	Workforce and Community Development			
30	Workforce Transition Plan	1	Began in 2021 PBR Report	D
	Other Stakeholder Discussions			
31	Public Dashboard	1	New/TBD	n/a
32	Demand Response Performance Incentive	2	New/TBD	n/a
33	Evaluation Criteria and Benchmarks	3	New/TBD	n/a

B. Future Metrics

The Reliability Outcome metrics of MAIFI_E and Power Quality are both considered future metrics, as they are tied to the successful deployment of our proposed Advanced Meter Infrastructure (AMI). We currently anticipate AMI deployment will be complete in 2025. As a result, we will propose calculations and verification methodologies for these metrics once

we have sufficient AMI meter capability data, likely in 2025. Tracking will begin in 2026 and reporting will begin in 2027. It should be noted that while the Company does currently report on MAIFI_E, until AMI is fully deployed, the MAIFI_E numbers will continue to reflect only the momentary data as reported via Supervisory Control and Data Acquisition (SCADA) systems.

II. RESPONSE TO COMMISSION ORDER POINTS

The nature of the metrics and their calculations approved in the Commission's Order require both a final calculation as well as a more holistic explanation for certain metrics; this section provides that explanation. For easy cross-reference, those metrics where we provide additional narrative below are noted in the metrics list, Attachment A.

A. Customer Service Quality

1. J.D. Power

The J.D. Power calculation of overall satisfaction score is a weighted index based on customer scores across 41 different attributes that fall into six broad categories:

- (1) power quality & reliability;
- (2) billing and payment;
- (3) corporate citizenship;
- (4) communications;
- (5) price; and
- (6) customer service.

The weighting for each category ranges from 9% to 25%, totaling 100%. The 41 attributes provide additional opportunities to improve satisfaction beyond the six categories. Examples of the 41 attributes include: customer communications during an outage; ease of understanding and fairness of pricing; ease and variety of options to pay bills; taking action to care for the environment; helping customers understand how to reduce energy use; communicating safety around electricity; and ease of using our call center and website for customer service. J.D. Power data scientists use proprietary regression modeling to refine this weighting annually to maintain a current picture of what drives customer satisfaction with utilities.

J.D. Power publishes utility satisfaction scores by region for residential customers each year in December (starting 2020) at the end of its annual study and makes the scores available to the public. J.D. Power combines customer scores for Xcel Energy customers in Minnesota, North Dakota, South Dakota, Wisconsin, and Michigan and publishes

the score in Xcel Energy Midwest. J.D. Power does not report scores publicly at a more granular level.

Xcel Energy confirmed with J.D. Power that Xcel Energy's scores for the NSP Minnesota Operating Company that includes Minnesota, North Dakota, and South Dakota could be shared annually with the Commission and used in a public facing online dashboard if the Commission determines a dashboard is an appropriate step. This information is provided to Xcel Energy in a separate summary worksheet provided by J.D. Power.

Table 2 below sets forth the NSP Minnesota residential overall satisfaction rankings for 2022, and, for reference, a five-year view showing 2018 through 2022. The Table reflects slightly adjusted rankings as previous reporting consisted of a manual extrapolation of (estimated) Minnesota only score data. To ensure consistent reporting with JD Power, moving forward we will submit the rankings and summary as they provide it to us for the NSP Minnesota operating company. Table 2 also includes the factor scores of the six categories surveyed by J.D. Power. Our peer set, used in J.D. Power summary reporting for Xcel Energy, includes 53 branded investor-owned utilities (IOUs) in addition to Xcel Energy included in the study.

As shown below, NSP Minnesota ranked at 36th percentile for overall customer satisfaction in 2022, which is lower than the previous four years. The primary reasons for both the industry and our NSP Minnesota decrease are negative perceptions about price, which is driven largely by rising customer bills. Another noticeable contributor to the decline is lowered awareness of the Company's community efforts, including volunteering, donations and environmental initiatives. These types of awareness reductions are known to correlate with declining customer satisfaction scores. Lastly, when working with rankings, there is a tight clustering of scores among the utilities for the factor categories and overall satisfaction, which can dramatically affect the utility rank without a corresponding statistically significant scoring difference. In 2022, this occurred for Billing & Payment, where NSP Minnesota holds the 23rd percentile rank compared to 2021 at 31st percentile rank despite only having a statistically insignificant scoring decline of 20 points (or 2%) on a 1,000 point scale. NSP Minnesota is statistically significantly lower than only seven of the fifty-three peers due to the bunching of utility scores. This means that many of the utilities in this ranking set are performing at relative parity. However, in this instance, if we compare by rank alone, it does not reflect this.

The Company takes very seriously the declining customer satisfaction scores and continues to pursue efforts to address the decline. In 2022, we increased customer communications and education resources to help customers better understand their bill and ways to save on their monthly bills through energy assistance and efficiency/conservation efforts. In 2023, The Company launched a comprehensive,

enterprise-wide review of customer satisfaction and how to effectively improve the customer experience through further improvements to communication and enhancements to our digital channels, including improving the login process, streamlining navigation, and improving self-help content. We are committed to proactively supporting customers with energy assistance resources and applications, customer outreach and education on bills, energy usage, time of use rates, and energy efficiency. Early indications are that these efforts are having a positive impact on customers based on the increase in the Q1, 2023 JD Power score.

Table 2
NSP MN Residential Overall Satisfaction Scores for 2018-2022

Xcel Energy - MN Residential OSAT Index + Major Factors	2022 Peer Set Percentile Rank	2021 Peer Set Percentile Rank	2020 Peer Set Percentile Rank	2019 Peer Set Percentile Rank	2018 Peer Set Percentile Rank
Overall Satisfaction	36%	57%	67%	89%	76%
Power Quality & Reliability	70%	72%	83%	89%	80%
Price	32%	52%	57%	81%	84%
Billing & Payment	23%	31%	48%	65%	51%
Corporate Citizenship	43%	69%	87%	87%	84%
Communications	34%	48%	59%	80%	82%
Customer Care	25%	65%	52%	81%	87%

^{*}Percentile ranks include NSP MN (MN, ND, SD combined), not MN only

2. ACSI

The American Customer Satisfaction Index (ACSI) provides benchmarks by company for the largest investor-owned energy utilities serving residential customers. J.D. Power has 145 large/midsize utilities in its residential electricity benchmark, while ACSI has 26 IOUs. However, during the Commission hearing in this proceeding, we agreed to provide the public facing survey results that can be found on the ACSI website³ free of charge for Commission review. We include as Attachment B to this report ACSI's most recent overall satisfaction survey scores for IOUs. If the Commission decides to move forward with evaluation and benchmarking of these metrics, the Company believes the ACSI should be re-considered and removed from reporting because it does not benchmark against as large of a peer utility group as our other customer satisfaction reporting with JD Power and provides no additional insight.

³ https://www.theacsi.org/industries/energy-utilities/investor-owned-energy-utilities/

B. Call Center Response Times

The Company worked diligently in the first portion of the year to mitigate post-pandemic market pressures impacting contact center hiring and performance. We show notable improvement in service level beginning late in the third quarter through the fourth quarter in 2022, ending the year at 84.59% of calls answered in 20 seconds or less, above required service quality tariff levels. The Company attributes this improvement to the actions taken throughout 2022 directly related to call center staffing and performance. Those actions included additional hiring of call center staff with a targeted focus on appropriate training for new agents to provide them the tools for success. This helped maintain a 90% staffing level in 2022. The Company is committed to meeting the needs of our customers and will continue to utilize lessons learned and best practices from our call center staffing and performance work to maintain safe and effective operations.

C. Demand Response Metrics

In its April 16, 2020 Order, the Commission approved additional metrics for demand response including MWh and amount called for load shedding, shaping and shifting. Additionally, a wording adjustment for our final metric of load factor for load net of variable generation was approved, setting the baseline for this future metric. We have included demand response capacity details for shedding load in Attachment A and address future metrics below.

1. Amount of Demand Response that Shapes Load

Demand response activities for shaping customer load include specific customer rates such as time-of-use (TOU) and behavioral demand response. The Company launched in November 2020 a residential TOU rate pilot called Flex Pricing.⁴ As a part of the pilot, about 17,000 customers in two sections of the Twin Cities metro area received advanced meters. About 9,000 of those customers are taking service on the pilot TOU rate, while the remaining customers stayed on their standard residential rate as a control group. As a part of the pilot the Company has been studying the effects of TOU rate price signals on the energy use behavior of customers. The pilot concluded in November 2022.

The Company submitted a mid-pilot progress report in February 2022 highlighting results through one year of pilot operations. Through the first year, we saw a modest demand savings during on-peak periods, a decrease of about 1 percent. In addition, we

⁴ In the Matter of Xcel's Residential Time of Use Rate Design Pilot Program, Docket No. E002/M-17-775, ORDER APPROVING PILOT PROGRAM, SETTING REPORTING REQUIREMENTS, AND DENYING CERTIFICATION REQUEST (August 7, 2018).

saw a 2 percent coincident peak reduction corresponding with the hour the Company experienced our maximum annual system load. We also saw in initial results that customers were becoming more responsive to the rate's price signals as the pilot went on. Overall, with the small number of participating customers and modest demand savings experienced, we have not generated enough demand response to claim as a part of this filing. The Company filed a final evaluation of the Flex Pricing pilot on February 10, 2023, which will highlight results through the full term of the pilot. The Company continues to review the shaping of design for these customers as they design a full TOU program for residential customers – at that time, we will be able to report on the load shaping.

In addition, the Company has received Commission approval in Docket No. E002/M-20-86 to pilot two separate rate designs for commercial and industrial customers. The first pilot rate is a General TOU Service rate design, which includes a new three-period energy rate, system demand rates, and distribution demand rates. The second pilot rate is a Critical Peak Pricing rate, which includes a three-period volumetric energy rate with a critical peak pricing component and distribution demand rates (but no system demand rates).⁵

We expect the pilot to launch later this year. The Commission approved the rate designs, tariffs, and recruitment plan for the pilots, but required the Company to submit an additional Compliance Filing. The Compliance Filing, submitted by the Company on March 31, 2023 included additional implementation details for the pilot. Once launched it will be conducted for a period of two years. We continue to evaluate the potential load reduction resulting from rates such as Critical Peak Pricing and as further analysis is conducted regarding the pilot scope, we will be able to begin to make estimations.

2. Amount of Demand Response that Shifts Load

Activities for shifting load include such technologies as electric vehicle optimization or commercial thermal storage. On February 1, 2021 the Company petitioned the Commission for approval of four pilots in our Load Flexibility Petition (Docket No. E002/M-21-101). On January 6, 2022 the Commission approved three of these pilots, with some modifications. The pilots are intended to provide customer incentives for reducing peak demand and shifting usage to off-peak periods as a cost-effective way to utilize current system resources. These programs were launched in the fall of 2022. Pilot

⁵ General Time-of-use Service Tariff, Docket No. E002/M-20-86, Compliance Filing-Pilot Programs, Xcel Energy (January 18, 2022).

⁶ In the Matter of the Petition of Northern State Power, doing business as Xcel Energy, for Approval of General Time-of-Use Service Tariff, Docket No. E002/M-20-86, ORDER APPROVING TIME OF USE PILOT AND SETTING ADDITIONAL REQUIREMENTS (February 1, 2023)

results will be included as part of future reporting when utilized for shifting load rather than a reduction during the peak (which are shedding resources).

3. Load Factor for Load Net of Variable Renewable Generation

The "load factor for load net of variable renewable generation" metric was chosen as an appropriate metric as it is based on data of hourly generation by generation source that is currently tracked by the utility, and directly addresses the performance of aligning load through demand response to renewable generation sources. The metric reported for 2022 – 40.50% – is the annual load factor for load on the Company's generation system when load provided by renewable generation sources is excluded. This load factor includes the load from hydro generation, which is not considered renewable generation for this metric. This metric will allow us to incorporate the results of the previous demand response metrics as they continue to evolve; however, this metric also accounts for further impacts such as energy efficiency, which is measured through our Conservation Improvement Program (CIP).

This metric has proven to be less effective than hoped in measuring the effectiveness of demand response efforts due to the rapid adoption of variable renewable generation. This adoption has greatly reduced the amount of energy in the load net of variable renewable generation. To produce a reduction in load factor, this requires a dramatic reduction in peak load that may be beyond the potential of demand response. If the Commission decides to re-open the metric discussion, we believe this metric should be re-evaluated.

D. Environmental Performance

The Environmental Performance Outcome hosts nine metrics and three sub-metrics. Where 2022 results needed no additional explanation, the metrics are noted to "See Attachment A for 2022 results." Where additional explanation is necessary, it is provided below with the associated metric.

- 1. Total carbon emissions by (1) utility-owned facilities and PPAs and (2) all sources [See Attachment A for 2022 results]
- 2. Carbon intensity (emissions per MWh) by (1) utility-owned facilities and PPAs and (2) all sources [See Attachment A for 2022 results]
- 3. Total criteria pollutant emissions

We report criteria pollutant information for utility-owned facilities only. As explained in our October 31, 2019 *Proposed Metric Methodology and Process Schedule on Performance Metrics and Incentives* report, approximately 85% of criteria pollutant emissions associated with the electricity we provide to our customers are from units that Xcel Energy owns, meaning

we have high confidence in the quality of the data, because we have Continuous Emissions Monitor (CEMS) data, stack test data, and fuel consumption data for these sources.

