414 Nicollet Mall
Minneapolis, Minnesota 55401

June 30, 2023

—Via Electronic Filing—

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

RE: REPLY COMMENTS
2022 ANNUAL SERVICE QUALITY REPORT
DOCKET NO. E002/M-23-73

Dear Mr. Seuffert:

Northern States Power Company, doing business as Xcel Energy, submits these Reply Comments in response to the June 16, 2023 Comments in the above-referenced docket regarding our 2022 Annual Report on Safety, Reliability, and Service Quality (2022 Annual Report) and our proposed reliability standards for 2023.

We have electronically filed this document with the Commission, and copies have been served on the parties on the attached service list. Please contact me at 612-337-2096 or bridget.dockter@xcelenergy.com, or Pamela Gibbs at pamela.k.gibbs@xcelenergy.com or 612-330-2889 if you have any questions regarding this filing.

Sincerely,

/s/

BRIDGET N. DOCKTER
REGULATORY MANAGER

Enclosure
c: Service List

STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION

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

IN THE MATTER OF NORTHERN STATES POWER COMPANY'S ANNUAL REPORT ON SAFETY, RELIABILITY, AND SERVICE QUALITY FOR 2022, AND PETITION FOR APPROVAL OF ELECTRIC RELIABILITY STANDARDS FOR 2023	DOCKET NO. E002/M-23-73 **REPLY COMMENTS**

INTRODUCTION

Northern States Power Company, doing business as Xcel Energy, submits these Reply Comments in response to the June 16, 2023 Comments in the above-referenced docket regarding our 2022 Annual Report on Safety, Reliability, and Service Quality (2022 Annual Report) and our proposed reliability standards for 2023.

Comments were filed by the Minnesota Department of Commerce, Division of Energy Resources (Department), and the City of Minneapolis (City). We appreciate the detailed review of our Annual Report; and in this Reply, we respond to the comments and provide the additional information requested. We continue to request that the Commission accept our Annual Report on Safety, Reliability, and Service Quality, and approve our proposed reliability standards for 2023 consistent with those approved by the Commission in 2022.

REPLY COMMENTS

I. Response to Department Recommendations

In their Comments, the Department recommends approval of our Service Quality Annual Report for 2022. The Department also requests the Company provide additional information in these Reply Comments on various topics. We address each of these requests below.

A. Explain how the percentages of meters not read for six to twelve months and the meter not read for more than twelve months for the "other" customer class increased 29 percent for the former and decreased 35 percent for the latter in 2022.

In 2022, we were able to read more of the meters listed in the "other" category in the twelve-month window, which created the 35 percent decrease, but we were not able to read these meters within the six-month window, thus the 29 percent increase. It is important to note that the percentage change in the "other" category is reflected more prominently in both increases and decreases because the number of meters in this category is small in comparison to meters in the other categories. As a result, when the number of instances change, a larger percentage fluctuation from the four-year average results.

B. Provide additional information regarding the decline in efficiency for service extension requests in in the Residential and Commercial classes in 2022.

Based on the nature of the work, installation time following a service extension request can vary and is dependent on several factors such as weather impacts, significant storm events, complexity of the work, and job site readiness. More recently, supply chain constraints affecting the entire industry can also affect installation time. For example, lead times for electrical materials increased 30 percent and has caused shortages for raw materials. This, in part, has caused our electric Residential service lead-times to increase somewhat in 2022 from our 2021 performance; however, we note that our 2021 performance was an all-time best turn-around time for electric services. In addition to the factors listed above, one of the internal metrics we used to drive our service lead-time reduction efforts was discontinued from use due to the highly manual nature of the tracking. For example, we used to begin tracking when the electrical inspection occurred as a proxy to indicate customer readiness. However, that did not regularly signal the customer was ready for service as there may be other issues with the construction site that are out of our control that would prevent us from completing installation. To maintain a current status, our design and construction teams would need to regularly check in on every request to determine status and update the Work Management System accordingly. To address this, we are exploring a new Service Lead-Time metric to leverage in 2023 that can be utilized to create efficiencies, in part through automation, for our impacted personnel to maintain in our Work Management System.

