- *Meter Removed*: Meter is removed in the field but still shows in the Meter Reading system.
- No Answer: No access to premises.
- Service Cut at Pole: Service disconnected either for non-payment or security.
- OC Meter Maint: Meter communication malfunction (generates a work order).

In general, the number of meters that go unread fluctuates annually, and is highly dependent on how successful we have been in reaching out to customers, how responsive customers have been to our efforts to communicate with them, and how successful we have been at solving access and other customer-related issues.

When we are unable to manually read a meter that is not transmitting usage data, we will reach out to the customer. When the field personnel enter a skip code that is customer-related, the AMR-system sends a letter to the customer asking them to contact the Company. The letter is sent each month when we attempt to read the meter. After six months of no read, the Company begins to investigate the issue deeper. We call and email the customer; we also try different avenues to locate property owners, such as asking neighbors or tenants, or searching available public records (e.g., property tax). The Company is allowed to disconnect the customer after a meter goes unread for 18 months due to access issues (after appropriate notices), although we seldom use this option because these customers are typically continuing to pay their estimated bills. If meters are not energized, we can and will remove them with customer permission, which stops the automated AMR read requests.

We note that 2020 was a challenging year and that due to the pandemic, we did not manually read meters from the beginning of April until the beginning of June. During this time frame meter exchanges were also not being completed and we did not contact customers to request access to their meters (residential or commercial). If a customer has an automated meter it will estimate twice prior to being flagged for a manual read. For example, if a failure happened in February, we would not have known that a manual read was needed Aril, at that point we were not reading meters so it would have been estimated from February until June or July depending on the cycle. In addition, since repairs to meters/modules were not being done, the number of meters we needed to read increased from approximately 3700 in April to 7500 in September. We did not have the staffing to read this number of meters which led to the increase in No Read Returned skips.

The Company remains committed to working through these challenges and lowering the number of unread meters in 2021.

Table 10

	Residential	Commercial	Industrial	Other	A Total	B Total Number of Meters Installed	A÷B Percent Read by Utility (Company)	
JANUARY	1618616	161178	13093	3874	1796761	1799481	99.85%	
FEBRUARY	1619614	161241	13094	3882	1797831	1800458	99.85%	
MARCH	1621005	161291	13108	3861	1799265	1801834	99.86%	
APRIL	1622975	161271	13120	3861	1801227	1804115	99.84%	
MAY	1623833	161296	13133	3856	1802118	1805139	99.83%	
JUNE	1626053	161284	13141	3850	1804328	1807235	99.84%	
JULY	1627329	161370	13141	3848	1805688	1808810	99.83%	
AUGUST	1629584	161541	13141	3851	1808117	1811059	99.84%	
SEPTEMBER	1631213	161652	13146	3840	1809851	1812763	99.84%	
OCTOBER	1633417	162011	13153	3840	1812421	1815238	99.84%	
NOVEMBER	1635466	162360	13156	3844	1814826	1817561	99.85%	
DECEMBER	1636288	162258	13109	3778	1815433	1819485	99.78%	

A. The number and percentage of customer meters read by utility personnel (Company.)

*The number of reads per month is based on the meter read schedule for the month. Example January 2021 runs from December 31 to February 4, 2020 to capture all meter read routes. This better reflects the meter reading counts per month. Previous numbers reflected readings that were read ONLY in that month, so months like February are naturally smaller totals because of 28 days versus 31 in others.

Pursuant to Minn. R. 7826.1400, Subpart D, the Company must provide various metrics on its meter-reading performance, including for each customer class and for each calendar month:

"Data on monthly meter reading staffing levels by work center or geographical area."

The following data for 2020 includes full-time equivalent numbers and does not count temporary staff positions. The "Other" category numbers include Xcel Energy personnel located in our Sioux Falls Service Center who read meters in western Minnesota and South Dakota.

	Jan-	Feb-	Mar-	Apr-	May-	Jun-	Jul-	Aug-	Sep-	Oct-	Nov-	Dec-
	20	20	20	20	20	20	20	20	20	20	20	20
Metro East	3	3	3	3	3	3	3	3	3	3	3	3
Metro West	3	3	3	3	3	3	3	3	3	3	3	3
Northwest	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Southeast	3	3	3	3	3	3	3	3	3	3	3	3
Other	1	1	1	1	1	1	1	1	1	1	1	1

TABLE 11 – METER READING STAFF LEVELS

Meter reading staffing levels during 2020 remained the same compared to 2019.

2. Meter Equipment Malfunctions Tariff Annual Report

- In the Commission's November 30, 2010 Order in Docket Nos. G002/CI-08-871 and E,G002/M-09-224, at Order Point 2, the Commission directed the Company to file the following information with its annual electric service quality reports filed pursuant to Minn. Rules, Part 7826.0500:
 - Volume of Investigate and Remediate Field orders;
 - Volume of Investigate and Refer Field orders;
 - Volume of Remediate Upon Referral Field orders;
 - Average response time for each of the above categories by month and year;
 - Minimum days, maximum days, and standard deviations for each category; and
 - Volume of excluded field orders.

In summary, we performed within the field response parameters prescribed in our tariff⁶, completing a total of 4,514 electric and 3,755 natural gas orders with an average response time of 3.04 and 4.90 days, respectively. We additionally completed 563 electric and 831 natural gas field orders for which we experienced access and/or environmental issues, both allowable Exclusions under the tariff. We provide our detailed results in Attachment J.

⁶ NSPM Electric Rate Book, General Rules and Regulations, Section No. 6 Meter Equipment Malfunctions, Sheet Nos. 17.2 – 17.4

In 2020, the Company had one remediate upon referral work order that was completed within the one-day maximum as required per the tariff and two that were completed outside the one-day maximum. The April order was created late on Good Friday and completed on Monday morning. The October order was created after hours and completed on the morning of day 2; however, this order was created incorrectly – and should have been created as investigate and remediate, which would have been completed within the maximum time allotted. Necessary communications have been implemented to prevent this type of situation going forward. While this report focuses on 2020 performance, we note that customer and employee safety is top of mind during the COVID-19 outbreak. Being mindful of the customer contacts that can occur with malfunctioning gas meters such as entering premises to access inside meters and/or to perform relights, we note that there are some inside meter situations that are deferred for future follow-up due to customers not comfortable due to COVID-19; however, these numbers are showing a decrease.

B. INVOLUNTARY DISCONNECTIONS

- Pursuant to Minn. R. 7826.1500, Subparts A-D, the Company must provide various metrics related to involuntary disconnections of service, including, for each customer class and each calendar month:
 - The number of customers who received disconnection notices.
 - The number of customers who sought cold weather rule protection under chapter 7820 and the number who were granted cold weather rule protection.
 - The total number of customers whose service was disconnected involuntarily, and the number of these customers restored to service within 24 hours.
 - The number of disconnected customers restored to service by entering into a payment plan.

Table 12 below provides the required information as outlined above.

TABLE 12
DISCONNECTION NOTICES, REQUESTS FOR
COLD WEATHER RULE PROTECTION

	Jan-20		Feb-20		Mar-20		Apr-20		May-20		Jun-20		Jul-20		Aug-20		Sep-20		Oct-20		Nov-20		Dec-20		Total	2020
	R	С	R	С	R	С	R	С	R	С	R	С	R	С	R	С	R	С	R	С	R	С	R	С	R	С
Number of customers who received disconnect notices ¹	49,667	5,240	67,079	5,081	60,352	5,470	45,698	7,630	1	6,630	1	10,969	0	5,597	1	5,219	0	5,122	4	5,034	0	4,352	0	5,129	222,803	71,473
Number of customers who sought cold weather rule protection ¹																										
Sought	9,399	0	11,442	0	10,447	0	12,348	0	0	0	0	0	0	0	0	0	0	0	5,255	0	5,012	0	4,322	0	58,225	0
Granted	9,399	0	11,442	0	10,447	0	12,348	0	0	0	0	0	0	0	0	0	0	0	5,255	0	5,012	0	4,322	0	58,225	0
												-					-	1	-	1						1
Number of customers locked for nonpayment	1,118	40	1,110	36	592	67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,820	143
Number of total customers restored to service within 24 hours	563	7	663	5	384	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,610	29
Number of customers restored to service with pay arrangements	451	11	349	5	169	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	969	18
 The data for customers rece Approximately 94 percent of 2 electric service, the disconnect difficult since Xcel Energy's cu 	iving disc Xcel Ener is due to stomer so	connect i rgy's Mir the total ervice sys	notices and nnesota cust amount of stem does n	seeking omers : regulat ot have	cold weath are electric o red charges o e the functio	er rule f or comb overdue onality to	protection r pined gas ar . Thus the p sort the da	epresen ad electr ability to ata in thi	is a combin ic customer o track disco s manner.	ution of 5. For th nnects c	gas and ele hose custon lue to elect	ctric custo ners recei ric non-p	omers. ving gas an ayment wo	ıd vuld be		•	•	•		•		•				

C. Service Extension Response Times

- Pursuant to Minn. R. 7826.1600, Subparts A and B, the Company must provide a report on service extension request response times, including, for each customer class and each calendar month;
 - The number of customers requesting service to a location not previously served by the utility and the intervals between the date service was installed and the later of the in-service date requested by the customer or the date the premises were ready for service.
 - The number of customers requesting services to a location previously served by the utility, but not served at the time of the request, and the intervals between the date service was installed and the later of the in-service date requested by the customer or the date the premises were ready for service.

Table 13 below is the required information by Part A of the Rule and includes data on service installations that require construction.

Residential													
	Jan- 20	Feb- 20	Mar- 20	Apr- 20	May- 20	Jun- 20	Jul- 20	Aug- 20	Sep- 20	Oct- 20	Nov- 20	Dec- 20	Total 2020
# Service Installations	277	337	321	381	510	522	522	603	521	707	625	561	5887
Avg days to complete from customer and site ready	7.4	4.9	5.3	2.8	4.5	2.8	6.5	6.3	6.2	5.9	6.6	5.9	5.48
Commercial													
	Jan- 20	Feb- 20	Mar- 20	Apr- 20	May- 20	Jun- 20	Jul- 20	Aug- 20	Sep- 20	Oct- 20	Nov- 20	Dec- 20	Total 2020
# Service Installations	26	25	40	41	47	44	53	53	51	76	64	83	603
Avg days to complete from customer and site ready	11.1	10.9	4.2	3.9	3.7	3.6	2.8	3.9	4.2	4.3	2.8	1.2	3.97

 Table 13 – Service Extension Installations

We note we are in the third year of reporting service extension response times with data from our new SAP work management system. The number of commercial installations in 2020 increased compared to 2019. We are seeing improved installation times due to leveraging and adapting the processes that were put in place with the SAP rollout in 2018. The processes include continued training with better handoffs from the time a customer requests an extension until completion of the work. We will continue training in 2021 and beyond as needed. With this increased focus and strategic approach to the data related to residential and commercial

services, the 2020 results show improvements in terms of completion and work closure accuracy. We believe the 2020 data is a more accurate reflection of the volume of completed work and our performance; whereas, the 2018 and 2019 data reflect the data capture and learning curve challenges we experienced.

For Part B of Rule 7826.1600, we note that 292,903 customers requested service at a location previously served by the Company in 2019. With respect to situations where we supply service to a location previously served by the Company, we handle these requests on the next business day. Responding to such a request generally involves setting a meter and connecting the service. Such cases are not reflected in the information provided in Table 13.

D. Call Center Response Times

- Pursuant to Minn. R. 7826.1700, the Company must provide "a detailed report on call center response times, including calls to the business office and calls regarding service interruptions. The report must include a month-by-month breakdown of this information."
- In the Commission's November 3, 2004 Order in Docket No. E002/M-04-511, at Order Point 6, the Commission required the Company to "include on a going forward basis, data regarding credit calls . . . in its calculation of call center response times."

Minn. R. 7826.1200, subp. 1 requires that we answer 80 percent of calls made to the business office during regular business hours within 20 seconds. We note that our Call Centers are staffed 24 hours a day, 7 days a week, and our Interactive Voice Response (IVR) system is used in the same manner across this time period, therefore, these were our "business hours." Our performance includes call and service level information on a 24-hours-a-day, 7 days-a-week basis.

Table 14 below provides a summary of our 2020 call center response time performance. Details on the various call types handled by our residential call center representatives, Business Solutions Center (BSC), Credit and Personal Account Representatives (PAR) and our IVR, along with performance information, can be found in **Attachment K**.

Calls Included	2020 Performance	Reference to Att K
Residential, BSC, Credit,		
PAR, IVR handled outage	68.4% in 20 seconds or less	Line 20
calls		
Residential, BSC, Credit,	95.9% in 20 accords or loss	Line 21
PAR, all IVR handled calls	03.070 III 20 seconds of less	Line 21

TABLE 14 – 2020 CALL CENTER RESPONSE TIME SUMMARY

As required by the Commission, we have included credit calls in our reported call center response time. We also provide as a comparison all service level calls offered to agents, which in addition to Residential, BSC, Credit and PAR, it includes all IVR handled calls.

In addition, Line 23 on Attachment K provides our average speed of answer (ASA) and the rows below break out the ASA by call center.

The month-by-month detail provides an overview of the challenges we encountered this year. During the first months of January through May, we were on par or exceeding historical performance and our designated targets. From March through May, we received an average of 55,000 fewer calls monthly compared with the same timeframe in 2019.

During the remaining months of 2020 (June through December), we received an average of 23,570 fewer calls per month than the previous year; but we were impacted by multiple factors – including COVID-19. Over the course of three weeks (March 16 to April 1), we transitioned all 360 call center agents and frontline customer support employees from Xcel Energy facilities to home, providing laptops and the telephone equipment they would need to answer calls in their homes. With our customers busy navigating pandemic-related issues and with many businesses closed, call volume was down. Our company responded to the conditions in the economy by implementing hiring freezes and limiting expenditures – including the use of overtime beginning end of April 2020 with a slight adjustment in June 2020. The Company continues to have an advanced review and approval process in place until further notice. As time went on, we began to see higher absenteeism and attrition rates, which likely were related to pandemic impacts on our employees and their families. Our customer service representatives also began to experience an increasing number of technology issues as they worked from home.

Civil unrest also had an impact to our company's operations. Our payment processing center is in downtown Minneapolis and our Remittance Processing was

disrupted for nine business days due to the unsafe conditions and along with illness. When it was safe to return to work, continued illness plagued the team and it took an additional 11 days until we were nearly fully staffed again. To help mitigate the situation, we established a "disaster recovery site" and a supplemental team worked to process checks that we received without accompanying statement stubs or incomplete or incorrect information. Despite our efforts, the turnaround time for payment processing was extended compared to what our customers normally see and this led to an increased number of calls.

In August through October, the culmination of all these factors, along with thousands of hours of COVID-related absences, caused a significant impact to our call center operations.

As all this was occurring, we implemented multiple strategies to address the issues we were encountering. For many months, we used special messaging within our IVR to efficiently provide information to customers and guide them to conduct transactions within the IVR or online. We saw a very positive customer response to these actions. We worked with our vendor partners and our in-house technology staff to identify and resolve performance issues in our computing environment. We offered incentives to our employees to work overtime and augmented our call center staffing with employees from other areas within our Customer Care organization. We suspended non-essential activities and implemented new procedures to reduce the length of calls and enable us to more effectively serve customers.

As we ended 2020, we had largely resolved technology issues, and from March through December, we hired 111 residential and credit customer service agents. Because all training is now done virtually rather than in a classroom setting, we have attempted to keep our training classes smaller, so it is taking some time to become fully staffed again. An additional 27 were hired in January 2021 and hiring is ongoing through the first half of 2021.

Due to higher than expected workload and ongoing COVID-19 absences at the start of 2021, the contact centers were only staffed to approximately 85 percent of actual need, but we are expanding our hiring efforts into three new communities – Ashland, WI; Roswell, NM; and Pueblo, CO; where we are advertising job openings for permanent home-based agents. We anticipate our contact centers should be fully staffed in May or June 2021, provided hiring targets are met.

We continue to work toward improving our customer experience and reaching our targeted customer service response levels that we have consistently achieved in the past.

In the Commission's December 18, 2020 Order in Docket No. E002/M-20-406, at Order Pont 13, the Commission required the company to clarify call center data in its 2020 service quality reports, discuss the Company's efforts to improve the reliability of its Customer Resource System, and explain why interactive voice response is included in reporting for calls answered within 20-second threshold.

In September and October 2019, the Company experienced longer Call Center response times due to a large unplanned customer resource system (CRS) outage that occurred over four days in late September 2019. At that time, we also informed the Commission of this event. This system outage impacted our customers' ability to conduct self-serve transactions on our website and interactive voice response (IVR) platforms, resulting in much higher call volume to our Call Center agents, who were offered approximately 96,000 calls during this 100-hour event. The increase in calls required significant staff augmentation, and approximately 70 agents provided nearly 900 additional hours of support. The higher than normal call volume also rolled into early October.

The system outage also impacted Call Center agents' ability to process customer transactions. Because agents who answered customer calls had limited ability to process transactions instantaneously, they had to use various forms for transactions such as payments, moving requests, and systems-issued call backs. In total, over 19,000 forms were submitted for processing, creating additional work that diverted agent resources from answering incoming calls as timely as usual.

In response to the September 2019 CRS outage, the Company has made several upgrades in our CRS system that has improved performance, reliability and security. A summary of the improvements is listed below:

Performance/reliability: upgraded and reorganized disk storage; upgraded with faster storage; mirrored the root volume group on servers; deployed replicated stand-by database.

Performance and security: upgraded server firmware to more current; nirvanasoft (complex billing engine) Win10 Middleware upgrade; application technical stack. The improvements and upgrades listed above assisted with the performance and reliability during 2020.

In early August 2020, our work-from-home contact center agents began experiencing delays in screen loading, white-screening, and VPN connectivity issues impacting the

use of core applications. A solution was identified by pushing a cyber security control/monitoring tool to the Call Center groups that appeared to alleviate the latency, white screening and VPN connectivity issues that were directly contributing to elevated average handle times.

Regarding the inclusion of interactive voice response (IVR) system calls in our call center metric; as required by Minn. Rule 7826.1700, the Company reports "call center response times, including calls to the business office and calls regarding service interruptions" as combined metric. As authorized under Minn. Rule 7826.1200, Subp. 2, for service interruptions, the metric includes outage calls made to the business office and outage calls handled by the IVR system. Additionally, many customers prefer the IVR system, so it is a priority to make IVR easy to use. By not including these calls, customers are not given consideration for their preferred channel in the metric. Although the reporting on call center response times has evolved organically over time and new lines have been added to Attachment K for transparency, we have used this same approach for reporting for more than 15 years, since Rules 7826.1200 and 7826.1700 became effective. Removing the ability to include IVR handled outage calls in our metric would require a significant increase to the Customer Care operations budget.

E. Emergency Medical Account

Pursuant to Minn. R. 7826.1800, the Company must provide "the number of customers who requested emergency medical account status under Minnesota Statutes, section 216B.098, subdivision 5, the number whose applications were granted, and the number whose applications were denied and the reasons for each denial."

When customers contact us indicating they have medical / life sustaining equipment, they are referred to our Personal Accounts Department for follow-up. A medical form is sent to the customer to be filled out by their doctor (or physician's assistant or certain nurses), including a signature and returned to the Company within 10 days. When the signed form is received, the Personal Account Representative (PAR) will update the account with the emergency medical account flag and file the form within our system. Certification must be renewed annually. Thirty days prior to expiration, our billing system automatically sends a new application to the customer for completion by a doctor and return to the Company in order to continue the certification. As of March 2021, the Company currently has 2,162 Minnesota households certified with the emergency medical account status.

Table 15 below provides the 2020 monthly counts of requests for emergency medical account status and the count of request denied. The reasons for denial of emergency medical account status include customers not returning the form to the Company and the doctor refusing to certify the customer needing medical/life support.

					-								
	Jan. 2020	Feb. 2020	Mar. 2020	Apr. 2020	May. 2020	Jun. 2020	Jul. 2020	Aug. 2020	Sept. 2020	Oct. 2020	Nov. 2020	Dec. 2020	Total 2020
	R	R	R	R	R	R	R	R	R	R	R	R	R
Requested	305	156	89	43	49	36	39	61	49	38	66	55	986
Denied	0	0	0	0	9	4	5	8	6	5	8	6	51

Table 15

*reasons for denial of emergency medical account status: 1. Customer did not return form; 2. Doctor refused to certify as Medical/Life Support.

The Company sent letters to hospital and clinic networks within our service territory providing information on the statutory protection available to customers with medically necessary equipment. We will continue to identify additional groups for outreach to promote our programs, as well as through our call centers and Personal Assistant Representatives.

F. Customer Deposits

Pursuant to Minn. R. 7826.1900, the Company is required to report on "the number of customers who were required to make a deposit as a condition of receiving service."

During 2020, we requested a total of 678 deposits as a condition of service for our residential customers that had filed for bankruptcy. We request these deposits upon notification from the bankruptcy court and/or the customer of their bankruptcy petition.

G. Customer Complaints

- Pursuant to Minn. R. 7826.2000, the Company is required to provide a Report on complaints by customer class and calendar month, including at least the following information:
 - The number of complaints received
 - The number and percentage of complaints alleging billing errors, inaccurate metering, wrongful disconnection, high bills, inadequate service, and the number involving serviceextension intervals, service-restoration intervals, and any other

identifiable subject matter involved in five percent or more of customer complaints.

- The number and percentage of complaints resolved upon initial inquiry, within ten days, and longer than ten days.
- The number and percentage of all complaints resolved by taking any of the following actions:
 - Taking the action the customer requested;
 - Taking an action the customer and the utility agree is an acceptable compromise;
 - Providing the customer with information that demonstrates that the situation complained of is not reasonable within the control of the utility;
 - Refusing to take the action the customer requested
- The number of complaints forwarded to the utility by the Commission's Consumer Affairs Office for further investigation and action.

We provide the required information as **Attachment L** to this Annual Report, which includes complaints that are handled by the Call Center and the Company's Customer Advocate Group.

Pages 1-4 of Attachment L contain information on customer complaints handled by our customer advocates. Attachment L, page 4 provides the number of complaints forwarded to the Company by the Commission's Consumer Affairs Office (CAO) for further investigation. The grand total on page 4 is consistent with the figure also reported in our Quality of Service Plan (QSP) Tariff Annual Report in Docket E,G002/CI-02-2034.

Attachment L pages 5-16 contain information on complaints handled within the Call Centers. Effective with our 2017 Annual report, the "High Bill" category on pages 5 through 16 now includes complaint calls related to decoupling issues. More specific details regarding decoupling complaints can be found in our annual report filed on February 1, 2019 in Docket Nos. E002/GR-13-868 and E002/GR-15-826.

In the Commission's December 18, 2020 Order in Docket No. E-002/M-20-406, at Order Point 16, the Commission ordered: after consultation with Department and Commission staff, each utility must file revised categories for reporting compliant data. The Commission hereby delegates authority to the Executive Secretary to approve

additional reporting categories, with the goal of establish them by the April 1, 2021 reporting deadline.

Commission Staff, including the Consumer Affairs Office, convened a work group meeting on Monday, March, 1, 2021 with the Department of Commerce, Xcel Energy, Minnesota Power, and Otter Tail Power to review and discuss current complaint categories used in annual Safety, Reliability, and Service Quality ("SRSQ") reports. Minnesota Rule 7826.2000 was reviewed along with the current categories used by each of the utilities and the Consumer Affairs Office. The group agreed to work together to further refine definitions for existing categories to allow for greater specificity and seek consistency, where possible. As part of this review, additional categories may be considered based on emerging topics of interest. Quarterly meetings will continue in 2021 with the objective of establishing a recommendation for use with the next calendar year (2022) to align with SRSQ reporting cycles.

H. Electronic Customer Contacts

In the Commission's December 18, 2020 Order in Docket No. E002/M-18-406, at Order Point 14, the Commission required the Company to "report over the next two reporting cycles, to the extent feasible, the following:

a. Yearly total number of website visits;
b. Yearly total number of logins via electronic customer communication platforms;
c. Yearly total number of emails or other customer service electronic communications received; and
d. Categorization of email subject, and electronic customer service communications by subject, including categories for communications related to assistance programs and disconnections as part of reporting under Minn. R. 7826.1700.

Over the years, the Company has consistently demonstrated our commitment to quality and reliable service to our customers and over time, we have expanded the channels in which we engage with our customers. Below we briefly provide an overview of these channels:

• Email: Customers can use the "<u>Contact Us</u>" form on XcelEnery.com and can also send emails to <u>customerservice@xcelenergy.com</u>. The Company's Correspondence Team responds to customer emails.

- Mobile App and My Account: Both platforms require authentication and customer activity is trackable. Customers can pay their bill, monitor energy usage, receive notifications, contact Xcel Energy via email or telephone call, and perform many other services. Customers can contact us in a mobile application us via a link to a simpler version of our online "Contact Us" form. These inquiries are received and processed in the same way as our other customer emails noted above. These emails are included in the email count below.
- Social Media: The Company's Correspondence Team also manages customer contacts received via various social media channels such as Facebook and Twitter and are considered "Impressions". These are platforms where people can view various postings directly from Xcel Energy or from other businesses or individuals and does not require authentication. Impressions can be tracked from Facebook and Twitter

Website Visits:	Facebook, Twitter,	12 681 427
	XcelEnergy.com	12,001,127
Logins via electronic		
customer	My Account,	10 432 738
communication	Mobile App	19,432,736
platforms		
Emails or other		
customer service		
electronic	Email	
communications		
received		

Below we provide a summary of the requested data:

The Company will supplement this filing with the total count of 2020 emails received in 2020 along with a summary of email topics.

In the Commission's May 14, 2019 Order in Docket No. E-002/M-18-239, at Order Point 4, the Commission required the Company to "further break down and explain the percentage of complaints they received that were not within the utilities' control (i.e., those related to energy-efficiency providers, solar installers, or other vendors/matters) and include a short summary in their electric service quality reports due April 1, 2020."

The Company is required to break down and explain the percentage of complaints it receives that would be considered not within the utility's control. In 2020, our customer advocate group handled at least 62 complaints which requested an action not in our control (Attachment L, page 6, section D). Examples of items not in control of Xcel Energy include situations involving equipment operating as designed, equipment not owned by Xcel Energy, Cold Weather Rule and Tariffs being followed, disconnection notices sent, circumstances of nature, customer's service disconnected in compliance with Commission Rules., and customer equipment not ready for testing.

Attachment L provides complaints handled by our call centers and includes counts of complaints where the Company demonstrated that the situation referenced in a customer's complaint was not reasonably within the control of the utility. Almost all of the complaints categorized as "Demonstrate" came from our residential customers, so we focus this summary on those complaints. In 2020, the residential complaints handled by our call center which were not within our control were primarily in three categories, below we provide some additional context based on complaint subcategories not included in Attachment L:

- Inadequate Service: These complaints comprised almost 31% of the Demonstrate category in 2020 and included issues around the cold weather program, payment agreements, past due notices, our personal account representatives (PAR) (who handle our low income programs, emergency medical status, and energy assistance) and service issues.
- **Billing Errors:** These complaints totaled almost 40% of the 2020 "Demonstrate" complaints and focus on billing items such as a bill explanation, budget billing and billing disputes.
- Wrongful Disconnection: In 2020, 5% of the "Demonstrate" complaints involved disconnections.

We do not track complaints related to vendors or solar installers, but when a call of this type is received, the Company will investigate the matter to determine the best outcome for the customer, and the extent to which we can or should be involved.

I. Planned Outage Communications

In Docket No. E-002/M-17-553, the Company requested Commission approval, among other things, to use express customer communication preferences in communicating planned outages to customers. The Commission approved the Company's request in an Order dated November 2, 2017. In our initial filing, we committed to provide a brief update in our electric and gas service quality report discussing our progress in implementing a new Planned Outage Communications system along with the following information:

- Number of customers who opted-in to preferences;
- Of those customers, how many prefer each type of communication;
- The number of customers who change or cancel their preferences and stated reason, if known; and
- The CSR will continue to include statistics on customer complaints.