In 2022, total criteria pollutant emissions from utility-owned facilities were:

NO_x: 6,802 tons
 SO₂: 3,354 tons
 PM: 492 tons
 Mercury: 0.0376 tons
 Lead: 0.0635 tons

The remaining 15% of criteria pollutant emissions are from sources we do not own, associated with energy purchased either through PPAs or in the wholesale market. The quality of the emissions data for these sources is less certain; we may have some directly measured data from certain sources, but for the others, we may have little insight into the generating source and the accompanying emissions.

4. Criteria pollutant emission intensity (criteria pollutant emissions per MWh)

For this metric – which as above is for utility-owned facilities only – total pounds of criteria pollutant emissions are divided by total generation from owned facilities. [See Attachment A]

NOx: 0.439 pounds per MWh
SO2: 0.216 pounds per MWh
PM: 0.032 pounds per MWh
Mercury: 0.000002 pounds per MWh
Lead: 0.000004 pounds per MWh

5. CO₂ emissions avoided by electrification of transportation – Alternative & Original approach

In this metric, we report three sub-metrics as requested by the Commission – two that focus on encouraging charging behavior that will tend to use lower-carbon electricity, and one that estimates CO₂ avoidance.

Moving forward, we will align the data collection methodology in this docket with that employed in the Company's Annual EV Reports filed in compliance with the Commission's Orders in Docket Nos. E002/M-15-111, E002/M-17-817, E002/M-18-643, E002/M-19-186, E002/M-19-559, E002/M-20-711, E002/M-20-745, and E002/M-

21-101. This allows for consistent baseline data collection between the two dockets. We discussed this revised data collection methodology with the Department, and they agreed it makes sense to align the baseline data with that used in the Annual EV Report if there was ever the need for cross comparisons to be made. The EV Annual Report utilizes a May to April 12-month data collection timeframe. To align the methodologies, we will begin to utilize the same May to April 12-month data collection timeframe instead of the previous January to December 12-month data collection timeframe. The metrics in this year's report captures data from May 2021 to April 2022.

a. Percent of EVs in Xcel Energy's MN service territory participating in managed charging programs or on whole-house TOU rates

For this metric, the Company proposed the following formula in our October 31, 2019 Proposed Metric Methodology and Process Schedule on Performance Metrics and Incentives report:

Customers on EV-specific managed charging rates or whole-house TOU rates who have self-identified as EV owners ÷ Number of EVs registered in Xcel Energy's service territory

As of April 2022, the percentage of EVs participating in managed charging programs or on whole-house TOU rates was 10.84%. This may be an underestimate, as it does not include customers on whole-house TOU rates who have self-identified as EV owners, for which we do not currently have data. It also does not account for the fact that a small number of those customers may own more than one EV but would only be counted once in the numerator.

b. Percent of managed charging customers' residential EV charging load occurring during off-peak hours

For this metric, the Company proposed the following formula in our October 31, 2019 Proposed Metric Methodology and Process Schedule on Performance Metrics and Incentives report:

Total annual energy consumed (MWh) by EVs charging during off-peak hours at the residences of customers enrolled in Xcel Energy's EV TOU rates or other managed charging programs ÷ Total annual energy consumed (MWh) by EVs charging at residences of customers enrolled in Xcel Energy's EV TOU rates or other managed charging programs

Between May 2021 and April 2022, the percentage of managed charging customers' residential and fleet EV charging load occurring during off-peak hours was 86.94%.

c. CO₂ avoidance estimate calculated from electric vehicle charging

In our May 6, 2019 *Comments* and December 12, 2019 *Reply Comments* in this docket, the Company proposed a method to estimate CO₂ avoidance based on the estimated number of kWh provided for electric vehicle (EV) charging, the estimated electric driving miles thus enabled, and the estimated amount of CO₂ that would have been emitted had that same number of miles been driven on gasoline. The method was further refined in our 2020 Annual Report, and we do not propose any new adjustments in this Annual Report. The method includes:

- A focus on light-duty EVs, which constitute the vast majority of EVs in our service territory.
- Calculation of the total annual kWh consumption by EVs by multiplying the number of EVs in the Company's Minnesota service territory as of April 2022 (20,941 EVs, including PHEVs and BEVs) by an estimate of the typical annual consumption per light-duty EV which is updated each year to reflect current data (4,284 kWh for 2022, an average for both PHEVs and BEVs).
- Calculation of CO₂ emissions from EV charging by multiplying the total annual kWh consumption by the system average CO₂ rate per kWh for the year in question, as reported to The Climate Registry and third-party verified.⁷ For EV customers who are also renewable energy tariff subscribers (77 as of April 2022), instead of the system average rate we assume those customers subscribe to Windsource for their full consumption and assign a CO₂ rate of 0 lbs/kWh to their EV charging.
- Calculation of CO₂ that would have otherwise been emitted by gasoline vehicles for an equivalent number of miles traveled by EVs. We use a conservative estimate of average kWh/mile which is updated annually (0.397 kWh/mile for 2022, based on data for light-duty EVs from www.fueleconomy.gov and incorporating a 10% charging inefficiency factor) to estimate the number of miles driven on electricity provided by the Company. We then calculate tailpipe CO₂ that would have been emitted if

⁷ As in prior years, we acknowledge there are a variety of different possible electricity CO₂ emission factors that

assumptions about the time of day of EV charging, in part because the majority of EV charging is not separately metered at this time. Using marginal or hourly emission factors would require metered data and/or assumptions about the time of day of EV charging.

could be used, including MISO-wide and utility-specific emission factors, and marginal, hourly average, and annual average emission factors. We continue to use utility-specific annual average here for three reasons. First, it is important to keep the calculation methods consistent across years so that change in this metric (or any metric) reflects actual performance – e.g., lower-carbon electricity year over year – rather than simply a change in methods. Second, utility-specific emission factors are consistent with the Commission's design principle for this docket that "Metrics should seek to measure behaviors that are within a utility's control and free from exogenous influences, such as weather or market forces," while MISO emission factors would not meet this design principle. Third, annual average emission factors are reasonable considering that for this calculation we make no

- this same number of miles had been driven on gasoline, using a gasoline emission factor from EPA (410 grams of CO₂ per mile).
- The CO₂ avoidance metric is then calculated as the difference between emissions from annual EV use and displaced emissions that otherwise would have occurred from equivalent travel by gasoline vehicles. In the case of EVs charged on an all-renewable tariff, with RECs retired on the subscriber's behalf, there is no deduction for CO₂ from EV charging.

Based on these assumptions, we estimate the Company provided approximately 89 million kWh for EV charging in 2022, which enabled an estimated 226 million electric miles. Had those miles been driven on gasoline, about 102,128 short tons of CO₂ would have been emitted. EV charging was responsible for an estimated 26,948 short tons of CO₂. The difference between the two, 75,180 short tons, represents a reasonable estimate of CO₂ avoidance in 2022 from electrification of transportation.

In addition to the values reported for 2022 within this annual report, we provide CO₂ avoided for years 2018-2021 in Attachment A. These values are refreshed annually.

6. CO₂ emissions avoided by electrification of buildings, agriculture, and other sectors

In our October 31, 2019 Proposed Metric Methodology and Process Schedule on Performance Metrics and Incentives, we recommended estimating CO₂ emissions avoided by electrification of buildings based on a comparison of CO₂ emitted to provide the same service (water heating, space heating, etc.) with electricity compared to a fossil fuel. Specifically, we proposed the basic formula:

(Annual average CO₂ emissions from the fossil electric appliances) – ((energy (in kWh) consumed by the electric appliance) * (Xcel Energy's annual system average CO₂ rate per kWh))

To date, the Company has negligible building electrification to report; however, statutory changes like The Energy Conservation and Optimization (ECO) Act, enacted in 2021 may enable additional equipment for electrification in the future. The ECO Act allows "efficient fuel-switching" to be eligible for limited spending as part of the Conservation

⁹ EPA estimates tailpipe emissions of about 404 grams CO₂ per mile for an average gasoline-powered passenger vehicle. See <u>Greenhouse Gas Emissions from a Typical Passenger Vehicle | Green Vehicle Guide | US EPA</u>.

¹⁰ Assigning the Company's 2021 Upper Midwest CO₂ intensity of 0.669 lbs/kWh to the estimated 20,380 EVs not charged on a renewable tariff, and 0 lbs/kWh to the 61 EVs enrolled in Windsource as of December 2021.

 $^{^8}$ 20,941 EVs * 4,284 kWh annual consumption per EV = 89,381,376 kWh estimated total EV charging. (89,381,376 + 329,868) kWh \div 0.397 kWh/mile = 225,972,907 electric miles enabled.

Improvement Program. One type of efficient fuel-switching is a switch from natural gas or other fossil fuels to electricity for building heating. The Company's first triennial plan under the ECO act will be filed on June 1, 2023. Measures and opportunities are still in review at this time.

Additionally, the Company supported passage of the Natural Gas Innovation Act (NGIA) in 2021, and actively engaged in a Minnesota Public Utilities Commission docket to establish lifecycle GHG accounting and cost/benefit analysis frameworks for NGIA, which the Commission adopted in June 2022. ¹¹ NGIA allows natural gas utilities to file five-year Innovation Plans including a range of different "innovative resources," including strategic electrification, which NGIA defines as the installation of electric end-use equipment in existing or new buildings, provided natural gas remains a back-up fuel and certain criteria are met.

Both the ECO Act and NGIA will enable electrification of buildings, agriculture and other sectors. In 2022, we participated in creating the guidance and frameworks that were finalized by the Department of Commerce for ECO and by the Commission for NGIA. The Company is now working on our first NGIA innovation plan and our next CIP triennial plan which we will file in 2023, both of which may include building electrification if the finalized regulations are favorable to it.

We note that part of the process for both ECO and NGIA is the development and adoption of guidance/frameworks for lifecycle GHG accounting. Adopted guidance and frameworks provided necessary structure, but left some details to be finalized with submittal of our first plans. Calculation methods for the environmental performance metric "CO₂ emissions avoided by electrification of buildings, agriculture, and other sectors" may be adjusted to align with the GHG accounting approaches ultimately adopted for efficient fuel-switching in ECO and strategic electrification in NGIA.

Passage of the Inflation Reduction Act, which included tax incentives and point-of-sale rebate programs for building sector electrification, is anticipated to further support adoption of efficient electrification measures in the state. While funding and administration is not directed to utilities, Xcel Energy intends to support the state energy office in implementation. We hope to maximize programs by allowing IRA funds to build on the foundation of existing utility incentives for weatherization and electric appliances.

7. Methane Emissions

Xcel Energy is committed to reducing methane emissions throughout the natural gas supply chain, which includes actions we have taken on the portion of that supply chain

1.

¹¹ Docket No. G999/CI-21-566.

that we control (the natural gas distribution system), as well as efforts to influence our natural gas suppliers to reduce methane emissions on the upstream and midstream portions (production, gathering and boosting, processing, transmission and storage of natural gas before it reaches our distribution system), which are discussed in the subsequent section for environmental performance metric 8.

a. Reducing methane emissions from our system

On the distribution system we own and control, methane emissions are already minimal. We have a long history of implementing operational improvements that reduce methane emissions, including system upgrades and participation in EPA's Natural Gas STAR and Methane Challenge programs. We have significantly reduced emissions from our distribution system primarily through replacing cast iron and unprotected steel pipes with protected steel and plastic. We have replaced all known cast iron distribution mains in Minnesota. At the end of 2022, 91.59% of our distribution mains and 97.29% of our distribution services were plastic, and another 7.69% of our distribution mains and 1.13% of our services were protected steel. A relevant study 12 shows pipe replacement can reduce distribution system emission rates well below the national average. Moreover, the Natural Gas Sustainability Initiative (NGSI) Methane Emissions Intensity Protocol estimates that, compared to cast iron distribution mains with a GHG emission factor of 1,157 kg/mile, protected steel distribution mains have an emission factor of 97 kg/mile and plastic distribution mains 29 kg/mile, 13 showing that converting to plastic and protected steel can dramatically reduce methane emissions. In addition to pipe replacement, we have also worked to avoid natural gas releases during system construction work, increased leak survey frequency, and replaced existing high-bleed controllers with low or no-bleed controllers where possible.

We report methane emissions from the distribution system annually through the EPA Mandatory Greenhouse Gas Reporting Rule, 40 CFR Part 98, Subpart W. Based on our EPA reporting, we estimate the leak rate ¹⁴ from the NSPM distribution system was approximately 0.121% in 2021, the most recent year with data available. This year, we are updating our reporting to provide a leak rate specific to NSPM. In previous years, we had reported a company-wide leak rate because operating company specific methane content values were not initially available. We are also providing updated values for the previous reporting years using assumptions to estimate values for the operating company specific

¹² Direct Measurements Show Decreasing Methane Emissions from Natural Gas Local Distribution Systems in the United States; Brian K. Lamb, Steven L. Edburg, Thomas W. Ferrara, Touché Howard, Matthew R. Harrison, Charles E. Kolb, Amy Townsend-Small, Wesley Dyck, Antonio Possolo, and James R. Whetstone; Environmental Science & Technology 2015 49 (8), 5161-5169; DOI: 10.1021/es505116p.

¹³ NGSI *Methane Emissions Intensity Protocol*, Version 1.0, at pages 33-34. See ngsi methaneintensityprotocol v1.0 feb2021.pdf (aga.org).