C. *Discuss why the number of formal complaints increased in 2022, while the number of complaints received in the Company's call center declined over the same period.*

The increase in formal complaints appears to correlate to the end of pandemic related moratoriums on disconnection activity, and the Company's subsequent resumption of credit and collections practices. Additionally, the widely publicized increase in natural gas prices which impacted consumers across the nation did have impacts on our customers, and an increase in complaints related to high bills was also observed. Beginning in 2018, the Company has undertaken several initiatives to ensure continuous improvement in our call center operations, with a goal of keeping costs low for all customers. Historically, our call center agents recorded all customer inquiries as a complaint, not just those where the nature of the inquiry was actually a complaint. These records included manual notes. As part of the Company's commitment to continuous improvement, the manual note-taking process was reviewed and it was determined that refining the instances in which call center agents were required to make manual notes to inquiries that were actual complaints would reduce the average handle time for each phone call, and therefore provide improvements to call center operations. Since 2018, the Contact Centers have continued to refine this process to ensure manual note-taking is only completed when necessary, including updates to the process in August and September of 2021 that further refined instructions as to when manual records should be made. The observed decrease in 2022 is attributed to no longer recording inquiries that are not actual complaints, and not necessarily an indication of a reduction of complaints received by the call center.

D. Provide information regarding the decline in electronic customer contacts in 2021 and 2022 relative to 2020.

The most substantial decline in electronic customer contacts over this three-year period relates to the Company's updates to the Customer Experience via email. After evaluating the service provided through email, we found that it was the least satisfying experience for our customers. The majority of emails required multiple back and forth correspondences and often ended with the customer making a phone call to our call center to resolve the issue. In an effort to serve our customers in the best and most efficient way, the Company transitioned our email interactions with our customers to focus on direct contact with our call center agents by discontinuing the active use of that email channel. Currently, when customers send emails to an existing customer service email address, they receive a reply email with a link to our most common self-service options and an invitation to call us to address all other concerns[1]. As we

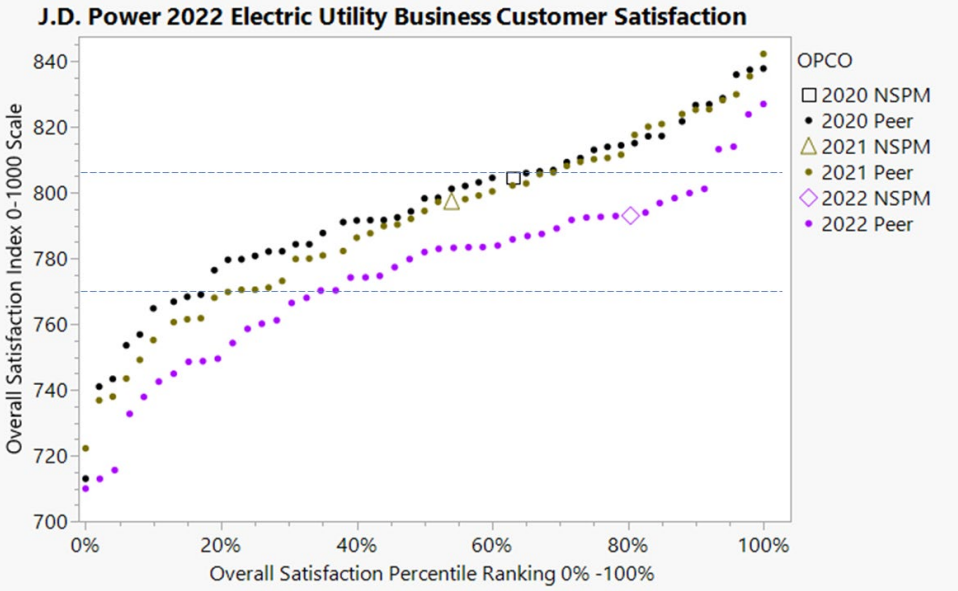
[1] customerservice@xcelenergy.com

indicated in our Annual Service Quality Report, the Company discussed this email transition with both the CAO and the OAG prior to filing our Annual Service Quality report. In regard to reductions in 2021 electronic customer contacts, the Company is aware of this decline and has conducted an analysis to determine driving factors. The analysis did not reveal one clear singular factor, and the Company believes this reduction was a combination of multiple converging circumstances, including utility specific protections and moratoriums decreasing customer contacts, external factors limiting the number of move in and move out inquiries including the national eviction mortarium, and a shift of customers using the email channel to other more satisfying channels – the previously mentioned factors which influenced the Company's evaluation of the channel may also have influenced customers to themselves select a different channel. To a much lesser extent, we saw a decrease in both our MyAccount online customer portal and website visits. In 2022, our MyAccount and mobile application were transitioned to new platforms. Both transitions included periods of time when related services were temporarily unavailable to customers, thereby reducing customer use of the services. Again, the Company has reviewed use in 2021 and similar to the email contact channel, no singular driving factor has been identified. The previously discussed internal and external moratoriums likely also contributed to the observed reductions in electronic customer contacts for these channels.