As of December 31, 2020, 3,559,285 Xcel Energy customers have opted-in to receive outage notifications – 1,658,962 to receive emails; 1,574,746 to receive Text/SMS messages; and 325,577 to receive phone notification of the outage.⁷ We currently do not track customers who change preferences, and we do not ask for a reason before allowing a customer to change their communication preferences. The number of customers that have opted-out of preferences (text/SMS and email) is 24,158.

During the continued testing the planned outage communications, we discovered that digital notifications in lieu letters requires more design and thus we continue to use letters to notify customers. Our variance requested in Docket No E002/M-17-533 will expire in 2021.

J. Customer Satisfaction

- In the Commission's February 9, 2018 Order in Docket Nos. E002/M-16-281 and E002/M-17-249, at Order Point 3.E., the Commission required the Company to "provide the following information in its next annual service quality report: The Company's internal customer satisfaction goals and a comparison of the Company's actual performance to those goals, as well as an explanation of the basis for those customer satisfaction goals."
- In the Commission's May 14, 2019 Order in Docket No. E-002/M-18-239, the Commission required the Company to "provide refreshed

⁷ Customers can specify more than one communication channel preference. Therefore, these numbers may not be representative of unique customer counts. All numbers reflect totals for all Xcel Energy customers.

information responsive to the Commission's February 9, 2018 order in future annual service-quality filings" essentially continuing this customer satisfaction reporting requirement.

a) 2020 Customer Satisfactions Goals and Performance

In addition to JD Power satisfaction studies for the utility industry, which focus on broad overall (relationship) satisfaction for the average utility customer, we also measure customer satisfaction when customers directly interact with the Company. The transaction surveys that we use to assess our performance internally are for customer interactions with our customer service representatives, our IVR system, and our website. Table 16 summarizes our 2020 customer satisfaction goals and performance at the transaction type level. We note that all goals are for Xcel Energy (all states), and the transactional survey results are specific to NSPM residential and business customers (combined).

TABLE 16Customer Satisfaction Goals and NSPM Performance – 2020

Customer Channel Scores & Goals - 2020										
OSAT Actual										
Customer Channel	Performance	Goal*								
Transaction - Phone Agent & IVR										
Combined OSAT	82.6%	84.6%								
Transaction - Agent Non-Credit OSAT	82.2%	86.9%								
Transaction - Agent Credit OSAT	80.0%	79.6%								
Transaction – IVR OSAT	83.1%	81.7%								

*NOTE: Goals were set at the company-wide level, not at OPCO level.

For phone and IVR transactions, customers are offered the opportunity to take the survey at the conclusion of their call/IVR use – or the option to get a follow-up call within 1 or 2 days after the transaction. For web transactions, customers are presented a pop-up window and offered the opportunity to participate in a survey. Customers are asked to provide feedback on the following scales:

- The *phone agent* metric represents the percentage of customers who score Xcel Energy 8, 9, or 10 (top 3 box) on a ten-point scale regarding their satisfaction with the phone call.
- The IVR metric represents the percentage of customers who score Xcel Energy a 4 or 5 (top 2 box) on a five-point scale regarding their satisfaction using our IVR system to complete their transaction.

b) J.D. Power Survey

J.D. Power independently measures relationship satisfaction and performs ongoing benchmarking studies that assess how utilities have performed in relation to one another. J.D. Power implements both a residential and business electric satisfaction study, measuring satisfaction with both customer segments across six categories or drivers of satisfaction – power quality and reliability, billing & payment, communications, corporate citizenship, customer service, and price. We subscribe to the J.D. Power survey because it provides a broad understanding of our customers and can combine it with other customer data, such as our transactional surveys, to develop action plans to improve satisfaction.

For several years, the Company has subscribed with J.D. Power to access the utility benchmarking results to help various internal work groups identify and prioritize on strategic areas of focus. This information was not used to set customer metrics for goals in 2020. Starting in 2018, we used the J.D. Power residential study to set and measure metrics for (1) overall residential satisfaction; (2) satisfaction with total monthly cost of electric bill; (3) keeping customers informed about an outage; and (4) percentage of customers recalling Company communications over past three months. This practice continued into 2020.

Table 17 details residential customer satisfaction overall, as well as by category/driver for NSPM in 2020. The percentile rank is NSPM's position within approximately 60 utilities in the J.D. Power study that the Company chooses to benchmarks itself against. As an example, a peer rank of 54 percentile would mean that NSPM has a higher score than 54 percent of the peer set.

Table 17: J.D. Power Residential Electric Satisfaction for NSP in 2020

LT I I I I I I I I I I I I I I I I I I I	NULL	
2019 Residential	Index Score	Peer Percentile Rank
Overall Customer Satisfaction Index	763	
Power Quality & Reliability		
Price		
Billing & Payment		
Corporate Citizenship		
Communications		

[PROTECTED DATA BEGINS...



Table 18 details small/medium business customer satisfaction from the 2020 J.D. Power business study. The table is a combination of NSPM and NSPW customer feedback; however, the scores are predominantly based on NSPM customers.

Table 18: J.D. Power Small/Medium Business Electric Satisfaction for NSPM in 2020

2020 Small/Medium Business	Index Score	Peer Percentile Rank
Overall Customer Satisfaction Index	804	
Power Quality & Reliability		
Price		
Billing & Payment		
Corporate Citizenship		
Communications		
Customer Service		

[PROTECTED DATA BEGINS...

...PROTECTED DATA ENDS]

Tables 17 and 18 are marked NON-PUBLIC as defined by Minn. Stat. § 13.37, subd. 1(b). The information contained in these Tables is from a subscription with JD Power. Because this information derives independent economic value from not being generally known to, and not being readily ascertainable by proper means by other persons who can obtain economic value from its disclosure or use, Xcel Energy maintains this information as a trade secret pursuant to Minn. Rule 7829.0500, subp 3.

V. PROPOSED ELECTRIC RELIABILITY STANDARDS FOR 2021

Minn. R. 7826.0600, subp. 1 requires each utility to propose standards for the following reliability indices:

- System Average Interruption Duration Index,
- System Average Interruption Frequency Index, and
- Customer Average Interruption Duration Index.

SAIDI measures the average total number of minutes a customer was without power during a calendar year. This index is calculated as follows:

SAIFI measures the average frequency of sustained service interruptions per customer during a calendar year and is calculated as follows:

CAIDI measures the average outage time a customer could expect to be without power if they experienced a sustained outage and is calculated as follows:

Minn. R. Chapter 7826 allows utilities to report reliability performance using normalized data. Normalized data is defined by Minn. R. 7826.0200, subp. 9 as "data that has been adjusted to neutralize the effects of outages due to major storms."

A. Recommendation for 2021 Standards

Minn. R. 7826.0600, Subpart 1 requires the Company to propose 2020 standards for SAIFI, SAIDI, and CAIDI.

Minn. R. 7826.0600, subp. 1, requires the Company to propose 2021 standards for SAIFI, SAIDI, and CAIDI. As the Commission is aware, these standards have traditionally been based on a rolling five-year historical average for each metric by work center. In our 2019 Annual Report filed in Docket No. E002/M-20-406, the Company provided options in response to the Commission's January 28, 2020 Order in E002/M-19-261 requesting a discussion "on transitioning from a five year rolling average method of proposing SAIDI, SAIFI, and CAIDI standards, to standards that are similar to the second quartile rank of similarly sized investor-owned utilities under either the IEEE benchmarking study or using United States Energy Information Administration (EIA) reliability data." Continuing that dialogue, the Commission's Order point 6 in Docket E002/M-20-406 requires

"....utilities must discuss and propose a transition to a full benchmarking approach to setting reliability standards. In advance of the transition, the Commission hereby delegates authority to the Executive Secretary to continue conversations with utilities and other interested parties on the following topics:

- a. Definition of "work centers"
- b. Benchmarking for individual work centers
- c. Other considerations for the transition to benchmarking

In response, the Company met with Commission Staff in early February to discuss these items. Regarding the definition of work centers, Minn. R. 7826.0200, subp. 13 defines work center as a portion of a utility's assigned service area that it treats as an administrative subdivision for purposes of maintaining and repairing its distribution system. Xcel Energy defines its work centers under the rule as our regional service areas. These regions are:

- Metro East
- Metro West
- Northwest
- Southeast

Customer outages on our system are categorized by region, and all of our delivery system work management is tied to these regional divisions. Therefore, we propose to continue using these four Minnesota work centers.

As we have stated previously, the Company supports a transition to the nationally recognized IEEE Distribution Reliability Working Group survey to benchmark our performance for the purposes of setting standards for SAIDI, SAIFI, and CAIDI Therefore, the Company proposes a benchmarking standard for each work center similar to the standard set for MN overall for the Commission's consideration. For the two large metro regions, we propose the same standard as the MN standard, that is better than the 2nd quartile of the IEEE benchmark for large utilities. For the two more rural areas of Southeast and Northwest Minnesota we propose the standard of better than the 2nd quartile of the IEEE benchmark for medium utilities. Below are graphs showing our historical performance for SAIDI, SAIFI and CAIDI compared to the corresponding benchmark. Graphs 24 to 26, provide the large utility info for our Metro West and Metro East work centers and Graphs 27 to 29 provide the medium utility info for our Southeast and Northwest work centers.

A comparison of the Company's performance to second quartile performance of a selection of industry peers provides an estimate of how the Company's performance compares to industry average. Comparisons are not perfect because each utility—and indeed each work center for the Company--is unique in its infrastructure, system layout, operating structure, weather patterns, etc. While recognizing significant

differences exist in performance capabilities of various utilities a better than average (2nd quartile or better) reliability performance of a utility compared to its peers suggests that the utility is attentive to providing quality service performance to its customers.

Graphs 24 to 29 will be updated later this year consistent with the Commission's Order Point 9 in Docket No. E002/M-20-401 that requires the Company to submit a supplemental filing 30 days after IEEE publishes the 2020 benchmarking results. Those 2020 2nd quartile results would be used to establish our thresholds for 2021.













VI. CONCLUSION

Xcel Energy is committed to providing our customers with quality, reliable service. We appreciate this opportunity to report our performance to the Commission, and respectfully request that the Commission accept our annual report on safety, reliability, and service quality.

Xcel EnergyPUBLIC DOCUMENT - NOT PUBLIC DATA HAS BEEN EXCISEDService Quality Report 2020DockeMinn. Rules 7826.0400 Part B - Claims ReportDocke

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Errort Number	Event Date	Claim Data	Event Cause	Event Cause Description	Daid Sum	Bodily
Event Number	Event Date	Claim Date	Code	Event Cause Description	Pald Sum	Injury
EV2017135925	3/27/2017	7/1/2020	1131	Vegetation	\$10,510.70	\$0.00
EV2018131816	3/19/2018	5/24/2018	1134	Work Performed Electrical	\$10,620.38	\$0.00
EV2018133324	12/15/2018	1/9/2019	1136	Outage	\$346.00	\$0.00
EV2019133951	4/19/2019	5/9/2019	1136	Outage	\$36.23	\$0.00
EV2019133952	4/25/2019	12/16/2019	1128	Transformer Overhead	\$2,994.27	\$0.00
EV2019134330	5/31/2019	7/16/2019	1134	Work Performed Electrical	\$1,817.09	\$0.00
					Protected Data	Begins
EV2019134118 ¹	6/1/2019	6/4/2019	1130	Tree Trimming		
					Protected	l Data Ends
EV2019136167	6/3/2019	8/12/2020	1130	Tree Trimming	\$1,366.00	\$0.00
EV2019135732	6/17/2019	5/27/2020	1107	Conductors - Underground	\$938.40	\$0.00
EV2019135225	6/21/2019	1/17/2020	1122	Poles & Towers	\$655.10	\$0.00
EV2019135344	6/23/2019	2/11/2020	1122	Poles & Towers	\$7,780.00	\$0.00
EV2019134610	7/30/2019	9/16/2019	1131	Vegetation	\$329.86	\$0.00
EV2019134801	9/3/2019	9/3/2019	1134	Work Performed Electrical	\$300.00	\$0.00
EV2019134793	9/17/2019	5/6/2020	1101	Abnormal Voltage	\$508.68	\$0.00
EV2019134793	9/17/2019	6/11/2020	1101	Abnormal Voltage	\$800.86	\$0.00
EV2019135169	9/17/2019	1/7/2020	1110	Equipment Failure	\$2,736.70	\$0.00
EV2019134737	9/28/2019	10/7/2019	1136	Outage	\$530.05	\$0.00
EV2019135133	9/28/2019	12/27/2019	1136	Outage	\$1,814.31	\$0.00
EV2019135180	9/28/2019	1/10/2020	1122	Poles & Towers	\$500.65	\$0.00
EV2019135157	10/11/2019	1/6/2020	1130	Tree Trimming	\$116.21	\$0.00
EV2019135368	11/4/2019	2/18/2020	1110	Equipment Failure	\$500.00	\$0.00
EV2019135270	11/19/2019	1/27/2020	1136	Outage	\$292.50	\$0.00
EV2019135288	12/9/2019	1/29/2020	1110	Equipment Failure	\$347.00	\$0.00
EV2020135615	1/18/2020	4/21/2020	1136	Outage	\$482.00	\$0.00
EV2020135367	2/4/2020	2/18/2020	1136	Outage	\$249.00	\$0.00
EV2020135527	2/7/2020	3/30/2020	1122	Poles & Towers	\$7,384.31	\$0.00
EV2020136361	2/12/2020	9/22/2020	1107	Conductors - Underground	\$309.39	\$0.00
EV2020135399	2/22/2020	2/25/2020	1128	Transformer Overhead	\$150.00	\$0.00
EV2020135502	2/24/2020	3/23/2020	1128	Transformer Overhead	\$180.00	\$0.00
EV2020135603	3/19/2020	4/17/2020	1127	Crew damaged driveway while installing new elec lines	\$3,900.00	\$0.00
EV2020135647	4/14/2020	4/29/2020	1136	Outage	\$935.80	\$0.00
EV2020135647	4/14/2020	5/4/2020	1136	Outage	\$250.00	\$0.00
EV2020136003	4/15/2020	7/16/2020	1134	Work Performed Electrical	\$231.50	\$0.00
EV2020136577	4/25/2020	11/5/2020	1122	Poles & Towers	\$17,125.00	\$0.00
EV2020135657	4/29/2020	5/5/2020	1128	Transformer Overhead	\$224.00	\$0.00
EV2020135787	5/5/2020	6/8/2020	1130	Tree Trimming	\$1,408.58	\$0.00
EV2020135695	5/7/2020	5/15/2020	1128	Transformer Overhead	\$20.42	\$0.00
EV2020136470	5/17/2020	10/14/2020	1122	Poles & Towers	\$1,615.00	\$0.00
EV2020135747	5/22/2020	6/1/2020	1122	Poles & Towers	\$149.94	\$0.00
EV2020135983	5/26/2020	7/14/2020	1134	Work Performed Electrical	\$3,131.00	\$0.00
EV2020135813	6/2/2020	6/11/2020	1129	Transformer Under Ground	\$565.44	\$0.00
EV2020135880	6/3/2020	6/23/2020	1129	Transformer Under Ground	\$65.00	\$0.00
EV2020135985	6/14/2020	7/14/2020	1122	Poles & Towers	\$205.25	\$0.00
EV2020136004	6/26/2020	7/16/2020	1136	Outage	\$90.00	\$0.00
EV2020136099	7/5/2020	8/3/2020	1128	Transformer Overhead	\$25,141.68	\$0.00
EV2020136261	7/7/2020	9/1/2020	1130	Tree Trimming	\$1,750.00	\$0.00

Xcel Energy PUBLIC DOCUMENT - NOT PUBLIC DATA HAS BEEN EXCISED Service Quality Report 2020 Docket No. E002/M-21-____ Minn. Rules 7826.0400 Part B - Claims Report Att A, Page 2 of 2

Event Number Event Date

Part B - Claims Report Att A, Page 2						
Claim Date	Event Cause Code	Event Cause Description	Paid Sum	Bodily Injury		
/25/2020	1134	Work Performed Electrical	\$750.00	\$0.00		
/22/2020	1122	Poles & Towers	\$100.00	\$0.00		
	1120		\$105 00	* 0.00		

EV2020136219	7/8/2020	8/25/2020	1134	Work Performed Electrical	\$750.00	\$0.00
EV2020136030	7/9/2020	7/22/2020	1122	Poles & Towers	\$100.00	\$0.00
EV2020136166	7/18/2020	8/12/2020	1130	Tree Trimming	\$405.00	\$0.00
EV2020136565	7/20/2020	11/3/2020	1128	Transformer Overhead	\$546.63	\$0.00
EV2020136615	7/22/2020	11/17/2020	1101	Abnormal Voltage	\$1,142.73	\$0.00
EV2020136552	8/6/2020	10/30/2020	1128	Transformer Overhead	\$3,005.00	\$0.00
EV2020136387	8/10/2020	9/28/2020	1128	Transformer Overhead	\$5,507.15	\$0.00
EV2020136488	8/14/2020	8/14/2020	1128	Transformer Overhead	\$43,366.19	\$0.00
EV2020136269	8/25/2020	9/2/2020	1122	Poles & Towers	\$1,472.38	\$0.00
EV2020136396	8/25/2020	9/28/2020	1101	Abnormal Voltage	\$1,054.23	\$0.00
EV2020136592	8/27/2020	11/12/2020	1122	Poles & Towers	\$26,951.48	\$0.00
EV2020136603	8/27/2020	11/13/2020	1128	Transformer Overhead	\$539.38	\$0.00
EV2020136414	9/9/2020	10/2/2020	1128	Transformer Overhead	\$100.00	\$0.00
EV2020136367	9/14/2020	9/24/2020	1122	Poles & Towers	\$2,554.62	\$0.00
EV2020136573	9/14/2020	11/5/2020	1128	Transformer Overhead	\$648.75	\$0.00
EV2020136627	10/20/2020	11/19/2020	1122	Poles & Towers	\$1,410.00	\$0.00
EV2020136643	11/12/2020	11/23/2020	1129	Transformer Under Ground	\$100.00	\$0.00
EV2020136665	11/15/2020	12/1/2020	1134	Work Performed Electrical	\$3,564.00	\$0.00
EV2020136653	11/18/2020	11/25/2020	1122	Poles & Towers	\$3,837.06	\$0.00
EV2020136653	11/18/2020	12/14/2020	1122	Poles & Towers	\$3,225.53	\$0.00

¹In June 2019, a customer commenced litigation against the Company alleging various claims about the Company's tree trimming and the alleged impact it had on drainage on their property. The facts and liability were disputed. The parties reached a confidential settlement agreement at mediation, which resulted in the removal of mature trees which had acted as a privacy and sound barrier on the property.

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DELIVERING CLEAN, SAFE, RELIABLE ELECTRICITY

MINNESOTA SERVICE QUALITY AND RELIABILITY

INFORMATION SHEET MINNESOTA



ABOUT XCEL ENERGY MINNESOTA

At Xcel Energy, we provide our customers with safe, clean, reliable electricity at a competitive price.



1.3 million electric customers served in 370 CITIES AND TOWNS across Minnesota

ENHANCING THE CUSTOMER EXPERIENCE

Each and every time our customers engage with us, we want to make it easy for them and deliver a positive, best-in-class experience.



5,887 New residential electric service installations completed in 2020



68.4[%] of calls answered within 20 SECONDS



5.48 days Average time to complete a new residential service installation

OUR COMMITMENT TO RELIABILITY

Each year, we report on various measurements of electric service reliability. Each measurement typically has two numbers: one number includes all outages during the year, including outages caused by major events like high-impact storms, and the other number excludes outages caused by major events.

Here are some highlights.





99 minutes Average total time a customer was without power in 2020**

*Also known as Average Service Availability Index, or ASAI. Excludes major event days, which include high-impact storms. **Also known as System Average Interruption Duration Index, or SAIDI. Excludes major event days, which include high-impact storms. All figures represent 2020 averages for all Minnesota customers, unless otherwise noted.

DELIVERING CLEAN, SAFE, RELIABLE ELECTRICITY

Docket No. E002/M-21-___ Attachment B, Page 2 of 2

MINNESOTA

~1

.50% 0%

<4%

2016

2016

2017

All Days Excluding MED

2017

Average number of outages a customer experienced in 2020⁺





2018

Percentage of customers with a power outage lasting longer than six hours in 2020^s

2018

4 outages

2019

2019

5 outages

2020

6+ outages

2020



MED = major event days, which include high-impact storms

† Also known as System Average Interruption Frequency Index, or SAIFI.

11 Also known as Customers Experiencing Multiple Interruptions, or CEMI. <5% excludes major event days.

Also known as Customers Experiencing Lengthy Interruptions, or CELI. <4% excludes major event days. §



2020 SOUTHEAST WORK CENTER 4th Quarter Update Xcel Energy Docket Nos. E002/M-19-261 and E002/M-20-406 February 5, 2021

I. **OVERVIEW**

Each year, Northern States Power Company, a Minnesota corporation (the Company), files an Annual Report and Petition on Service Quality Performance and Proposed Reliability Measures (Annual Service Quality Report). In the Company's 2018 Annual Service Quality Report, Docket No. E-002/M-19-261, the Minnesota Public Utilities Commission (Commission) raised several concerns related to the staffing levels and reliability performance within the Company's Southeast Work Center. In its January 28, 2020 Order in the above-referenced docket, the Commission required the Company to provide a report of various issues related to staffing and reliability in the Southeast Work Center by February 27, 2020. In that report the Company proposed to provide the Commission quarterly updates on the reliability metrics in the Southeast Work Center in order to keep the Commission informed on both our efforts and the outcomes of our work on this important issue. In its December 18, 2020 Order in the 2019 Annual Service Quality Report, Docket No. E002/M-20-406, the Commission ordered the Company to continue filing quarterly status reports on efforts to improve reliability in the Southeast Work Center through fourth quarter 2021.

In this fourth quarterly update, the Company provides a brief update on staffing levels and 2020 reliability data, as well as ongoing improvement plans, in an effort to provide the Commission with a better understanding of our performance trends in the Southeast Work Center. There are a variety of factors and system components that can impact reliability, and we will continue to investigate them for specific areas of remediation.

II. STAFFING AT SOUTHEAST WORK CENTER

In 2020, the Company engaged in an effort to hire additional field and maintenance personnel in the Southeast Work Center. During the fourth quarter we extended offers, which were accepted, for two positions in Winona and one position in Red Wing. These three positions have 2021 start dates. The Company continues to move forward in the process to recruit candidates for the additional open positions available in the Southeast work center that are currently posted.

III. RELIABILITY WITHIN THE SOUTHEAST WORK CENTER

A. SAIDI, SAIFI, and CAIDI Metrics Year to Date

The following tables and charts show the 2020 current year and historical reliability performance by individual quarter and year-to-date. The year-end performance results are preliminary and may change slightly as they are finalized.

These reliability statistics are calculated using the Annual Rules ordered method of IEEE 1366 Regional Major Event Day (MED), which means it includes outages occurring at all levels (distribution, substation, and transmission), and:

- Includes all outage cause codes.
- Where applicable, includes credit for partial restoration.
- Bases calculations on the number of customers' billing accounts and meters.
- Bases calculations on normalized data.

The System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (SAIFI) are incremental indices wherein the year-todate performance is the summation of the month-end values. The Customer Average Interruption Duration Index (CAIDI) is an average performance index where the year-to-date performance can both rise and fall over the course of the year.

The typical trend line of the year-to-date SAIDI and SAIFI performance follows an "S" shape. The outage impacts in the 1st and 4th quarters of the year are fairly minimal and flat, due to light-to-moderate winter weather, whereas the 2nd and 3rd quarters tend to be steeper due to late-Spring through early-Fall weather activity. Since CAIDI is an average and dependent on the base amount of outages being included, the year-to-date trend line can commonly fluctuate up and down during the 1st and 2nd quarters and then increases slightly with elevated summer activity before flattening out in the last quarter.

Table 1 - YTD Monthly SAIDI, SAIFI, CAIDI
MN SOUTHEAST REGION SYSTEM DATA
MN ANNUAL RULES - IEEE 1366 Region Normalized

		Cust						YTD	YTD
2020	Cust Ints	Cust Mins	Serv	SAIDI	SAIFI	CAIDI	SAIDI	SAIFI	CAIDI
Jan	2,900	347,797	130,089	2.7	0.02	120	2.7	0.02	120
Feb	1,202	201,788	130,491	1.5	0.01	168	4.2	0.03	134
Mar	6,198	622,763	130,547	4.8	0.05	100	9.0	0.08	114
Apr	7,866	721,193	130,530	5.5	0.06	92	14.5	0.14	104
May	8,670	1,009,422	130,333	7.7	0.07	116	22.3	0.21	108
Jun	14,625	1,567,267	130,429	12.0	0.11	107	34.3	0.32	108
Jul	19,382	2,571,725	130,377	19.7	0.15	133	54.0	0.47	116
Aug	14,035	1,796,223	130,452	13.8	0.11	128	67.8	0.57	118
Sep	10,790	2,039,302	130,492	15.6	0.08	189	83.4	0.66	127
Oct	10,655	999,635	130,532	7.7	0.08	94	91.1	0.74	123
Nov	11,426	1,037,677	130,642	7.9	0.09	91	99.0	0.83	120
Dec	6,209	793,483	130,728	6.1	0.05	128	105.1	0.87	120
YTD	113,958	13,708,272		105.1	0.87	120			

Table 2 – YTD Quarterly SAIDI, SAIFI, CAIDI Comparison of MN Southeast Region Historical Performance

		VTD	Dalta ta	Dalta ta	Dalta ta	2 Vr Aug	E Vic Arres (AE	VTD	VTD	VTD	VTD	VTD
		YID	Della lo	Della lo	Della lo	3 YI AVG	5 YI AVG (15-	YID	YID	YID	YID	YID
Index		2020	2019	3 Yr Avg	5 Yr Avg	(17-19)	19)	2019	2018	2017	2016	2015
SAIDI	1st Quarter	9.0	-11.5	-11.1	-9.2	20.1	18.2	20.5	21.2	18.6	11.9	18.9
	2nd Quarter	34.3	-29.5	-24.7	-19.1	59.0	53.4	63.7	59.0	54.2	41.2	48.9
	3rd Quarter	83.4	-22.7	-11.7	-4.7	95.1	88.1	106.1	99.0	80.3	87.8	67.5
	4th Quarter	105.1	-24.0	-9.7	-3.1	114.7	108.2	129.1	118.8	96.3	110.2	86.5
SAIFI	1st Quarter	0.08	-0.10	-0.12	-0.10	0.20	0.18	0.18	0.22	0.21	0.07	0.23
	2nd Quarter	0.32	-0.14	-0.16	-0.12	0.47	0.44	0.45	0.50	0.46	0.32	0.46
	3rd Quarter	0.66	-0.10	-0.07	-0.03	0.73	0.69	0.75	0.77	0.67	0.63	0.61
	4th Quarter	0.87	-0.06	-0.02	0.02	0.89	0.86	0.93	0.92	0.84	0.85	0.75
CAIDI	1st Quarter	114	-1	13	3	100	111	115	97	89	168	83
	2nd Quarter	108	-32	-17	-14	125	122	140	117	117	129	106
	3rd Quarter	127	-14	-3	-1	130	128	141	129	120	140	110
	4th Quarter	120	-19	-7	-5	128	126	139	130	115	130	115







IEEE 1366 Normalized by Region - All Levels, sustained outages only (>5 minutes),
Chart 3



Chart 4



IEEE 1366 Normalized by Region - All Levels, sustained outages only (>5 minutes),

B. Major Event Days / Impact Events in the Fourth Quarter 2020

There were no days in the fourth quarter that qualified as a major event day. However, a winter storm that occurred on December 23, 2020 did have significant impact to both the metro and southeast regions. The following is a list of some of the reliability events that occurred in the Southeast Work Center during the fourth quarter 2020, and the impact they had on SAIDI, SAIFI, and CAIDI.