¹⁴ MMscf of methane emissions per MMscf of methane throughput.

methodology. The estimate of emissions from our NSPM system is unchanged as compared to last year as a function of the current reporting methodology. The EPA reporting methodology relies on emission factors and equipment counts to calculate methane emissions such that when the size of the system increases, the estimate of emissions increases proportionally. Although the NSPM system size increased and the quantity of natural gas delivered to customers increased in 2021, the methane content of the gas decreased such that the methane emission intensity was unchanged from 2020. Reporting methodologies continue to evolve, and we want to continue to work with the Commission to accommodate evolving protocols that aim to improve emissions measurement accuracy.

In addition to the mandatory EPA reporting, we have joined <u>ONE Future</u>, a coalition of over 50 natural gas companies working to expand emissions reporting and collectively limit methane emission intensity across the entire natural gas supply chain to 1% or less of throughput by 2025. By joining ONE Future, the Company is committing to keep our methane emissions rate at or below 0.2% from the distribution system.

b. Proposed methodology for reporting methane emissions

As discussed above, we report methane emissions from the distribution system annually through the EPA Mandatory Greenhouse Gas Reporting Rule, Subpart W. We propose relying on the EPA reporting to estimate methane emissions from the distribution system. This reporting is independently verified and publicly reported by EPA. Note that because EPA Subpart W data for 2022 is not yet available, the figure included in the Attachment A metrics list for our distribution system methane leak rate is for 2021. Due to the time required for verification, reporting to EPA and publication by EPA, Subpart W data for a prior year is generally not available until the fall of the following year. In the performance metrics annual report each April, we propose to report this metric for two years prior (all other metrics being for the prior year).

As noted above, emissions from upstream and midstream operations are outside of the Company's direct control, and requiring quantitative reporting metrics for reducing these emissions would therefore appear to violate the Commission's design principles in this docket. For this reason, we propose reporting a quantitative metric only for methane emissions on the Company's distribution system. However, in the next section, we provide a qualitative discussion of efforts the Company is taking to influence disclosure of emissions data and emissions reductions from upstream and midstream operations.

8. Upstream Methane Emissions (NEW)

In its February 9, 2022 Order in the instant docket, the Commission included a new requirement as Order Point 6:

Xcel [Energy] must include in its PBR annual reports information on: availability of data specific to its gas suppliers on upstream methane emissions; regulation of methane emissions upstream of the Company's distribution system, and the Company's position on such regulations; participation in voluntary initiatives to quantify and reduce methane from gas suppliers; any certified gas purchases; pilots with gas marketers to track and source gas with lower associated methane emissions; and any other actions the Company has taken to secure data on and/or reduce upstream methane emissions. No later than 2024, the Company will re-evaluate data available on upstream methane to consider feasibility of reporting of methane emissions attributable to total natural gas purchases across the full fuel cycle (from drilling and extraction to the end-use).

Upstream methane emissions data specific to NSP Minnesota's gas suppliers is not available at this time. As explained in our 2020 Annual Report ¹⁵ and discussed further in the December 16, 2021 hearing, NSPM's gas purchasing is not direct from gas producers at the wellhead, but rather from market centers that are aggregating gas supply from multiple sources. Currently we do not have a means to determine the source of each quantity of purchased gas with certainty; suppliers may change daily, and there is no contractual or legal obligation for the seller to provide methane emissions data. Emissions from upstream and midstream operations are outside of the Company's control as they occur before we receive gas. Nonetheless, the Company is working to influence gas producers and suppliers to reduce these upstream and midstream emissions, as well as to improve disclosures of emission data. We describe those efforts here.

The Company was the first major U.S. energy provider to announce aggressive goals for reducing greenhouse gas emissions across three large sectors of the economy: electricity, natural gas use in buildings, and transportation. In 2021, the Company announced a netzero vision for natural gas by 2050, with an interim goal to reduce greenhouse gas emissions 25% by 2030. The 2030 interim goal includes sourcing only certified low-methane emissions natural gas for both power generation and gas distribution and achieving net-zero methane emissions on our gas distribution system. The scope of our net-zero vision for natural gas spans the entire supply chain from upstream production to customer end use. For more information, please see our report, Net-Zero Vision for Natural Gas.

Regarding the Company's position on regulation of upstream methane emissions, on January 31, 2022, we submitted a comment letter in general support of EPA's direct regulation of methane emissions from the upstream oil and gas sector. The proposed rule establishing new source performance standards (NSPS) and emissions guidelines (EG)

¹⁵ 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. E002/CI-17-401. 2020 ANNUAL REPORT. April 30, 2021, pages 16-17.

for the Crude Oil and Natural Gas source category under the Clean Air Act was published in the Federal Register on November 15, 2021, (86 FR 63110). EPA estimates the proposed rule would reduce methane by 41 million metric tons from 2023-2035 (920 MT CO₂e), a 75% reduction from covered sources by 2030 compared to 2005. Please see the Company's letter to EPA, provided as Attachment C.

The Company also participates in voluntary initiatives to quantify methane from gas suppliers and to reduce upstream emissions. Starting with gas procurement for 2021, we included in our request for purchase proposals a voluntary request for disclosure of methane intensity based on the Natural Gas Sustainability Initiative's Methane Emissions Intensity Protocol and best practices. Thus far, no producers in the upper Midwest have provided the requested voluntary information. However, as noted above, since the gas supply is aggregated at a market center from various potential upstream sources, sellers may not be able to specify a unique source for the supply.

Additionally, the Company is actively engaged in ONE Future, a coalition of over 50 natural gas companies representing more than 20% of the U.S. natural gas value chain working to expand emissions reporting and collectively limit methane emission intensity across the entire natural gas supply chain to 1% or less of throughput by 2025. In 2021, ONE Future members across all segments (production, gathering and boosting, processing, transmission and storage, and distribution) collectively achieved an intensity of 0.462%. The following methane intensities were achieved by members in the upstream and midstream sectors individually:

- production sector achieved 0.152%, beating the 2025 target of 0.283%
- gathering and boosting sector achieved 0.080%, meeting the 2025 target of 0.080%
- processing sector achieved 0.027%, beating the 2025 target of 0.111%
- transmission & storage sector achieved 0.089%, beating the 2025 target of 0.301%

Regarding "certified natural gas" (CNG) purchases and pilots, the Company continues to monitor and support the growing market for CNG, i.e. natural gas that has been certified by an independent third party to be produced with a low methane intensity and advanced technology to measure and monitor methane emissions. Recently, the Company set ambitious goals for its natural gas business, which includes CNG purchasing, as discussed above. However, we are still early in the implementation process, and it may take several years for sellers to be able to provide methane intensity certificates for gas purchases at market centers where direct purchasing from producers is not available. We will continue to report progress on this front in future annual reports.

We are working to support growth of the market for certified natural gas which is produced with leading best practices and advanced monitoring to significantly reduce methane emissions during production. The methane intensity of gas production is verified by an independent third-party to create a certified gas product with an associated certificate. To date, we have completed nine pilot purchases of certified natural gas in our territories. To support transparency in reporting of upstream methane emissions and grow the supply and transactability of certified natural gas we have joined the Differentiated Gas Coordinating Council (DGCC). The DGCC is working with federal agencies and legislators to support policies to reduce methane emissions throughout the gas supply chain.

The Company made one CNG purchase for NSP Minnesota. We buy from market centers for NSP Minnesota, where CNG sourcing is currently limited. CNG sourcing is more feasible in the near term in the Company's Colorado service territory, where there is opportunity to purchase natural gas direct from producers.

When conducting our annual spring gas purchase auctions for Minnesota, we request CNG bids as well as traditional gas supply bids. However, until the CNG production market further develops, we expect a limited amount of certified gas to be available, so we do not expect significant quantity offers in the near term.

We plan to work with the Commission to develop strategy for the purchase of CNG and the recovery of related costs in the future. CNG purchases are not currently addressed within the gas supply plans we submit to the Commission. If CNG suppliers demand a market premium for CNG products, we must address this issue with the Commission before committing to purchases with a higher cost than standard natural gas. There are several possible regulatory mechanisms that could be used to address CNG purchases, including a new miscellaneous docket regarding monthly purchased gas costs, future gas rate cases, or in one of the dockets related to the Natural Gas Innovation Act such as Docket No.G999/CI-21-565.¹⁶

9. Inclusion of Upstream Methane in Calculation of GHG Emissions Avoided by Electrification of Buildings, Agriculture and Other Sectors (NEW)

In its February 9, 2022 Order in the instant docket, the Commission included a new requirement as Order Point 7:

Xcel |Energy| must include in its report, once the Commission has determined adequate

¹⁶ In the Matter of a Commission Evaluation of Changes to Natural Gas Utility Regulatory and Policy Structures to Meet State Greenhouse Gas Reduction Goals. PUC Docket Number: G999/CI-21-565. Noticed July 23, 2021.

data on upstream methane is available to support utility-specific reporting of such emissions, methane emissions across the full fuel cycle in its calculation of greenhouse gas emissions avoided by electrification of buildings, agriculture, and other sectors.

As described in No. 8 above, adequate data on upstream methane is not yet available to support utility-specific reporting of such emissions. The Company will continue to report on its efforts to improve upstream methane data and reduce upstream methane emissions in future annual reports. Once the Commission has determined adequate data is available, the Company will begin including avoided upstream methane emissions in its calculation of greenhouse gas emissions avoided by electrification of buildings, agriculture, and other sectors.

III. STAKEHOLDER DISCUSSIONS AND ASSOCIATED FILING REQUIREMENTS

The Commission's April 16, 2020 and February 9, 2022, Orders directed the Company to engage in stakeholder discussions and development of a demand response financial incentive as well as feedback on our proposed performance scorecard. We provide additional detail on each of these requirements below.

A. Demand Response Financial Incentive

Page 8 and Order Point 1.f. of the Commission's Order directed Xcel Energy to work with stakeholders and the Department to develop a demand response financial incentive. Order Point 1.f. states as follows:

[F]urthermore, 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.

In compliance with that Order, the Company filed an incentive proposal in Docket No. E002/M-21-101. Although the Commission did not approve the incentive in their hearing held on January 6, 2022, the Company was encouraged to address future incentives for demand response through the Conservation Improvement Plan as

contemplated by the Energy Conservation and Optimization Act of 2021 (ECO) and found in Minnesota Statute § 216B.2401.¹⁷

B. Dashboard

The Commission issued a February 9, 2022 Order directing the Company to:

[H]ost one or more stakeholder meetings for stakeholders to ask questions and provide feedback on the proposed scorecard.

Information regarding stakeholders meetings and feedback on dashboard development in compliance with the February 9, 2022 Order was included in our 2021 PBR Annual Report that is currently pending hearing.

C. Work With Stakeholders to Develop Evaluation Criteria and Benchmarks and File Them at a Later Date

The Commission's April 16, 2020 Order identified a future step, to develop evaluation criteria and benchmarks with stakeholders. Specifically, the Order states:

[S]imilarly, 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.

Further, the Order also notes our position on benchmark development:

[X] cel 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.

We requested the Commission consider three years of annual report data (2021 through 2023 reports for 2020 through 2022 data) prior to developing the benchmarking criteria. We believe this provides an adequate timeframe to develop a record and for all parties to meet to assess appropriate benchmarking criteria. This position was supported by most stakeholders, and the Commission approved the request in its February 9, 2022 Order:

¹⁷ See HF 164 passed in 2021.

[P]rovide three years of data before developing evaluation and benchmarking targets for the performance metrics.

If and when the Commission determines an appropriate time to begin the next stage of evaluation and benchmarking criteria discussions, the Company is happy to engage.

D. Workforce Transition Plan

In its February 9, 2022, Order, the Commission approved our proposed Workforce Transition Plan.

[T]he Commission adopts the Workforce Transition metric; Xcel [Energy] must obtain additional stakeholder feedback on the plan as it is developed for the 2021 annual performance metrics report.

Request to move reporting into new Workforce Transition docket

There is significant overlap in reporting of the Workforce Transition Plan (Plan) in this docket and Docket No. E002/M-22-265, the Workforce Transition docket, which was opened on June 30, 2022 as required by the Commission's Order in our most recent Integrated Resource Plan (IRP). ¹⁸ We believe it is most efficient to report on the Plan in the Workforce Transition docket. The annual update requirements for the Plan are more robust in the Commission's IRP Order; our reporting based on those requirements provides a comprehensive illustration of our ongoing work with plant employees and stakeholders during the clean energy transition. Pending Commission hearing on our 2021 PBR Annual Report requesting to transfer the duplicative Workforce Transition Plan reporting to the new, dedicated docket, we include a copy of the December 22, 2022 Workforce Transition Plan as Attachment D. ¹⁹ If the Commission would like us to continue submitting updates in this docket, we will use our most recent comprehensive plan filed annually at the end of December in the Workforce Transition docket.

CONCLUSION

In conclusion, we have provided reporting for the 33 metrics that the Commission approved on April 16, 2020 and February 9, 2022 for the period of January, 1 2022 through December 31, 2022.

¹⁸ See Docket No. E002/RP-19-368, ORDER APPROVING PLAN WITH MODIFICATIONS AND ESTABLISHING REQUIREMENTS FOR FUTURE FILINGS at Order Point 24 (April 15, 2022).

¹⁹ The Department's November 1, 2022 Letter in this docket recommended the Commission, via consent calendar, transfer workforce transition reporting to the Workforce Transition docket.

We welcome any questions the Commission and parties may have about our 2022 Performance Metrics Annual Report and look forward to providing future annual updates. Thank you for the continued opportunity to participate in this proceeding.