E. Provide additional context regarding the significant improvement in small commercial customer satisfaction comments in the JD Power survey results over the past three years.

The J.D. Power 2022 Electric Utility Business Customer Satisfaction Study shows both declines and improvements in our customer satisfaction scores, reflected in both index scores and percentile rankings. NSP Minnesota indexes declined slightly in most instances between 2021 to 2022 in the Annual Performance report, except for Power Quality & Reliability. However, in comparison to peer utilities, NSP Minnesota improved favorably, i.e., the relative ranking of NSP Minnesota's overall satisfaction score was higher than those of peers (Chart 1). The suspected reason for this anomaly is that our peer utilities may have been impacted more by economic conditions. Price is the key driver in overall satisfaction for all customer segments. Note, however, the high number of peer utilities with indexes within 36 index points of each other (+/- 1.8 percentage points on the thousand-point scale) do not represent statistically significant differences.

CHART 1
NSPM Business Customer Satisfaction Indices



* Data is sourced from J.D. Power Electric Utility Business Customer Satisfaction studies, NSP Minnesota 2020-2022.

F. *Provide additional context regarding the significant decline in residential customer satisfaction comments in the JD Power survey results over the past three years.*

The J.D. Power Residential Electric study residential customer satisfaction decline is driven largely by the Price factor, an -8% drop since 2020, reflecting monthly bill increases. In comparison, the Power Quality and Reliability factor declined -3 percent. This two-year period coincides with the COVID pandemic. Thirty two percent of NSPM study respondents in 2022 indicated their financial status was worse off than one year ago as opposed to only 14 percent that indicated they were better off. Inflation has affected customers beyond just electricity bills, with rising costs for food, housing, medical, transportation, and other goods and services. Satisfaction trending consistently shows that score declines for one factor are often mirrored in declines of other factors, leading to the drop in scores overall and by factor.

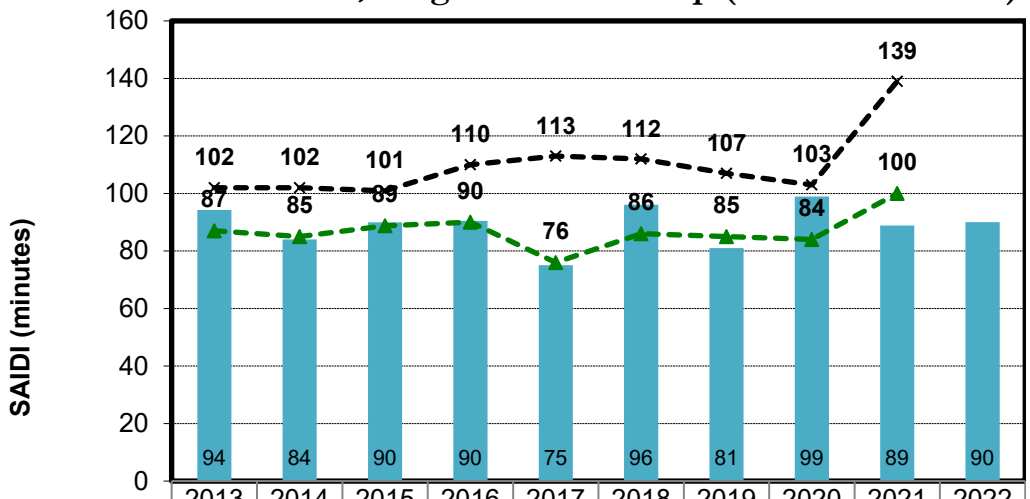
Two additional notes regarding how sampling differences between segments may impact results. The residential study occurs quarterly, while the business study occurs only twice per year with considerably more respondents (~1,190 residential) versus ~300 businesses per year for NSP Minnesota and it has more peer utilities included within the study per J.D. Power's utility size requirements (53 residential peers versus 47 business peers).

Ensuring our customers are satisfied with the service we provide is very important to us. As a result of the trending that both our score and those of utilities around the country have seen, the Company currently has engaged a cross functional team focusing on better meeting the needs of our customers identified through our customer satisfaction surveys and J.D. Power results.