- Impact Events / Days
 - o Moderate Storm Activity
 - 12/23, Snow/Ice/Wind-related events
 - Blowing snow/ icing/windy conditions resulted in a large number of outages caused by conductors contacting each other. The bulk of the large impact events occurred during the late afternoon to early evening hours.
 - Indices impacts: SAIDI (4.4), SAIFI (0.03), CAIDI (143)
 - o Transmission
 - 12/23, 4 Transmission line events serving the Fairfax / Lake Crystal / Dennison areas, Conductor Contact / Transformer
 - These events were the result of windy/snowy conditions during the storm. The lines faulted were out of service for a range of 6-174 minutes.
 - Indices impacts: SAIDI (1.6)/SAIFI (0.02)/CAIDI (92)
 - o Distribution Substation
 - 11/29, Distribution Substation serving the Morristown area, Blown fused cutout
 - This event was the result of a fuse cutout opening in a distribution substation. The substation bus faulted taking one feeder out of service for 260 minutes.
 - Indices impacts: SAIDI (2.4)/SAIFI (0.01)/CAIDI (260)
 - 11/3, Distribution Substation serving the Mankato area, Animal Contact
 - This event was the result of an animal contacting the line causing the arrestor to blow. The substation bus faulted taking three feeders out of service for 37 minutes.
 - Indices impacts: SAIDI (0.9)/SAIFI (0.02)/CAIDI (37)

- o Distribution Lines
 - 12/23, Conductor Contact in the North Mankato area
 - This event was the result of an OH mainline feeder contacting another wire during windy winter storm conditions. The event took place at 4 p.m. and resulted in a 4-hour duration event.
 - Indices impacts: SAIDI (1.9), SAIFI (0.01), CAIDI (252)
 - 10/23, Connector Failure event in the Mankato area
 - This event was the result of a splice failing causing a mainline wire to be downed and lock out. The event took place at 10 p.m. All customers were restored within 2 hours.
 - Indices impacts: SAIDI (1.3), SAIFI (0.01), CAIDI (96)
 - 10/11, Animal contact in the Winona area
 - This event was the result of an animal contact causing a mainline feeder to trip and lock out. The event took place at 9 a.m. All customers were isolated and restored within 1 hour.
 - Indices impacts: SAIDI (0.9), SAIFI (0.02), CAIDI (60)
 - 11/5, Unknown in the Winona area
 - This event was the result of a mainline feeder breaker opening. Line was patrolled but cause was unknown. The event took place at 11 a.m. All customers were isolated and restored within 1 hour.
 - Indices impacts: SAIDI (0.9), SAIFI (0.01), CAIDI (63)

C. Improvement Plan Updates

In our February 27, 2020 filing, we committed to investigate other areas for improvement and that we would provide updates in the quarterly reports as this investigative work progresses.

As one can see from Graph 4 above entitled Southeast Work Center SAIDI – Top Causes, there have been a high number of events due to "conductor contact." In addition, it is expected that a large number of outages designated as unknown could actually be attributed to conductor contact. As discussed in the first quarter report, the Pipestone area has had the highest occurrence of galloping in the Southeast Work Center. Long spans can be especially susceptible to this situation. Locations for mitigating galloping have been identified. Mitigation work will involve the installation of additional poles in long spans to reduce the span length and distribution line spacers to reduce the possibility of conductor contact. This work in the Pipestone area will commence in 2021.

In our 2018 Annual Service Quality filing and our February 27, 2020 filing, we described the porcelain cutout replacement program. By way of background, a "cutout" is a mounting device for holding a protective fuse which blows when there is a fault on the system. Porcelain cutouts were used for many years. In Minnesota, we have over 100,000 porcelain cutouts and approximately 750 fail each year. In 2011, Xcel Energy migrated away from installing porcelain cutouts and instead started installing polymer cutouts during new construction and replacement work. When porcelain cutouts fail, it can cause or extend the length of an outage. Many porcelain cutouts still exist on the distribution system, and it is difficult to determine cutouts near end of life. In 2019, work began to replace porcelain cutouts with polymer cutouts on three feeders in the Southeast Work Center. Porcelain cutout replacement was not fully completed on these three feeders by the end of 2020. Work will continue on these replacements in 2021. The porcelain cutout feeder replacement project will continue into 2021 by adding additional locations for porcelain cutout replacement in the Southeast Work Center. This program appears promising in its ability to reduce and shorten outages, but with the change-out program still in early stages, it is difficult to quantify improvements.

Through our Pole Inspection Program, distribution poles are inspected on a regular cycle to determine if there are any that need to be replaced. As a result of the Pole Inspection Program, there were 420 poles in the Red Wing area and 150 poles in the Zumbrota area that were identified for replacement in 2020. The replacement of these 570 poles is 90 percent complete. There were 500 poles identified for replacement in the Tracy area and the replacements in this area are 90 percent complete. Crews are actively working to complete these replacements. Pole replacement efforts will continue throughout the Southeast Work Area in 2021.

All vegetation management work for 2020 was completed as scheduled. There were 532 miles of line trimmed in 2020. Vegetation management efforts will continue as planned through 2021.

In addition, sections of underground cable on four separate distribution feeders in the Southeast Work Center have been identified for replacement. At the time of this update, one section of cable in the Red Wing area and a section of cable in the Zumbrota area have been replaced. There are two additional sections of underground cable in the Red Wing area. These are expected to be replaced in early 2021.

The feeders in the Waterville and Waseca areas serve large sections of the Southeast Work Area and they consist of several hundred circuit miles of overhead conductor. Service interruptions in these areas can be time consuming to troubleshoot because of the length of the feeders. Remote fault indicators will be installed on one feeder in each of these areas in 2021 to assist with troubleshooting outages, which should help to reduce outage times.

The Company has developed plans and is executing on these plans and will continue to develop plans to improve the reliability of the Southeast Region. The Southeast Work Center is geographically our largest work center, spanning from portions of Yellow Medicine county—about 30 miles from the Minnesota-South Dakota border—on the west to the Minnesota-Wisconsin border on the east. The largest service center area is Mankato, stretching 120 miles from Jordan on the northeast to Bergen on the southwest. Depending on the location of the outage, the time of day, and the distance travelled by the first responder it could take over two hours for the first responder to arrive at the outage location and then additional time to restore service.

In addition to the geographic composition of the Southeast Work Center, the natural variability in reliability performance due to the weather can make it difficult to quantify reliability improvement especially in an area as vast as the Southeast region. This can be illustrated by comparing the relatively favorable 2020 performance with the poorer performance in 2019 and 2018. While there were reliability improvement efforts made in 2020, it is unlikely that those improvements alone are the cause for the favorable 2020 reliability performance. More likely is that 2020 was a milder weather year in the Southeast Work Center which contributed significantly to the improvement in reliability indices.

IV. CONCLUSION

The Company appreciates the opportunity to provide the Commission with this fourth update regarding improvements in staffing levels and reliability metrics in the Southeast Work Center.

Order Point 3 in the Commission's December 12, 2014 Order in Docket No. E-002/M-14-131 required the Company "to augment its next filing to include a description of the policies, procedures and actions that it has implemented, and plans to implement, to assure reliability, including information on how it is demonstrating pro-active management of the system as a whole, increased reliability, and active contingency planning."

Each year, Xcel Energy develops and manages programs to maintain and improve the performance of its transmission and distribution assets. We identify and implement these programs in an effort to assure reliability, enable proactive management of the system as a whole, and effectively respond when outages occur.

Reliability Management Program Development

Causes and trends for historical outages are monitored and reviewed to identify opportunities to maintain and improve reliability. Investments in reliability improvement are made in addition to other capital programs that provide for adequate capacity to meet customer requirements. Investments for improvement become part of the reliability management program. A reliability core team, consisting of both field and planning functions, monitors system performance and progress against performance targets on a regular basis, taking actions as necessary to ensure the best possible system performance.

High value 2020 programs continuing into 2021 include: Feeder Performance Improvement Program (FPIP); Outage Exception Reporting Tool (OERT); proactive mainline and tap cable replacement; substation transformer and breaker condition assessment; and vegetation management (tree trimming). The vegetation management program includes investigation of tree related events causing large outages to determine if the outage would have been preventable if trimming had occurred the day before the outage. These programs all target primary outage cause codes seen in 2020 and prior years' performance. They are expected to support strong system performance. The reliability core team will continue to monitor system performance on a regular basis to determine if additional and/or shifts in actions should be initiated as the year unfolds.

In 2019, six automated switches were installed for a FLISR (Fault Location Isolation and Service Restoration) pilot project. This project is providing a test of this technology which has potential for reducing the number of customers experiencing service interruptions. Testing and monitoring continue into 2021. An assessment is expected in 2021 for a pilot project of cutout mounted reclosers (TripSaver) that automatically restore temporary outages on previously fused laterals which reduces the number of service interruptions to customers. A decision to make these devices a standard protective option for engineers will likely be made in 2021. Performance improvement plans in 2020 also include multiple initiatives for improving electric service in the Southeast work area, as detailed more in our previously filed report on the Southeast work center, which is attached to this filing at **Attachment C**. Examples of increased efforts is our continued enhanced investigation of tree related interruptions, our continued efforts on replacing porcelain cutouts and identification of areas with excessive galloping.

Improvements to existing work practices that reliability core team members and their staff identify, and implement are important contributors to reliable utility performance and good customer reliability experience. Improvements include operational and/or procedural changes to reduce the duration and the frequency of outages. Many of these improvements do not require additional funding to implement and are achieved via ongoing employee training and/or incorporation into standard work procedures. System improvement programs are monitored and updated as appropriate.

1. Reliability Management Programs – 'Star Chart'

After considering the most common failures and their causes, as well as at-risk equipment, we have developed work plans, or programs, to target our investments; we show a summary of these programs in the 'Star Chart' on the following page. These programs represent those proactive investments in our transmission and distribution systems that we believe are most likely to improve overall reliability, asset health, and meet various contingency planning requirements. These investments are made in addition to other capital investments that provide for adequate capacity to meet customer requirements and to accommodate load switching during outage response to minimize customer impacts.

Reliability Management Program Impacts (Star Chart)

	NSPM Program	Summary Table 1							
			2018	2019	2020		імі	PACTS	
	Funded Programs	Description	(k\$)	(k\$)	(k\$)	SAIFI	CAIDI	СЕМІ	Complaints
	Feeder Perf.	FPIP evaluates and implements improvements for feeders				*		*	*
	Improvement Program (OH & UG)	experiencing an increased number of outages based on prior year information.	1 / 51	1 138	1 011				
	Outage Exception Reporting Tool	OERT process provides automatic notification to area engineers when repeating outage criteria have been met and engineering solutions are implemented to eliminate	1,401	1,100	1,011			*	*
	(6114 66)	rearring problems.	490	292	143				
	Mainline Cable Replacement, (UG)	Deteriorating non-jacketed cable is failing and causing repeat outages. Proactive and reactive replacement of this	1,930	2,557	1,719	*			*
ity	Tap (URD) Cable, (UG)	able reduces the outages.	19,593	15,019	26,470	*	*		*
bil	Install Automated	These automation solutions reduce restoration times for				*		*	*
elia	Switches	with other distribution lines.	0	0	65				
Å	Feeder Infrared Evaluation (OH)	Many pieces of equipment show excess heating prior to failure. The FIRE program provides infrared scans of overhead mainline which reveal specific equipment that is likely to fail so it can repaired prior to causing an outage.	58	40	40	*			
	Vegetation Management (Transmission & Distribution)	Cost benefit prioritized arauit trimming in NSPM. Continued reactive "Hot Spot" trimming.	29,352	31,193	20,633	*		*	*
	Program Replacements (Transmission)	Replaœs end-of-life equipment (i.e switches, laminated arms, specificinsulators, poles) in order to reduœ maintenanœ costs and improve reliability.	229	1,444	3,764	*			*
ty	Pole Inspection & Replacement (Distribution)	Pole Inspections indude an above groundline visual inspection. Groundline inspections are based on age and environment and may indude visual, sound and bore and excavation. Treatment of poles may be induded. Based on results poles may be tagged for replacement.	11,035	20,500	28,285	*	*		
gri	Transmission	Replaces end-of-life equipment in order to reduce	0.000	F 750	0.000	*			
Inte	Substation Line ELR Work (Transmission)	maintenance costs and improve reliability. Identifies lines that have components that have reached their end of life or where significant refurbishment work is needed to enhance system performance and reliability. Project focus may be to extend life of existing asset 20 + years or to replace and address future capacity upgrade concerns.	9,228	5,759	2,863	*			*

Footnote: The above table reflects multi-year initiatives that are part of the Reliability Management Program(RMP). Information is based on current RMP, and is subject to change.

Funding information for previous years is a combination of Capital and O&M dollars; most of the equipment replacement dollars are capital expense while the inspection and testing programs include O&M dollars; O&M dollars and capital for pole replacements and FIRE program are currently estimates since changes are included in broader programs of work(e.g., OH rebuild OH maintenance accounts).

We have indicated the primary performance impacts of these programs with a red star, where applicable; performance impacts include SAIFI (System Average Interruption Frequency Index), CAIDI (Customer Average Interruption Duration Index), CEMI (Customers Experiencing Multiple Interruptions) and Customer Complaints.

2. Reliability Management Programs – Key Initiatives

The table below outlines primary program indicators for our key initiatives/programs. The actual amount of work completed under each program varies from year to year and is based primarily on assessments of those areas requiring the greatest attention, as well as the results of our condition assessment (*i.e.*, the number of deficiencies requiring corrective action). For further description of the programs described in Table 2 below, Key Initiatives, please see the Star Chart (Table 1 above).

, , , , , , , , , , , , , , , , , , , ,							
	2020	2019	2018	2017	2016	2015	2014
Outage Exception Reporting Tool (OERT) (Replaced REMS in 2	2016)						
# of Exceptions identified	3,927	3,735	4,014	3,398	6,635	4,935	5,105
# of Service & Work Requests identified	959	518	652	297	215	408	455
Vegetation Management Program							
Total Overhead Distribution miles completed	1,606	2,647	2,307	2,417	2,086	1,856	3,737
Total Overhead Transmission miles completed	762	896	768	762	1,039	909	879
Normalized Tree-coded Sustained Cust Ints.(W/O Storms)	184,302	170,994	214,299	145,422	155,370	106,215	93,010
Non-normalized Tree-coded Sustained Cust Ints.(With Storms)	286,735	242,158	243,867	277,068	305,946	220,787	154,642
Underground Cable Replacement Program							
# of Segments That Have Been Replaced (est.)	2,579	1,158	1,504	1,411	1,378	861	1,165
# of Failures(Only on Primary Cable)	1,459	1,301	1,366	1,453	1,607	1,560	1,386
Feeder Infrared Evaluation(FIRE)							
# of Feeders Scanned	259	280	209	248	275	256	267
# of Hot Spots Corrected	66	55	67	71	68	99	62
Feeder Performance Improvement Plans(FPIP)							
Investigations Completed	112	111	108	113	105	96	108
Wood Pole Inspection Plan							
Total Distribution Wood Poles Inspected	40,179	10,312	33,720	17,972	18,845	10,213	9,198
Total Transmission Wood Poles Inspected	3,124	3,381	2,464	4,000	4,660	4,119	3,565
		1			1		

 Table 2

 Reliability Management Key Initiatives/Programs

Information based on current RMP, subject to change

3. Reliability Management Programs – Work Practices

Improvements to existing work practices that the reliability core team members and their staffs identify, and implement are also an important contributor to the customer reliability experience and our reliability performance. These are operational and/or procedural changes intended to either reduce the *duration* of outages should they occur, or to reduce the *frequency* of outages.

As noted in the Reliability Management Work Practices table below, we assess and prioritize the actions based on a balance of their ability to positively impact reliability (high, medium or low), as well our ability to incorporate into standard work practices – with most occurring concurrently. Many of these actions do not require additional funding to implement and are achieved via ongoing employee training and/or incorporation into standard work procedures. We continuously monitor all actions and update our plan as appropriate.

Table 3 Reliability Management Work Practices

Areas of		Action/		Reliability
Opportunity	Key Initiative	Program	Description	Impact
			Adding a full-time work coordinator to schedule all appointment work. The coordinator will be in contact with customers prior-to, during and following their scheduled	
Resource		Work	appointment. This will optimize use resources in support our customers. Better customer	
Management	Duration	Coordination	service for appointments and resource availability for outage restoration work will result.	Medium
_		Management	Schedule managers for staggered shifts in metro area to enable human response after	
	Duration	Staffing	hours: 3 managers working 5:30 a.m. to 4:00 p.m.: 1 manager 3:00 p.m. to 11:p.m.	Medium
		System	Substation inspection done on every substation specific to identifying animal incursion	
	Frequency	Integrity	risk and vegetation issues.	High
		Infrared		
Substations	Frequency	Inspections	IR Subs after major equipment is switched out of service or thermal heating is suspected.	High
		Equipment		
		Failure	Install Mobile subs and connection cables as quickly as possible when customers are out	
	Duration	Response	due to equipment failure.	Medium
		Restore	During a feeder event Control Center personel restore service to as many customers as	
	Duration	before repair	possible before making temporary/permanent repairs.	Medium
			Use of application software to assist manual patrol of outages and momentary outages.	
		Patrol	This will allow for quicker response and permit a single resource to respond to a greater	
	Duration	Optimization	number of outages or appointments.	Medium
			Reduce impact of intentional outage to ensure all steps are being taken to keep the	
		Intentional	maximum number of customers on. Verify switching to reduce customer counts. Repair	
Feeders	Frequency	Outages	while hot instead of taking outage.	Medium
	Frequency &	VM	Partner with Vegetaiton Management leadership to prioritize trimming of circuits that are	
	Duration	Parternership	scheduled to be trimmed. Substations to be trimmed with associated feeders.	High
	Frequency &	Feeder Patrol	Looking for unfused taps and animal protection. Identify 336 auto splices. Continued use	
	Duration	Program	of IR/thermo imaging to identify problems.	Medium
		Condition	Utilizing UAS (Drone) technology to complete a comprehensive inspection of our worst	
		Assessment &	performing feeders, a pilot program has been instituted to identify and mitigate risk to the	
	Frequency	Correction	distribution system.	High
		Restore		
	Duration	before repair	Advanced technology going into the control centers and the field.	High
		Distribution		
		Operations	DMS (Distribution Management System) currently scheduled to be installed by year-end	
Control Center	Duration	Model	2021. This will allow detailed visibility into the distribution system.	High
		Model 1/0	This is a pilot project to model 1/0 URD as close to real time so the OMS model will reflect	
	CAIDI	Switching	the configuration of the URD circuit after it has been switched.	Medium
		Validate		
		Restoration	Tighten up existing process on actual restoration times, utilize approver process to ensure	
	CAIDI	Times	outage times are correct.	High
		COM Saturday		
	CAIDI	Crews	metro COM Saturday Crews. 3 Metro East and 3 Metro West	Medium
			Currently negotiating on-call crews for outage response, Friday-Monday to enhance	
СОМ	CAIDI	Backup Crews	response time to customer outages.	Medium
		Underground		
	SAIFI & CAIDI	Cable Repair	Repair and/or replace cables as directed by engineering	High
		REMS/CEMI		
	SAIFI	Work	Complete work referred by engineering in a timely manner	Low
		On-going		
		Regular		
		Reliability		
	SAIFI & CAIDI	Meeting	Meet regularly to review reliability, and share ideas to improve reliablity performance.	Low
Reliability Team/		Outage		
Communications	CAIDI	Reviews	Root Cause Invesigation of outages greater than 90 minutes or 0.1 SAIDI	Medium
			6. In 2021, Control Center Leadership is producing a detailed CAIDI report on a monthly	
			basis, the purpose and impact of the report is to call out opportunities for improvement on	
			response, meet with the first responders to develop plans to remove obstacles to	
		Continious	response and holding employees accountable to timeliness of response using the data and	
	CAIDI	Improvement	operator comments.	Medium

CEMI Tools

Xcel Energy developed tools that allow us to better track the causes of our CEMI (Customers Experiencing Multiple Interruptions). In conjunction with a mapping tool we can look at our customers' experience as it identifies customers with multiple outages over a revolving 12 months and then provide a visual representation of those outages in our service territory. Although, the metric measures customers who have experience at least six sustained outages during non-storm days, we can study customers' experience earlier. This customer centric tool helps highlight customers that have had outages from different causes rather than a single root cause. In other words, this tool does not look at the device that caused the outage, it examines how many times a customer was out of service regardless of the reason.

These tools compliment other programs, such as the Outage Exception Reporting Tool (OERT) that help us identify specific equipment issues (for instance, the same device tripping multiple times). The CEMI tools provide the link from the outage information to the specific customer information on a holistic basis. Since much of our analysis has focused on a system perspective, this tool really rounds out our reliability planning by helping focus on the customers' experience.

There are many reasons a customer could have an outage. These causes include downed trees, animal contact, a car hitting a pole, or even a lightning strike. Each one of these causes could show up on a different report for a different piece of equipment that all flow down to the same customer. These tools allow us to analyze customer experience *truly* from a customers' experience. These tools help our efforts in the long term to reduce repeated outages for customers.

The Company provides more detail about CELI metrics, including responding to specific Commission order points, in the body of its Annual Report.

Conclusion

In summary, we have summarized the processes and data that we use to determine areas of greatest impact, develop targeted investment strategies, ensure the execution of annual work plans, and assure reliability and ongoing satisfactory performance of the system as a whole. We know that positive results are a direct reflection of consistent and sustained focus, and as such, believe our reliability management programs and other actions provide a solid foundation on which to deliver reliable performance of our distribution system.

									All Causes	s,							
									Distributio	n Substation	٦,						
									Transmiss	sion Substat	ion,	All levels, No	"Planned"	Cause	All levels,	"Planned" C	Cause only
						All levels,	All Causes i	ncluded	and Trans	mission Line	e levels	Includes Bul	k Power Su	pply	Includes B	ulk Power ?	Supply
Metro Eas	t						Total		Bul	k Power Su	pply	I	Jnplanned			Planned	
Feeder ID	Substation	City	SAIFI	SAIDI	CAIDI	Outages	Customers Affected	Customer Mins Out	Outages	Customers Affected	Customer Mins Out	Outages	Customers Affected	Customer Mins Out	Outages	Customers Affected	Customer Mins Out
[-	Security Data Begins																
		Cottage Grove	3.00	532.45	177.48	3	201	35,674	0	0 0	0	3	201	35,674	0	0	0
2		Rosemount	1.50	473.25	315.50	8	135	42,593	0	0 0	0	8	135	42,593	0	0	0
		Bayport	3.85	464.96	120.77	52	7,908	955,032	0	0 0	0	52	7,908	955,032	0	0	0
		Saint Paul	1.33	417.15	312.56	9	2,090	653,259	0	0 0	0	9	2,090	653,259	0	0	0
		Saint Paul	3.34	360.38	108.01	29	6,403	691,571	2	3,845	227,026	28	6,328	679,421	1	75	12,150
		Little Canada	1.58	303.79	192.30	12	1,970	378,825	0	0 0	0	12	1,970	378,825	0	0	0
		Roseville	2.50	299.55	119.70	25	2,555	305,844	0	0 0	0	25	2,555	305,844	0	0	0
		Saint Paul	3.61	291.07	80.71	41	7,530	607,746	0	0 0	0	41	7,530	607,746	0	0	0
		Lino Lakes	0.60	286.87	481.26	32	2,460	1,183,908	0	0 0	0	32	2,460	1,183,908	0	0	0
		Saint Paul	2.30	282.03	122.55	47	2,138	262,005	0	0 0	0	47	2,138	262,005	0	0	0
		Saint Paul	3.73	269.30	72.18	52	13,229	954,922	0	0 0	0	52	13,229	954,922	0	0	0
		Rosemount	1.06	266.30	250.82	10	1,101	276,157	0	0 0	0	10	1,101	276,157	0	0	0
		Arden Hills	2.93	264.89	90.41	52	5,236	473,365	0	0 0	0	52	5,236	473,365	0	0	0
		White Bear Lake T	2.06	261.12	126.70	109	5,643	714,953	0	0 0	0	109	5,643	714,953	0	0	0
		West Saint Paul	1.57	258.87	164.99	43	2,898	478,131	0	0 0	0	43	2,898	478,131	0	0	0
		Maplewood	1.37	238.79	173.96	14	1,838	319,737	0	0 0	0	14	1,838	319,737	0	0	0
		Saint Paul	2.15	236.75	110.24	16	3,054	336,659	0	0 0	0	16	3,054	336,659	0	0	0
		Eagan	3.68	234.16	63.67	9	548	34,890	0	0 0	0	9	548	34,890	0	0	0
		Saint Paul	3.51	233.71	66.65	114	10,727	714,910	2	6,120	361,080	114	10,727	714,910	0	0	0
		Shoreview	3.44	227.32	66.17	24	3,655	241,865	2	2,128	61,712	24	3,655	241,865	0	0	0
		Roseville	1.71	227.25	132.94	7	1,012	134,533	0	0 0	0	7	1,012	134,533	0	0	0
		Stillwater	1.63	225.51	138.70	67	3,294	456,889	0	0 0	0	67	3,294	456,889	0	0	0
		Inver Grove Height	1.71	222.25	130.16	24	3,683	479,384	0	0 0	0	24	3,683	479,384	0	0	0
ļ.		Saint Paul	2.81	221.15	78.80	29	8,184	644,873	0	0 0	0	29	8,184	644,873	0	0	0
j		Vadnais Heights	2.03	214.06	105.50	15	3,575	377,167	0	0 0	0	15	3,575	377,167	0	0	0

(1) Based on Jan 1-Dec 31, 2020, year-end normalized data (IEEE Op Co Level)

"Total" includes all causes, all levels

"Bulk Power Supply" includes Distribution Substation, Transmission Substation, and Transmission Line levels, all cause codes "Unplanned" includes all levels and no outages with a primary cause code of "Planned", Includes Bulk Power Supply outages "Planned" includes all levels and only outages with a primary cause code of "Planned", Includes Bulk Power Supply outages

Metro East Poor Performing Feeders (2) Based on performance Sept 2019 to Aug 2020, Major Event Days are included CMO: customer minutes out