Dated: April 28, 2023

Northern States Power Company

			METRICS TRACKING RESULTS AND EVALUATIONS						
OUTCOME	COMMISSION-APPROVED METRIC	Reporting Status APPROVED CALCUL REPORT AN		2022	2021	2020	2019	2018	2017
rdability 1	Rates per kWh based on total revenue, reported (1) by customer class and (2) with all classes aggregated	Began in 2020 PBR NSPM-MN customers only. Report		 Residential: \$0.15601/kWh Commercial: \$0.13256/kWh Industrial: \$0.10263/kWh Total Customers: \$13243/kWh 	 Residential: \$0.13921/kWh Commercial: \$0.11576/kWh Industrial: \$0.08996/kWh Total Customers: \$0.11689/kWh 	 Residential: \$0.13740/kWh Commercial: \$0.10494/kWh Industrial: \$0.07975/kWh Total Customers: \$0.10908/kWh 	 Residential: \$0.13625/kWh Commercial: \$0.10400/kWh Industrial: \$0.08023/kWh Total Customers: \$0.10724/kWh 	 Residential: \$0.14147/kWh Commercial: \$0.10549/kWh Industrial: \$0.08138/kWh Total Customers: \$0.10957/kWh 	 Residential: \$0.13786/kWh Commercial: \$0.10805/kWh Industrial: \$0.07839/kWh Total Customers: \$0.10840/kWh
2	Average monthly bills for residential customers	Began in 2020 PBR Report annually: Report Total Annual Residentia Total Number of Residentia		\$98.62	\$90.72	\$88.28	\$83.74	\$91.30	\$84.75
3	Total disconnections for nonpayment for residential customers	Reported Prior to PBR Continue same system-generated disconnections for nonpayment u (QSP) reports, Cold Weather Rule Income Discount reporting. Proceedings of monthly decommission-approved template process.	d process to determine total used in Quality Service Plan e, and Annual Electric Low ess includes internal system-disconnections on a	9,263	6,062	2,819	14,939	16,218.00	17,777
4	Total arrearages for residential customers	Reported Prior to PBR Continue same calculation process arrearages for reporting in Quality Cold Weather Rule, and Annual El reporting. Process includes intern reporting of monthly bad debt who company, customer type, active/i overdue.	y Service Plan (QSP) reports, lectric Low Income Discount nal system-generated here arrears are calculated by	\$88,482,147	\$82,753,364	\$60,838,363	\$44,976,724	\$44,895,753.00	\$40,898,573.00
bility	Customs Augusta Intermedian Dunstian Index	Departed Drieg to DDD Depart with and without major of	vant dava	All Davis, 104.42	All Days 120.04	All Davis, 124.10	All Davis, 124 FO	All Davis, 125 00	All Davis, 444.70
1	System Average Interruption Duration Index (SAIDI): Indicates average interruption duration per customer during defined period of time.	Reported Prior to PBR Report with and without major examples and substained Custome Total Number of Custome "Sustained event" = duration of moder Point: Direct Xcel to use a consistent with the Commission's Annual Service Quality, Safety, an reporting their SAIDI, SAIFI, CAIDI docket.	er Interruption Durations omers Served nore than 5 minutes Normalization method s most recent Order in the nd reliability docket in	All Days: 184.42 Annual Rules Normalized: 90.00	All Days: 129.94 Annual Rules Normalized: 88.79	All Days: 134.19 Annual Rules Normalized: 98.92	All Days: 124.50 Annual Rules Normalized: 81.02	All Days: 125.00 Annual Rules Normalized: 96.07	All Days: 141.70 Annual Rules Normalized: 75.04
2	System Average Interruption Frequency Index	Reported Prior to PBR Use Jan–Dec each year to align wi			All Days: 1.04	All Days: 1.07	All Days: 0.86	All Days: 0.95	All Days: 0.90
	(SAIFI): Indicates average number of sustained interruptions per customer over defined period of time.	Sum of Total Sustained Custo Total Number of Cust Order Point: Direct Xcel to use a	omers Interrupted comers Served	Annual Rules Normalized: 0.86	Annual Rules Normalized: 0.92	Annual Rules Normalized: 0.99	Annual Rules Normalized: 0.75	Annual Rules Normalized: 0.89	Annual Rules Normalized: 0.74
		consistent with the Commission's Annual Service Quality, Safety, an reporting their SAIDI, SAIFI, CAIDI docket.	nd reliability docket in						
3	Customer Average Interruption Duration Index (CAIDI): Indicates average time to restore service to customers that have been interrupted from sustained event.	Reported Prior to PBR Report with and without major ex Sum of Total Sustained Custome Sum of Total Sustained Custome	er Interruption Durations	All Days: 170.24 Annual Rules Normalized: 104.05	All Days: 124.67 Annual Rules Normalized: 96.31	All Days: 124.89 Annual Rules Normalized: 100.28	All Days: 145.30 Annual Rules Normalized: 108.29	All Days: 131.22 Annual Rules Normalized: 107.39	All Days: 158.10 Annual Rules Normalized: 100.90
		Order Point: Direct Xcel to use a consistent with the Commission's Annual Service Quality, Safety, an reporting their SAIDI, SAIFI, CAIDI docket.	s most recent Order in the nd reliability docket in						
4	Customers Experiencing Long Interruption	Reported Prior to PBR Report with and without major ex	vent days. Proposed formula:	All Days: .0835%	All Days 0.496%	All Days: 0.339%	All Days: 0.562%	All Days: 0.748%	All Days: 1.030%
	Duration (CELID): Indicates ratio of customers experiencing interruptions with duration equal to or greater than "d" during defined period of time.	Total Number of Customers interruptions of "d" or more Total Number of Custo Propose "d" = 24 hours. Consister	e hours duration omers Served	Annual Rules Normalized: .0034%	Annual Rules Normalized: 0.113%	Annual Rules Normalized: 0.133%	Annual Rules Normalized: 0.047%	Annual Rules Normalized: 0.051 %	Annual Rules Normalized: 0.078 %
		Plan, where customers experience more receive \$50 bill credit for ear longer than 24 hours. Order Point: Direct Xcel to use a	sing outage of 24 hours or ach outage occurrence lasting						
		consistent with the Commission's Annual Service Quality, Safety, an reporting their SAIDI, SAIFI, CAIDI docket.	s most recent Order in the nd reliability docket in						
5	Customers Experiencing Multiple Interruptions (CEMI): Indicates ratio of individual customers experiencing more than "n" sustained interruptions to total number of customers served.	Reported Prior to PBR Report with and without major ex Total Number of Customers more than "n" sustaine Total Number of Cust	s that experience ed interruptions	All Days: 0.786% Annual Rules Normalized: 0.421%	All Days: 0.674% Annual Rules Normalized: 0.467%	All Days: 0.538% Annual Rules Normalized: 0.366%	All Days:0.450 % Annual Rules Normalized: 0.137%	All Days: 0.699% Annual Rules Normalized: 0.591%	All Days: 0.523% Annual Rules Normalized: 0.231%
		Propose "n" to be 5 sustained into annual Service Quality Report, who more than 5 sustained interruption credit.	nere customers experiencing						
		Order Point: Direct Xcel to use a consistent with the Commission's Annual Service Quality, Safety, an reporting their SAIDI, SAIFI, CAIDI docket.	s most recent Order in the nd reliability docket in						

OUTCOME	COMMISSION-APPROVED METRIC	Reporting Status	APPROVED CALCULATION METHOD REPORT ANNUALLY	2022	2021	2020	2019	2018	2017
6	Average Service Availability Index (ASAI): Similar to SAIDI - is percentage of time service is available. (Whereas SAIDI is average total amount of time service is unavailable.)		,	All Days: 99.9649% Annual Rules Normalized: 99.9829%	All Days: 99.9752% Annual Rules Normalized: 99.9831%	All Days: 99.9745% Annual Rules Normalized: 99.9812%	All Days: 99.9763% Annual Rules Normalized: 99.9846%	All Days: 99.9762% Annual Rules Normalized: 99.9817%	All Days: 99.9730% Annual Rules Normalized: 99.9857%
7	Momentary Average Interruption Frequency Index (MAIFI _E): The amount of momentary interruptions a customer would experience during a period of time.	but not with AMI technology. Propose and Tracking in 2026, Report in 2027	Report with and without major event days: Sum of Total Momentary Customer Interruptions Total Number of Customers Served Momentary events = having duration of less than or equal to 5 minutes.	Discussion in narrative.	Discussion in narrative.	Discussion in narrative.	NA	NA	NA
8	Power Quality	capacilities are	None currently. Could be tracked, and percent of customer exceptions can be reported with AMI data. Specific capabilities still being developed and will be determined over the coming years.	Discussion in narrative.	Discussion in narrative.	Discussion in narrative.	NA	NA	NA
Customer Service Quality									
1	Existing multi-sector metrics, including ACSI and J.D. Power (NSPM)		Reporting from Xcel Energy's subscription to J.D. Power and public information published by ACSI.		_content&view=article&id=149&catid=&Itemid=	J.D. Power discussion in narrative. ACSI Study: https://www.theacsi.org/index.php?option=com=_content&view=article&id=149&catid=&Itemid=214&i=Investor-Owned+Energy+Utilities	NA	NA	NA
2	Call center response time: Measures telephone response time.	Reported Prior to PBR	Calls answered by a call center representative within 20 seconds + all calls handled via self-service in the Interactive Voice Response (IVR) system Total calls into our call centers or business office	84.59%	82.90%	85.8%	90.80%	91.12%	90.10%
3	Billing invoice accuracy: Measures percent of accurate invoices Xcel Energy issues to customers.	Reported Prior to PBR	Number of invoices canceled for controllable reasons Total number of invoices issued "Controllable reasons" = human errors made by field or office personnel, billing system and metering system communications errors, and malfunctioning meter equipment.		37,222 controllable cancel rebills in 2021, 24,936,261 invoices sent in 2021. Data is from M2M Detailed Reports 37,222/24,936,261 = 99.85% accurate	39,983 controllable cancel rebills in 2020, 21,702,130 invoices sent in 2020. Data is from M2M Detailed Reports 39,983/21,702,130 = 99.82% accurate	35,358 controllable cancel rebills in 2019, 24,193,752 invoices sent in 2019. Data is from M2M Detailed Reports 35,358/24,193,752 = 99.83% accurate	29,894 controllable cancel rebills in 2018, 21,222,643 invoices sent in 2018. Data is from M2M Detailed Reports 29,894/21,222,643 = 99.86% accurate	39,196 controllable cancel rebills in 2017, 21,029,969 invoices sent in 2017. Data is from M2M Detailed Reports 39,196/21,029,969 = 99.85% accurate
4	Number of customer complaints: Measures number of complaints based on number of complaints per 1,000 customers to regulatory agencies to ensure performance is measured in relation to total customer base.	Reported Prior to PBR	Number of MPUC Complaints < Number of Customers/1000 x 0.2059	1,823,353/ 1000 x 0.2059= 375 330 MPUC complaints by Xcel Energy < 375 2022 Threshold per QSP calculation The calculation for the per 1000 customers is: 1,823,353 Customers/1000 = 1823.353 numbe of complaints 330: Calculation 330/1823.353 =.1810 which is less than the .2059 threshold.	Threshold per QSP calculation The calculation for the per 1000 customers is: 1,803,744 r Customers/1000 = 1803.744 number of complaints 257: Calculation 257/1803.744	1,782,621/1000 x 0.2059= 367 239 MPUC complaints by Xcel Energy < 367 2020 Threshold per QSP calculation The calculation for the per 1000 customers is: 1,782,621 Customers/1000 = 1782.621, number of complaints 239: Calculation 239/1782.621 =.1341 which is less than the .2059 threshold.	367 2019 Threshold per QSP calculation The calculation for the per 1000 customer is: 1,765,013 Customers/1000 = 1765.013, number of complaints 396: Calculation	calculation for the per 1000 customers is: 1,749,615 Customers/1000 = 1749.615 number of complaints 248: Calculation	357 2017 Threshold per QSP calculation The calculation for the per 1000 customers is: 1,734,941 Customers/1000 = 1734.941, number of complaints 113: Calculation