G. Discuss the apparent lack of improvement in its reliability indices (SAIDI, SAIFI, and CAIDI) over the past 10 years.

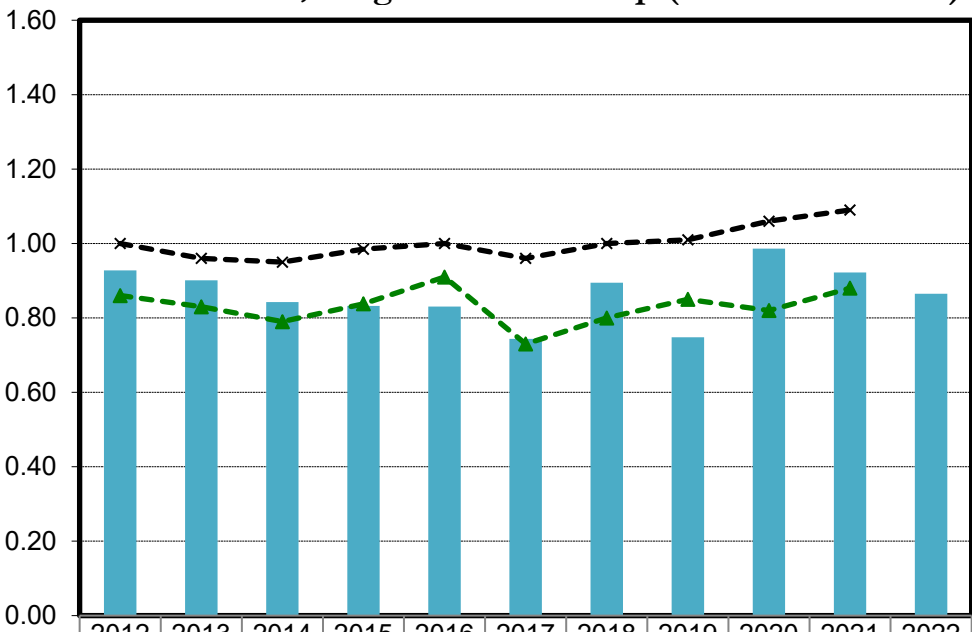
The Company has maintained a consistent level of good reliability performance over the past 10 years as reflected in its stable SAIDI, SAIFI, and CAIDI results. We continue to meet the reliability standards as approved by the Commission and note there is no requirement to improve upon that reliability. Improvement above the levels currently attained will require capital investment that is to be balanced with other state priorities. The Company's reliability performance results over this time period compare favorably against national benchmarking of similar size utilities participating in the IEEE Distribution Reliability Working Group annual survey. Increased storm impacts and aging infrastructure challenges experienced nationally have led to an upward trend in median SAIDI and SAIFI benchmarking results as seen in the charts below. Through these challenges, both the first quartile utility group threshold and the Company's Minnesota performance have been relatively flat - and consistent with each other during this time period.

CHART 2
IEEE Benchmark SAIDI; Large Utilities Group (>=1M customers)



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Xcel Energy MN	94.3	84.0	90.0	90.5	75.0	96.1	81.0	98.9	88.8	90.0
1st Quartile	87	85	89	90	76	86	85	84	100	
2nd Quartile	102	102	101	110	113	112	107	103	139	

CHART 3
IEEE Benchmark SAIFI; Large Utilities Group (>=1M customers)



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Xcel Energy MN	0.93	0.90	0.84	0.83	0.83	0.74	0.89	0.75	0.99	0.92	0.86
1st Quartile	0.86	0.83	0.79	0.84	0.91	0.73	0.80	0.85	0.82	0.88	
2nd Quartile	1.00	0.96	0.95	0.98	1.00	0.96	1.00	1.01	1.06	1.09	

H. Discuss how the creation of more accurate outage start and completion times will likely lead to a decline in the Company's reliability metrics for the three feeders it identified as having been equipped with FLISR.

The Company has not made this assertion; however, we understand this request to be in reference to the discussion at the bottom of page 39 of our Annual Report, which states:

> "However, it should be noted that because AMI technology provides enhanced capabilities, creating more accurate outage start and completion times, this will likely reflect as a decline of our reported reliability metrics as compared to our historical reporting."