	Feeder ID	Substation	City	SAIFI	SAIDI	CAIDI	Reasons for Poor Performance	Operational Changes Made, Considering or Planned
A			St Paul	1.46	242.85	166.34	212,290 CMO's (47.3%) due to paper and lead cable underground splice failure 7/2/2020. Splice replaced. 98,696 CMO's (22.0%) Failed insulator replaced 6/29/2020.	Paper and lead cable UG Splice replaced July 2020. Reclosure replaced with failed insulator June 2020. Created Notification to replace 36 Cutouts, 3 Crossarms and 4 poles and install ClamStar over 7 Automatic overhead Splices.
в			Stillwater	1.67	269.75	161.53	283.7k CMO's (52.0%) 8/14/2020 Storm/Lightning/strong winds; 101.1k CMO's (18.5%) due to Pothead Termination Failure.	Replace Potheads August 2020, replace 6 arresters, 6 Cross Arms, Install 3 ClampStar over 3 autos, repair leaning pole & broken guy. Schedule to be completed October 2021.
с			Inver Grove Height	1.01	114.50	113.37	307,739 CMO's (73.2%) due to Tree from outside of Maintenance Corridor on 9/24/2019.	Feeder last trimmed in 2018, Feeder Mainline trim scheduled 2023. Created Notification to replace 56 Cutouts, 12 lighnting arresters, 3 Crossarms and install ClampStar over 7 Automatic overhead splices.
D			Woodbury	0.75	100.81	134.41	247.3k CMO's (37.6%) due to fuse cutout failure, cutout and pole replace downstream due to tracking. 221.1k COM's (33.6%) due to vegetation outages on Taps.	Request for repair to remove single phase pothead off pole with other 3 phase cutouts that failed, scheduled complete October 2021. Feeder Trim scheduled for 2021, last trimmed 2016. No feeder level outages. The feeder has been on a multiyear reliability plan started in 2018 and schedule completed April 2021 which includes replacing 41 Crossarms and installing new high contamination resistance insulators, replace 18 lightning arresters, replace 18 Porcelain cutouts with new Poly Cutouts on taps.
E			Eagan	1.83	171.88	93.92	13.5k CMO's (56.0%) due to Feeder underground splice failures on 6/6/2020 & 7/2/2020; 9.9k CMO's (41.1%) due to failed switchcenter on 10/17/2019.	Request for repair to replace all underground Splices from feeder breaker to feeder switch, scheduled completion October 2021. Replaced two switchcenters (one failed, 2nd had tracking) Oct 2019. This feeder was on 2019 FIPI list with 2 underground feeder splice failures and multiple spans of tap level cable failures resulting in 11 spans of tap level cable being replaced November 2018.
		Security Data Ends]						

									All Causes	,						
									Distribution	n Substatior	۱,					
									Transmiss	ion Substat	ion,			All levels,	"Planned" C	ause only
						All levels,	All Causes i	included	and Transi	nission Line	elevels			Includes B	ulk Power S	Supply
Metro We	st						Total		Bull	Power Su	pply	Unpl	anned		Planned	
Feeder ID	Substation	City	SAIFI	SAIDI	CAIDI	Outages	Customers Affected	Customer Mins Out	Outages	Customers Affected	Customer Mins Out	Customers Affected	Customer Mins Out	Outages	Customers Affected	Customer Mins Out
[Se	curity Data Begins															
1		Minnetonka	6.10	1,182.18	193.72	11	1,965	380,661	0	0	0	1,905	379,341	1	60	1,320
2		Bloomington	0.50	750.00	1,500.00	1	1	1,500	0	0	0	1	1,500	0	0	0
3		Eden Prairie	0.73	598.47	824.92	4	444	366,266	0	0	0	444	366,266	0	0	0
4		Minneapolis	1.99	560.59	281.81	2	1,476	415,955	0	0	0	1,476	415,955	0	0	0
5		Hopkins	2.41	545.02	225.93	17	6,711	1,516,241	0	0	0	6,711	1,516,241	0	0	0
6		Watertown	3.70	488.61	132.21	55	4,723	624,438	0	1,276	312,620	4,723	624,438	0	0	0
7		Watertown	3.01	456.31	151.51	16	4,379	663,475	1	1,451	355,495	4,379	663,475	0	0	0
8		Mound	2.52	392.39	155.81	65	6,762	1,053,570	0	0	0	6,741	1,052,022	4	21	1,548
9		Richfield	2.91	340.57	117.14	26	5,867	687,264	2	4,040	56,560	5,867	687,264	0	0	0
0		Minnetonka	2.30	332.53	144.65	19	2,131	308,254	0	0	0	2,131	308,254	0	0	0
1		Minnetonka	5.14	328.80	63.98	5	185	11,837	0	0	0	185	11,837	0	0	0
2		Saint Louis Park	2.40	325.87	135.83	23	1,449	196,824	0	0	0	1,449	196,824	0	0	0
3		Mound	1.85	323.18	174.87	23	2,238	391,366	0	0	0	2,163	390,541	2	75	825
4		Hopkins	1.90	291.16	153.16	10	2,266	347,065	0	0	0	2,266	347,065	0	0	0
5		Minneapolis	5.30	282.24	53.28	39	15,293	814,823	2	5,805	136,431	15,293	814,823	0	0	0
6		Bloomington	2.76	282.10	102.38	8	1,747	178,852	3	700	44,224	1,747	178,852	0	0	0
7		Tonka Bay	1.52	275.51	181.09	62	2,305	417,404	0	0	0	2,231	355,285	4	74	62,119
8		Minnetonka	4.08	273.46	67.05	41	10,898	730,677	1	2,673	82,863	10,898	730,677	0	0	0
9		Minneapolis	3.28	248.10	75.70	31	3,615	273,653	0	0	0	3,615	273,653	0	0	0
20		Saint Louis Park	1.56	243.48	156.32	21	1,123	175,546	0	0	0	1,123	175,546	0	0	0
21		Bloomington	2.03	241.27	118.62	7	1,259	149,346	0	0	0	1,259	149,346	0	0	0
2		Golden Valley	1.99	240.54	120.70	11	564	68,074	0	0	0	564	68,074	0	0	0
3		Minneapolis	1.96	223.73	114.20	3	96	10,963	0	0	0	96	10,963	0	0	0
4		Wayzata	1.74	218.00	125.59	12	1,781	223,672	0	0	0	1,781	223,672	0	0	0
25		Minneapolis	0.62	216.66	351.94	4	197	69,332	0	0	0	197	69,332	0	0	0

(1) Based on Jan 1-Dec 31, 2020, year-end normalized data (IEEE Op Co Level)

"Total" includes all causes, all levels

"Bulk Power Supply" includes Distribution Substation, Transmission Substation, and Transmission Line levels, all cause codes "Unplanned" inlcudes all levels and no outages with a primary cause code of "Planned", Includes Bulk Power Supply outages "Planned" includes all levels and only outages with a primary cause code of "Planned", Includes Bulk Power Supply outages

Metro West Poor Performing Feeders (2)

Based on performance Sept 2019 to Aug 2020, Major Event Days are included CMO: customer minutes out

	Feeder ID	Substation	City	SAIFI	SAIDI	CAIDI	Reasons for Poor Performance	Operational Changes Made, Considering or Planned
A			Wayzata	2.76	390.19	141.33	299.0k CMO's (61.1%). Breaker open due to Feeder underground splice failure; 122.3k CMO's (25.0%) Unknown Feeder outage, Trouble patrolled mix of overhead & underground; 30.2k CMO's (6.2%) tap cable failure; 27.7k CMO's (5.7%) due to vegetation, last trimmed 2014.	Replace failed feeder underground splice February 2020, Replacde span of tap cable September 2020. Mainline Feeder trim scheduled 2021.
в			Edina	2.74	339.80	124.01	304.0k CMO's (90.7%) due to Vegetation; 19.6k CMO's (5.9%) Failed Feeder Cap Bank.	Scheduled 2021 Feeder trim; Failed Cap Bank Replaced 2020.
с			Edina	1.42	268.87	189.35	310.0k CMO's (83.2%) 7/18/2020 Storm/high winds Tree debris various locations on Feeder and Taps.	Feeder last trimmed 2019, next scheduled trim 2024.
D			Minneapolis	1.12	117.13	104.58	341.8k CMO's (91.7%) 9/6/2019 Tree on Mainline wire down broken crossarm.	2/3 feeder trimmed in 2020, last 1/3 scheduled trim in 2021.
E			Brooklyn Park	2.32	352.74	152.04	391.7k CMO's (69.8%) 8/14/2020 Storm/high winds tree debris and trees took down poles, overhead wire various taps.	Feeder last trimmed 2017, next scheduled trim 2022.

Security Data Ends]

									All Causes	ί,							
									Distribution	n Substatio	n,						
									Transmiss	ion Substat	ion,	All levels, I	No "Planne	d" Cause	All levels, '	"Planned" C	Cause only
						All levels,	All Causes	included	and Transi	mission Lin	e levels	Includes B	ulk Power S	Supply	Includes B	ulk Power S	Supply
Northwes	t						Total		Bull	k Power Su	ipply		Unplanned	d		Planned	
Feeder ID	Substation	City	SAIFI	SAIDI	CAIDI	Outages	Customers Affected	Customer Mins Out	Outages	Customers Affected	Customer Mins Out	Outages	Customers Affected	Customer Mins Out	Outages	Customers Affected	Customer Mins Out
[Se	curity Data Begins																
		Cottonwood	3.02	872.46	288.76	28	2,544	734,610	0	0	0	28	2,544	734,610	0	0	
		Clara City	3.08	728.50	236.57	23	2,365	559,485	1	766	62,812	23	2,365	559,485	0	0	
		Becker Twp	21.65	612.95	28.31	10	931	26,357	0	0	0	10	931	26,357	0	0	
		Belview	2.68	532.23	198.41	27	904	179,363	0	0	0	27	904	179,363	0	0	
		Wood Lake	2.59	483.97	186.85	15	1,163	217,303	1	467	79,390	15	1,163	217,303	0	0	
		Sauk Rapids	2.20	470.21	214.07	16	5,377	1,151,067	0	0	0	13	5,130	1,129,680	3	247	21,38
		Maynard	2.19	426.42	194.70	14	576	112,149	0	0	0	14	576	112,149	0	0	
		Clarkfield	3.04	402.86	132.50	25	1,803	238,896	0	0	0	25	1,803	238,896	0	0	
		Saint Cloud	2.03	381.98	188.06	11	3,132	589,019	0	0	0	11	3,132	589,019	0	0	
		Cosmos	3.02	360.92	119.69	24	2,135	255,529	0	0	0	24	2,135	255,529	0	0	
		Dilworth	1.78	324.44	182.29	42	4,567	832,515	0	0	0	42	4,567	832,515	0	0	
		Saint Cloud	1.62	296.25	183.22	10	2,275	416,818	0	0	0	10	2,275	416,818	0	0	
		Raymond	2.15	290.43	134.92	39	1,905	257,027	0	0	0	39	1,905	257,027	0	0	
		Sartell	1.84	255.63	138.76	22	4,377	607,371	0	0	0	21	4,376	607,240	1	1	13
		Clear Lake	1.41	239.66	169.79	8	343	58,237	0	0	0	6	295	53,537	2	48	4,70
		Kingston	1.11	239.14	215.07	5	149	32,045	1	136	30,328	5	149	32,045	0	0	
		Sauk Rapids	1.00	229.09	228.04	9	1,309	298,510	0	0	0	9	1,309	298,510	0	0	
		Glyndon	1.38	226.73	164.57	35	1,098	180,700	0	0	0	35	1,098	180,700	0	0	
		Saint Cloud	1.21	224.98	185.32	11	2,507	464,591	0	0	0	10	2,505	464,557	1	2	3
		Dassel	1.66	217.89	130.94	17	1,278	167,339	1	769	39,219	16	1,276	167,193	1	2	14
		Rogers	1.61	211.24	131.08	37	7,202	944,024	0	0	0	35	7,160	942,683	2	42	1,34
		Albany	1.58	208.50	132.20	24	1,809	239,146	0	0	0	24	1,809	239,146	0	0	
		Waite Park	1.04	206.44	197.79	9	501	99,092	0	0	0	9	501	99,092	0	0	
		Sauk Rapids	1.82	198.07	109.05	63	6,724	733,260	0	0	0	60	5,904	692,782	3	820	40,47
		Kimball	1.26	194.83	155.12	11	579	89.817	1	459	75.276	11	579	89.817	0	0	

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Northwest Poor Performing Feeders (2) Based on performance Sept 2019 to Aug 2020, Major Event Days are included CMO: customer minutes out

	Feeder ID	Substation	City	SAIFI	SAIDI	CAIDI	Reasons for Poor Performance	Operational Changes Made, Considering or Planned
A			Becker	9.30	1,937.26	208.31	49.6k CMO's (59.6%) due to broken disconnect in substation; 26.8k CMO's (32.2%) due to 5 various tap cable failures.	Broken disconnect repaired by sub maintenance, revaluate tap cable failures as needed for replacement.
В			Granite City	1.14	122.99	107.89	356.6k CMO's (80.7%) CMO's due to transmission bus outage.	Transmission/Substation groups made repairs.
с			Montevideo	2.29	624.64	272.77	160.1k CMO's (99.8%) 7/18/2020 Storm/Lightning Strike/Tree on overhead feeder wires down.	Removed tree & repair overhead feeder back to normal. Feeder trimmed completed 2020.
D			Paynesville	1.92	1,442.35	751.22	3,787.8k CNO's (97.8%) 9/2/2020 Storm caused tree down on overhead line.	Removed tree & repair overhead feeder back to normal. Feeder last trimmed 2017, next trim scheduled 2022.
E			Saint Cloud	2.27	443.99	195.59	396.3k CMO's (43.3%) due to feeder breaker open due to lightning strike; 310.6k CMO's (33.9%) due to double circuit pole burn off due to bad porcelain cutout; 196.6k CMO's (21.5%) due to squirrel flash across C phase Step-down transformer.	Burnt Pole and Cutout replaced and Stepdown transformer replaced.

Security Data Ends]

									All Causes	ί,							
									Distribution	n Substatior	۱,						
									Transmiss	ion Substat	ion,	All levels,	No "Planne	d" Cause	All levels,	"Planned" C	Cause only
						All levels,	All Causes i	ncluded	and Transi	mission Line	e levels	Includes B	ulk Power S	Supply	Includes B	ulk Power S	Supply
Southeast	t						Total		Bull	k Power Su	ipply		Unplanned	i		Planned	
Feeder ID	Substation	City	SAIFI	SAIDI	CAIDI	Outages	Customers Affected	Customer Mins Out	Outages	Customers Affected	Customer Mins Out	Outages	Customers Affected	Customer Mins Out	Outages	Customers Affected	Custome Mins Out
[Sec	urity Data Begins																
		Red Wing	3.87	871.54	225.02	85	7,731	1,739,596	0	0	0	85	7,731	1,739,596	0	0	
2		Wacouta Twp	2.45	621.41	253.61	43	985	249,807	0	0	0	43	985	249,807	0	0	
		Frontenac	3.76	545.48	144.97	43	2,679	388,381	2	1,421	100,148	43	2,679	388,381	0	0	
		Good Thunder	5.31	454.81	85.63	33	3,001	256,970	2	1,130	65,540	33	3,001	256,970	0	0	
5		Clarks Grove	3.57	442.33	123.86	19	1,682	208,335	1	469	32,830	19	1,682	208,335	0	0	
		Belle Plaine	1.56	388.18	249.42	42	3,427	854,776	1	2,194	699,146	41	3,299	831,224	1	128	23,55
·		Belle Plaine	1.40	379.64	271.67	20	1,628	442,284	1	1,153	392,020	19	1,619	441,100	1	9	1,18
		Henderson	2.00	378.97	189.49	5	966	183,043	1	482	83,868	5	966	183,043	0	0	
		Wabasha	0.68	370.37	543.51	24	584	317,411	0	0	0	24	584	317,411	0	0	
		Morristown	2.48	357.38	144.07	46	3,014	434,219	2	2,424	373,296	46	3,014	434,219	0	0	
		Mapleton	3.27	354.21	108.34	45	3,276	354,923	2	2,016	60,480	45	3,276	354,923	0	0	
		Chandler	1.65	311.21	188.68	8	287	54,151	0	0	0	8	287	54,151	0	0	
		Lime Twp	3.79	298.76	78.76	13	1,119	88,133	0	0	0	12	1,116	87,218	1	3	91
		Waterville	2.11	282.17	133.43	13	1,161	154,913	0	0	0	13	1,161	154,913	0	0	
i		New Auburn	2.44	279.03	114.17	6	545	62,224	1	222	2,664	6	545	62,224	0	0	
;		Northfield	0.43	277.71	648.00	6	12	7,776	0	0	0	6	12	7,776	0	0	
·		Madison Lake	1.72	252.19	146.27	30	1,281	187,377	1	740	91,760	30	1,281	187,377	0	0	
		North Mankato	3.07	250.89	81.80	21	3,524	288,271	0	0	0	19	3,522	288,156	2	2	11
1		Slayton	2.63	226.83	86.28	14	2,006	173,075	2	1,523	80,695	14	2,006	173,075	0	0	
		Waterville	1.49	221.14	148.49	53	1,394	206,990	0	0	0	53	1,394	206,990	0	0	
		Zumbrota	1.42	213.89	150.64	18	744	112,077	0	0	0	18	744	112,077	0	0	
		Jasper	1.26	208.09	164.54	30	1,362	224,110	0	0	0	30	1,362	224,110	0	0	
3		Red Wing	1.60	206.81	129.57	30	1,636	211,983	0	0	0	30	1,636	211,983	0	0	
		Courtland	1.29	198.50	153.94	11	539	82,972	0	0	0	11	539	82,972	0	0	
5		Lime Twp	1.00	197.00	197.00	1 1	1	197	1 0	1 0	0	1 1	1	197	0	0	

(1) Based on Jan 1-Dec 31, 2020, year-end normalized data (IEEE Op Co Level)

"Total" includes all causes, all levels

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Southeast Poor Performing Feeders (2)

Based on performance Sept 2019 to Aug 2020, Major Event Days are included CMO: customer minutes out

	Feeder ID	Substation	City	SAIFI	SAIDI	CAIDI	Reasons for Poor Performance	Operational Changes Made, Considering or Planned
А			Red Wing	3.94	870.75	221.00	1,460,8k COM's (84.1%) due to trees on line dates 8/8/2020 - 8/9/2020.	Scheduled trim in 2021.
в			Mankato	3.81	295.54	77.57	37.5k CMO's (43.6%) due to feeder breaker locking out during lightning. 27.1k CMO's (31.5%) due to 2 tree outages from Outside of Maintenance Corridor, last trimmed in 2016, scheduled trim in 2021.	Create Notification to install enhanced lightning arresters appx 6 miles on feeder, schedule completion November 2021. Feeder last trimmed in 2016, scheduled feeder trim in 2021.
с			Winona	0.89	828.55	930.96	43.9k CMO's (99.9%) Tree on primary from outside of Maintenance Corridor.	43.9k CMO's (99.9%) Tree on primary from outside of Maintenance Corridor, removed tree.
D			Waterville	2.20	220.54	100.25	59.8k CMO's (49.3%) Unknown cause for Mainline Recloser to operate 2 different months; 41.9k CMO's (34.5%) due to 2 tree outages from Outside of Maintenance Corridor.	Create Notification to install enhanced lightning arrester appx 6 miles on feeder, scheduled completion October 2021. Feeder last trimmed 2020, next scheduled trim 2025.
E			Zumbrota	2.03	458.19	225.71	193.8k CMO's (82.1%) due to various tree outages; 33.9k CMO's (14.4%) primary cable failures behind same fuse.	Feeder trim completed 2020, next scheduled trim 2025. Created Notification to replace 5 spans of cable behind same fuse, scheduled completion June 2021.

Security Data Ends]

Xcel Energy Minn. R. 7826.0600 Part F Bulk Power Supply Interruptions 2020

Line	Begin Date	Begin Time	Duration Hrs	Duration Mins	Cause	Comments	Remedial Action
[NOT PUBLIC DATA BEGINS							
	1/3/2020	13:13	16	44	Winter Storm	Potential Ice Shedding/Galloping	Circuit patrolled-Evaluate circuit for potential future mitigation project.
	3/5/2020	11:01	1	48	Winter Storm	High Winds	Circuit patrolled and line re- energized.
	3/11/2020	9:39	0	18	Substation Construction	Static wire fell onto bus during during stringing	Repaired
	3/30/2020	8:39	0	55	External	Vehicle damage to structures	Structures replaced
	4/2/2020	23:03	0	8	Winter Storm	Potential Ice Shedding/Galloping	Circuit patrolled-Evaluate circuit for potential future mitigation project.
	4/2/2020	23:16	1	20	Winter Storm	Potential Ice Shedding/Galloping	Circuit patrolled-Evaluate circuit for potential future mitigation project.
	4/2/2020	23:42	2	51	Winter Storm	Potential Ice Shedding/Galloping	Circuit patrolled-Evaluate circuit for potential future mitigation project.
	4/3/2020	0:31	1	15	Winter Storm	Potential Ice Shedding/Galloping	Circuit patrolled-Evaluate circuit for potential future mitigation project.
	4/3/2020	1:26	1	28	Winter Storm	Potential Ice Shedding/Galloping	Circuit patrolled-Evaluate circuit for potential future mitigation project.
	4/3/2020	3:48	10	1	Winter Storm	Potential Ice Shedding/Galloping	Circuit patrolled-Evaluate circuit for potential future mitigation project.
	4/4/2020	11:11	0	6	Unknown	Unknown	Circuit patrolled and line re- energized.
	4/18/2020	15:09	0	38	Unknown	Unknown	Circuit patrolled and line re- energized.
	4/27/2020	4:07	0	5	Unknown	Unknown	Circuit patrolled and line re- energized.
	4/29/2020	15:19	0	38	Vegetation	Tree on Line	Remove tree and inspect conductor for damage
	5/1/2020	8:38	0	50	Unknown	Unknown	Circuit patrolled and line re- energized.

Xcel Energy Minn. R. 7826.0600 Part F Bulk Power Supply Interruptions 2020

PUBLIC DOCUMENT -NOT PUBLIC DATA HAS BEEN EXCISED

Docket No. E002/M-21-____ Attachment F

Line	Begin Date	Begin Time	Duration Hrs	Duration Mins	Cause	Comments	Remedial Action
	5/1/2020	16:17	0	8	Unknown	Unknown	Circuit patrolled and line re- energized.
	5/6/2020	8:38	0	15	Unknown	Unknown	Circuit patrolled and line re- energized.
	5/14/2020	0:17	0	7	Equipment	Failed Splice	Repaired/Replaced
	5/14/2020	14:02	0	14	Unknown	Mis-operation in Non-Xcel Substation	Non-Xcel Inspection
	5/14/2020	15:42	0	5	External	Vehicle damage to structures	Structures replaced
	6/2/2020	18:09	0	6	Weather	Lightning	Strike intensity and location identified. Circuit patrolled and line re-energized.
	6/6/2020	17:30	1	44	Equipment	Insulator Failure	Replaced
	6/12/2020	12:52	0	54	Unknown	Unknown	Non-Xcel circuit patrolled and line re-energized.
	6/14/2020	14:04	1	4	Vegetation	Tree on Line	Remove tree and inspect conductor for damage
	6/17/2020	20:47	0	5	Weather	Lightning	Strike intensity and location identified. Circuit patrolled and line re-energized.
	6/25/2020	18:11	1	11	Weather	Structure Down	Structure replaced
	6/28/2020	18:48	1	15	Equipment	Failed Conductor	Repaired
	6/29/2020	7:19	0	30	Equipment	Crossarm Failure	Replaced
	7/13/2020	21:12	0	51	Vegetation	Tree on Line	Remove tree and inspect conductor for damage
	7/18/2020	0:20	1	56	Weather	Structures Down	Structures replaced
	7/18/2020	0:43	1	5	Weather	Lightning	Strike intensity and location identified. Circuit patrolled and line re-energized.
	7/20/2020	19:54	0	58	Vegetation	Tree on Line	Remove tree and inspect conductor for damage
	7/27/2020	10:23	0	28	Equipment	Transformer Failure	Repaired/Replaced
	7/30/2020	20:09	1	22	Equipment	Current Transformer	Repaired/Replaced
	7/31/2020	14:22	2	12	Storms	Lightning	Strike intensity and location identified. Circuit patrolled and line re-energized.
	8/8/2020	13:22	1	54	Equipment	Structure Damage	Replaced
	8/8/2020	18:06	1	43	Weather	Unknown	Circuit patrolled and line re- energized.

Xcel Energy Minn. R. 7826.0600 Part F Bulk Power Supply Interruptions 2020

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Line	Begin Date	Begin Time	Duration Hrs	Duration Mins	Cause	Comments	Remedial Action
	8/10/2020	2:35	0	9	Weather	Lightning	Strike intensity and location identified. Circuit patrolled and line re-energized.
	8/28/2020	4:27	0	46	Weather	Lightning with Conductor Damage	Repaired
	8/30/2020	11:33	0	43	Weather	Non-Xcel Structure Down	Non-Xcel Repaired
	9/24/2020	4:41	3	43	Equipment	Non-Xcel Failed Arrester	Non-Xcel Repaired
	10/13/2020	14:19	0	19	Equipment	Insulator/Cross Arm Failure	Replaced
	10/19/2020	13:25	0	29	Unknown	Unknown	Circuit patrolled and line re- energized.
	10/20/2020	15:30	2	47	External	Vehicle damage to adjacent distibution structure	Repaired/replaced distribution structure and inspected transmission facilities
	10/22/2020	7:52	9	44	Winter Storm	Potential Ice Shedding/Galloping	Circuit patrolled. Evaluate circuit for potential future mitigation project.
	10/22/2020	16:39	0	26	Weather / Environmental	Insulator Contamination	Monitor Condition
	11/21/2020	13:16	1	19	Equipment	Breaker Fault	Repaired/Replaced
	11/24/2020	1:21	15	17	Equipment	Undetermined Relay Action	Repaired/Replaced
	12/19/2020	0:25	5	32	External	Vehicle damage to structures	Structures replaced
	12/21/2020	11:28	0	32	Equipment	Crossarm Failure	Replaced
	12/23/2020	11:18	1	32	Winter Storm	Potential Ice Shedding/Galloping	Circuit patrolled-Evaluate circuit for potential future mitigation project.
	12/23/2020	12:10	2	6	Winter Storm	Potential Ice Shedding/Galloping	Circuit patrolled-Evaluate circuit for potential future mitigation project.
	12/23/2020	14:04	0	43	Winter Storm	Unknown	Circuit patrolled and line re- energized.
	12/23/2020	17:50	3	6	Equipment and Winter Storm	Failed Jumper and Potential Ice Shedding/Galloping	Repair and Circuit patrolled- Evaluate circuit for potential future mitigation project.
	12/23/2020	17:53	0	40	External	Vehicle damage to structures	Structures replaced

NOT PUBLIC DATA

ENDS]