COMMISSION-APPROVED METRIC	Reporting Status	APPROVED CALCULATION METHOD REPORT ANNUALLY	2022	2021	2020	2019	2018	2017
Total carbon emissions by: (1) utility-owned facilities and PPAs and (2) all sources	Began in 2020 PBR Report	Registry (TCR) by data "pools." • Pool 1 = owned zero-emission facilities	12,612,098 tons	tons	tons	15,193,303 tons	(a) Utility-owned facilities and PPAs = 17,132,871 tons (b) All sources = 18,549,479 tons	(a) Utility-owned facilities and PPAs =17,537,080 tons(b) All sources = 18,891,471 tons
	equipped with continuous emission (CEMS) • Pool 3 = owned fossil EGUs not endemone and spot-pure sources (to which we can ascribe and pool 6 = short-term and spot-pure unknown sources in MISO market (specific pool 6).							
		facilities and PPAs only, include Pools 1-4 only. In calculating emissions from all sources, include Pools 1						
		We include CO2 from MISO market purchases, but deduct CO2 from trade margin sales, since this energy does not serve customers, and if energy purchasers report this CO2, would result in double-counting.						
Carbon intensity (emissions per MWh) by: (1) utility-owned facilities and PPAs and (2) all	Began in 2020 PBR Report	divide total CO2 from Pools 1-4 by total generation (MWh) for		(a) Utility -owned facilities and PPAs = 667 pounds per MWh	(a) Utility -owned facilities and PPAs = 640 pounds per MWh	(a) Utility-owned facilities and PPAs = 760 pounds per MWh	(a) Utility-owned facilities and PPAs = 829 pounds per MWh	(a) Utility-owned facilities and PPAs = 865 pounds per MWh
Jources	MW For Poo	· · · · · · · · · · · · · · · · · · ·	(b) All sources = 603 pounds per MWh.	(b) All sources = 669 pounds per MWh.	(b) All sources = 643 pounds per MWh.	(b) All sources = 786 pounds per MWh	(b) All sources = 857 pounds per MWh	(b) All sources = 893 pounds per MWh
		We include CO2 from MISO market purchases, but deduct CO2 from trade margin sales, since this energy does not serve customers, and if energy purchasers report this CO2, would result in double-counting.						
Total criteria pollutant emissions	Began in 2020 PBR Report	only. Nitrous oxide (NOx) and sulfur dioxide (SO2) emissions are tracked based upon state and federal monitoring requirements. Various emissions monitoring methods are used, depending upon facility and pollutant, including CEMS, fuel flow and fuel analysis. For particulate matter (PM), emissions are tracked based on	 SO2: 3,354 tons PM: 492 tons Mercury: 0.0376 tons Lead: 0.0635 tons Additional discussion in narrative	 NOx: 7,318 tons SO2: 3,886 tons PM: 541 tons Mercury: 0.0378 tons Lead: 0.0563 tons Additional discussion in narrative	 NOx: 6,050 tons SO2: 3,356 tons PM: 472 tons Mercury: 0.0435 tons Lead: 0.0532 tons Additional discussion in narrative	 NOx: 7,919 tons SO2: 4,695 tons PM: 554 tons Mercury: 0.0375 tons Lead: 0.0615 tons Additional discussion in narrative	 NOx: 9,550 tons SO2: 6,634 tons PM: 648 tons Mercury: 0.0355 tons Lead: 0.0730 tons Additional discussion in narrative	 NOx: 9843 tons SO2 5728 tons PM: 1006 tons Mercury: 0.0325 tons Lead: 0.0785 tons Additional discussion in narrative
Criteria pollutant emission intensity per MWh	Began in 2020 PBR Report	for "Total criteria pollutant emissions," and then divide those figures by total MWh of generation to derive criteria pollutant emission intensity.	• SO2: 0.216 pounds per MWh	 NOx: 0.479 pounds per MWh SO2: 0.254 pounds per MWh PM: 0.035 pounds per MWh Mercury: 0.000002 pounds per MWh Lead: 0.000004 pounds per MWh 	 NOx: 0.416 pounds per MWh SO2: 0.231 pounds per MWh PM: 0.032 pounds per MWh Mercury: 0.000003 pounds per MWh Lead: 0.000004 pounds per MWh 	 NOx: 0.509 pounds per MWh SO2: 0.302 pounds per MWh PM: 0.036 pounds per MWh Mercury: 0.000002 pounds per MWh Lead: 0.000004 pounds per MWh 	 NOx: 0.575 pounds per MWh SO2: 0.400 pounds per MWh PM: 0.039 pounds per MWh Mercury: 0.000002 pounds per MWh Lead: 0.000004 pounds per MWh 	 NOx: 0.619 pounds per MWh SO2: 0.360 pounds per MWh PM: 0.000002 pounds per MWh Mercury: 0.000005 pounds per MWh Lead: pounds per MWh
CO2 emissions avoided by electrification of transportation – Alternative & Original approach	Began in 2020 PBR Report	participating in managed charging programs or on whole-house	• 2,271	• 8.61% • 1,761 • 20,449	7.23% Additional discussion in narrative.	6.16%	4.50%	3.39%
CO2 emissions avoided by electrification of transportation – Alternative & Original approach	Began in 2020 PBR Report	charging load occurring during off-peak hours. Proposed	• 6,509.61 MWh • 7,487.12 MWh	• 89.5% • 4,847 MWh • 5,415 MWh	93.9% Additional discussion in narrative.	94.0%	92.8%	92.70%
	Total carbon emissions by: (1) utility-owned facilities and PPAs and (2) all sources Carbon intensity (emissions per MWh) by: (1) utility-owned facilities and PPAs and (2) all sources Total criteria pollutant emissions Criteria pollutant emission intensity per MWh CO2 emissions avoided by electrification of transportation — Alternative & Original approach	Total carbon emissions by: (1) utility-owned facilities and PPAs and (2) all sources Carbon intensity (emissions per MWh) by: (1) utility-owned facilities and PPAs and (2) all sources Total criteria pollutant emissions Total criteria pollutant emissions Criteria pollutant emission intensity per MWh Co2 emissions avoided by electrification of transportation – Alternative & Original approach CO2 emissions avoided by electrification of Began in 2020 PBR Report CO2 emissions avoided by electrification of Began in 2020 PBR	Total carbon emissions by: 13 utility-owned facilities and PPAs and (2) all sources Page	Total cathering natures any (1), stalley owned continues and PPAs and (2) all sources are discussed and pPAs	Position de Notes (1994) de la control de la	The professional professional and security of the procession of th	The continuation and continue The continuation of the continue The continue	Company Comp

ОИТСОМЕ	COMMISSION-APPROVED METRIC	Reporting Status	APPROVED CALCULATION METHOD REPORT ANNUALLY	2022	2021	2020	2019	2018	2017
5(c)	CO2 emissions avoided by electrification of transportation – Alternative & Original approach	Began in 2020 PBR Report	includes the following with additional detail given in the narrative: • Calculation of the total annual kWh consumption by EVs in	Additional discussion in narrative.	76,895 tons Additional discussion in narrative.	53,784 tons Additional discussion in narrative.	39,355 tons Additional discussion in narrative	31,376 tons Additional discussion in narrative	25,857 tons Additional discussion in narrative
6	CO2 emissions avoided by electrification of buildings, agriculture, and other sectors	Began in 2020 PBR Report	•	Additional discussion in narrative re CIP/ECO and NGIA.	No quantitative results to report for 2021. Additional discussion in narrative.	No quantitative results to report for 2020 Additional discussion in narrative.	No quantitative results for 2019	No quantitative results for 2018	No quantitative results for 2017
7	Discussion of methane emissions, including proposed methodology for reporting	Began in 2020 PBR Report	ordered by Commission (April 16, 2020 Order, order point 1.d) In Reply comments address our position i. Fresh Energy's proposed methane leakage rate value of 3%; the Department's recommended leakage rate of 1.87% (Department changed to .2% at the hearing); or None or <.2% based on reporting to the EPA under subpart W of the GHG Reporting Program.	W, the methane emission rates on the gas distribution system controlled by Xcel Energy was 0.121% for NSPM and 0.163% enterprise wide. Note that for this Environmental Performance metric only, the reported data is for 2021, not	In 2020 as reported to EPA Mandatory Greenhouse Gas Reporting Rule under Subpart W, the methane emission rates on the gas distribution system controlled by Xcel Energy was 0.121% for NSPM and 0.146% enterprise wide. Note that for this Environmental Performance metric only, the reported data is for 2020 not 2021, since Subpart W data for 2021 is not yet available as of April 2022. Additional discussion in narrative.	In 2019 as reported to EPA Mandatory Greenhouse Gas Reporting Rule under Subpart W, the methane emission rates on the gas distribution system controlled by Xcel Energy was 0.107% for NSPM and 0.144% enterprise wide. Note that for this Environmental Performance metric only, the reported data is for 2019 not 2020, since Subpart W data for 2020 is not yet available as of April 2021. Additional discussion in narrative.	NA	NA	NA
8	Require Xcel Energy to include in its PBR annual reports information on: availability of data specific to its gas suppliers on upstream methane emissions; regulation of methane emissions upstream of the Company's distribution system, and the Company's position on such regulations; participation in voluntary initiatives to quantify and reduce methane from gas suppliers; any certified gas purchases; pilots with gas marketers to track and source gas with lower associated methane emissions; and any other actions the Company has taken to secure data on and/or reduce upstream methane emissions. No later than 2024, the Company will re-evaluate data available on upstream methane to consider feasibility of reporting of methane emissions attributable to total natural gas purchases across the full fuel cycle (from drilling and extraction to the end-use).	Began in 2021 PBR Report		Additional Discussion in narrative.	Additional Discussion in narrative.	New metric for 2021. Nothing reported for 2020.	NA NA	NA NA	NA NA
9	Once the Commission has determined adequate data on upstream methane is available to support utility-specific reporting of such emissions, methane emissions across the full fuel cycle in its calculation of greenhouse gas emissions avoided by electrification of buildings, agriculture, and other sectors.	New / TBD		May be dependent on 2021 hearing outcome.	We do not report yet.	New metric for 2021. Nothing reported for 2020.	NA	NA	NA

ОИТСОМЕ	COMMISSION-APPROVED METRIC	Reporting Status	APPROVED CALCULATION METHOD REPORT ANNUALLY	2022	2021	2020	2019	2018	2017
ost Effective Alignment of eneration and Load									
1	Demand response, including (1) capacity available (MW & MWh) and (2) amount called (MW, MWh per year)	Reported Prior to PBR	System Generated	(1)Total Capacity Available in MN 772 Gen. MW and 165,134 Gen. MWh. (2) Total Actual Capacity called (2022) 0 Gen. MW and 1,671 Gen. MWh.	(1)Total Capacity Available in MN (summer 2021) 764 Gen. MW and 147,466 Gen. MWh. (2) Total Actual Capacity called (2020) 0 Gen. MW and 2,192 Gen. MWh.	Total Capacity Available in MN (summer 2020) 755 Gen. MW and 155,967 Gen. MWh. Total Actual Capacity called (2020) 0 Gen. MW and 1,066 Gen. MWh.	Total Capacity Available in MN (summer 2019) 749 Gen. MW and 165,807 Gen. MWh. Total Actual Capacity called (2019) Gen. MW and 2,633 Gen. MWh.	Total Capacity Available in MN (summer 2018) 718 Gen. MW and 150,451 Gen. MWh. Total Actual Capacity called (2018) 4 Gen. MW and 576 Gen. MWh.	Total Capacity Available in MN (summer 2017) 658 Gen. MW and 134,140 Gen. MWh. Total Actual Capacity called (2017) 342 Gen. MW and 755 Gen. MWh.
2	Integration of customer loads with utility supply - Amount of demand response that SHAPES customer load profiles through price response, time varying rates, or behavior campaigns.		Actual MW at system peak hour before and after rate initiation or the start of a behavioral program. As these programs mature it, will be necessary to determine how participants load would have grown over time without the program. Forecasted load avoided will be based on actual trends over time.	time of use rates are still being reviewed as	of use rates are still being reviewed as part of our pilot efforts.	Shaping activities such as fuel switching and time of use rates are still being reviewed as part of our pilot efforts. Additional discussion in narrative.	e NA	NA	NA
3	Integration of customer loads with utility supply - Amount of demand response that SHIFTS energy consumptions from times of high demand to times when there is a surplus of renewable generation.		Available MWh during times contingency events and/or shifts to particular times of the day over time. Calculations would likely be based on assumptions until a larger population of customers can be analyzed through a measurement and verification process to verify reduction in load. This calculation is the only demand respond type that will not forecast specific load – only actual shifting will be measured.		II Shifting activities such as fuel switching and time of use rates are still being reviewed as part of our pilot efforts . Additional discussion in narrative.	Shifting activities such as fuel switching and time of use rates are still being reviewed as part of our pilot efforts. Additional discussion in narrative.	e NA	NA	NA
4(a) continued	Integration of customer loads with utility supply-Amount of demand response that SHEDS loads that can be curtailed to provide peak capacity and supports the system in contingency events for Available Load	Report	Customers with interval data to determine the actual potential demand reduction during an event, the Company completes an	MW and 165,134 Gen. MWh. (2) Total Actual Capacity called (2022) 0 Gen. MW and 1,671 Gen. MWh.	Total Capacity Available in MN (summer 2021) 764 Gen. MW and 147,466 Gen. MWh.	Total Capacity Available in MN (summer 2020) 755 Gen. MW and 155,967 Gen. MWh.	Total Capacity Available in MN (summer 2019) 749 Gen. MW and 165,807 Gen. MWh.	Total Capacity Available in MN (summer 2018) 718 Gen. MW and 150,451 Gen. MWh.	Total Capacity Available in MN (summer 2017) 658 Gen. MW and 134,140 Gen. MWh.
4(b)	Integration of customer loads with utility supply -		simulating interruptions for each hour given the two types of cycling strategies. The estimated potential load relief kW per customer is the difference between the observed load and the assumed cycling strategy of smart and standard switches. We estimate the potential load relief for all hours during the collection period (using the most current year data) by estimating the allowed hourly duty cycle that would be achieved by control and subtracting it from the observed kW load. The allowed duty cycle represents a simulation of the load level the AC would be controlled down to. • We then average these individual load relief estimates per hour per customer class - residential or commercial. Next, using the average sample customer load relief estimates for the group from non-interrupt days across the summer, we build linear regression models with regressing sample load relief estimates against Temperature Humidity Index (using a rolling 5 year timeframe). • From those regressions, a final model is selected based on statistical merit, to which we then apply corresponding system peaking weather conditions to derive a kW per customer load relief value.		Total Actual Capacity called (2020) 0 Gen. MW	Total Actual Capacity called (2020) 0 Gen. MW	Total Actual Capacity called (2019) 0 Gen.	Total Actual Capacity called (2018) 4 Gen.	Total Actual Capacity called (2017) 342
4(u)	Amount of demand response that SHEDS loads that can be curtailed to provide peak capacity and supports the system in contingency events - for Actual Load Reduction Achieved	Report	during an event. We measure actual load by hour compared to the delta between the actual load and the estimated load that would have occurred without the interruption. This metric will be broken up by event for emergency and contingency events.	MW and 165,134 Gen. MWh. (2) Total Actual Capacity called (2022) 0 Gen. MW and 1,671	and 2,192 Gen. MWh.	and 1,066 Gen. MWh.	MW and 2,633 Gen. MWh.	MW and 576 Gen. MWh.	Gen. MW and 755 Gen. MWh.
4(c)	Metrics that measure the effectiveness and success of items above, individually and in aggregate.	Report	Load factor for load net of variable renewable generation. Measurement will help determine how well Xcel Energy is shaping load to integrate with most cost-effective supply including demand response, energy efficiency and DERs. The closer to one the measurement is, the more load is being shaped.	40.50%	41.20%	46.79% Annual Load Factor for load net of renewable generation (w/o Hydro being considered renewable) Additional discussion in narrative.	52.05%	51.68%	51.72%