Advanced metering infrastructure (AMI) – not FLISR – will provide the Company with more accurate outage start and completion times. Power loss information is identified by an AMI meter's "last gasp," which is the last message transmitted by the meter upon detection of an outage. With the legacy AMR metering system, the primary method of identifying an outage is to rely on customers to report outages. Customer(s) may not report an outage immediately or in many cases at all, so in the absence of AMI's last gasp, the Company's recorded outage start time may be later as customer(s) may not report an outage right away. With AMI, we will receive more precise information on the duration of an outage, which may result in increased calculated outage durations or SAIDI. In addition, with AMI we will be able to identify outages that may have otherwise gone unreported by the customer, which would increase SAIFI and MAIFI. Though a limited sample, the Company has already seen examples when customers do not report outages and an AMI meter sends a last gasp for an outage. In this way, declining SAIDI or SAIFI may reflect only a change in the accuracy and frequency of the information the Company receives, but not a true change in system performance or the customers' experience in which the Company does expect AMI and FLISR to improve reliability.

With regard to FLISR, we expect that FLISR will improve our reliability performance and a customer's outage experience. However, certain reliability metrics may decline after FLISR is enabled. For instance, FLISR will help some customers avoid sustained outages. Sustained outages are tracked by the SAIDI (system average interruption duration index) and SAIFI (system average interruption frequency index) metrics and shorter duration outages (less than five minutes) are tracked by the Momentary Average Interruption Frequency Index (MAIFI) metric. FLISR operates for outages

that occur on the distribution mainline. Although mainline outages only account for 3 percent of distribution outage events, today they account for over 30 percent of the distribution SAIDI. In essence, we expect that FLISR will transform sustained outages into momentary outages for some customers. As a result, with FLISR, we expect that some customers will experience fewer sustained outages thus improved SAIDI and SAIFI metrics while the MAIFI metric will decline. We also expect that FLISR may cause Customer Average Interruption Duration Index (CAIDI) metric to decline related to all outages (not mainline outages). CAIDI is a measure of the length of time the average customer can expect to be without power during an interruption. CAIDI performance can decline when there are fewer customers impacted by mainline outages (outages that typically impact larger number of customers and are shorter in duration) and the outages metrics are more heavily concentrated on problems that take a longer time to fix. As FLISR's automatic switching will restore power quickly to customers, the result will be a sustained outage that impacts fewer customers. We expect this may negatively impact CAIDI metrics but ultimately will be a more positive outage experience for our customers because FLISR will minimize the number of customers impacted by mainlines outages on the system. The tables below show an illustrative example of a distribution feeder that serves 1,000 customers.

TABLE 1

Distribution Feeder Before FLISR

	Mainline Outages	Tap and Below	Total
Number of Outages	2	50	52
Avg Customer per Outage	1,000	20	57.7
Avg Outage Duration	60	100	73.3
SAIDI	120	100	220
SAIFI	2	1	3
CAIDI	60	100	73.3
MAIFI	0	0	0

TABLE 2

Distribution Feeder After FLISR

	Mainline Outages	Tap and Below	Total
Number of Outages	2	50	52
Avg Customer per Outage	400	20	34.6
Avg Outage Duration	55	100	80
SAIDI	44	100	144
SAIFI	0.8	1	1.8
CAIDI	55	100	80
MAIFI	2	0	1.2

The discussion above highlights that trying to isolate reliability metrics and benefits to a single factor such as AMI or FLISR has several nuances and may not be particularly valuable unless put in the right context. Particularly when looking at individual feeders in which there can be a significant amount of variability year to year. Factors such as vegetation, animals, storms, and public damage play a significant role in year-over-year reliability and while the Company actively works to limit these risks through various programs and initiatives, these factors are largely outside of the control of the Company and can either positively or negatively impact reliability in a given year. As such, it should not be assumed that improved reliability is a direct result of FLISR nor should it be assumed that declining reliability is a direct result of FLISR not achieving its objective.

FLISR is an integrated system that includes the advanced application within ADMS, a communication network, and automated field devices that enable automated switching devices to decrease the duration and number of customers affected by any individual mainline outage. Specific to the three feeders that are equipped with automated field devices (feeders are not equipped with "FLISR" as noted in the question, FLISR is an integrated system) no conclusions should be drawn by looking at the year-over-year reliability metrics. Feeder reliability metrics include all outages and FLISR provides reliability benefits specific to mainline outages and as described above, there are many factors that can either positively or negatively impact reliability in a given year.