	JANUARY	Y = 7 total	qualifying events,	nts, 0 events with no email						
	Feeder	Primary Event #	Begin Time	Completion Time	Duration Min.	Customer s Out	Region	Email sent to CAO		
	[PROTEC	CTED DAT	A BEGINS							
1		1801474	01/01/20 14:43	01/01/20 15:48	65	1,900	Metro West	Х		
2		1802082	01/04/20 18:59	01/04/20 19:59	60	609	Metro East	Х		
3		1804588	01/18/20 10:04	01/18/20 12:06	122	2,448	Metro East	Х		
4		1804873	01/18/20 23:59	01/19/20 01:34	95	2,009	Metro West	Х		
5		1804850	01/18/20 23:59	01/19/20 01:34	95	1,638	Metro West	Х		
6		1805281	01/21/20 17:25	01/21/20 18:38	73	3,809	Metro West	Х		
7		1806393	01/27/20 02:08	01/27/20 04:32	144	570	Southeast	Х		
	FEBRUA	RY = 11 tot	al qualifying even	ts, 0 events with n	io email					
1		1808852	02/06/20 17:13	02/06/20 19:19	126	4,947	Northwest	Х		
2		1809410	02/08/20 23:51	02/09/20 10:49	658	1,571	Metro East	Х		
3		1809567	02/09/20 12:59	02/09/20 13:59	60	626	Metro West	Х		
4		1809579	02/09/20 12:59	02/09/20 13:59	60	751	Metro West	Х		
5		1809546	02/09/20 12:59	02/09/20 13:59	60	2,045	Metro West	Х		
6		1809548	02/09/20 12:59	02/09/20 13:59	60	1,388	Metro West	Х		
7		1809550	02/09/20 12:59	02/09/20 13:59	60	1,541	Metro West	Х		
8		1809551	02/09/20 12:59	02/09/20 13:59	60	890	Metro West	Х		
9		1811141	02/16/20 18:57	02/16/20 20:33	96	1,255	Metro West	Х		
10		1811176	02/17/20 01:29	02/17/20 03:29	120	1,663	Metro West	Х		
11		1812319	02/23/20 23:02	02/24/20 00:34	92	3,220	Metro East	Х		
	MARCH :	= 8 total qu	alifying events, 0	events with no en	nail	•				
1		1815633	03/10/20 17:47	03/10/20 18:59	72	563	Southeast	Х		
2		1817001	03/12/20 21:10	03/13/20 05:11	481	2,028	Metro West	Х		
3		1818839	03/21/20 23:38	03/22/20 01:37	119	3,598	Northwest	Х		
4		1818908	03/22/20 13:46	03/22/20 21:19	453	1,539	Northwest	Х		
5		1818907	03/22/20 13:46	03/22/20 21:45	479	1,286	Northwest	Х		
6		1819576	03/25/20 08:11	03/25/20 10:24	133	1,183	Metro West	Х		
7		1820145	03/27/20 11:45	03/27/20 13:04	79	2,571	Metro West	Х		
8		1820571	03/28/20 20:15	03/28/20 21:20	65	1,725	Metro East	Х		
	APRIL =	11 total qua	lifying events, 0 e	vents with no ema	ail	•				
1		1823200	04/02/20 23:43	04/03/20 02:33	170	839	Northwest	Х		
2		1825058	04/05/20 08:03	04/05/20 09:15	72	3,065	Metro East	Х		
3		1823982	04/05/20 20:11	04/05/20 23:14	183	1,336	Metro West	Х		
4		1824259	04/07/20 05:49	04/07/20 07:54	125	1,032	Southeast	Х		
5		1824435	04/07/20 16:01	04/07/20 17:05	64	1,251	Metro West	Х		
6		1826879	04/16/20 04:48	04/16/20 06:34	106	633	Metro West	Х		
7		1827553	04/19/20 05:34	04/19/20 06:44	70	1,835	Metro West	Х		
8		1827555	04/19/20 05:34	04/19/20 08:02	148	1,868	Metro West	X		
9		1828009	04/20/20 16:00	04/20/20 17:30	90	830	Metro East	Х		
10		1828879	04/22/20 18:07	04/22/20 19:15	68	1,267	Metro East	Х		
11		1828959	04/22/20 18:07	04/22/20 19:31	84	575	Metro East	X		
	MAY = 21	total quali	fying events, 3 eve	ents with no email						
1		1832723	05/05/20 13:54	05/05/20 15:15	81	5,129	Metro West	X		
2		1835162	05/13/20 10:08	05/13/20 11:20	72	566	Southeast	Х		
3		1835313	05/13/20 23:43	05/14/20 01:56	133	666	Northwest	х		

4	1835336	05/13/20 23:43	05/14/20 06:14	391	530	Northwest	Х
5	1835502	05/14/20 14:02	05/14/20 15:06	64	3,229	Northwest	х
6	1835947	05/16/20 08:10	05/16/20 09:22	72	1,419	Metro West	х
7	1836594	05/17/20 04:00	05/17/20 05:16	76	2,033	Metro East	Х
8	1836750	05/17/20 11:47	05/17/20 21:00	553	604	Metro East	Х
9	1836956	05/17/20 17:45	05/17/20 19:31	106	1,430	Metro West	х
10	1840986	05/26/20 21:33	05/26/20 22:55	82	5,678	Metro East	
11	1841100	05/26/20 22:45	05/27/20 10:40	715	2,036	Metro East	х
12	1841171	05/26/20 23:18	05/27/20 02:39	201	2,692	Metro West	
13	1841417	05/27/20 06:28	05/27/20 07:40	72	2,848	Metro West	Х
14	1841961	05/28/20 01:56	05/28/20 13:12	676	874	Metro West	Х
15	1841985	05/28/20 06:15	05/28/20 08:31	136	2,572	Metro West	Х
16	1842002	05/28/20 07:00	05/28/20 08:36	96	741	Metro West	Х
17	1842230	05/28/20 14:28	05/28/20 15:38	70	2,864	Metro West	Х
18	1842231	05/28/20 14:28	05/28/20 15:55	87	1,189	Metro West	Х
19	1842732	05/29/20 02:59	05/29/20 15:37	758	842	Metro West	Х
20	1842735	05/29/20 03:09	05/29/20 16:30	801	1,612	Metro West	
21	1842746	05/29/20 05:15	05/29/20 13:51	516	874	Metro West	Х
	JUNE = 43 total qua	lifying events, 0 ev	vents with no ema	il			
1	1846010	06/03/20 15:46	06/03/20 16:55	69	1,302	Northwest	Х
2	1846185	06/04/20 02:08	06/04/20 03:43	95	1,688	Metro West	Х
3	1846186	06/04/20 02:08	06/04/20 05:17	189	581	Metro West	Х
4	1846939	06/05/20 00:52	06/05/20 05:59	307	710	Metro East	х
5	1846998	06/05/20 03:15	06/05/20 04:33	78	1,927	Metro East	Х
6	1847006	06/05/20 03:15	06/05/20 04:33	78	1,502	Metro East	Х
7	1846996	06/05/20 03:15	06/05/20 04:33	78	2,945	Metro East	Х
8	1846995	06/05/20 03:15	06/05/20 04:33	78	3,060	Metro East	Х
9	1847005	06/05/20 03:15	06/05/20 04:33	78	2,814	Metro East	Х
10	1846997	06/05/20 03:15	06/05/20 04:33	78	2,677	Metro East	Х
11	1854382	06/06/20 17:30	06/06/20 19:14	104	1,300	Northwest	Х
12	1852684	06/06/20 22:00	06/07/20 00:25	145	1,702	Metro East	Х
13	1848911	06/06/20 23:39	06/07/20 02:56	197	1,806	Metro East	Х
14	1849608	06/07/20 20:18	06/07/20 22:01	103	1,921	Metro West	х
15	1849967	06/07/20 20:54	06/07/20 21:54	60	724	Metro West	Х
16	1851867	06/08/20 21:56	06/08/20 23:03	67	1,889	Metro West	Х
17	1851866	06/08/20 21:56	06/08/20 23:03	67	705	Metro West	Х
18	1851872	06/08/20 21:56	06/09/20 00:48	172	772	Metro West	Х
19	1851878	06/08/20 21:56	06/08/20 23:05	69	726	Metro West	Х
20	1851865	06/08/20 21:56	06/08/20 23:06	70	2,042	Metro West	Х
21	1851869	06/08/20 21:56	06/08/20 23:06	70	2,076	Metro West	х
22	1853092	06/09/20 18:17	06/09/20 19:30	73	2,059	Metro West	Х
23	1853518	06/10/20 03:42	06/10/20 05:55	133	1,152	Northwest	Х
24	1854825	06/12/20 15:05	06/12/20 16:28	83	882	Northwest	х
25	1854972	06/13/20 07:45	06/13/20 09:24	99	1,117	Metro East	х
26	1854971	06/13/20 07:45	06/13/20 09:24	99	2,275	Metro East	х
27	1855574	06/14/20 17:10	06/14/20 18:15	65	2,899	Metro West	х
28	1857954	06/18/20 18:22	06/18/20 19:29	67	933	Metro West	х
29	1857960	06/18/20 18:25	06/18/20 19:38	73	2,402	Metro West	Х
30	1858673	06/19/20 13:08	06/19/20 14:27	79	1,794	Metro East	х

31	185982	0 06/21/20 18:14	06/21/20 20:08	114	1,089	Southeast	Х
32	186278	7 06/27/20 08:49	06/27/20 11:55	186	1,417	Metro East	Х
33	186278	6 06/27/20 08:49	06/27/20 11:29	160	1,939	Metro East	Х
34	186292	2 06/27/20 08:49	06/27/20 14:08	319	1,780	Metro East	Х
35	186306	0 06/27/20 16:08	06/27/20 18:44	156	2,168	Metro East	Х
36	186384	3 06/28/20 18:48	06/28/20 20:35	107	1,001	Northwest	Х
37	186383	2 06/28/20 18:48	06/28/20 20:03	75	1,949	Northwest	Х
38	186382	9 06/28/20 18:48	06/28/20 20:03	75	1,151	Northwest	Х
39	186461	7 06/29/20 03:43	06/29/20 05:31	108	664	Metro East	Х
40	187297	2 06/29/20 19:15	06/29/20 22:31	196	3,105	Metro East	Х
41	187288	0 06/29/20 19:15	06/29/20 23:56	281	2,916	Metro East	Х
42	186663	2 06/30/20 00:54	06/30/20 02:30	96	1,035	Metro East	Х
43	186688	3 06/30/20 09:46	06/30/20 11:10	84	3,392	Metro West	Х
	JULY = 43 total qu	ualifying events, 0 ev	vents with no emai	il	•		•
1	186820	1 07/01/20 00:40	07/02/20 01:07	1,467	1,043	Metro West	Х
2	186796	1 07/01/20 15:29	07/01/20 16:35	66	3,538	Metro East	Х
3	186821	9 07/01/20 23:17	07/02/20 00:30	73	613	Metro West	Х
4	186857	3 07/02/20 16:01	07/02/20 17:35	94	2,317	Metro West	Х
5	186879	7 07/02/20 20:15	07/02/20 22:10	115	3,757	Metro East	Х
6	186916	2 07/03/20 14:04	07/03/20 15:08	64	3,166	Metro West	Х
7	186939	3 07/03/20 17:34	07/03/20 19:03	89	2,375	Metro East	Х
8	187057	1 07/05/20 14:10	07/05/20 21:04	414	2,389	Metro East	Х
9	187156	9 07/06/20 11:36	07/06/20 12:39	63	1,713	Metro West	Х
10	187169	0 07/06/20 13:31	07/06/20 15:00	89	1,630	Metro West	Х
11	187168	2 07/06/20 14:30	07/06/20 17:32	182	666	Metro West	Х
12	187321	8 07/08/20 19:36	07/08/20 21:17	101	933	Southeast	Х
13	187341	0 07/08/20 23:47	07/09/20 01:24	97	2,854	Metro West	Х
14	187375	8 07/09/20 08:44	07/09/20 10:12	88	1,853	Southeast	Х
15	187481	7 07/11/20 13:13	07/11/20 15:34	141	703	Northwest	Х
16	187512	0 07/11/20 19:35	07/11/20 21:21	106	1,507	Metro West	Х
17	187604	6 07/13/20 14:40	07/13/20 16:05	85	1,164	Metro West	Х
18	187635	4 07/13/20 21:13	07/13/20 23:03	110	500	Southeast	Х
19	187869	7 07/17/20 17:55	07/17/20 19:49	114	1,758	Southeast	Х
20	191834	5 07/18/20 00:43	07/18/20 01:48	65	1,366	Northwest	Х
21	191838	0 07/18/20 00:43	07/18/20 01:48	65	719	Northwest	Х
22	191845	0 07/18/20 00:43	07/18/20 01:48	65	785	Northwest	х
23	187896	8 07/18/20 01:43	07/18/20 08:14	391	661	Northwest	Х
24	187975	9 07/18/20 02:20	07/18/20 05:08	168	2,546	Metro East	х
25	187906	4 07/18/20 02:36	07/18/20 07:38	302	1,052	Metro West	х
26	187912	4 07/18/20 02:42	07/18/20 07:11	269	1,591	Metro West	х
27	187918	9 07/18/20 02:52	07/18/20 07:14	262	572	Metro West	х
28	187921	0 07/18/20 02:54	07/18/20 04:40	106	1,639	Metro West	X
29	187922	2 07/18/20 02:56	07/18/20 05:58	182	1,379	Metro West	Х
30	187946	7 07/18/20 03:19	07/18/20 05:32	133	1,881	Metro East	X
31	187974	6 07/18/20 03:19	07/18/20 06:17	178	846	Metro East	Х
32	187952	8 07/18/20 03:25	07/18/20 05:54	149	1,612	Southeast	X
33	187954	9 07/18/20 03:27	07/18/20 06:38	191	1,114	Southeast	х
34	187956	6 07/18/20 03:32	07/18/20 04:48	76	551	Southeast	Х
35	188068	1 07/18/20 18:25	07/18/20 19:31	66	2,454	Metro East	х

36		1882556	07/21/20 15:34	07/21/20 22:30	416	3,983	Metro West	Х
37		1882712	07/21/20 21:48	07/21/20 23:43	115	1,368	Southeast	х
38		1883942	07/24/20 20:07	07/25/20 15:27	1,160	647	Metro West	х
39		1884564	07/26/20 02:13	07/26/20 06:48	275	2,442	Northwest	Х
40		1885155	07/27/20 10:23	07/27/20 12:23	120	588	Southeast	х
41		1885151	07/27/20 10:23	07/27/20 12:27	124	740	Southeast	х
42		1885576	07/28/20 06:16	07/28/20 07:49	93	1,553	Metro East	х
43		1885722	07/28/20 12:11	07/28/20 13:44	93	1,713	Metro West	х
	AUGUST =	42 total o	qualifying events,	2 events with no e	email			
1		1889343	08/06/20 15:44	08/06/20 16:48	64	527	Metro West	х
2		1889499	08/07/20 06:21	08/07/20 08:05	104	2,408	Metro East	х
3		1890153	08/08/20 17:16	08/08/20 20:43	207	515	Southeast	х
4		1890162	08/08/20 17:29	08/09/20 00:01	392	1,937	Southeast	х
5		1890346	08/08/20 18:06	08/08/20 19:49	103	710	Southeast	х
6		1890829	08/09/20 05:02	08/09/20 07:11	129	1,903	Southeast	х
7		1890989	08/09/20 08:17	08/09/20 11:06	169	1,796	Southeast	х
8		1891506	08/09/20 21:06	08/10/20 00:18	192	3,956	Metro West	х
9		1891671	08/10/20 01:32	08/10/20 03:23	111	1,451	Metro East	х
10		1891937	08/10/20 03:07	08/10/20 04:58	111	1,121	Metro West	х
11		1891979	08/10/20 03:21	08/10/20 04:39	78	753	Metro West	х
12		1893643	08/12/20 01:44	08/12/20 09:27	463	3,045	Metro West	х
13		1893785	08/12/20 10:04	08/12/20 11:34	90	1,548	Southeast	х
14		1873051	08/14/20 19:39	08/14/20 21:41	122	2,339	Metro West	х
15		1895564	08/14/20 19:55	08/15/20 02:33	398	562	Metro West	х
16		1895634	08/14/20 19:59	08/14/20 21:35	96	1,823	Metro West	
17		1895625	08/14/20 19:59	08/14/20 21:45	106	2,094	Metro West	х
18		1895657	08/14/20 20:01	08/14/20 22:06	125	2,556	Metro West	х
19		1895758	08/14/20 20:04	08/14/20 21:38	94	1,795	Metro East	х
20		1895695	08/14/20 20:04	08/15/20 08:35	751	2,816	Metro West	х
21		1895821	08/14/20 20:05	08/14/20 22:53	168	679	Metro West	Х
22		1896104	08/14/20 20:13	08/14/20 23:33	200	1,327	Metro East	х
23		1896124	08/14/20 20:14	08/15/20 00:29	255	1,964	Metro East	х
24		1896212	08/14/20 20:18	08/14/20 22:22	124	2,312	Metro East	х
25		1896276	08/14/20 20:23	08/14/20 22:24	121	5,224	Metro East	х
26		1896354	08/14/20 20:24	08/15/20 00:13	229	2,818	Metro East	х
27		1896326	08/14/20 20:26	08/14/20 22:24	118	2,412	Metro East	х
28		1899934	08/16/20 09:51	08/16/20 11:31	100	701	Metro East	Х
29		1901066	08/18/20 12:42	08/18/20 21:36	534	1,668	Metro West	х
30		1901065	08/18/20 12:42	08/18/20 21:14	512	739	Metro West	Х
31		1902160	08/20/20 16:30	08/20/20 17:57	87	507	Metro West	х
32		1902629	08/21/20 23:34	08/22/20 01:09	95	1,107	Metro West	х
33		1903394	08/23/20 17:47	08/23/20 19:17	90	971	Northwest	Х
34		1903468	08/23/20 17:47	08/23/20 21:51	244	3,993	Northwest	Х
35		1903578	08/23/20 20:56	08/23/20 22:46	110	3,191	Metro East	x
36		1904533	08/25/20 14:04	08/26/20 03:57	833	1,250	Metro West	Х
37		1905584	08/27/20 11:19	08/27/20 20:41	562	1,106	Metro West	Х
38		1905681	08/27/20 13:53	08/27/20 15:46	113	942	Metro West	

Xcel Energy Service Quality Report 2020 Major Service Interruptions Notification

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39	1905778	08/27/20 16:09	08/28/20 23:00	1,851	3,140	Metro West	Х
40	1907440	08/31/20 02:57	08/31/20 06:31	214	2,062	Northwest	Х
41	1907552	08/31/20 04:28	08/31/20 05:36	68	1,894	Metro West	Х
42	1907756	08/31/20 09:33	08/31/20 10:42	69	2,045	Metro East	Х
	SEPTEMBER = $11 t$	otal qualifying eve	ents, 0 events with	no email			
1	1908512	09/02/20 09:47	09/02/20 14:23	276	2,132	Metro East	Х
2	1908612	09/02/20 12:49	09/03/20 00:27	698	978	Southeast	Х
3	1909029	09/03/20 10:07	09/03/20 11:19	72	2,085	Metro East	Х
4	1910349	09/06/20 17:45	09/06/20 19:30	105	752	Metro West	Х
5	1910452	09/07/20 06:51	09/07/20 12:30	339	2,194	Southeast	Х
6	1910461	09/07/20 06:51	09/07/20 12:31	340	1,153	Southeast	Х
7	1911585	09/10/20 01:20	09/10/20 03:26	126	1,156	Metro East	Х
8	1914438	09/19/20 15:11	09/19/20 16:27	76	2,690	Metro West	Х
9	1914585	09/20/20 07:39	09/20/20 08:47	68	1,150	Southeast	Х
10	1916406	09/24/20 07:15	09/24/20 08:48	93	2,247	Metro East	Х
11	1918564	09/30/20 17:20	09/30/20 22:40	320	1,793	Metro East	Х
	OCTOBER = 30 tota	al qualifying event	s, 0 events with no	o email			
1	1919044	10/01/20 13:50	10/01/20 19:20	330	2,072	Metro West	х
2	1919122	10/01/20 15:07	10/01/20 17:40	153	1,335	Northwest	Х
3	1919432	10/02/20 15:49	10/03/20 02:44	655	1,336	Metro East	Х
4	1919837	10/04/20 14:42	10/04/20 16:07	85	3,538	Metro East	Х
5	1920831	10/06/20 14:47	10/06/20 15:48	61	593	Metro East	Х
6	1923564	10/11/20 08:54	10/11/20 10:07	73	1,046	Southeast	Х
7	1923583	10/11/20 08:54	10/11/20 09:54	60	2,057	Southeast	Х
8	1922714	10/11/20 22:49	10/12/20 01:28	159	2,376	Northwest	Х
9	1923354	10/12/20 21:39	10/13/20 14:13	994	1,911	Metro East	Х
10	1924397	10/14/20 21:09	10/14/20 22:32	83	1,631	Metro West	х
11	1924868	10/15/20 18:25	10/15/20 20:12	107	1,063	Metro East	х
12	1924864	10/15/20 18:25	10/15/20 20:12	107	3,609	Metro East	Х
13	1925714	10/18/20 06:11	10/18/20 10:21	250	3,574	Northwest	х
14	1926373	10/20/20 14:32	10/20/20 15:39	67	2,741	Metro East	х
15	1926854	10/20/20 14:32	10/20/20 16:02	90	511	Metro East	Х
16	1926441	10/20/20 15:30	10/20/20 18:17	167	714	Metro West	Х
17	1926438	10/20/20 15:30	10/20/20 21:57	387	1,145	Metro West	Х
18	1944388	10/20/20 15:43	10/20/20 17:43	120	719	Metro West	Х
19	1926620	10/20/20 16:11	10/20/20 17:32	81	1,790	Metro East	Х
20	1926654	10/20/20 16:11	10/21/20 06:18	847	2,723	Metro East	Х
21	1926784	10/20/20 16:31	10/20/20 17:41	70	1,018	Metro East	Х
22	1927009	10/20/20 17:43	10/20/20 21:23	220	924	Metro West	Х
23	1927279	10/20/20 19:08	10/20/20 21:48	160	3,045	Metro West	Х
24	1927706	10/20/20 21:19	10/20/20 22:38	79	1,672	Metro West	Х
25	1929095	10/23/20 07:50	10/23/20 09:12	82	766	Northwest	Х
26	1929431	10/23/20 21:54	10/23/20 23:51	117	1,734	Southeast	X
27	1929595	10/24/20 12:33	10/24/20 13:36	63	1,596	Metro East	X
28	1929695	10/24/20 17:31	10/25/20 01:35	484	1,028	Northwest	X
29	1934926	10/28/20 21:05	10/28/20 22:17	72	3,477	Metro West	X
30	1938989	10/31/20 17:50	10/31/20 19:10	80	638	Metro West	Х
	NOVEMBER = 15 to	otal qualifying eve	ents, 3 events with	no email			
1	1939322	11/01/20 02:04	11/01/20 03:30	86	677	Metro East	Х

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2		1939344	11/01/20 03:15	11/01/20 05:02	107	1,504	Metro East	Х
3		1941686	11/05/20 11:31	11/05/20 12:34	63	1,062	Southeast	Х
4		1941685	11/05/20 11:31	11/05/20 12:34	63	1,943	Southeast	Х
5		1942200	11/06/20 17:47	11/06/20 18:49	62	1,901	Metro West	Х
7		1942491	11/08/20 02:20	11/08/20 03:25	65	990	Metro West	Х
8		1943209	11/09/20 12:56	11/09/20 13:57	61	2,679	Metro West	Х
9		1944681	11/13/20 15:32	11/13/20 19:30	238	838	Northwest	Х
10		1944755	11/13/20 21:17	11/13/20 23:30	133	2,254	Metro East	
11		1944797	11/14/20 00:33	11/14/20 01:35	62	1,731	Metro West	Х
12		1944974	11/14/20 17:00	11/15/20 02:58	598	1,963	Metro East	
13		1945067	11/15/20 04:08	11/15/20 12:47	519	2,193	Metro East	
14		1945754	11/17/20 04:41	11/17/20 05:53	72	3,641	Metro West	Х
15		1948527	11/29/20 19:19	11/29/20 23:39	260	1,212	Southeast	Х
	DECEMB	BER = 20 to	otal qualifying eve	nts, 1 event with n	io email			
1		1951382	12/09/20 10:06	12/09/20 11:16	70	2,482	Metro East	Х
2		1951483	12/09/20 10:14	12/09/20 11:16	62	2,871	Metro East	
3		1952582	12/13/20 14:44	12/13/20 15:54	70	2,053	Metro West	Х
4		1953308	12/16/20 06:50	12/16/20 08:13	83	706	Northwest	Х
5		1953596	12/17/20 04:36	12/17/20 07:04	148	1,519	Metro West	Х
6		1953943	12/19/20 00:25	12/19/20 04:30	245	2,727	Metro West	Х
7		1954076	12/19/20 05:04	12/19/20 06:48	104	2,728	Metro West	Х
8		1954969	12/22/20 18:21	12/22/20 19:30	69	577	Metro East	Х
9		1955162	12/23/20 11:18	12/23/20 12:50	92	604	Southeast	Х
10		1955322	12/23/20 12:23	12/23/20 14:13	110	565	Southeast	Х
11		1955689	12/23/20 14:44	12/23/20 16:30	106	1,248	Metro West	Х
12		1955730	12/23/20 14:50	12/23/20 18:54	244	1,038	Metro East	Х
13		1955733	12/23/20 14:52	12/23/20 16:28	96	565	Southeast	Х
14		1955904	12/23/20 15:16	12/23/20 21:55	399	1,209	Metro West	Х
15		1956146	12/23/20 15:59	12/23/20 20:11	252	1,004	Southeast	Х
16		1956337	12/23/20 16:38	12/23/20 18:02	84	2,167	Metro West	Х
17		1956457	12/23/20 17:20	12/23/20 20:58	218	927	Metro West	Х
18		1956516	12/23/20 17:30	12/23/20 18:49	79	2,524	Metro West	Х
19		1957591	12/25/20 18:23	12/26/20 05:50	687	2,951	Metro East	Х
20		1957771	12/26/20 17:11	12/26/20 18:16	65	1,097	Metro West	Х

PROTECTED DATA ENDS]

Minnesota - MAIFI	January	February	March	April	May	June	July	August	September	October	November	December	YTD
2020 With Storms, All Levels, All Causes	0.01	0.03	0.03	0.06	0.07	0.17	0.12	0.15	0.07	0.07	0.03	0.06	0.88
Tariff Normalized, IEEE Region No Trans Line, All Ca	0.01	0.03	0.03	0.04	0.07	0.15	0.09	0.10	0.06	0.06	0.02	0.05	0.70
Annual Normalized, IEEE Region All Levels, All Caus	0.01	0.03	0.03	0.06	0.07	0.17	0.11	0.11	0.07	0.06	0.03	0.06	0.82
CES Cust Served													
2019 With Storms, All Levels, All Causes	0.03	0.04	0.06	0.11	0.09	0.08	0.10	0.06	0.14	0.06	0.04	0.01	0.82
Tariff Normalized, IEEE Region No Trans Line, All Ca	0.02	0.01	0.06	0.07	0.07	0.06	0.07	0.05	0.09	0.06	0.02	0.01	0.60
Annual Normalized, IEEE Region All Levels, All Caus	0.03	0.04	0.06	0.08	0.09	0.08	0.09	0.06	0.12	0.06	0.04	0.01	0.77
CES Cust Served													
2018 With Storms, All Levels, All Causes	0.01	0.04	0.03	0.09	0.13	0.08	0.09	0.10	0.10	0.05	0.03	0.01	0.77
Tariff Normalized, IEEE Region No Trans Line, All Ca	0.01	0.04	0.03	0.06	0.12	0.07	0.08	0.07	0.08	0.05	0.02	0.01	0.63
Annual Normalized, IEEE Region All Levels, All Caus	0.01	0.04	0.03	0.08	0.13	0.08	0.09	0.10	0.10	0.05	0.03	0.01	0.75
CES Cust Served													
2017 With Storms, All Levels, All Causes	0.04	0.02	0.06	0.06	0.04	0.14	0.10	0.04	0.09	0.13	0.01	0.03	0.76
Tariff Normalized, IEEE Region No Trans Line, All Ca	0.03	0.02	0.04	0.04	0.04	0.07	0.09	0.04	0.08	0.08	0.01	0.03	0.57
Annual Normalized, IEEE Region All Levels, All Caus	0.04	0.02	0.06	0.06	0.04	0.09	0.10	0.04	0.09	0.13	0.01	0.03	0.71
CES Cust Served													
2016 With Storms, All Levels, All Causes	0.02	0.04	0.06	0.06	0.09	0.10	0.17	0.09	0.09	0.04	0.11	0.03	0.91
Tariff Normalized, IEEE Region No Trans Line, All Ca	0.02	0.04	0.05	0.04	0.09	0.08	0.08	0.06	0.07	0.04	0.06	0.03	0.64
Annual Normalized, IEEE Region All Levels, All Caus	0.02	0.04	0.06	0.06	0.09	0.10	0.11	0.09	0.09	0.04	0.07	0.03	0.80
CES Cust Served													
MAIFI - <= 5 Minutes Duration													
Metro East - MAIFI	January	February	March	April	Мау	June	July	August	September	October	November	December	YTD
2020 With Storms, All Levels, All Causes	0.00	0.05	0.05	0.08	0.07	0.20	0.15	0.15	0.05	0.05	0.02	0.09	0.97
Tariff Normalized, IEEE Region No Trans Line, All Ca	0.00	0.05	0.05	0.08	0.07	0.18	0.12	0.10	0.04	0.05	0.02	0.08	0.85
Annual Normalized, IEEE Region All Levels, All Caus	0.00	0.05	0.05	0.08	0.07	0.20	0.15	0.13	0.05	0.05	0.02	0.09	0.95
CES Cust Served													
2019 With Storms, All Levels, All Causes	0.03	0.08	0.05	0.09	0.06	0.04	0.11	0.07	0.10	0.06	0.04	0.00	0.74
Tariff Normalized, IEEE Region No Trans Line, All Ca	0.03	0.01	0.05	0.09	0.06	0.03	0.06	0.07	0.05	0.06	0.03	0.00	0.54
Annual Normalized, IEEE Region All Levels, All Caus	0.03	0.08	0.05	0.09	0.06	0.04	0.09	0.07	0.08	0.06	0.04	0.00	0.70
CES Cust Served													
2018 With Storms, All Levels, All Causes	0.01	0.05	0.04	0.06	0.15	0.06	0.13	0.11	0.09	0.08	0.03	0.01	0.84
Tariff Normalized, IEEE Region No Trans Line, All Ca	0.01	0.05	0.04	0.06	0.14	0.06	0.13	0.09	0.09	0.08	0.03	0.01	0.81
Annual Normalized, IEEE Region All Levels, All Caus	0.01	0.05	0.04	0.06	0.14	0.06	0.13	0.11	0.09	0.08	0.03	0.01	0.83
CES Cust Served													
2017 With Storms, All Levels, All Causes	0.06	0.03	0.06	0.07	0.06	0.07	0.14	0.04	0.07	0.20	0.01	0.01	0.82
Tariff Normalized, IEEE Region No Trans Line, All Ca	0.06	0.03	0.06	0.05	0.05	0.05	0.13	0.04	0.07	0.09	0.01	0.01	0.65
Annual Normalized, IEEE Region All Levels, All Caus	0.06	0.03	0.06	0.07	0.06	0.05	0.13	0.04	0.07	0.20	0.01	0.01	0.79
CES Cust Served													
2016 With Storms, All Levels, All Causes	0.02	0.07	0.08	0.10	0.07	0.06	0.11	0.09	0.12	0.03	0.06	0.01	0.80
I aritt Normalized, IEEE Region No Trans Line, All Ca	0.02	0.07	0.08	0.07	0.07	0.06	0.06	0.09	0.10	0.03	0.06	0.01	0.70
Annual Normalized, IEEE Region All Levels, All Caus	0.02	0.07	0.08	0.10	0.07	0.06	0.06	0.09	0.12	0.03	0.06	0.01	0.76
CES Cust Served													