OUTCOME	COMMISSION-APPROVED METRIC	Reporting Status	APPROVED CALCULATION METHOD REPORT ANNUALLY	2022	2021	2020	2019	2018	2017
Workforce Community Development									
1	Workforce plan with data relative to plant closures to analyze attrition, skill gaps, workforce impacts, etc., and plan to address impacts as result of plant closures.	Began in 2021 PBR Report	Submit a draft comprehensive and prescriptive workforce transition plan annually and leading up to the closure of each coal fired generating unit. The "workforce transition plan" (WFTP) will include forecasted attrition, workforce impacts, solutions, and estimated solution costs. The report will evolve and forecasts will be refined as each plant nears closure, based on an employees aspirations and the decisions they choose for themselves. Per Commission Order, the Company will perform outreach to additional labor organizations and other representative organizations for feedback on the Plan.		Discussion in narrative	Transition Plan proposal in 2020 report narrative.	N/A	NA	NA
Stakeholder Discussions									
1	PUBLIC DASHBOARD: Require the Company to host one or more stakeholder meetings for stakeholders to ask questions and provide feedback about the proposed scorecard.	New / TBD		Discussion in narrative.	Stakeholder discussion held on February 22, 2022 in compliance with MPUC Order.	Discussion in narrative.	NA	NA	NA
2	DEMAND RESPONSE PERFORMANCE INCENTIVE: Develop and file a demand response incentive Commission consideration by Q1 2021.	New / TBD		Discussion in narrative.	Discussion in narrative.	Discussion in narrative.	NA	NA	NA
3	EVALUATION CRITERIA AND BENCHMARKS: Commission to direct Xcel Energy to begin development of evaluation criteria and benchmarks 2023 after the 2022 annual report is filed.	New / TBD	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.		Discussion in narrative.	Discussion in narrative.	NA	NA	NA



Satisfaction Benchmarks by Company

Energy Utilities

Company	2022	2023	% Change
Energy Utilities	72	72	0%
Atmos Energy	76	77	1%
CenterPoint Energy	78	76	-3%
NextEra Energy	75	75	0%
NiSource	73	75	3%
Southern Company	75	75	0%
Berkshire Hathaway Energy	73	74	1%
Exelon	72	74	3%
All Others	NM	73	NA
Dominion Energy	74	73	-1%
Duke Energy	72	73	1%
Public Service Enterprise Group	71	73	3%
Salt River Project	76	73	-4%
Xcel Energy	72	73	1%
Ameren	72	72	0%
American Electric Power	69	72	4%
CMS Energy	72	72	0%
Consolidated Edison	73	72	-1%
DTE Energy	69	72	4%
PPL	72	72	0%
Sempra	73	72	-1%
WEC Energy Group	75	72	-4%
Los Angeles Department of Water and Power	68	71	4%
FirstEnergy	70	70	0%
Entergy	69	69	0%
National Grid	69	69	0%
CPS Energy	63	68	8%
Edison International	69	68	-1%
Eversource	66	65	-2%
PG&E	61	63	3%
Showing 1 to 20 of 20 ontring		_	

Showing 1 to 30 of 30 entries

2023 results based on data collected January - December 2022.

Last Updated 04/13/2023

Source:

Energy Utilities - The American Customer Satisfaction Index (theacsi.org)

^{*2023} ACSI scores for measured investor-owned utilities = 72, measured municipalities = 71, and measured cooperatives = 74.

Docket No. E002/CI-17-401 2022 Annual Report – Performance Metrics and Incentives Attachment C – Page 1 of 2 April 28, 2023

> Xcel Energy, Inc. 1800 Larimer Street Denver, CO 80202



January 31, 2022

VIA FEDERAL E-RULEMAKING PORTAL

U.S. Environmental Protection Agency EPA Docket Center 1200 Pennsylvania Ave., NW. Washington, DC, 20460

Docket ID No. EPA-HQ-OAR-2021-0317

Re: Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review

On November 15, 2021, EPA published a proposed rule that establishes new source performance standards (NSPS) and emissions guidelines (EG) for the Crude Oil and Natural Gas source category under the Clean Air Act in the Federal Register (86 FR 63110). Xcel Energy appreciates the opportunity to provide general comments on the proposed Oil and Gas (O&G) Sector Rule in the context of the broader Biden-Harris Administration vision for reducing national methane emissions 30% by 2030 as presented in the US Methane Emissions Reduction Action Plan¹. In general, we support the direct regulation of methane emissions from oil and gas sector operations if the rules are cost effective, allow flexibility in compliance, and consider cumulative policy impacts.

Xcel Energy is an energy service holding company serving approximately 3.7 million electric customers and 2.1 million natural gas customers in eight states, including Colorado, Minnesota, Texas, New Mexico, Wisconsin, North Dakota, South Dakota, and Michigan. We are a vertically integrated electric generation, transmission, and distribution owner, as well as a natural gas local distribution company (LDC) owner with minor natural gas transmission and storage assets.

Xcel Energy was the first major U.S. energy provider to announce aggressive goals for reducing greenhouse gas emissions across three large sectors of the economy: electricity, natural gas use in buildings, and transportation. In 2018, we committed to delivering 100% carbon-free electricity to customers by 2050, with an interim goal of reducing carbon emissions 80% by 2030. In 2020, we pledged to power 1.5 million electric vehicles in our service areas by 2030. Most recently, in November of last year, our company announced a net-zero vision for natural gas by 2050, with an interim goal to reduce greenhouse gas emissions 25% by 2030. This 2030 commitment includes sourcing only certified low-methane emissions natural gas for both power generation and gas distribution and achieving net-zero methane emissions on the LDC. Taken as a whole, the scope of our net-zero vision for natural gas spans the entire supply chain from upstream production to customer end use. For more information, please see our report, Net-Zero Vision for Natural Gas,

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¹ https://www.whitehouse.gov/wp-content/uploads/2021/11/US-Methane-Emissions-Reduction-Action-Plan-1.pdf

published in November of 2021². Reducing emissions attributed to the natural gas supply chain is an important part of our clean energy vision as most Xcel Energy customers rely on natural gas for heating their homes and businesses. Natural gas is especially important in the colder climates we serve in the Upper Midwest and Colorado where it remains the most affordable, dependable, and flexible home and building heating option.

As Xcel Energy is not directly regulated by EPA's proposed O&G Sector Rule, with this letter we are providing general rather than technical comments. We appreciate the explicit exclusion of LDCs from the source category. Xcel Energy also supports direct regulation of upstream methane emissions and federal action that integrates existing state rules, such as those already implemented in Colorado which are proven successful without high costs. This is a commonsense approach that can reduce regulatory burden and minimize costs to consumers while achieving necessary emissions reductions. It is also important to provide flexibility in federal regulations to leave room for voluntary or state actions that may go further. For example, such a regulation could help support a robust, verifiable, and additional certified natural gas market, which may incentivize additional emissions reductions upstream and across the supply chain.

It is important to recognize that attaining zero emissions from the natural gas supply chain is likely not feasible, cost-effective, nor necessary to meet climate goals. Accordingly, Xcel Energy's goal to achieve net, rather than absolute, zero methane emissions on our LDC allows any remaining emissions that cannot be directly reduced to be offset. Likewise, EPA's proposed rule covering upstream emissions achieves meaningful reductions without requiring zero emissions. We strongly encourage this same approach to Department of Transportation's Pipeline and Hazardous Materials Safety Administration (PHMSA) forthcoming Methane Leak Detection Repair Rule required by the PIPES Act. Xcel Energy plans to engage in the PHMSA rulemaking which we anticipate will directly impact natural gas LDCs.

Finally, we also advise that the cumulative impact of all regulatory and policy actions taken to reduce emissions from the O&G sector be considered. Actions taken should be complementary and avoid unnecessary increases in cost while reducing emissions. It would be contrary to the objective of significantly reducing the nation's greenhouse gas emissions if overregulation inadvertently advantaged coal over natural gas for electric generation.

Thank you for this opportunity to provide comments. We look forward to engaging on the issue of reducing methane emissions from the O&G sector. If there are any questions about the issues presented herein please contact me or Jeff Lyng, Director of Energy & Environmental Policy, at Jeff.R.Lyng@xcelenergy.com or (303) 294-2005.

Sincerely,

Frank P. Prager

Senior Vice President, Strategy, Planning & External Affairs

Frank.Prager@xcelenergy.com

(303) 294-2108

² https://www.xcelenergy.com/staticfiles/xe-responsive/Net-Zero-Vision-for-Natural-Gas.pdf

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WORKFORCE TRANSITION PLAN

MINNESOTA

Attachment D - Page 2 of 22 $\,$

April 28, 2023

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INTRODUCTION

BACKGROUND

Leading the clean energy transition is one of Xcel Energy's corporate priorities. We were the first major US electricity provider with a vision to serve customers with 100% carbon-free electricity by 2050 and to reduce carbon emissions company-wide by 80% from 2005 levels by 2030.

For the second year in a row, we had our largest annual decline in carbon emissions in 2020, reducing carbon emissions overall by 51% from 2005 levels, putting us more than halfway to our vision of delivering 100% carbon-free electricity to customers by 2050.

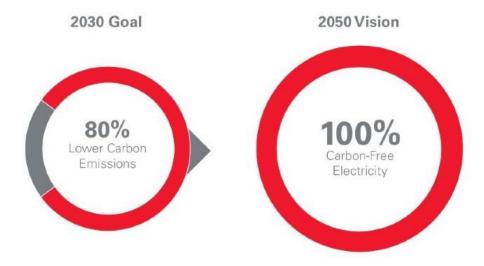


Figure 1. Building our carbon-free future.

To achieve our goal in Minnesota, we plan to retire our existing coal plants by 2030, expand our use of wind and solar systems, build on our successful energy efficiency programs and demand response options, and add new transmission infrastructure to connect more clean energy to the grid. We have a highly skilled and experienced workforce that we plan to transition to new and existing jobs across Xcel Energy. Our workforce is an important part of our clean energy vision.

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WORKFORCE TRANSITION

Outlined in this workforce transition plan are planning, headcount, and cost estimates with respect to workforce transitions that will occur as a result of the proposed retirement of electric generating facilities. It is important to note that this workforce transition plan will continue to be updated over time so that all plans and estimates incorporate the latest information and assumptions.

Xcel Energy has a long and successful history of performing strategic workforce planning to support workers through a transition, creating and executing upon workforce plans, and enabling a smooth transition of our workforce. We have a highly skilled workforce, and it is our desire and intent to retain these skilled workers to the greatest extent feasible.

While transition plans for impacted employees at the Sherburne County Generating Station (Sherco) and Allen S. King Generating Plant (King) facilities are still under development, Xcel Energy continues to engage in significant and deliberate workforce transition planning efforts. The company has been communicating regularly with plant employees, IBEW local unions, and building trades unions to ensure transparency and to maintain engagement.

This workforce transition plan will highlight each step of the planning and transition process. The outcomes of each phase will be updated as workforce transition planning progresses, when plant retirement dates near, as future jobs and required skills become more clear, and as the company evaluates existing opportunities for impacted workers across the organization.

STRATEGIC WORKFORCE PLANNING DEPARTMENT

The Strategic Workforce Planning (SWP) department is housed within the Human Resource and Employee Services business area at Xcel Energy. The SWP department routinely performs workforce modeling to forecast headcount and costs, identify risks and opportunities, assess skill profiles across jobs and business areas, align the workforce to strategic priorities, and deploy workforce solutions based on data-driven insights. The SWP department holds the responsibility of creating and executing upon a workforce transition plan, in partnership and collaboration with multiple solution owners and key stakeholders.

The SWP department consists of workforce analytics consultants and analysts with a data science background and leadership consulting skills.

WORKFORCE TRANSITION PLANNING COLLABORATION

The SWP department at Xcel Energy works closely with both internal and external key stakeholders and partners to model, plan, design, and facilitate workforce transition.

Partner with key stakeholders

Solutioning

Partner with key stakeholders

State legislative and regulatory compliance

Employees

Execute transition plan

Deploy WF transition plans
and best practices

Figure 2. Workforce transition planning collaboration.