Understanding FLISR reliability benefits requires analyzing mainline outages and how the integrated FLISR technology functioned in decreasing the duration and number of

customers affected by any given mainline outage that ultimately improved reliability for customers.

These nuances show that a single reliability metric – particularly for an individual feeder – provides little value and can be misleading; therefore, reliability indices must be interpreted holistically and in the proper context of variables such as vegetation, animals, storms, public damage, technological improvements, and other factors in order to glean a comprehensive and accurate picture of overall system performance and ultimately the experience of our customers.

I. *Explain the dispersion of the estimated restoration times that do not fall within the -90 to 0 and +1 to +90-minute ranges for 2022.*

The percent balance of the estimated restoration times (ERT) accuracy windows (outside of ± 90 minutes) consists mostly of outages in which the customers are receiving system generated ERTs. ERT times begin as system-generated estimations based on many factors of an outage. Once the outage is first detected, the control center operators must determine which device/area of devices may have caused the outage and prepare the crews for restoration operations. The system determines the preliminary ERT information the operators gather from customer calls amounts and device connectivity. Once the crews are assigned the outage, arrive to the outage site, and can determine the scope of the outage work needed, the crew provides an updated ERT based on the extent of the outage. The ERTs provided to customers at this stage of the outage are typically more accurate than the initial system generated ERTs.

Table 3 illustrates the total percent of ERTs that is either greater than +90 minutes or was less than -90 minutes for NSPM and MN Only in 2022. The totals combined with those that fall within the -90 to 0 and +1 to +90 equal 100 percent.

TABLE 3

2022

ERT Greater than +90	
NSPM	17.30%
NSPM (MN Only)	19.50%
ERT Less than -90	
NSPM	8.50%
NSPM (MN Only)	9.00%

II. Response to City of Minneapolis (City) Recommendations

In their Comments, the City notes the safety, reliability, and service quality reports and reliability maps are excellent sources for guiding efforts to deliver more equitable service to customers and requests the Company provide additional information in Reply Comments on various topics. We address these topics below.

A. Set a goal of the first quartile as a reliability standard to be phased in over time.

The Company believes that the current reliability standards, within the second quartile, are the most appropriate standards at this time. Second quartile reliability standards represent better than average reliability within a group of comparable utilities nationally. This standard was originally proposed by all of the electric investor owned Minnesota utilities in their respective 2019 Safety, Reliability, and Service Quality Reports. In Order Point 11 of the Commission's December 18, 2020 Order, Docket No. E002/M-20-406, the Commission first set the Minnesota service territory-wide Reliability Standard at the IEEE benchmarking second quartile for Xcel Energy, Minnesota Power (MP), and Ottertail Power (OTP), affirming it as the correct standard. IEEE second quartile reliability standards have continued to be accepted for Xcel Energy, as well as MP and OTP for the past three years.

Service reliability remains a core goal of Xcel Energy; however, it must be prioritized among other goals. The Minnesota state legislature has in recent years set quantitative policy goals for the state's electric utilities. One example is customer affordability where updates to Minn. Stat. § 216C.05, subd. 2 set a goal that retail electricity rates be five percent below the national average. A second example is renewable energy objectives where Minn. Stat. § 216B.16, subd. 2g sets a 100 percent carbon-free standard by the year 2040. These objectives are not necessarily in conflict with system reliability improvement; however, Company investments do need to be prioritized in a way that does not compromise affordability. Any benchmarks or metrics in the

Company's service quality standards that impose more stringent targets have both costs and benefits associated with those changes. Within the context of current legislative energy policy priorities, the Company believes that our proposed second quartile reliability standards remain reasonable and appropriate.

B. Direct Xcel to create a plan to close the locational reliability gap so that customers being served on the poorest performing feeders are brought to a similar level of service as those on higher performing feeders experience based on rolling three-year historic data.

Xcel Energy strives to provide equitable service to all of its customers. The interactive maps we update annually with reliability, disconnection, affordability, and low-income CIP program participation information helps provide insight to how that service is, or may be, delivered. At the same time, we must balance system investments according to state law and meeting the needs of our entire customer base. When prioritizing system investments, we consider elements such as areas experiencing multiple interruptions on feeders with the largest customer minutes of interruption, and feeders that have the poorest performance over the past year as measured by SAIDI and SAIFI. The company invested over $3 million on reliability improvement projects on these feeders in 2022. Xcel Energy is actively pursuing federal funding for electric service resilience improvement projects in Minnesota and other service areas. One example is our grid resilience grant application to the federal Department of Energy earlier this year. This application includes Minnesota project locations and is part of the Grid Resilience and Innovation Partnerships program (DE-FOA-0002740) funded through the federal Infrastructure Investment and Jobs Act (IIJA).