MAIFI - <= 5 Minutes Duration

Xcel Energy Service Quality Report 2020 Additional MAIFI Reporting

Metro West - MAIFI	January	February	March	April	May	June	July	August	September	October	November	December	YTD
2020 With Storms, All Levels, All Causes	0.01	0.01	0.02	0.02	0.07	0.15	0.09	0.12	0.08	0.08	0.03	0.04	0.72
Tariff Normalized, IEEE Region No Trans Line, All Ca	0.01	0.01	0.02	0.02	0.07	0.15	0.06	0.06	0.08	0.08	0.03	0.04	0.62
Annual Normalized, IEEE Region All Levels, All Caus	0.01	0.01	0.02	0.02	0.07	0.15	0.09	0.06	0.08	0.06	0.03	0.04	0.63
CES Cust Served													
2019 With Storms, All Levels, All Causes	0.02	0.01	0.05	0.08	0.08	0.09	0.07	0.04	0.11	0.07	0.02	0.02	0.64
Tariff Normalized, IEEE Region No Trans Line, All Ca	0.02	0.00	0.05	0.08	0.08	0.09	0.06	0.04	0.11	0.07	0.01	0.02	0.61
Annual Normalized, IEEE Region All Levels, All Caus	0.02	0.01	0.05	0.08	0.08	0.09	0.06	0.04	0.11	0.07	0.02	0.02	0.64
CES Cust Served													
2018 With Storms, All Levels, All Causes	0.01	0.03	0.01	0.05	0.10	0.06	0.06	0.07	0.10	0.03	0.02	0.00	0.56
Tariff Normalized, IEEE Region No Trans Line, All Ca	0.01	0.03	0.01	0.05	0.10	0.06	0.06	0.05	0.10	0.03	0.02	0.00	0.53
Annual Normalized, IEEE Region All Levels, All Caus	0.01	0.03	0.01	0.05	0.10	0.06	0.06	0.07	0.10	0.03	0.02	0.00	0.55
CES Cust Served													
2017 With Storms, All Levels, All Causes	0.02	0.02	0.04	0.05	0.03	0.15	0.07	0.03	0.10	0.08	0.02	0.02	0.61
Tariff Normalized, IEEE Region No Trans Line, All Ca	0.02	0.02	0.04	0.04	0.03	0.08	0.07	0.03	0.09	0.05	0.02	0.02	0.51
Annual Normalized, IEEE Region All Levels, All Caus	0.02	0.02	0.04	0.05	0.03	0.08	0.07	0.03	0.10	0.08	0.02	0.02	0.55
CES Cust Served													
2016 With Storms, All Levels, All Causes	0.02	0.04	0.04	0.04	0.11	0.14	0.19	0.06	0.04	0.04	0.09	0.06	0.85
Tariff Normalized, IEEE Region No Trans Line, All Ca	0.02	0.04	0.04	0.03	0.11	0.10	0.08	0.03	0.04	0.04	0.07	0.06	0.65
Annual Normalized, IEEE Region All Levels, All Caus	0.02	0.04	0.04	0.04	0.11	0.14	0.10	0.06	0.04	0.04	0.09	0.06	0.76
CES Cust Served													
MAIFI - <= 5 Minutes Duration												-	
Northwest - MAIFI	January	February	March	April	May	June	July	August	September	October	November	December	YTD
2020 With Storms, All Levels, All Causes	0.01	0.10	0.06	0.10	0.16	0.20	0.14	0.23	0.07	0.13	0.01	0.06	1.27
Tariff Normalized, IEEE Region No Trans Line, All Ca	0.01	0.10	0.02	0.04	0.13	0.13	0.08	0.18	0.01	0.05	0.01	0.00	0.75
Annual Normalized, IEEE Region All Levels, All Caus	0.01	0.10	0.06	0.10	0.16	0.20	0.09	0.23	0.07	0.13	0.01	0.06	1.22
CES Cust Served												0.00	
All Laures All Laures All Causes												0.00	
2019 With Storms, All Levels, All Causes	0.01	0.05	0.12	0.09	0.17	0.14	0.17	0.16	0.46	0.04	0.08	0.05	1.52
Tariff Normalized, IEEE Region No Trans Line, All Ca	0.01 0.00	0.05 0.03	0.12 0.12	0.09 0.03	0.17 0.09	0.14 0.09	0.17 0.13	0.16 0.05	0.46 0.16	0.04 0.04	0.08 0.06	0.05	1.52 0.84
Tariff Normalized, IEEE Region No Trans Line, All Causes Annual Normalized, IEEE Region All Levels, All Caus	0.01 0.00 0.01	0.05 0.03 0.05	0.12 0.12 0.12	0.09 0.03 0.06	0.17 0.09 0.17	0.14 0.09 0.14	0.17 0.13 0.17	0.16 0.05 0.16	0.46 0.16 0.40	0.04 0.04 0.04	0.08 0.06 0.08	0.05 0.05 0.05 0.05	1.52 0.84 1.43
ZU19 With Storms, All Levels, All Causes Tariff Normalized, IEEE Region No Trans Line, All Ca Annual Normalized, IEEE Region All Levels, All Caus CES Cust Served	0.01 0.00 0.01	0.05 0.03 0.05	0.12 0.12 0.12	0.09 0.03 0.06	0.17 0.09 0.17	0.14 0.09 0.14	0.17 0.13 0.17	0.16 0.05 0.16	0.46 0.16 0.40	0.04 0.04 0.04	0.08 0.06 0.08	0.05 0.05 0.05	1.52 0.84 1.43
2019 With Storms, All Levels, All Causes Tariff Normalized, IEEE Region No Trans Line, All Ca Annual Normalized, IEEE Region All Levels, All Caus CES Cust Served 2018 With Storms, All Levels, All Causes	0.01 0.00 0.01 0.01	0.05 0.03 0.05 0.06	0.12 0.12 0.12 0.12	0.09 0.03 0.06 0.27	0.17 0.09 0.17 0.30	0.14 0.09 0.14 0.16	0.17 0.13 0.17 0.07	0.16 0.05 0.16 0.14	0.46 0.16 0.40 0.16	0.04 0.04 0.04 0.08	0.08 0.06 0.08 0.04	0.05 0.05 0.05 0.05	1.52 0.84 1.43 1.42
2019 With Storms, All Levels, All Causes Tariff Normalized, IEEE Region No Trans Line, All C Annual Normalized, IEEE Region All Levels, All Caus CES Cust Served 2018 With Storms, All Levels, All Causes Tariff Normalized, IEEE Region No Trans Line, All C	0.01 0.00 0.01 0.01 0.01	0.05 0.03 0.05 0.06 0.06	0.12 0.12 0.12 0.07 0.05	0.09 0.03 0.06 0.27 0.07	0.17 0.09 0.17 0.30 0.17	0.14 0.09 0.14 0.16 0.11	0.17 0.13 0.17 0.07 0.05	0.16 0.05 0.16 0.14 0.08	0.46 0.16 0.40 0.16 0.06	0.04 0.04 0.04 0.08 0.04	0.08 0.06 0.08 0.04 0.03	0.05 0.05 0.05 0.05 0.06 0.03	1.52 0.84 1.43 1.42 0.75
 2019 With Storms, All Levels, All Causes Tariff Normalized, IEEE Region No Trans Line, All Caus CES Cust Served 2018 With Storms, All Levels, All Causes Tariff Normalized, IEEE Region No Trans Line, All Caus Annual Normalized, IEEE Region No Trans Line, All Causes 	0.01 0.00 0.01 0.01 0.01 0.01	0.05 0.03 0.05 0.06 0.06 0.06	0.12 0.12 0.12 0.07 0.05 0.07	0.09 0.03 0.06 0.27 0.07 0.27	0.17 0.09 0.17 0.30 0.17 0.30	0.14 0.09 0.14 0.16 0.11 0.16	0.17 0.13 0.17 0.07 0.05 0.07	0.16 0.05 0.16 0.14 0.08 0.14	0.46 0.16 0.40 0.16 0.06 0.16	0.04 0.04 0.04 0.08 0.04 0.08	0.08 0.06 0.08 0.04 0.03 0.04	0.05 0.05 0.05 0.06 0.03 0.06	1.52 0.84 1.43 1.42 0.75 1.42
 2019 With Storms, All Levels, All Causes Tariff Normalized, IEEE Region No Trans Line, All Caus CES Cust Served 2018 With Storms, All Levels, All Causes Tariff Normalized, IEEE Region No Trans Line, All Caus Annual Normalized, IEEE Region All Levels, All Caus CES Cust Served 	0.01 0.00 0.01 0.01 0.01 0.01	0.05 0.03 0.05 0.06 0.06 0.06	0.12 0.12 0.12 0.07 0.05 0.07	0.09 0.03 0.06 0.27 0.07 0.27	0.17 0.09 0.17 0.30 0.17 0.30	0.14 0.09 0.14 0.16 0.11 0.16	0.17 0.13 0.17 0.07 0.05 0.07	0.16 0.05 0.16 0.14 0.08 0.14	0.46 0.16 0.40 0.16 0.06 0.16	0.04 0.04 0.04 0.08 0.04 0.08	0.08 0.06 0.08 0.04 0.03 0.04	0.05 0.05 0.05 0.06 0.03 0.06	1.52 0.84 1.43 1.42 0.75 1.42
 2019 With Storms, All Levels, All Causes Tariff Normalized, IEEE Region No Trans Line, All Causes CES Cust Served 2018 With Storms, All Levels, All Causes Tariff Normalized, IEEE Region No Trans Line, All Causes Tariff Normalized, IEEE Region All Levels, All Causes CES Cust Served 2017 With Storms, All Levels, All Causes 	0.01 0.00 0.01 0.01 0.01 0.01 0.01	0.05 0.03 0.05 0.06 0.06 0.06 0.06	0.12 0.12 0.12 0.07 0.05 0.07 0.20	0.09 0.03 0.06 0.27 0.07 0.27 0.27	0.17 0.09 0.17 0.30 0.17 0.30 0.09	0.14 0.09 0.14 0.16 0.11 0.16 0.27	0.17 0.13 0.17 0.07 0.05 0.07 0.08	0.16 0.05 0.16 0.14 0.08 0.14 0.06	0.46 0.16 0.40 0.16 0.06 0.16 0.18	0.04 0.04 0.04 0.08 0.04 0.08 0.17	0.08 0.06 0.08 0.04 0.03 0.04 0.04	0.05 0.05 0.05 0.05 0.06 0.03 0.06 0.03 0.06	1.52 0.84 1.43 1.42 0.75 1.42 1.37
 2019 With Storms, All Levels, All Causes Tariff Normalized, IEEE Region No Trans Line, All Caused CES Cust Served 2018 With Storms, All Levels, All Causes Tariff Normalized, IEEE Region No Trans Line, All Causes Tariff Normalized, IEEE Region All Levels, All Causes CES Cust Served 2017 With Storms, All Levels, All Causes Tariff Normalized, IEEE Region No Trans Line, All Causes Tariff Normalized, IEEE Region No Trans Line, All Causes 	0.01 0.00 0.01 0.01 0.01 0.01 0.01 0.09 0.05	0.05 0.03 0.05 0.06 0.06 0.06 0.06	0.12 0.12 0.12 0.07 0.05 0.07 0.20 0.09	0.09 0.03 0.06 0.27 0.07 0.27 0.08 0.02	0.17 0.09 0.17 0.30 0.17 0.30 0.09 0.03	0.14 0.09 0.14 0.16 0.11 0.16 0.27 0.10	0.17 0.13 0.17 0.07 0.05 0.07 0.08 0.05	0.16 0.05 0.16 0.14 0.08 0.14 0.06 0.04	0.46 0.16 0.40 0.16 0.06 0.16 0.18 0.17	0.04 0.04 0.04 0.08 0.04 0.08 0.17 0.17	0.08 0.06 0.08 0.04 0.03 0.04 0.00 0.00	0.05 0.05 0.05 0.06 0.03 0.06 0.13 0.13	1.52 0.84 1.43 1.42 0.75 1.42 1.37 0.85
 2019 With Storms, All Levels, All Causes Tariff Normalized, IEEE Region No Trans Line, All Cause CES Cust Served 2018 With Storms, All Levels, All Causes Tariff Normalized, IEEE Region No Trans Line, All Cause CES Cust Served 2017 With Storms, All Levels, All Causes Tariff Normalized, IEEE Region All Levels, All Cause CES Cust Served 2017 With Storms, All Levels, All Causes Tariff Normalized, IEEE Region No Trans Line, All Cause Tariff Normalized, IEEE Region No Trans Line, All Cause Tariff Normalized, IEEE Region No Trans Line, All Cause Tariff Normalized, IEEE Region No Trans Line, All Cause 	0.01 0.00 0.01 0.01 0.01 0.01 0.09 0.05 0.09	0.05 0.03 0.05 0.06 0.06 0.06 0.06 0.01 0.01 0.01	0.12 0.12 0.12 0.07 0.05 0.07 0.20 0.20 0.20	0.09 0.03 0.06 0.27 0.07 0.27 0.07 0.27 0.08 0.02 0.08	0.17 0.09 0.17 0.30 0.17 0.30 0.09 0.03 0.09	0.14 0.09 0.14 0.16 0.11 0.16 0.27 0.10 0.18	0.17 0.13 0.17 0.05 0.05 0.07 0.08 0.05 0.08	0.16 0.05 0.16 0.14 0.08 0.14 0.08 0.14	0.46 0.16 0.40 0.16 0.06 0.16 0.18 0.17 0.18	0.04 0.04 0.04 0.08 0.04 0.08 0.17 0.17 0.17	0.08 0.06 0.08 0.04 0.03 0.04 0.00 0.00 0.00	0.05 0.05 0.05 0.05 0.06 0.03 0.06 0.13 0.13 0.13 0.13	1.52 0.84 1.43 1.42 0.75 1.42 1.37 0.85 1.28
 2019 With Storms, All Levels, All Causes Tariff Normalized, IEEE Region No Trans Line, All C: Annual Normalized, IEEE Region All Levels, All Caus CES Cust Served 2018 With Storms, All Levels, All Causes Tariff Normalized, IEEE Region No Trans Line, All C: Annual Normalized, IEEE Region All Levels, All Caus CES Cust Served 2017 With Storms, All Levels, All Causes Tariff Normalized, IEEE Region No Trans Line, All C: Annual Normalized, IEEE Region No Trans Line, All C: Annual Normalized, IEEE Region All Levels, All Caus CES Cust Served 	0.01 0.00 0.01 0.01 0.01 0.01 0.09 0.05 0.09	0.05 0.03 0.05 0.06 0.06 0.06 0.01 0.01 0.01	0.12 0.12 0.12 0.07 0.05 0.07 0.20 0.09 0.20	0.09 0.03 0.06 0.27 0.07 0.27 0.08 0.02 0.08	0.17 0.09 0.17 0.30 0.17 0.30 0.09 0.03 0.09	0.14 0.09 0.14 0.16 0.11 0.16 0.27 0.10 0.18	0.17 0.13 0.17 0.05 0.05 0.07 0.08 0.08 0.05 0.08	0.16 0.05 0.16 0.14 0.08 0.14 0.06 0.04 0.06	0.46 0.16 0.40 0.16 0.06 0.16 0.18 0.17 0.18	0.04 0.04 0.04 0.08 0.04 0.08 0.17 0.17 0.17	0.08 0.06 0.08 0.04 0.03 0.04 0.00 0.00 0.00	0.05 0.05 0.05 0.06 0.03 0.06 0.13 0.13 0.13	1.52 0.84 1.43 1.42 0.75 1.42 1.37 0.85 1.28
 2019 With Storms, All Levels, All Causes Tariff Normalized, IEEE Region No Trans Line, All C: Annual Normalized, IEEE Region All Levels, All Caus CES Cust Served 2018 With Storms, All Levels, All Causes Tariff Normalized, IEEE Region No Trans Line, All C: Annual Normalized, IEEE Region All Levels, All Caus CES Cust Served 2017 With Storms, All Levels, All Causes Tariff Normalized, IEEE Region No Trans Line, All C: Annual Normalized, IEEE Region No Trans Line, All C: Annual Normalized, IEEE Region All Levels, All Caus CES Cust Served 2016 With Storms, All Levels, All Causes 2016 With Storms, All Levels, All Causes 	0.01 0.00 0.01 0.01 0.01 0.01 0.09 0.05 0.09 0.00	0.05 0.03 0.05 0.06 0.06 0.06 0.01 0.01 0.01 0.01	0.12 0.12 0.12 0.07 0.05 0.07 0.20 0.20 0.10	0.09 0.03 0.06 0.27 0.07 0.27 0.07 0.27 0.08 0.02 0.08 0.02	0.17 0.09 0.17 0.30 0.17 0.30 0.09 0.03 0.09 0.17	0.14 0.09 0.14 0.16 0.11 0.16 0.27 0.10 0.18 0.11	0.17 0.13 0.17 0.05 0.05 0.07 0.08 0.05 0.08 0.05 0.08	0.16 0.05 0.16 0.14 0.08 0.14 0.06 0.04 0.06 0.08	0.46 0.16 0.40 0.16 0.06 0.16 0.18 0.17 0.18 0.13	0.04 0.04 0.04 0.08 0.04 0.08 0.17 0.17 0.17 0.17 0.07	0.08 0.06 0.08 0.04 0.03 0.04 0.00 0.00 0.00 0.00 0.42	0.05 0.05 0.05 0.05 0.06 0.03 0.06 0.13 0.13 0.13 0.13 0.13 0.13	1.52 0.84 1.43 1.42 0.75 1.42 1.37 0.85 1.28
 2019 With Storms, All Levels, All Causes Tariff Normalized, IEEE Region No Trans Line, All C: Annual Normalized, IEEE Region All Levels, All Caus CES Cust Served 2018 With Storms, All Levels, All Causes Tariff Normalized, IEEE Region No Trans Line, All C: Annual Normalized, IEEE Region All Levels, All Caus CES Cust Served 2017 With Storms, All Levels, All Causes Tariff Normalized, IEEE Region No Trans Line, All C: Annual Normalized, IEEE Region No Trans Line, All C: Annual Normalized, IEEE Region All Levels, All Caus CES Cust Served 2016 With Storms, All Levels, All Causes Tariff Normalized, IEEE Region No Trans Line, All C: 	0.01 0.00 0.01 0.01 0.01 0.01 0.09 0.05 0.09 0.00 0.00	0.05 0.03 0.05 0.06 0.06 0.06 0.01 0.01 0.01 0.01 0.01	0.12 0.12 0.12 0.07 0.05 0.07 0.20 0.20 0.20 0.10 0.08	0.09 0.03 0.06 0.27 0.07 0.27 0.08 0.02 0.08 0.02 0.08 0.04 0.03	0.17 0.09 0.17 0.30 0.17 0.30 0.09 0.03 0.09 0.17 0.11	0.14 0.09 0.14 0.16 0.11 0.16 0.27 0.10 0.18 0.11 0.07	0.17 0.13 0.17 0.05 0.07 0.08 0.05 0.08 0.05 0.08 0.24 0.07	0.16 0.05 0.16 0.14 0.08 0.14 0.06 0.04 0.06 0.04 0.06 0.08 0.05	0.46 0.16 0.40 0.16 0.06 0.16 0.18 0.17 0.18 0.13 0.10	0.04 0.04 0.04 0.08 0.04 0.08 0.17 0.17 0.17 0.17 0.17	0.08 0.06 0.08 0.04 0.03 0.04 0.00 0.00 0.00 0.00 0.00	0.05 0.05 0.05 0.05 0.06 0.03 0.06 0.13 0.13 0.13 0.13 0.13 0.13	1.52 0.84 1.43 1.42 0.75 1.42 1.37 0.85 1.28 1.42 0.64
 2019 With Storms, All Levels, All Causes Tariff Normalized, IEEE Region No Trans Line, All C: Annual Normalized, IEEE Region All Levels, All Cause CES Cust Served 2018 With Storms, All Levels, All Causes Tariff Normalized, IEEE Region No Trans Line, All C: Annual Normalized, IEEE Region All Levels, All Cause CES Cust Served 2017 With Storms, All Levels, All Causes Tariff Normalized, IEEE Region No Trans Line, All C: Annual Normalized, IEEE Region No Trans Line, All C: Annual Normalized, IEEE Region All Levels, All Cause CES Cust Served 2016 With Storms, All Levels, All Causes Tariff Normalized, IEEE Region No Trans Line, All C: Annual Normalized, IEEE Region No Trans Line, All C: 	0.01 0.00 0.01 0.01 0.01 0.01 0.09 0.05 0.09 0.00 0.00 0.00	0.05 0.03 0.05 0.06 0.06 0.06 0.06 0.01 0.01 0.01 0.01	0.12 0.12 0.12 0.07 0.07 0.05 0.07 0.20 0.20 0.20 0.10 0.08 0.10	0.09 0.03 0.06 0.27 0.27 0.27 0.27 0.08 0.02 0.08 0.02 0.08 0.04 0.04	0.17 0.09 0.17 0.30 0.17 0.30 0.09 0.03 0.09 0.17 0.11 0.17	0.14 0.09 0.14 0.16 0.11 0.16 0.27 0.10 0.18 0.11 0.07 0.11	0.17 0.13 0.17 0.05 0.07 0.08 0.05 0.08 0.05 0.08 0.24 0.24 0.07 0.19	0.16 0.05 0.16 0.14 0.08 0.14 0.06 0.04 0.06 0.08 0.05 0.08	0.46 0.16 0.40 0.16 0.06 0.16 0.18 0.17 0.18 0.13 0.13 0.13	0.04 0.04 0.04 0.08 0.04 0.08 0.17 0.17 0.17 0.17 0.07 0.07 0.07	0.08 0.06 0.08 0.04 0.03 0.04 0.00 0.00 0.00 0.00 0.00	0.05 0.05 0.05 0.05 0.03 0.06 0.13 0.13 0.13 0.13 0.13 0.13 0.04 0.04 0.03 0.04	1.52 0.84 1.43 1.42 0.75 1.42 1.37 0.85 1.28 1.42 0.64 0.95