Key internal partners and stakeholders include, but are not limited to:

- Human Resources and Employee Services Departments
 - Strategic Workforce Planning (SWP)
 - Workforce Relations (WFR)
 - Human Resources Business Partners (HRBPs)
 - Enterprise Learning Organization (ELO)
 - Workforce Analytics (WFA)
- Operations business areas
 - Energy Supply Generation
 - Distribution
 - Transmission

- o Gas
- Northern States Power Minnesota (NSPM) operating company
 - Resource Planning
 - State Government Affairs
 - Community Relations

Key external partners and stakeholders include, but are not limited to:

- IBEW local unions representing Xcel Energy employees
- Minnesota building trades labor unions whose members work for Xcel Energy and its contractors
- Center for Energy Workforce Development (CEWD)
- Minnesota State Energy Center of Excellence
- Energy Providers Coalition for Education (EPCE) and their education partners
- DEED/Energy Transition Office
- Center for Energy and the Environment (CEE)
- Local education partners, community colleges and universities across the state
- All local workforce centers across the state of Minnesota

WORKFORCE TRANSITION PLANNING PROCESS PHASES

To facilitate workforce transition in Minnesota, the SWP department continues to adopt the multifaceted approach described above to enable a smooth transition at coal plants. The process of planning for workforce transition is as follows:

3 1 4 2 Model the impacted Identify transition Conduct job overview Create and deploy Update workforce workforce, inventory opportunities that will sessions and introduce workforce transition transition plan, skills, identify future arise due to natural day-in-the-life resources and roll out communicate with opportunities, attrition from all promotional videos. transition pathways for employees and all key communicate regularly operations business Approximately two workers; Encourage stakeholders with employees and areas, from future years prior to plant employees to leverage stakeholders, and assets or new work and closure conduct resources to better submit plan in potential insourcing of prepare and qualify for transition conversations Performance Based contract work; update with workers, map their transition Rates Annual Report annually employee aspirations to aspirations opportunities, and perform gap analysis

Figure 3. Transition workforce planning process.

PHASE 1

WORKFORCE TRANSITION PLANNING MODELING

The following estimates were derived and updated as of **December 31, 2021** and will continue to be updated as more refined input becomes available with respect to plant retirement, future opportunities that become available, and employees' aspirations and skills. There are no changes to the estimates in 2022.

Furthermore, both the headcount and cost estimates will be refined once each employee participates in the transition conversations (which occur approximately two years prior to closure) and we are able to gain greater insight into the aspirations of our workers, their skills, available local opportunities, and programs we need to build or deploy to enable a smooth transition.

WORKFORCE HEADCOUNT MODELS

Detailed workforce analysis was conducted to estimate the number of potential impacted employees at each plant and identify the solutions required to transition these employees. This analysis is completed within the SWP department and in collaboration with other data analysts within Xcel Energy's Energy Supply and Resource Planning business areas.

Table 1. Projected headcount and the number of employees to transition at Sherco.

Plant	Sherco						
Event	2023 EOY 2026 EOY 2030 EOY Unit 2 Closure Unit 1 Closure Unit 3 Closure						
Current Headcount As of December 31, 2021		201					
Target Headcount At closure	199 176 138						
Projected Headcount Without backfilling	160	102	29				
Understaffed Level Without backfilling	(39)	(74)	(109)				
Projected Headcount With backfilling	199	176	138				
Employees to Transition	0	0	138				

*Notes:

 There are 36 non-operations employees beyond the operations target headcount of 102 who do not report to plant leadership, totaling 138 employees needed through 2030.

Table 2. Projected headcount and the number of employees to transition at King.

Plant	King
Event	2028 EOY Closure
Current Headcount As of December 31, 2021	76
Target Headcount At closure	74
Projected Headcount Without backfilling	(5)
Understaffed Level Without backfilling	(64)
Projected Headcount With backfilling	74
Employees to Transition	74
Number of Employees with Retention Agreements	(11)
Remaining Employees to Transition	63

*Notes:

- The company and the union have already reached agreement with 11 Operators to secure their employment at the King plant up until closure. The agreement includes transfer to Operator positions at other nearby plants.
- There are 10 non-operations employees beyond the operations target headcount of 64 who do not report to plant leadership, totaling 74 employees needed through 2028.

Definition of workforce variables used in Tables 1 & 2:

Event

Proposed early retirement dates.

• Current Headcount

Number of Xcel Energy benefitted employees working at the plant as of December 31, 2021. These numbers do not include supplemental building trade workers who are employed by either Xcel Energy or by contractors.

Target Headcount

The number of employees needed to run the remaining units. Through continued collaboration with the company's Energy Supply team, we estimated the number of Xcel Energy employees that would, at a minimum, be needed to operate the plant up to and at the time of closure.

Projected Headcount (without back-filling)

Current Headcount less projected retirement and non-retirement attrition and transfers from December 31, 2021 up to the early retirement date. Without backfilling assumes employees who retire or leave the organization are not replaced.

Understaffed Level (without back-filling)

Target Headcount less Projected Headcount; to calculate the number of employees (understaffed)/overstaffed to the minimum Target Headcount of employees needed to operate a unit if employees who retire or leave the organization are not replaced.

Projected Headcount (with back-filling)

Current Headcount less projected retirement and non-retirement attrition and transfers from December 31, 2021 up to the Event date. In our projection with back-filling, employees who retire or leave the organization are replaced up to, but not exceeding, the Target Headcount.

Employees to Transition

This is the number of employees to be retained through transfer within the plant, within other generating units or within other business areas across the organization. This number represents the number of employees who will be transitioned due to the retirement of a facility. To the extent feasible, we do not anticipate any layoffs. Our intent is to retain our employees and redeploy across the organization. Opportunities for these workers are outlined below in the *Phase 2, Future Opportunities for Impacted Workers* section of this report.

Sherco Unit 2 Closure

Employees to Transition is equal to Projected Headcount (with backfilling) less Target Headcount at closure. Previously backfilled workers will flow to positions at the remaining operating units (i.e., Unit 1 and Unit 3).

Sherco Unit 1 Closure

Employees to Transition is equal to Projected Headcount (with backfilling) less Target Headcount at closure. Previously backfilled workers will flow to positions at the remaining operating unit (i.e., Unit 3).

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Sherco Unit 3 Closure

Employees to Transition is equal to Target Headcount at closure. There is no Projected Headcount beyond 2030, which is the final unit closure date; as more information becomes available, these estimates will be updated accordingly.

King Plant Closure

Employees to Transition is equal to Projected Headcount (with backfilling) minus the number of employees with retention agreements.

Number of Employees with Retention Agreements

This number represents the number of employees with agreements to remain at the King Plant through closure along with transfer to nearby plants.

Remaining Employees to Transition

This number represents the number of Employees to Transition minus the number of Employees with Retention Agreements. We will need to retain a number of employees for demolition after closure.

The SWP department uses target headcount and attrition forecasts in the workforce planning models to estimate the number of impacted employees at each plant. Energy Supply provides the target headcount in resource planning models and Workforce Analytics provides the retirement and non-retirement attrition projection data. These estimates are early projections and will continue to be updated annually and leading up to the retirement of each unit.

- Workforce Analytics at Xcel Energy uses an actuarial-based attrition simulator to forecast company turnover, both retirement and non-retirement.
 - Non-retirement attrition percentages are based on historical Xcel Energy experience.
 - Retirement attrition percentages are based on inputs such as the employee's age, service, and selected retirement plan.

Target headcounts for the plants were derived by the plant directors at each plant location in Energy Supply. The plant directors created a workforce plan to identify the number of people they need in each job to continue safe operation of the remaining units. These projections are estimates and may be updated as we approach retirement of these units and when resource needs are more easily identifiable.

The above tables and calculations do not include supplemental workers that the company uses on an as-needed basis or for major overhauls of the units. Supplemental

workers are provided either directly by the building trade unions or by the contractors through which we source to execute on these activities.

WORKFORCE COST MODELS

Cost models of potential transition resources have been developed that include, but are not limited to, internal technical training, internal enterprise-wide learning courses, external educational assistance, relocation, and voluntary severance/early-exit.

Based on similar transitions of other coal plants across our service territory, primary transition resources needed to transition a workforce were identified and high-level cost projections associated with the anticipated closure of our remaining coal units in Minnesota were conducted.

Table 3. Estimated cost of potential transition resources.

Plant	Sherco Unit 2 Unit 1	Sherco Unit 1 Unit 2	Sherco Unit 3 Unit 3	King
Event	Closure	Closure	Closure	Closure
Internal Tech Training	\$0	\$0	\$6,150,000	\$1,650,000
Enterprise Learning Organization Training			\$150,000	\$150,000
External Industry Training	\$0	\$0	\$160,200	\$44,500
On-the-Job Training				
Tuition Reimbursement	\$0	\$0	\$189,000	\$47,250
Relocation	\$0	\$0	\$60,000	\$20,000
Severance				
Subtotal	\$0	\$0	\$6,709,200	\$1,911,750
Grand Total			\$8,620,950	

Approximately \$8,620,950 of employee transition costs (Table 3) were estimated, dependent upon final closure date, based on the total cost of the combined transition resources applied to the total number of potentially affected workers for Sherco and King; reported as "Employees to Transition" in Tables 1 & 2. The costs are early estimates and will continue to evolve as we learn the aspirations of our workers, as attrition projections materialize, and as we learn of new opportunities within the communities these plants reside.

The assumptions used in each transition resource line item in Table 3 are listed below:

Event

Proposed early retirement date.

Internal Tech Training

An annual cost estimate per headcount of \$25,000 is provided by the Internal Technical Training team based on existing technical training infrastructure to provide ongoing training. The duration of technical training ranges from two to four years, with an average of three years used in the cost model. The percent of employees leveraging this resource is an estimate derived from the assessment of upskilling/reskilling needs and the historical transfers during prior plant retirements in which internal technical training was leveraged to move to positions at other Xcel Energy locations. Cost estimate does not include employee wages.

Enterprise Learning Organization (ELO) Training

The cost estimate for enterprise-wide transition resources by ELO is independent of the number of impacted employees who choose to leverage the resources. The ELO cost estimate of approximately \$300,000 (\$150,000 per plant) is derived based on the assessment of upskilling/reskilling needs. ELO may collaborate with local education partners to build and deploy training courses.

External Industry Training

The cost estimates for external industry training (e.g., certifications, micro credentials, individual courses) are calculated based on the certificate offerings at Bismarck State College (BSC), an EPCE education partner. There are five electric- and energy-related certificates that on average require 56.4 credit hours to complete each certificate. Since some employees will choose to complete all courses in the certificate while others will elect to take several individual classes to upskill and/or reskill, we halve the average number of credit hours used in our cost modelling, rounded to 28 credit hours. Additionally, we use \$300 as the per-

credit-hour cost for the BSC certificates, consistent with the EPCE member tuition rate at BSC. The percent of employees leveraging this resource is an estimate derived from the assessment of upskilling/reskilling needs.

On-the-Job Training

Cost is expected to be incurred for on-the-job training in remaining units or at locations to which employees transfer. The cost estimate for on-the-job training has yet to be determined and will be estimated as we near the retirement of each unit and after gathering employee aspirations through transition conversations.

Tuition Reimbursement

We use \$5,250 in our tuition reimbursement cost estimates, consistent with the United States Code, Title 26 Internal Revenue Code, §127 Educational Assistance Programs. An average of three years is used in the cost model. The percent of employees leveraging this resource is an estimate derived from the assessment of upskilling/reskilling needs.

Relocation

The relocation cost of \$10,000 per headcount is based on prior coal unit closures. The percent of employees leveraging this resource is an estimate derived from historical relocation during prior plant retirements.

Severance

Though we do not anticipate layoffs and we are committed to a transition of our workforce some employees may not execute upon the transition pathways; severance costs will be estimated as we near retirement of each unit. Cost estimates for severance are derived based on the collective bargaining agreements.

Sherco Unit 2: There are no costs of transition because Projected Headcount (with backfilling) does not exceed Target Headcount, as outlined in Table 1, "Employees to Transition." Employees may need additional training related to any uniqueness of units 1 and 3, which would result in on-the-job training costs that are to be determined but will be provided as part of future updates to the workforce transition plan.

Sherco Unit 1: There are no costs of transition because Projected Headcount (with backfilling) does not exceed Target Headcount, as outlined in Table 1, "Employees to Transition." Employees may need additional training related to any uniqueness of unit 3, which would result in on-the-job training costs that are to be determined but will be provided as part of future updates to the workforce transition plan.

Cost estimates will be refined in future updates to the workforce transition plan and after transition conversations with each employee take place and we are able to gather

employee transition preferences, skill gaps, and the transition supports leveraged. Transition conversations with employees will take place approximately two years prior to closure.

PHASE 2

FUTURE OPPORTUNITIES FOR IMPACTED WORKERS

The Strategic Workforce Planning Department anticipates that many of the transition opportunities for plant employees at Sherco and King will be in the form of transfers to nearby locations. Some of these transfers will require upskilling or reskilling, while others will be parallel job transfers and not require additional training. Unlike plant closures in more remote areas of our service territories, Sherco and King are located near large metropolitan areas, which include a high number of service centers and other Xcel Energy facilities.

Using natural attrition forecasts as a proxy to determine the number of opportunities that will come available across all operations areas within 50 miles of the Sherco and King plants, we estimate the following between 2022 and 2030:

Table 4. Projected future opportunities within Xcel Energy at locations near Sherco based on attrition and retirement forecast across all operations areas for 2022-2030.