Additionally, the Company is currently undertaking an analysis of the five metrics included in our interactive map to determine if there is any correlation between performance and these metrics. The Commission formalized our efforts with a requirement to file the results of our analysis and a plan for any disparities in our next Annual Service Quality report filed in 2024. Those order points are shown below.

On May 11, 2023 in Docket Nos E-002/M-20-406 & E-002/CI-17-401, the Commission issued the following Order Points 3 and 4.

> *3. Required Xcel to conduct an analysis that examines whether there is a relationship between poor performance on the five identified metrics displayed on the interactive map and equity indicators. Required Xcel to file this analysis with its next service quality report due April 1, 2024.*

4. If Xcel's analysis determines there are disparities in any of the five metrics displayed on the map, required Xcel to identify preliminary steps it could take to rectify the disparities and if Commission approval is required, where and when it would expect to file solutions. This should include an analysis of whether modifications to Xcel's Quality of Service Plan are necessary to address any identified disparities. Required Xcel to file this preliminary plan with its next service quality report due April 1, 2024.

The City also mentioned locational reliability in its Comments. On May 15, 2023 the Department issued Information Request (IR) No. 2, that directly requests a response to the City's questions and comments regarding the disparities between Xcel Energy and four neighboring utilities. In that IR response we discuss how differing factors between utilities and system capabilities, construction, age, and configuration create different results. We have included our response to DOC IR 2 as Attachment A for additional explanation.

III. Consistency with Recent Orders and Minn. Rules Ch. 7826

Response to Department of Commerce Comments
We appreciate the Department's thorough review of our 2022 Electric Service Quality Report and confirmation they believe we have met required Orders and Rules, including the update to our DER complaint tracking and response times and customer complaints absorbed under this single reporting location.

Response to City of Minneapolis Comments
In our 2022 Electric Service Quality report, filed on March 31, 2023, we note the requirement of our 2021 report in the Commission's Order, dated November 9, 2022 in Docket No. E002/22-162. That Order requires the Company to document response duration in days, beginning from the date of initial customers contact to the date of Company reply, for inquiries, complaints, or disputes related to Distributed Energy Resources (DER) and/or the interconnection process that are received through Xcel Energy's call center, email, or otherwise with information to be shared via an .xlsx format in the Company's 2023 service quality filing.

In its current Comments, the City requested "that the Commission uphold the Order and require Xcel to take necessary steps to comply with tracking all DER inquiries and response times so that 2023 SRSQ data is as complete as possible. One possible expedient solution that could be implemented immediately is a shared tracking spreadsheet to record DER complaints taken by the call center and other staff."

The Company seeks to clarify that we have begun the necessary steps to track all DER inquiries and response times in response to this Order point. Soon after the Commission's November 9, 2022 Order requiring this additional tracking of DER communications, the Company began evaluating how to comply with this requirement. Since that time, we have been working to establish a process to track DER inquiries in both our call center and within our program team (where the majority of calls and emails are received). Unfortunately, we were unable to find a cost-effective solution to automatically track the multitude of questions (that could be considered an inquiry) within our software systems today. Since our program staff do not currently have a system enabled capability to track emails, we have implemented a process to begin manually tracking emails from the point of initial contact to the date of Company reply beginning in January 2023. The Company will report this information, as required, in an xlsx format in our 2024 QSP Report.

For inquiries received in the call center, those that are complicated, are of the nature of a complaint, are a dispute, or require escalation have always been documented. Reinforcing education is being provided to the call centers to ensure that even simple inquiries are also recorded – but for this requirement it is to track only the point of initial contact, not every contact. Unfortunately, as with email, a systematic solution has not been found, therefore, tracking of inquiries through the call center is reliant on manual processes at this time.

Further, the Company already provides tracking on disputes and complaints as part of several of our DER reporting requirements, this includes Dockets No. E002/M-13-867, E002/M-13-1015 and E999/CI-16-521. We actively report and track these details while reporting on a quarterly basis. The challenge with this reporting requirement is addressing "inquiries" which includes any email sent to any individual within the Company regarding issues such as the status of an application or perhaps which program is best for a customer to participate in. On average, the solar team receives approximately 200 to 400 emails daily. As a result, the tracking process is burdensome and adding time and cost to the overall DER process, however, we are manually tracking inquiries in a spreadsheet.