MAIFI - <= 5 Minutes Duration

Xcel Energy Service Quality Report 2020 Additional MAIFI Reporting

Southeast - MAIFI	January	February	March	April	May	June	July	August	September	October	November	December	YTD
2020 With Storms, All Levels, All Causes	0.03	0.00	0.00	0.14	0.01	0.15	0.14	0.22	0.08	0.05	0.09	0.03	0.96
Tariff Normalized, IEEE Region No Trans Line, All Ca	0.03	0.00	0.00	0.04	0.01	0.10	0.11	0.15	0.07	0.04	0.02	0.00	0.56
Annual Normalized, IEEE Region All Levels, All Caus	0.03	0.00	0.00	0.14	0.01	0.15	0.14	0.17	0.08	0.05	0.09	0.03	0.90
CES Cust Served													
2019 With Storms, All Levels, All Causes	0.04	0.04	0.13	0.30	0.11	0.15	0.14	0.03	0.12	0.05	0.09	0.02	1.22
Tariff Normalized, IEEE Region No Trans Line, All Ca	0.02	0.04	0.09	0.02	0.04	0.03	0.08	0.03	0.04	0.05	0.05	0.01	0.48
Annual Normalized, IEEE Region All Levels, All Caus	0.04	0.04	0.13	0.12	0.11	0.15	0.12	0.03	0.09	0.05	0.09	0.02	0.99
CES Cust Served													
2018 With Storms, All Levels, All Causes	0.04	0.04	0.03	0.16	0.07	0.11	0.13	0.17	0.14	0.01	0.03	0.02	0.92
Tariff Normalized, IEEE Region No Trans Line, All Ca	0.02	0.00	0.01	0.03	0.06	0.07	0.09	0.10	0.03	0.01	0.02	0.00	0.44
Annual Normalized, IEEE Region All Levels, All Caus	0.04	0.04	0.03	0.11	0.07	0.11	0.13	0.17	0.04	0.01	0.03	0.02	0.78
CES Cust Served													
2017 With Storms, All Levels, All Causes	0.00	0.02	0.03	0.07	0.03	0.18	0.15	0.05	0.04	0.15	0.01	0.00	0.73
Tariff Normalized, IEEE Region No Trans Line, All Ca	0.00	0.02	0.00	0.04	0.03	0.02	0.09	0.03	0.03	0.10	0.01	0.00	0.37
Annual Normalized, IEEE Region All Levels, All Caus	0.00	0.02	0.03	0.07	0.03	0.18	0.15	0.05	0.04	0.15	0.01	0.00	0.73
CES Cust Served													
2016 With Storms, All Levels, All Causes	0.05	0.00	0.10	0.03	0.02	0.05	0.26	0.26	0.21	0.03	0.05	0.00	1.05
Tariff Normalized, IEEE Region No Trans Line, All Ca	0.03	0.00	0.00	0.01	0.02	0.02	0.10	0.07	0.06	0.03	0.05	0.00	0.39
Annual Normalized, IEEE Region All Levels, All Caus	0.05	0.00	0.10	0.03	0.02	0.04	0.22	0.26	0.21	0.03	0.05	0.00	1.00
CES Cust Served													
MAIFI - <= 5 Minutes Duration												-	
Minnesota - Customer Interruptions	January	February	March	April	May	June	July	August	September	October	November	December	YTD
2020 With Storms, All Levels, All Causes	10,396	39,042	39,986	75,276	94,115	222,654	157,725	197,967	93,098	93,900	35,448	76,966	1,136,573
Tariff Normalized, IEEE Region No Trans Line, All Ca	10,396	39,042	35,813	54,924	88,609	197,434	113,516	123,612	81,003	79,725	25,943	61,441	911,458
Annual Normalized, IEEE Region All Levels, All Caus	10,396	39,042	39,986	75,276	94,115	222,654	147,286	144,530	93,098	80,913	35,448	76,966	1,059,710
CES Cust Served	1,290,479	1,293,848	1,294,877	1,295,113	1,295,757	1,296,076	1,296,089	1,296,619	1,297,076	1,297,132	1,298,128	1,299,397	
2019 With Storms, All Levels, All Causes	33,812	52,508	81,258	134,469	108,928	103,049	124,083	79,369	179,825	75,041	50,310	18,447	1,041,099
Tariff Normalized, IEEE Region No Trans Line, All Ca	28,787	16,119	76,448	87,955	88,939	80,372	87,100	65,265	110,861	75,041	30,296	16,859	764,042
Annual Normalized, IEEE Region All Levels, All Caus	33,812	52,508	81,258	107,764	108,928	103,049	111,694	79,369	159,811	75,041	50,310	18,447	981,991
CES Cust Served	1,271,572	1,272,182	1,273,191	1,273,389	1,273,236	1,272,910	1,273,366	1,280,040	1,280,959	1,282,278	1,284,381	1,287,572	
2018 With Storms, All Levels, All Causes	17,028	50,720	37,088	110,806	166,321	96,952	116,525	125,816	132,306	63,103	35,948	18,615	971,228
Tariff Normalized, IEEE Region No Trans Line, All Ca	11 000	45 0 40	21 002	70 014	14E 00C	00 070	106 900	02 206	105 644	59 210	26 810	13 170	798.074
Annual Normalized, IEEE Region All Levels, All Caus	14,090	45,049	31,003	70,214	145,000	86,076	100,029	93,300	105,644	30,219	20,013	10,170	
	14,890	45,049 50,720	37,088	104,668	145,666	86,076 96,952	114,166	125,816	120,555	63,103	35,948	18,615	947,230
CES Cust Served	17,028 1,260,537	45,049 50,720 1,261,499	37,088 1,262,635	104,668 1,263,050	145,886 162,571 1,263,057	86,076 96,952 1,266,221	114,166 1,266,173	125,816 1,263,754	120,555 1,266,996	63,103 1,268,418	35,948 1,269,462	18,615 1,270,153	947,230
CES Cust Served 2017 With Storms, All Levels, All Causes	14,890 17,028 <u>1,260,537</u> 48,438	45,049 50,720 <u>1,261,499</u> 25,199	37,088 37,088 1,262,635 72,370	104,668 1,263,050 78,526	145,886 162,571 <u>1,263,057</u> 56,089	86,076 96,952 <u>1,266,221</u> 171,914	106,829 114,166 1,266,173 124,532	93,380 125,816 <u>1,263,754</u> 49,070	105,644 120,555 1,266,996 110,614	63,103 1,268,418 168,822	35,948 1,269,462 17,302	18,615 1,270,153 35,011	947,230
CES Cust Served 2017 With Storms, All Levels, All Causes Tariff Normalized, IEEE Region No Trans Line, All Ca	14,890 17,028 1,260,537 48,438 43,639	45,049 50,720 <u>1,261,499</u> 25,199 25,199	37,088 37,088 <u>1,262,635</u> 72,370 55,242	70,214 104,668 <u>1,263,050</u> 78,526 51,938	145,886 162,571 <u>1,263,057</u> 56,089 44,843	86,076 96,952 <u>1,266,221</u> 171,914 83,569	106,829 114,166 <u>1,266,173</u> 124,532 111,372	93,380 125,816 <u>1,263,754</u> 49,070 44,023	105,644 120,555 <u>1,266,996</u> 110,614 105,611	63,103 1,268,418 168,822 101,720	35,948 1,269,462 17,302 17,302	18,615 1,270,153 35,011 35,011	947,230 957,887 719,469
CES Cust Served 2017 With Storms, All Levels, All Causes Tariff Normalized, IEEE Region No Trans Line, All Ca Annual Normalized, IEEE Region All Levels, All Caus	14,890 17,028 <u>1,260,537</u> 48,438 43,639 48,438	45,049 50,720 <u>1,261,499</u> 25,199 25,199 25,199	37,083 37,088 <u>1,262,635</u> 72,370 55,242 72,370	70,214 104,668 1,263,050 78,526 51,938 78,526	145,660 162,571 <u>1,263,057</u> 56,089 44,843 56,089	86,076 96,952 <u>1,266,221</u> 171,914 83,569 113,347	100,029 114,166 1,266,173 124,532 111,372 122,624	93,380 125,816 <u>1,263,754</u> 49,070 44,023 49,070	105,644 120,555 <u>1,266,996</u> 110,614 105,611 110,614	63,103 1,268,418 168,822 101,720 168,822	35,948 1,269,462 17,302 17,302 17,302	18,615 1,270,153 35,011 35,011 35,011	947,230 957,887 719,469 897,412
CES Cust Served 2017 With Storms, All Levels, All Causes Tariff Normalized, IEEE Region No Trans Line, All Caus Annual Normalized, IEEE Region All Levels, All Caus CES Cust Served	14,690 17,028 <u>1,260,537</u> 48,438 43,639 48,438 1,253,235	45,049 50,720 <u>1,261,499</u> 25,199 25,199 25,199 1,253,916	37,088 37,088 1,262,635 72,370 55,242 72,370 1,254,234	104,668 1,263,050 78,526 51,938 78,526 1,254,354	145,680 162,571 <u>1,263,057</u> 56,089 44,843 56,089 1,254,432	86,076 96,952 <u>1,266,221</u> 171,914 83,569 113,347 1,254,973	100,029 114,166 <u>1,266,173</u> 124,532 111,372 122,624 1,254,729	125,816 1,263,754 49,070 44,023 49,070 1,255,562	103,644 120,555 <u>1,266,996</u> 110,614 105,611 110,614 1,256,281	63,103 1,268,418 168,822 101,720 168,822 1,256,880	35,948 1,269,462 17,302 17,302 17,302 1,258,571	18,615 1,270,153 35,011 35,011 35,011 1,259,394	947,230 957,887 719,469 897,412
CES Cust Served 2017 With Storms, All Levels, All Causes Tariff Normalized, IEEE Region No Trans Line, All C: Annual Normalized, IEEE Region All Levels, All Caus CES Cust Served 2016 With Storms, All Levels, All Causes	17,028 17,028 1,260,537 48,438 43,639 48,438 1,253,235 25,441	45,049 50,720 1,261,499 25,199 25,199 25,199 1,253,916 52,112	37,088 37,088 1,262,635 72,370 55,242 72,370 1,254,234 80,843	70,214 104,668 1,263,050 78,526 51,938 78,526 1,254,354 70,399	145,000 162,571 1,263,057 56,089 44,843 56,089 1,254,432 114,855	86,076 96,952 1,266,221 171,914 83,569 113,347 1,254,973 128,116	106,829 114,166 1,266,173 124,532 111,372 122,624 1,254,729 215,856	125,816 1,263,754 49,070 44,023 49,070 1,255,562 111,183	100,644 120,555 1,266,996 110,614 105,611 110,614 1,256,281 116,858	63,103 1,268,418 168,822 101,720 168,822 1,256,880 45,828	35,948 1,269,462 17,302 17,302 17,302 1,258,571 134,584	18,615 1,270,153 35,011 35,011 35,011 1,259,394 42,779	947,230 957,887 719,469 897,412 1,138,854
CES Cust Served 2017 With Storms, All Levels, All Causes Tariff Normalized, IEEE Region No Trans Line, All C: Annual Normalized, IEEE Region All Levels, All Caus CES Cust Served 2016 With Storms, All Levels, All Causes Tariff Normalized, IEEE Region No Trans Line, All C:	14,890 17,028 1,260,537 48,438 43,639 48,438 1,253,235 25,441 22,237	45,049 50,720 1,261,499 25,199 25,199 25,199 1,253,916 52,112 52,112	31,663 37,088 1,262,635 72,370 55,242 72,370 1,254,234 80,843 66,022	70,214 104,668 1,263,050 78,526 51,938 78,526 1,254,354 70,399 48,486	145,000 162,571 1,263,057 56,089 44,843 56,089 1,254,432 114,855 106,986	86,076 96,952 1,266,221 171,914 83,569 113,347 1,254,973 128,116 95,825	106,829 114,166 1,266,173 124,532 111,372 122,624 1,254,729 215,856 93,846	125,816 1,263,754 49,070 44,023 49,070 1,255,562 111,183 71,208	100,644 120,555 1,266,996 110,614 105,611 110,614 1,256,281 116,858 85,741	63,103 1,268,418 168,822 101,720 168,822 1,256,880 45,828 45,828	25,919 35,948 1,269,462 17,302 17,302 1,258,571 134,584 71,773	18,615 1,270,153 35,011 35,011 35,011 1,259,394 42,779 41,482	947,230 957,887 719,469 897,412 1,138,854 801,546
CES Cust Served 2017 With Storms, All Levels, All Causes Tariff Normalized, IEEE Region No Trans Line, All Ca Annual Normalized, IEEE Region All Levels, All Caus CES Cust Served 2016 With Storms, All Levels, All Causes Tariff Normalized, IEEE Region No Trans Line, All Ca Annual Normalized, IEEE Region All Levels, All Caus	17,028 1,260,537 48,438 43,639 48,438 1,253,235 25,441 22,237 25,441	45,049 50,720 1,261,499 25,199 25,199 25,199 1,253,916 52,112 52,112 52,112	31,663 37,088 1,262,635 72,370 55,242 72,370 1,254,234 80,843 66,022 80,843	70,214 104,668 1,263,050 78,526 51,938 78,526 1,254,354 70,399 48,486 70,399	145,686 162,571 1,263,057 56,089 44,843 56,089 1,254,432 114,855 106,986 114,855	86,076 96,952 1,266,221 171,914 83,569 113,347 1,254,973 128,116 95,825 125,305	$\begin{array}{c} 106,829\\ 114,166\\ 1,266,173\\ 124,532\\ 111,372\\ 122,624\\ 1,254,729\\ 215,856\\ 93,846\\ 132,820\\ \end{array}$	125,816 1,263,754 49,070 44,023 49,070 1,255,562 111,183 71,208 111,183	100,644 120,555 1,266,996 110,614 105,611 110,614 1,256,281 116,858 85,741 116,858	63,103 1,268,418 168,822 101,720 168,822 1,256,880 45,828 45,828 45,828	25,919 35,948 1,269,462 17,302 17,302 1,258,571 134,584 71,773 86,413	18,615 1,270,153 35,011 35,011 35,011 1,259,394 42,779 41,482 42,779	947,230 957,887 719,469 897,412 1,138,854 801,546 1,004,836

Xcel Energy Service Quality Report 2020 Additional MAIFI Reporting

Metro East - Customer Interruptions	January	February	March	April	May	June	July	August	September	October	November	December	YTD
2020 With Storms, All Levels, All Causes		21,232	22,795	34,095	31,423	87,285	63,157	64,341	22,355	22,675	6,522	37,749	413,629
Tariff Normalized, IEEE Region No Trans Line, All Cau	uses	21,232	22,795	34,095	31,183	78,150	53,017	44,777	18,391	19,787	6,522	34,516	364,465
Annual Normalized, IEEE Region All Levels, All Cause	es	21,232	22,795	34,095	31,423	87,285	63,157	54,908	22,355	22,675	6,522	37,749	404,196
CES Cust Served	424,660	426,282	426,613	426,479	426,652	426,708	426,462	426,801	426,834	426,885	427,232	427,721	
2019 With Storms, All Levels, All Causes	13,545	35,223	19,335	39,427	25,017	15,108	45,934	31,388	43,475	23,817	18,352	2	310,623
Tariff Normalized, IEEE Region No Trans Line, All Ca	13,545	4,999	19,335	35,822	25,017	13,692	25,945	31,388	22,336	23,817	11,675	2	227,573
Annual Normalized, IEEE Region All Levels, All Caus	13,545	35,223	19,335	39,427	25,017	15,108	39,627	31,388	35,312	23,817	18,352	2	296,153
CES Cust Served	419,683	419,901	420,157	420,211	420,088	419,961	420,135	421,742	421,918	422,298	423,044	424,150	
2018 With Storms, All Levels, All Causes	5,434	22,864	16,058	26,163	60,461	26,771	55,108	44,561	37,613	33,627	14,436	6,069	349,165
Tariff Normalized, IEEE Region No Trans Line, All Ca	5,434	22,864	16,058	26,163	56,711	26,771	55,108	38,388	37,613	33,627	12,145	6,069	336,951
Annual Normalized, IEEE Region All Levels, All Caus	5,434	22,864	16,058	26,163	56,711	26,771	55,108	44,561	37,613	33,627	14,436	6,069	345,415
CES Cust Served	415,400	415,867	416,331	416,570	416,559	417,460	417,406	417,529	417,675	418,464	418,813	419,251	
2017 With Storms, All Levels, All Causes	23,529	10,552	23,793	29,693	26,334	30,215	56,586	17,240	27,139	84,099	5,706	5,862	340,748
Tariff Normalized, IEEE Region No Trans Line, All Ca	23,529	10.552	23,793	19,335	22,105	18,646	54,678	17,240	27,139	38,693	5,706	5.862	267,278
Annual Normalized, IEEE Region All Levels, All Caus	23,529	10.552	23,793	29,693	26.334	18,646	54,678	17,240	27,139	84.099	5,706	5.862	327,271
CES Cust Served	412,791	413.033	413,181	413.401	413,461	413,487	413,489	413.829	413,948	414,136	414,640	414,964	- ,
2016 With Storms, All Levels, All Causes	8.042	30.312	31,530	39,980	28.813	25.258	44.241	35.094	49,970	10.848	24.347	2,540	330.975
Tariff Normalized IEEE Region No Trans Line All C:	8 042	30,312	31,530	27 061	27 881	25 258	24 527	35 094	41 452	10,848	24 347	2 540	288 892
Annual Normalized, IEEE Region All Levels, All Caus	8.042	30.312	31,530	39,980	28,813	25,258	24,527	35.094	49,970	10.848	24.347	2.540	311,261
CES Cust Served	410.535	410.808	411.301	411.260	411,117	410,936	411.390	411,453	411.397	411.786	412.089	412.530	
Metro West - Customer Interruptions	January	February	March	April	May	June	July	August	September	October	November	December	YTD
2020 With Storms, All Levels, All Causes	5,461	5,585	10,064	10,976	41,059	90,801	58,284	76,417	51,502	48,884	16,127	26,842	442,002
Tariff Normalized, IEEE Region No Trans Line, All Ca	5,461	5,585	10,064	10,976	41,059	90,801	36,345	38,039	51,502	48,884	16,127	26,842	381,685
Annual Normalized, IEEE Region All Levels, All Caus	5,461	5,585	10,064	10,976	41,059	90,801	53,880	39,950	51,502	35,897	16,127	26,842	388,144
CES Cust Served	613,516	614,496	614,923	615,283	616,090	616,224	616,529	616,512	616,878	616,744	617,202	617,724	
2019 With Storms, All Levels, All Causes	12,910	6,452	31,818	46,135	48,620	52,224	39,878	24,462	64,468	40,849	11,121	10,557	389,494
Tariff Normalized, IEEE Region No Trans Line, All Ca	12,687	2,015	31,818	46,135	47,497	52,224	34,914	23,340	64,468	40,849	5,698	10,557	372,202
Annual Normalized, IEEE Region All Levels, All Caus	12,910	6,452	31,818	46,135	48,620	52,224	36,037	24,462	64,468	40,849	11,121	10,557	385,653
CES Cust Served	602,621	602,845	603,436	603,556	603,725	603,657	603,795	608,316	608,874	609,255	610,028	611,784	
2018 With Storms, All Levels, All Causes	5,634	16,461	8,897	32,597	60,725	37,120	36,442	43,114	58,046	19,281	13,773	2,689	334,779
Tariff Normalized, IEEE Region No Trans Line, All Ca	5,634	15,033	8,897	31,479	60,725	37,120	34,083	32,924	58,046	19,281	9,258	2,689	315,169
Annual Normalized, IEEE Region All Levels, All Caus	5,634	16,461	8,897	32,597	60,725	37,120	34,083	43,114	58,046	19,281	13,773	2,689	332,420
CES Cust Served	597,570	597,981	598,412	598,492	598,854	600,487	600,447	600,156	600,628	601,130	601,579	601,815	
2017 With Storms, All Levels, All Causes	13,443	11,028	21,059	30,168	14,998	86,309	39,284	18,933	57,172	45,207	10,641	13,463	361,705
Tariff Normalized, IEEE Region No Trans Line, All Ca	13,443	11,028	21,059	24,943	14,998	49,924	39,284	18,933	55,280	30,413	10,641	13,463	303,409
Annual Normalized, IEEE Region All Levels, All Caus	13,443	11,028	21,059	30,168	14,998	49,924	39,284	18,933	57,172	45,207	10,641	13,463	325,320
CES Cust Served	594,042	594,419	594,617	594,504	594,556	595,107	594,745	595,053	595,586	595,728	596,694	597,020	
2016 With Storms, All Levels, All Causes	10,618	20,783	24,765	21,968	63,448	83,030	110,665	33,826	24,568	22,046	54,918	35,894	506,529
Tariff Normalized, IEEE Region No Trans Line, All Ca	10,618	20,783	24,765	16,991	63,448	60,133	47,503	20,215	24,568	22,046	40,310	35,894	387,274
Annual Normalized, IEEE Region All Levels, All Caus	10,618	20,783	24,765	21,968	63,448	83,030	57,852	33,826	24,568	22,046	54,918	35,894	453,716
CES Cust Served	592,434	593,132	593,410	593,402	593,175	592,828	593,312	593,023	593,171	593,304	593,406	593,764	

Northwest - Customer Interruptions	January	February	March	April	May	June	July	August	September	October	November	December	YTD
2020 With Storms, All Levels, All Causes	885	12,198	6,920	11,708	19,925	24,671	17,486	27,932	8,402	16,134	1,298	7,967	155,526
Tariff Normalized, IEEE Region No Trans Line, All Ca	885	12,198	2,748	4,362	15,613	15,912	9,343	21,861	1,485	6,257	1,298	27	91,989
Annual Normalized, IEEE Region All Levels, All Caus	885	12,198	6,920	11,708	19,925	24,671	11,451	27,932	8,402	16,134	1,298	7,967	149,491
CES Cust Served	122,214	122,579	122,794	122,821	122,682	122,715	122,721	122,854	122,872	122,971	123,052	123,224	
2019 With Storms, All Levels, All Causes	1,728	5,899	13,998	10,907	20,768	16,473	20,235	19,306	56,047	4,285	9,243	5,554	184,443
Tariff Normalized, IEEE Region No Trans Line, All Cau	ises	4,172	13,998	3,710	11,114	11,089	15,677	6,357	19,484	4,285	6,821	5,554	102,261
Annual Normalized, IEEE Region All Levels, All Caus	1,728	5,899	13,998	6,769	20,768	16,473	20,235	19,306	48,244	4,285	9,243	5,554	172,502
CES Cust Served	120,666	120,755	120,871	120,858	120,786	120,697	120,884	121,043	121,183	121,384	121,716	121,815	
2018 With Storms, All Levels, All Causes	1,198	6,639	8,612	31,935	36,360	18,864	8,792	16,827	19,251	9,246	4,400	7,474	169,598
Tariff Normalized, IEEE Region No Trans Line, All Ca	907	6,639	5,767	8,789	20,908	12,801	6,423	9,496	6,688	4,362	3,456	3,820	90,056
Annual Normalized, IEEE Region All Levels, All Caus	1,198	6,639	8,612	31,935	36,360	18,864	8,792	16,827	19,251	9,246	4,400	7,474	169,598
CES Cust Served	119,719	119,746	119,834	119,899	119,749	120,060	120,084	117,736	120,257	120,307	120,531	120,566	
2017 With Storms, All Levels, All Causes	10,977	919	24,225	9,678	10,449	32,504	9,596	6,738	21,792	20,249	1	15,664	162,792
Tariff Normalized, IEEE Region No Trans Line, All Ca	6,178	919	10,329	2,658	3,432	12,011	5,694	4,580	19,884	19,792	1	15,664	101,142
Annual Normalized, IEEE Region All Levels, All Caus	10,977	919	24,225	9,678	10,449	21,891	9,596	6,738	21,792	20,249	1	15,664	152,179
CES Cust Served	119,071	119,106	119,096	119,097	119,146	119,131	119,230	119,316	119,243	119,388	119,502	119,642	
2016 With Storms, All Levels, All Causes	93	1,005	11,840	5,177	20,353	13,458	28,226	9,706	15,535	8,776	49,329	4,299	167,797
Tariff Normalized, IEEE Region No Trans Line, All Ca	93	1,005	9,726	3,546	13,416	7,793	8,714	6,374	11,692	8,776	1,158	3,002	75,295
Annual Normalized, IEEE Region All Levels, All Caus	93	1,005	11,840	5,177	20,353	12,545	21,946	9,706	15,535	8,776	1,158	4,299	112,433
CES Cust Served	118,447	118,497	118,533	118,564	118,400	118,386	118,423	118,468	118,519	118,626	118,717	119,019	
												-	
Southeast - Customer Interruptions	January	February	March	April	May	June	July	August	September	October	November	December	YTD
2020 With Storms, All Levels, All Causes	4,050	27	207	18,497	1,708	19,897	18,798	29,277	10,839	6,207	11,501	4,408	125,416
Tariff Normalized, IEEE Region No Trans Line, All Ca	4,050	27	206	5,491	754	12,571	14,811	18,935	9,625	4,797	1,996	56	73,319
Annual Normalized, IEEE Region All Levels, All Caus	4,050	27	207	18,497	1,708	19,897	18,798	21,740	10,839	6,207	11,501	4,408	117,879
CES Cust Served	130,089	130,491	130,547	130,530	130,333	130,429	130,377	130,452	130,492	130,532	130,642	130,728	
2019 With Storms, All Levels, All Causes	5,629	4,934	16,107	38,000	14,523	19,244	18,036	4,213	15,835	6,090	11,594	2,334	156,539
Tariff Normalized, IEEE Region No Trans Line, All Ca	2,555	4,933	11,297	2,288	5,311	3,367	10,564	4,180	4,573	6,090	6,102	746	62,006
Annual Normalized, IEEE Region All Levels, All Caus	5,629	4,934	16,107	15,433	14,523	19,244	15,795	4,213	11,787	6,090	11,594	2,334	127,683
CES Cust Served	128,602	128,681	128,727	128,764	128,637	128,595	128,552	128,939	128,984	129,341	129,593	129,823	
2018 With Storms, All Levels, All Causes	4,762	4,756	3,521	20,111	8,775	14,197	16,183	21,314	17,396	949	3,339	2,383	117,686
Tariff Normalized, IEEE Region No Trans Line, All Ca	2,915	513	1,161	3,783	7,542	9,384	11,215	12,578	3,297	949	1,960	601	55,898
Annual Normalized, IEEE Region All Levels, All Caus	4,762	4,756	3,521	13,973	8,775	14,197	16,183	21,314	5,645	949	3,339	2,383	99,797
CES Cust Served	127,848	127,905	128,058	128,089	127,895	128,214	128,236	128,333	128,436	128,517	128,539	128,521	
2017 With Storms, All Levels, All Causes	489	2,700	3,293	8,987	4,308	22,886	19,066	6,159	4,511	19,267	954	22	92,642
Tariff Normalized, IEEE Region No Trans Line, All Ca	489	2,700	61	5,002	4,308	2,988	11,716	3,270	3,308	12,822	954	22	47,640
Annual Normalized, IEEE Region All Levels, All Caus	489	2,700	3,293	8,987	4,308	22,886	19,066	6,159	4,511	19,267	954	22	92,642
CES Cust Served	127,331	127,358	127,340	127,352	127,269	127,248	127,265	127,364	127,504	127,628	127,735	127,768	
2016 With Storms, All Levels, All Causes	6,688	12	12,708	3,274	2,241	6,370	32,724	32,557	26,785	4,158	5,990	46	133,553
Tariff Normalized, IEEE Region No Trans Line, All Ca	3,484	12	1	888	2,241	2,641	13,102	9,525	8,029	4,158	5,958	46	50,085
Annual Normalized, IEEE Region All Levels, All Caus	6,688	12	12,708	3,274	2,241	4,472	28,495	32,557	26,785	4,158	5,990	46	127,426
CES Cust Served	126,928	127,033	127,143	127,124	126,989	126,894	126,970	127,055	127,116	127,170	127,202	127,273	

	Residential	Commercial	Industrial	Other	A Total	B Total Number of Meters Installed	A÷B Percent Read by Utility (Company)	
JANUARY	1618616	161178	13093	3874	1796761	1799481	99.85%	
FEBRUARY	1619614	161241	13094	3882	1797831	1800458	99.85%	
MARCH	1621005	161291	13108	3861	1799265	1801834	99.86%	
APRIL	1622975	161271	13120	3861	1801227	1804115	99.84%	
MAY	1623833	161296	13133	3856	1802118	1805139	99.83%	
JUNE	1626053	161284	13141	3850	1804328	1807235	99.84%	
JULY	1627329	161370	13141	3848	1805688	1808810	99.83%	
AUGUST	1629584	161541	13141	3851	1808117	1811059	99.84%	
SEPTEMBER	1631213	161652	13146	3840	1809851	1812763	99.84%	
OCTOBER	1633417	162011	13153	3840	1812421	1815238	99.84%	
NOVEMBER	1635466	162360	13156	3844	1814826	1817561	99.85%	
DECEMBER	1636288	162258	13109	3778	1815433	1819485	99.78%	

A. The number and percentage of customer meters read by utility personnel (Company).

*The number of reads per month is based on the meter read schedule for the month. Example January 2020 runs from December 31 to February 4 2020 to capture all meter read routes. This better reflects the meter reading counts per month. Previous numbers reflected readings that were read ONLY in that month, so months like February are naturally smaller totals because of 28 days versus 31 in others.

B. The number and percentage of customer meters read by customers.

	Residential	Commercial	Industrial	Other	A Total	B Total Number of Meters Installed	A÷B Percent Read by Customer
JANUARY	4				4	1799481	0.00%
FEBRUARY	3				3	1800458	0.00%
MARCH	8	1			9	1801834	0.00%
APRIL	6				6	1804115	0.00%
MAY	9				9	1805139	0.00%
JUNE	14	1			15	1807235	0.00%
JULY	24				24	1808810	0.00%
AUGUST	23				23	1811059	0.00%
SEPTEMBER	12				12	1812763	0.00%
OCTOBER	9				9	1815238	0.00%
NOVEMBER	5				5	1817561	0.00%
DECEMBER	6				6	1819485	0.00%

C-1. The number and percentage of residential customer meters that have not been read by utility personnel for periods of six to 12 months and an explanation as to why they have not been read.