	Sherco Plant	
	Total Projected Jobs 2022-2030	Average Number of Jobs Per Year
Non-Bargaining	2,239	249
Bargaining	426	47

Nearby Locations: Monticello, St Cloud Service Center, Montrose Service Center, Maple Grove Service Center, Albany Service Center, Waconia Service Center, 401 Nicollet Mall, 414 Nicollet Mall, Chestnut Service Center, Riverside Gen Plant, St Anthony Falls Hydro Proj, Edina Service Center, Centre Pointe, Shorewood Service Center

Table 5. Projected future opportunities within Xcel Energy at locations near King based on attrition and retirement forecast across all operations areas for 2022-2028.

	King Plant	
	Total Projected Jobs 2022-2028	Average Number of Jobs Per Year
Non-Bargaining	1,904	272
Bargaining	576	82

Nearby Locations: White Bear Lake Service Center, Hugo Training Center, Centre Pointe, Rice Street Service Center, High Bridge Combined Cycle, Inver Hills Gen Plant, Wescott Lng Plant, Newport Service Center, 401 Nicollet Mall, 414 Nicollet Mall, Chestnut Service Center, Riverside Gen Plant, Riverside Training Center, St Anthony Falls Hydro Proj, Maple Grove Service Center, Edina Service Center, Wyoming Service Center, Black Dog Gen Plant, Prairie Island, Red Wing Gen Plant, Red Wing Service Center, Shorewood Service Center, Cannon Falls Service Center, Blue Lake Gen Plant

Similar analysis is conducted for all operations business areas across the state of Minnesota:

Table 6. Projected future opportunities within Xcel Energy across Minnesota based on attrition and retirement forecast for 2022-2030.

	Total Projected Jobs 2022-2030	Average Number of Jobs Per Year
Non-Bargaining	2,794	310
Bargaining	1,064	118

Many of the skills of our employees at our coal generating facilities are transferrable to other positions across the company. We will provide employees with information about the positions in order for workers to identify the jobs in which they are most interested, and the skills required. Leaders across all operations business areas will welcome these skilled workers transitioning from the King and Sherco generating facilities into their organization.

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Transition pathways will be created in partnership with each employee to retain, redeploy, or relocate workers based on their aspirations, availability, and in accordance with the collective bargaining agreement obligations. Impacted workers will be able to leverage internal and external resources to upskill or reskill in order to transition into other positions within the company.

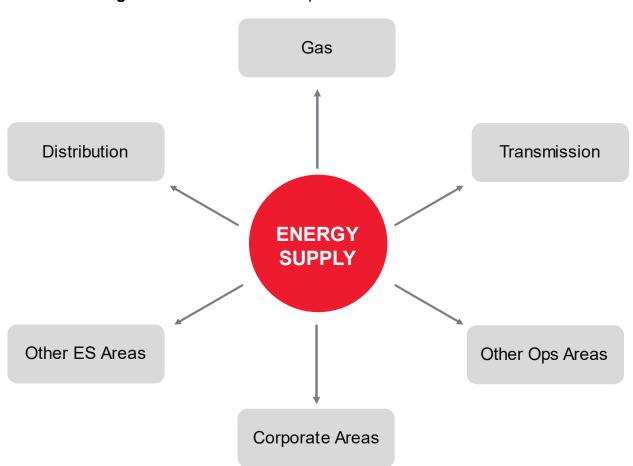


Figure 4. Transition across operations.

The above tables are the greater portion of the opportunities that may be available to workers who are impacted by the early retirement of our coal plants and the company continues to evaluate our resource mix and has proposed several solar projects near or on the plant sites that, if approved, may provide workers with future renewable energy jobs. The company continues to work in partnership with our communities to draw new business and new jobs to the areas.

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Providing insight to our employees about potential new jobs so they are aware of the different opportunities available is an important part of our transition efforts. For the purpose of ensuring employees are aware of and informed about different pathways, we plan in-person informational job overview sessions from employees who are in the positions that will come available in order to advertise potential job paths, as well as day-in-the-life promotional videos of jobs to explore.

To the extent practicable, Xcel Energy does not anticipate any layoffs. We have a strong track record in transitioning plant workers without layoffs. We are committed to a smooth transition as we continue our journey to achieve our clean energy goals.

We will continue to update all opportunities and worker outcomes in future updates, leading up to all retirement or conversion dates. In addition, we will build transparency and demonstrate the commitment to our workforce through updates to our employees, to labor unions and to key external stakeholders impacted by these closures.

Our Employees with The Minnesota Building Trades

In recognition of the work performed at the Sherco and King Plants by workers from the Minnesota Building Trades Unions we will continue to evaluate transition options and support the transition of long-tenured workers in partnership with key stakeholders including trade union leadership and leveraging resources available to impacted workers through the local workforce centers and the Minnesota Department of Employment and Economic Development (DEED). The Company will continue to identify options available to this workforce and will continue to adjust the workforce transition plan over time, gathering stakeholder feedback and providing updates to the commission through the annual filing of a refreshed workforce transition plan.

In order to create a diverse pipeline of talent into energy jobs and continue to support the building trades from whom we have long sourced temporary, contract, and construction work, Xcel Energy has partnered with DEED to develop the Xcel Energy Power-Up workforce training and development program. This program will provide workforce training of energy-related construction work and help to bring diverse candidates into the building trades. The program represents an investment in developing a diverse community of workers through the building trades and our communities across our Minnesota service territory into energy related construction jobs.

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PHASE 3

TRANSITION CONVERSATIONS

Approximately two years prior to a unit retirement, transition conversations will be conducted with all employees at an impacted plant. The purpose of the transition conversation is to: (1) provide greater insight into all the opportunities available to workers; (2) gather an employee's aspirations or transition preferences, including the jobs in which they are most interested; (3) evaluate their appetite for upskilling or reskilling and the skills they brought to the position they are in; (4) determine whether they desire to relocate; and (5) address their questions or concerns about transition.

The SWP department will work collaboratively with teams across Human Resources and Employee Services to facilitate transition conversations with workers so that the company can work in partnership with the employees and the unions on more detailed transition planning. The department created an easy-to-use data template to capture transition preferences from transition conversations with workers and designed a real-time online form that will automatically compile and aggregate data on the backend for further analysis.

SKILL MODELLING AND SKILL GAP ANALYSIS

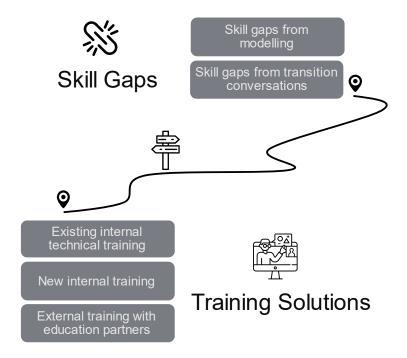
For the transition of our coal plant employees the SWP department piloted skill inventorying and modeling for jobs at Sherco and King to help identify the skills within the positions at the plant and the skills needed to move into positions across Operations to identify skill gaps. The results of skill gap analysis will inform and guide the department in recommending and deploying the appropriate reskilling/upskilling programs for the workers to leverage, which will enable their transition.

SWP developed bargaining job skill profiles using the Center for Energy Workforce Development (CEWD) Energy Industry Competency framework as the foundation and modified it to better fit and represent the skills and competencies of Xcel Energy jobs. The skill modelling is primarily focused on the core foundational skills that are transferable and applicable to a wide array of skilled technician jobs. With the CEWD framework used for soft skills and some technical skills, we then layered in the Xcel Energy Individual Contributor competencies to represent and capture the skills associated with each position, which allows us to more easily identify where these skills are transferrable across Xcel Energy. Once the framework was complete, we consulted closely with job subject matter experts in Workforce Relations to go through each of the jobs individually to assess and rank the skills by position for both impacted positions at the coal plants and positions into which workers could potentially transition across the

organization. The outcomes were then reviewed with plant leadership for feedback and/or adjustments.

SWP has developed additional quantitative models that map skill profiles from existing plant jobs to skill profiles of potential future jobs. These models assess the degree to which existing skills match skills needed in potential future jobs, shedding light on reskilling, upskilling, and other possible training pathways for Xcel Energy employees. Using text network analysis, SWP has also developed models for assessing how suitable existing plant jobs are with potential new jobs in renewable energy as well as with existing Xcel Energy jobs.

Figure 5. Skill mapping



After transition conversations take place, we aggregate and analyze the results to identify skill gaps based on a full skill profile of the job of each worker, the skills brought to the position, and the position(s) to which they prefer to transfer in order to identify and report skills gaps. Once skill gaps are identified, we gather solutions that currently exist in upskilling/reskilling that we might be able to leverage internally or externally, what we may want to modify, or what we may consider if new upskilling/reskilling solutions need to be created to bridge the skill gap. We will look for the most cost effective solutions for the benefit of the greatest population of our workforce. We may leverage our internal training organization or external education partners in doing so.

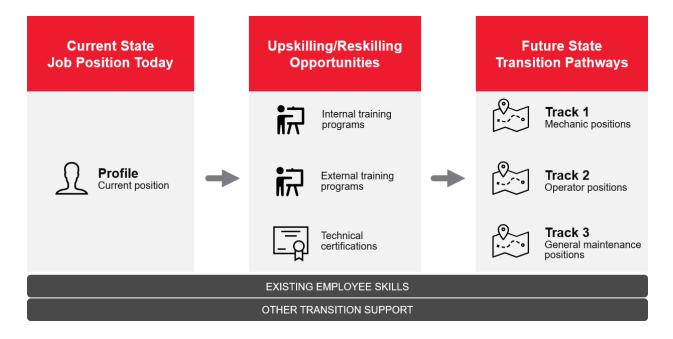
PHASE 4

TRANSITION PATHWAYS

Once skill gaps and solutions are identified, transition pathways are created for employees by leveraging existing upskilling/reskilling programs and building new upskilling/reskilling solutions with our internal and external training partners.

The transition pathways provide potential transition tracks for employees with the corresponding and recommended menu of options available for workers to transition, which would include upskilling/reskilling opportunities available plus other transition supports. The upskilling/reskilling opportunities include all internal training programs, external training programs, and technical certifications provided by external education institutions. The pathway will outline the resources available, and in some cases the timing or the schedule of these trainings (if applicable). A transition track is a collection of similar future job opportunities that likely require similar skills and training. A supervisor will provide an overview of these transition tracks to each individual employee, offering support as their leader, answers to FAQs, and any other tools or information that may be helpful to the employee. Supervisors will receive training on how best to support their employee through transition, both in process and in providing effective coaching and feedback. It will then be up to the employee to take initiative and leverage the supports offered.

Figure 6. Transition pathways.



We are an equal opportunity employer and will continue to operate in compliance with our collective bargaining agreements throughout this transition process. Xcel Energy endeavors to create and provide feasible workforce transition solutions to impacted workers.

For workers who may consider relocation to another position within the company, we will work with the employees by looking at necessary training, the hiring process, relocation benefits, and other support, while maintaining compliance with our collective bargaining agreements. For workers who are eligible for retirement and decide to exercise that option, the HR retirement team will provide support and guidance through the retirement process.

Navigating uncertainty and change can be difficult. Xcel Energy provides numerous free resources to all employees and their family members at any time via our Employee Assistance Program (EAP), regardless of the employee's enrollment in a company medical plan.

EAP offers information and guidance on topics including, but not limited to, managing change, handling personal crises, career counselling, educational support services, financial management and emotional well-being. Information on EAP is available to employees on the company intranet site, XpressNET.

PHASE 5

UPDATE WORKFORCE TRANSITION PLAN

In future updates to the workforce transition plan and leading up to the retirement of our plants, we will update our plan using the latest information and assumptions in the headcount and cost models. Information gathered from the transition conversations will be used to create the transition pathways based on the results of our skill gap analysis.

Additionally, we will provide regular updates to IBEW Locals and key external stakeholders to continue to build upon the transparency of the phases and outcomes, commitment to our workforce, and our progress.



CERTIFICATE OF SERVICE

I, Ella Giefer, hereby certify that I have this day served copies of the foregoing document on the attached list of persons.

- <u>xx</u> by depositing a true and correct copy thereof, properly enveloped with postage paid in the United States mail at Minneapolis, Minnesota
- xx electronic filing

DOCKET NO. E002/CI-17-401

Dated this 28th day of April 2023

/s/

Ella Giefer Regulatory Administrator

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Audrey	Partridge	apartridge@mncee.org	Center for Energy and Environment	212 3rd Ave. N. Suite 560 Minneapolis, Minnesota 55401	Electronic Service	No	OFF_SL_17-401_Official
Generic Notice	Residential Utilities Division	residential.utilities@ag.stat e.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012131	Electronic Service	Yes	OFF_SL_17-401_Official
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Christine	Schwartz	Regulatory.records@xcele nergy.com	Xcel Energy	414 Nicollet Mall FL 7 Minneapolis, MN 554011993	Electronic Service	No	OFF_SL_17-401_Official
Doug	Scott	dscott@gpisd.net	Great Plains Institute	2801 21st Ave Ste 220 Minneapolis, MN 55407	Electronic Service	No	OFF_SL_17-401_Official
Will	Seuffert	Will.Seuffert@state.mn.us	Public Utilities Commission	121 7th PI E Ste 350 Saint Paul, MN 55101	Electronic Service	Yes	OFF_SL_17-401_Official
Patricia F	Sharkey	psharkey@environmentalla wcounsel.com	Midwest Cogeneration Association.	180 N LaSalle St Ste 3700 Chicago, IL 60601	Electronic Service	No	OFF_SL_17-401_Official

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