IV. What level should the Commission set the 2023 Reliability Standards?

The Company continues to support its original proposal to set the 2023 standards based on the 2023 IEEE benchmarking results as follows:

- Statewide reliability- IEEE second quartile for large utilities;
- Metro East and Metro West work centers: IEEE second quartile for large

utilities; and
- Southeast and Northwest work centers: IEEE second quartile for medium utilities.

The Company notes that these 2023 IEEE Standards proposals are also supported in public comments submitted by both the City of Minneapolis and the Minnesota Department of Commerce.

CONCLUSION

Xcel Energy is committed to providing our customers with safe, reliable, and quality customer service. We appreciate the thoughtful review of our 2022 Annual Electric Service Quality Report by the Department and the City as well as the opportunity to respond to their Comments submitted in this docket. We believe we have met the requirements laid out in the Report and request the Commission accept our 2022 Annual Report on electric safety, reliability, and service quality as detailed in our March 31, 2023 filing.

Dated: June 30, 2023
Northern States Power Company

☐ **Not Public Document – Not For Public Disclosure**
☐ **Public Document – Not Public Data Has Been Excised**
☒ **Public Document**

Xcel Energy		Information Request No.	2
Docket No.:	E002/M-23-73		
Response To:	Minnesota Department of Commerce		
Requestor:	John Kundert		
Date Received:	May 15, 2023		

Question:
Topic: Service Reliability Comparison for 2021
Reference(s): Docket No. G002/M-20-406, City of Minneapolis Comments dated January 6, 2023 pages 3 – 4

Provide a narrative that explains the various factors that would result in Connexus Energy, Dakota Electric Association, Shakopee Public Utilities, and Wright-Hennepin Cooperative Electric Association having different results than Xcel Energy's Minnesota Electric service territory regarding System Average Duration Index, (SAIDI), System Average Interruption Frequency Index (SAIFI), and Customer Average Interruption Duration Index (CAIDI) in 2021.

Response:
Many factors can affect the reported reliability performance of electric utilities. We will discuss the most significant here. One difference is in the way outages are tracked and recorded. As shown in Table 2 from the referenced City of Minneapolis Comments, some Minnesota utilities do not have automatic recording of outages whereas Xcel Energy does have automatic recording of outages. With manual methods of recording of outages there is a greater chance of missing outage data which could lead to an overstatedly low outage rate which influences both SAIDI and SAIFI.

Other factors affect the overall reliability performance as well. One such factor is line and equipment exposure, whether that be due to severe weather disturbances, wildlife contacts, or public damage like vehicle collisions. Age of the poles, lines, and equipment play a significant role as these components begin to reach their end of useful life and experience increasing failure rates.

Also, system construction and configuration have a significant impact on reliability especially the differences between underground distribution lines and overhead distribution lines. Not only do underground lines avoid most weather and vegetation related outages, but they also often have built in looped systems so that power can be restored from a separate source through switching even before repairs are completed. System construction and age are likely

contributors to the different results reported by neighboring utilities. As seen in Table 1 below, Northern States Power - Minnesota has a significant portion of its customer base located in areas developed during the 1960s and 1970s when overhead electric distribution lines were more commonly constructed. This highlights a significant difference in the age of electric infrastructure from original development.

Table 1

Electric Utility	Primary Service Area (County)	Housing Structure Median Year Built*	Primary residential electric service type during median year of original construction
Shakopee Public Utilities	Scott County	1996	Underground
Wright-Hennepin Coop Elec Assn	Wright County	1993	Underground
Dakota Electric Association	Dakota County	1987	Underground
Connexus Energy	Anoka County	1985	Underground
Northern States Power Co - Minnesota	Hennepin County	1971	Overhead
	Ramsey County	1965	Overhead
*Source: US Census 2016-2020 American Community Survey 5-year Estimates			

Preparer: Michael Renman
Title: Manager, System Performance
Department: Electric System Performance
Telephone: 651-229-2509
Date: May 25, 2023

CERTIFICATE OF SERVICE

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

xx 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. G002/M-23-73

Dated this 30th day of June 2023

/s/

Christine Schwartz
Regulatory Administrator

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