Account Class: Residential														
Message	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Percent
NO READING RETURNED	104	48	32	104	121	53	59	60	75	47	51	48	802	44.70%
NO ANSWER	15	26	29	2	0	61	39	22	10	13	16	11	244	13.60%
OC Meter Maint	20	16	12	25	40	9	4	14	16	8	5	4	173	9.64%
NEED KEY OR CODE	7	12	7	0	0	10	10	7	11	3	3	9	79	4.40%
METER REMOVED	7	2	3	0	0	6	7	12	8	10	6	11	72	4.01%
METER OFF	5	4	12	3	0	13	10	8	3	4	3	5	70	3.90%
BAD KEY OR CODE	2	5	4	1	0	3	7	16	5	3	2	3	51	2.84%
DEAD REGISTER	1	4	4	1	0	9	5	6	12	0	3	4	49	2.73%
KEY NOT AVAILABLE	0	5	20	0	0	2	8	4	0	1	1	1	42	2.34%
DOOR LOCKED	4	3	2	0	0	4	10	6	1	2	0	6	38	2.12%
GATE PROBLEM	1	2	2	1	0	1	3	6	1	1	1	7	26	1.45%
SERVICE CUT AT POLE	1	2	3	0	0	2	3	5	2	2	3	3	26	1.45%
HANDHELD ESTIMATE	0	0	0	24	0	0	0	0	0	0	0	0	24	1.34%
BUSINESS CLOSED	0	3	0	0	0	3	3	2	2	1	1	2	17	0.95%
NO ACCESS BACK YARD	1	1	4	1	0	0	4	0	0	0	2	2	15	0.84%
METER BLOCKED	0	0	0	1	1	3	3	1	1	0	0	2	12	0.67%
VACANT	0	3	2	0	0	2	3	0	0	0	0	0	10	0.56%
DOG	0	0	0	0	0	3	1	0	1	0	0	3	8	0.45%
CUST REQUESTS SKIP	2	1	1	0	0	0	0	0	1	0	0	0	5	0.28%
CUSTOMER READING	0	0	0	0	0	0	0	1	1	1	1	1	5	0.28%
GARAGE LOCKED	1	1	0	1	0	0	0	0	0	0	0	1	4	0.22%
REFUSED ADMITTANCE	0	1	1	0	0	1	0	1	0	0	0	0	4	0.22%
Non-Energized	1	1	0	0	0	0	0	0	1	0	0	0	3	0.17%
OC CellNet New: no premise ID	0	0	0	0	0	1	0	0	0	0	1	1	3	0.17%
BAD ROAD	1	0	0	0	0	0	1	0	0	0	0	0	2	0.11%
CANNOT LOCATE	1	0	0	0	0	0	0	0	0	0	0	1	2	0.11%
PANDEMIC	0	0	0	0	0	0	0	0	0	0	0	2	2	0.11%
SNOW/MUD	1	0	1	0	0	0	0	0	0	0	0	0	2	0.11%
EMED Data Corrupt	0	0	0	0	0	0	0	0	0	1	0	0	1	0.06%
EMED Meter Maint	0	0	0	0	1	0	0	0	0	0	0	0	1	0.06%
NO WINDOW CARD	0	0	0	0	0	1	0	0	0	0	0	0	1	0.06%
SPS DEAD REGISTER	0	0	0	0	0	0	0	0	0	0	0	1	1	0.06%
TOTAL	175	140	139	164	163	187	180	171	151	97	99	128	1794	100%

Xcel Energy Service Quality Report 2020 Minn. R. 7826.1400 – Meter Reading

C-1. The number and percentage of commercial customer meters that have not been read by utility personnel for periods of six to 12 months and an explanation as to why they have not been read.

Account Class: Commercial

necount class. Commercial														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Percent
NO READING RETURNED	30	13	19	25	42	32	21	34	44	42	29	33	364	38.20%
METER REMOVED	4	11	5	7	9	11	15	11	15	14	12	14	128	13.43%
METER OFF	13	11	6	8	3	8	15	11	12	8	10	13	118	12.38%
DEAD REGISTER	1	3	7	4	3	2	3	1	6	6	7	7	50	5.25%
NO ANSWER	2	1	4	1	0	8	5	6	2	5	5	3	42	4.41%
SERVICE CUT AT POLE	3	2	2	4	3	4	2	3	5	4	1	4	37	3.88%
VACANT	0	1	1	1	0	2	4	2	5	7	6	6	35	3.67%
OC Meter Maint	5	2	2	2	7	3	1	2	3	1	0	2	30	3.15%
BUSINESS CLOSED	0	0	3	1	0	7	3	2	4	3	0	1	24	2.52%
DOOR LOCKED	2	2	1	0	0	1	5	2	2	1	0	4	20	2.10%
PANDEMIC	0	0	0	1	1	3	1	1	2	3	3	2	17	1.78%
NEED KEY OR CODE	0	0	0	3	0	2	5	2	2	1	1	0	16	1.68%
GATE PROBLEM	0	0	5	2	2	2	1	0	0	0	0	0	12	1.26%
BAD KEY OR CODE	0	0	0	1	1	3	2	2	0	0	0	2	11	1.15%
Non-Energized	2	0	2	0	1	0	0	2	1	1	1	0	10	1.05%
HANDHELD ESTIMATE	0	0	0	8	0	0	0	0	0	0	0	0	8	0.84%
CUST REQUESTS SKIP	0	0	0	0	0	0	0	1	2	0	3	0	6	0.63%
SEASONAL	0	2	1	0	0	0	0	0	0	0	1	2	6	0.63%
KEY NOT AVAILABLE	0	0	1	0	0	1	2	1	0	0	0	0	5	0.52%
BAD ROAD	1	0	0	1	0	0	0	1	0	0	0	0	3	0.31%
OC CellNet New: no premise														
ID	0	0	0	0	0	0	0	1	1	0	0	0	2	0.21%
REFUSED ADMITTANCE	1	0	0	0	0	0	1	0	0	0	0	0	2	0.21%
ABS Data Corrupt - MCC	0	0	0	0	0	0	0	0	0	1	0	0	1	0.10%
ABS MCC Calc Reading	0	0	0	1	0	0	0	0	0	0	0	0	1	0.10%
CANNOT LOCATE	1	0	0	0	0	0	0	0	0	0	0	0	1	0.10%
METER BLOCKED	0	0	0	0	0	0	0	0	0	0	0	1	1	0.10%
PAINTED OVER	0	0	0	0	0	1	0	0	0	0	0	0	1	0.10%
UNSAFE CONDITION	0	0	0	0	1	0	0	0	0	0	0	0	1	0.10%
WRONG ROUTE	0	0	0	0	0	0	1	0	0	0	0	0	1	0.10%
TOTAL	65	48	59	70	73	90	87	85	106	97	79	94	953	100%

Xcel Energy Service Quality Report 2020 Minn. R. 7826.1400 – Meter Reading

C-1. The number and percentage of industrial customer meters that have not been read by utility personnel for periods of six to 12 months and an explanation as to why they have not been read.

Account Class: Industrial

Message	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Percent
NO READING RETURNED	18	21	22	20	27	30	27	18	35	49	46	32	345	89.38%
METER OFF	1	2	2	4	2	3	1	0	1	1	0	0	17	4.40%
VACANT	1	1	0	0	0	1	1	1	1	1	0	0	7	1.81%
ABS MCC Calc Reading	0	0	1	1	0	0	0	0	0	0	0	1	3	0.78%
BUSINESS CLOSED	0	0	0	1	1	1	0	0	0	0	0	0	3	0.78%
HANDHELD ESTIMATE	0	0	0	3	0	0	0	0	0	0	0	0	3	0.78%
NO ANSWER	0	0	1	0	0	0	1	0	0	0	0	0	2	0.52%
Non-Energized	0	1	1	0	0	0	0	0	0	0	0	0	2	0.52%
BAD KEY OR CODE	0	1	0	0	0	0	0	0	0	0	0	0	1	0.26%
CUST REQUESTS SKIP	0	0	0	0	0	1	0	0	0	0	0	0	1	0.26%
METER REMOVED	0	0	0	0	0	0	0	0	0	0	1	0	1	0.26%
SEASONAL	0	0	0	0	0	0	1	0	0	0	0	0	1	0.26%
TOTAL	20	26	27	29	30	36	31	19	37	51	47	33	386	100%

C-1. The number and percentage of other customer meters that have not been read by utility personnel for periods of six to 12 months and an explanation as to why they have not been read.

Account Class: Other														
Message	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Percent
NO READING RETURNED	1	2	0	0	0	0	1	1	2	2	2	2	13	100%
TOTAL	1	2	0	0	0	0	1	1	2	2	2	2	13	100%

Xcel Energy Service Quality Report 2020 Minn. R. 7826.1400 – Meter Reading

C-2. The number and percentage of residential customer meters that have not been read by utility personnel for periods of longer than 12 months and an explanation as to why they have not been read.

Account Class: Residential

Message	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Percent
NO READING RETURNED	26	12	13	40	45	30	23	40	39	32	21	31	352	45.54%
NO ANSWER	8	15	10	0	0	22	31	21	11	9	16	9	152	19.66%
METER OFF	3	2	2	0	0	3	4	3	10	9	7	9	52	6.73%
OC Meter Maint	8	5	3	5	12	2	0	3	5	4	4	0	51	6.60%
DOOR LOCKED	2	3	1	0	0	3	2	1	0	1	1	8	22	2.85%
VACANT	1	0	2	0	0	5	6	2	1	2	1	1	21	2.72%
NEED KEY OR CODE	0	4	2	1	0	0	2	1	4	3	1	0	18	2.33%
METER REMOVED	0	0	2	0	0	1	2	1	3	2	2	3	16	2.07%
SERVICE CUT AT POLE	0	1	1	0	0	1	1	0	5	1	3	1	14	1.81%
KEY NOT AVAILABLE	0	0	10	0	0	0	0	1	0	0	0	0	11	1.42%
DEAD REGISTER	0	2	2	0	0	1	2	1	1	0	0	0	9	1.16%
BAD KEY OR CODE	1	1	1	0	0	0	1	3	0	0	0	0	7	0.91%
GATE PROBLEM	0	0	0	0	0	0	1	1	1	2	1	1	7	0.91%
HANDHELD ESTIMATE	0	0	0	7	0	0	0	0	0	0	0	0	7	0.91%
UNSAFE CONDITION	0	0	0	0	0	2	0	0	0	2	1	2	7	0.91%
METER BLOCKED	1	0	1	1	0	1	1	1	0	0	0	0	6	0.78%
NO ACCESS BACK YARD	1	1	1	0	0	0	1	0	0	0	1	0	5	0.65%
PANDEMIC	0	0	0	0	0	1	0	0	0	0	1	2	4	0.52%
BAD ROAD	1	1	0	1	0	0	0	0	0	0	0	0	3	0.39%
REFUSED ADMITTANCE	1	1	0	0	0	1	0	0	0	0	0	0	3	0.39%
BUSINESS CLOSED	0	0	0	0	0	0	1	0	0	0	0	0	1	0.13%
CUSTOMER READING	1	0	0	0	0	0	0	0	0	0	0	0	1	0.13%
DOG	0	0	0	0	0	0	1	0	0	0	0	0	1	0.13%
Non-Energized	0	0	0	0	0	0	0	0	0	1	0	0	1	0.13%
SEASONAL	1	0	0	0	0	0	0	0	0	0	0	0	1	0.13%
SNOW/MUD	0	0	1	0	0	0	0	0	0	0	0	0	1	0.13%
TOTAL	55	48	52	55	57	73	79	79	80	68	60	67	773	100%

C-2. The number and percentage of commercial customer meters that have not been read by utility personnel for periods of longer than 12 months and an explanation as to why they have not been read.

Account Class: Commercial

Message	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Percent
NO READING RETURNED	30	20	16	23	27	16	16	15	19	22	21	25	250	36.55%
METER OFF	12	16	11	12	11	16	18	16	10	9	10	9	150	21.93%
DEAD REGISTER	7	7	13	5	9	4	2	3	7	4	6	2	69	10.09%
METER REMOVED	0	1	3	1	1	2	4	5	2	4	4	3	30	4.39%
NO ANSWER	2	2	2	1	0	3	4	4	3	2	2	3	28	4.09%
Non-Energized	2	4	4	3	0	2	4	4	0	2	2	1	28	4.09%
SERVICE CUT AT POLE	2	0	1	2	3	2	3	2	3	3	3	3	27	3.95%
NEED KEY OR CODE	1	2	0	0	0	1	2	2	3	3	2	1	17	2.49%
VACANT	2	1	1	2	0	0	2	1	0	0	1	4	14	2.05%
DOOR LOCKED	1	0	2	1	1	2	2	0	0	0	1	1	11	1.61%
OC Meter Maint	0	0	1	0	2	2	0	1	1	2	0	0	9	1.32%
KEY NOT AVAILABLE	1	0	4	0	0	0	0	0	0	0	1	2	8	1.17%
UNSAFE CONDITION	0	2	1	0	1	2	0	0	0	1	0	1	8	1.17%
BUSINESS CLOSED	0	1	0	1	0	2	0	1	2	0	0	0	7	1.02%
BAD ROAD	1	2	1	0	0	0	1	1	0	0	0	0	6	0.88%
CUST REQUESTS SKIP	0	1	1	0	0	1	0	1	1	0	1	0	6	0.88%
HANDHELD ESTIMATE	0	0	0	4	0	0	0	0	0	0	0	0	4	0.58%
GATE PROBLEM	0	0	0	0	0	0	0	1	1	0	0	0	2	0.29%
PAINTED OVER	0	0	0	0	0	2	0	0	0	0	0	0	2	0.29%
SEASONAL	1	0	0	1	0	0	0	0	0	0	0	0	2	0.29%
ABS Data Corrupt - MCC	0	0	0	0	0	0	0	1	0	0	0	0	1	0.15%
ABS Stale Reads - MCC	0	0	0	0	0	0	1	0	0	0	0	0	1	0.15%
BAD KEY OR CODE	0	0	0	0	0	0	0	0	0	0	1	0	1	0.15%
METER BLOCKED	1	0	0	0	0	0	0	0	0	0	0	0	1	0.15%
REPLACE GLASS	0	1	0	0	0	0	0	0	0	0	0	0	1	0.15%
SNOW/MUD	0	0	0	1	0	0	0	0	0	0	0	0	1	0.15%
TOTAL	63	60	61	57	55	57	59	58	52	52	55	55	684	100%

C-2. The number and percentage of industrial customer meters that have not been read by utility personnel for periods of longer than 12 months and an explanation as to why they have not been read.

Account Class: Industrial														
Message	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Percent
NO READING RETURNED	13	40	24	26	39	28	29	33	30	27	27	22	338	91.11%
METER OFF	0	0	1	1	0	2	2	1	2	2	2	3	16	4.31%
KEY NOT AVAILABLE	0	0	0	0	0	1	0	1	1	0	0	1	4	1.08%
NO ANSWER	0	0	0	0	0	0	0	1	1	0	0	1	3	0.81%
SEASONAL	0	1	0	0	0	0	0	0	0	1	1	0	3	0.81%
DEAD REGISTER	0	0	0	0	1	0	0	1	0	0	0	0	2	0.54%
VACANT	0	0	0	0	0	0	1	0	0	0	0	1	2	0.54%
BUSINESS CLOSED	0	0	0	0	1	0	0	0	0	0	0	0	1	0.27%
Xcel Energy									D	ocket]	No. E(002/M	-21	_
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Service Quality Report 20	20											Attacl	hment I	
Xcel Energy Service Quality Report 2020 Minn. R. 7826.1400 – Meter ReadingCUST REQUESTS SKIP000NEED KEY OR CODE000IOTAL1341252741									Pag	e 7 of 7	,			
CUST REQUESTS SKIP	0	0	0	0	0	0	0	0	0	1	0	0	1	0.27%
NEED KEY OR CODE	0	0	0	0	0	0	1	0	0	0	0	0	1	0.27%
TOTAL	13	41	25	27	41	31	33	37	34	31	30	28	371	100%

C-2. The number and percentage of other customer meters that have not been read by utility personnel for periods of longer than 12 months and an explanation as to why they have not been read.

Account Class: Other														
Message	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Percent
NO READING RETURNED	3	3	3	3	3	3	3	3	1	1	1	1	28	70%
METER OFF	1	1	1	0	0	1	1	1	1	0	1	0	8	20%
DEAD REGISTER	0	0	0	1	1	0	0	0	0	1	0	1	4	10%
TOTAL	4	4	4	4	4	4	4	4	2	2	2	2	40	100%

D. Total number of meters installed by month.**

Residential	Commercial	Industrial	Other	Total
1619240	162920	13130	4191	1799481
1620184	162943	13139	4192	1800458
1621532	162971	13143	4188	1801834
1623785	162975	13169	4186	1804115
1624738	163040	13177	4184	1805139
1626751	163120	13185	4179	1807235
1628224	163215	13192	4179	1808810
1630341	163345	13199	4174	1811059
1631889	163496	13207	4171	1812763
1634023	163835	13210	4170	1815238
1635970	164211	13209	4171	1817561
1637581	164526	13209	4169	1819485
	Residential 1619240 1620184 1621532 1623785 1624738 1626751 1628224 1630341 1631889 1634023 1635970 1637581	ResidentialCommercial161924016292016201841629431620153216297116237851629751624738163040162675116312016282241632151630341163345163188916383516359701642111637581164526	ResidentialCommercialIndustrial161924016292013130162018416294313139162153216297113143162378516297513169162473816304013177162675116312013185162822416321513192163034116334513207163188916349613207163597016421113209163758116452613209	ResidentialCommercialIndustrialOther1619240162920131304191162018416294313139419216215321629711314341881623785162975131694186162473816304013177418416267511631201318541791638224163215131924179163034116334513207417116340231638351321041701635970164211132094169

**We have removed "deleted meters" from the total number of meters installed per month. The "deleted meters" designation is given to meters that were incorrectly entered into the system and were never truly installed at a premise. This ensures our data is more representative of meters in the field.

114111457	Work Possiution	Data	lan	Fab	Mor	Anr	Mov	lun	1.1	Aug	Son	Oct	Nov	Dee	Grand
Electric	INVESTIGATE AND REMEDIATE	Order Count	Jaii	242	222	API	200	Juli	Jui 402	Aug	Sep	200	204	Dec	4074
Liectric			2.00	2 25	2.45	2.00	309	2.00	402	340	2.24	320	2 00	302	4071
		Average Days	3.08	3.35	3.15	2.89	2.95	3.08	2.88	3.06	3.33	2.53	2.89	3.02	3.02
		IVIIII Days	1	1	1	1	1	0	1	1	1	1	1	1	0
		Max of Days	26	24	15	13	7	8	12	10	52	21	16	22	52
		StdDev of Days	1.73	1.83	1.43	1.25	1.19	1.27	1.26	1.23	4.20	2.01	1.98	1.95	1.94
	INVESTIGATE AND REFER	Order Count	37	31	46	67	55	45	43	22	17	26	15	36	440
		Average Days	3.43	3.45	3.24	2.88	3.00	3.60	2.67	2.86	5.29	3.04	3.73	3.36	3.24
		Min Days	2	2	1	1	1	1	1	1	1	1	1	1	1
		Max of Days	21	7	6	6	6	6	6	8	29	14	6	18	29
		StdDev of Days	3.11	1.39	1.25	1.14	1.12	1.60	1.23	1.52	7.67	3.36	1.71	2.75	2.39
	REMEDIATE UPON REFERRAL	Order Count				1					1	1			3
		Average Days				3.00					0.00	2.00			1.67
		Min Days				3					0	2			0
		Max of Days				3					0	2			3
		StdDev of Days				0.00					0.00	0.00			1.53
Electric Order Count	•	•	352	344	378	435	364	412	445	368	352	347	319	398	4514
Electric Average Days			3.12	3.36	3.16	2.89	2.96	3.14	2.86	3.05	3.41	2.56	2.93	3.05	3.04
Electric Min Days			1	1	1	1	1	0	1	1	0	1	1	1	0
Electric Max of Days			26	24	15	13	7	8	12	10	52	21	16	22	52
Electric StdDev of Days			1.92	1.79	1.41	1.23	1.18	1.32	1.26	1.24	4.43	2.13	1.97	2.03	1.99

Gas	INVESTIGATE AND REMEDIATE	Order Count	206	240	260	266	220	198	190	197	236	188	130	203	2534
		Average Days	4.64	4.90	4.81	3.34	4.31	4.83	4.29	4.07	4.67	3.82	4.86	4.82	4.43
		Min Days	0	0	1	0	1	1	1	1	1	1	1	0	0
		Max of Days	12	11	14	23	15	88	15	14	23	12	20	28	88
		StdDev of Days	2.55	2.25	2.26	2.20	2.18	6.49	2.26	2.23	2.66	2.09	3.02	3.71	3.04
	INVESTIGATE AND REFER	Order Count	65	87	100	122	74	61	33	27	38	19	16	36	678
		Average Days	4.18	4.63	4.33	3.23	4.14	4.07	3.76	3.41	3.92	3.58	4.31	4.92	4.03
		Min Days	1	2	1	1	2	2	1	2	2	1	1	2	1
		Max of Days	11	12	10	8	7	13	9	7	11	7	8	8	13
		StdDev of Days	2.24	2.05	1.99	1.41	1.66	2.81	2.00	1.47	1.98	1.92	2.36	1.90	2.02
	REMEDIATE UPON REFERRAL	Order Count	46	87	83	113	59	32	39	27	17	17	8	15	543
		Average Days	4.61	7.47	3.92	8.10	7.36	5.94	18.10	19.26	6.65	7.47	10.88	11.07	8.19
		Min Days	1	0	0	1	0	1	1	1	1	0	2	1	0
		Max of Days	24	85	15	36	40	14	46	71	36	23	21	21	85
		StdDev of Days	4.45	13.16	2.74	6.96	7.48	3.66	11.96	20.54	8.19	6.72	7.62	6.37	10.02
Gas Order Count			317	414	443	501	353	291	262	251	291	224	154	254	3755
Gas Average Days			4.54	5.38	4.53	4.39	4.78	4.79	6.28	5.63	4.69	4.08	5.12	5.20	4.90
Gas Min Days			0	0	0	0	0	1	1	1	1	0	1	0	0
Gas Max of Days			24	85	15	36	40	88	46	71	36	23	21	28	88
Gas StdDev of Days			2.84	6.41	2.32	4.23	3.75	5.65	7.04	8.40	3.20	2.86	3.57	3.99	4.83
			-												
Total E & G Order Count			669	758	821	936	717	703	707	619	643	571	473	652	8269
Total E & G Average Days	8		3.79	4.47	3.90	3.69	3.86	3.82	4.13	4.10	3.99	3.16	3.64	3.89	3.88
Total E & G Days Min			0	0	0	0	0	0	1	1	0	0	1	0	0
Total E & G Days Max			26	85	15	36	40	88	46	71	52	23	21	28	88
Total E & G Davs Std Dev	/		2.50	4.99	2.07	3.29	2.91	3.86	4.70	5.57	3.97	2.55	2.79	3.13	3.69

EXCLUSIONS														
	Meter Access													
Utility	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Grand Total	
Electric Order Count	48	6	44	18	47	142	53	56	76	47	16	10	563	
Electric Average Days	107.25	75.00	116.52	162.28	128.70	74.82	77.09	55.55	63.74	30.53	25.75	38.00	79.20	
Gas Order Count 85 42 87 21 55 121 75 87 157 74 8 19 831														
Gas Average Days	150.66	13.81	109.78	98.33	66.35	62.88	90.63	64.38	124.71	84.65	28.00	63.32	91.37	
Total E & G Order Count	133	48	131	39	102	263	128	143	233	121	24	29	1394	
Total E & G Average Days	134.99	21.46	112.05	127.85	95.08	69.33	85.02	60.92	104.82	63.63	26.50	54.59	86.45	
				Er	nviron	menta	l							
Electric Order Count	0	0	0	0	0	0	0	0	0	0	0	0	0	
Electric Average Days	0	0	0	0	0	0	0	0	0	0	0	0	0	
					Equip	ment								
Electric Order Count	0	0	0	0	0	0	0	0	0	0	0	0	0	
Electric Average Days	0	0	0	0	0	0	0	0	0	0	0	0	0	

Xcel Energy Service Quality Report 2020 Minn. R. 7826.1700 - Call Center Response Time Minnesota Service Level

	-	January	February	March	April	May	June	July	August	September	October	November	December	2020
1	All Residential Calls offered to Agents	61,322	58,523	59,228	61,809	64,761	91,049	83,446	86,030	68,396	72,638	60,651	61,876	829,729
2	All BSC Calls Offered to Agents	4,746	3,926	4,165	3,905	3,564	4,976	3,944	3,994	4,055	4,511	3,766	4,164	49,716
3	All Credit Calls Offered to Agents	9,449	14,423	13,179	14,495	6,354	5,733	5,245	5,104	6,202	5,258	4,225	4,254	93,921
4	All PAR Calls Offered to Agents	3,041	2,668	1,983	1,804	1,980	1,800	1,565	1,568	1,745	1,865	1,965	2,272	24,256
5	All Calls Offered to Agents	78,558	79,540	78,555	82,013	76,659	103,558	94,200	96,696	80,398	84,272	70,607	72,566	997,622
					-							·		
6	All Residential Calls Answered by Agents within 20 seconds	50,004	48,903	47,091	48,371	49,359	55,351	52,942	21,479	11,330	19,172	35,730	36,789	476,521
7	All BSC Calls Answered by Agents within 20 seconds	3,729	2,801	3,129	3,103	3,015	3,435	2,901	2,548	2,283	2,054	2,375	2,411	33,784
8	All Credit Calls Answered by Agents within 20 seconds	7,249	9,918	9,979	13,358	5,570	3,725	2,404	1,937	2,025	1,343	2,450	2,791	62,749
9	All PAR Calls Answered by Agents within 20 seconds	2,627	2,313	1,749	1,621	1,737	1,458	937	865	1,324	1,473	1,604	1,794	19,502
10	All Calls Answered by Agents within 20 seconds	63,609	63,935	61,948	66,453	59,681	63,969	59,184	26,829	16,962	24,042	42,159	43,785	592,556
												•		
11	Non-Billing and Non-Outage Calls Completed in IVR	25,128	21,238	19,743	26,061	20,435	23,136	21,260	27,344	36,055	33,097	20,858	20,324	294,679
	-	-								-		-		
12	Billing Calls Handled by IVR	105,039	103,684	107,855	109,795	100,364	109,751	109,551	111,938	115,023	113,323	91,739	95,663	1,273,725
													1 1	
13	Outage Calls Handled by IVR	8,021	10,672	14,621	16,347	22,437	46,180	40,836	49,247	15,571	28,480	13,417	17,979	283,808
14	Outage Calls Offered to Agents	7,640	7,797	8,986	9,583	13,056	21,613	19,105	22,145	12,516	16,649	9,824	10,346	159,260
15	Total Outage Calls	15,661	18,469	23,607	25,930	35,493	67,793	59,941	71,392	28,087	45,129	23,241	28,325	443,068
—	All Calls Offered to Arente L Outers Calls											1	, ,	
16	Handled by IVR	86,579	90,212	93,176	98,360	99,096	149,738	135,036	145,943	95,969	112,752	84,024	90,545	1,281,430
17	All Calls Answered by Agents within 20 seconds + Outage Calls Handled by IVR	71,630	74,607	76,569	82,800	82,118	110,149	100,020	76,076	32,533	52,522	55,576	61,764	876,364
18	All Calls Offered to Agents + Outage Calls Handled by IVR + Billing Calls Handled by IVR	191,618	193,896	201,031	208,155	199,460	259,489	244,587	257,881	210,992	226,075	175,763	186,208	2,555,155
19	All Calls Answered by Agents within 20 seconds + Outage Calls Handled by IVR + Billing Calls Handled by IVR	176,669	178,291	184,424	192,595	182,482	219,900	209,571	188,014	147,556	165,845	147,315	157,427	2,150,089

Xcel Energy Service Quality Report 2020 Minn. R. 7826.1700 - Call Center Response Time Minnesota Service Level

		January	February	March	April	May	June	July	August	September	October	November	December	2020
20	Service Level All Calls (Residential, BSC, Credit and PAR and all calls handled by IVR)	93.1%	92.7%	92.5%	93.4%	92.3%	86.0%	86.8%	75.5%	74.3%	76.8%	85.5%	86.1%	85.8%
21	Service Level All Calls (Residential, BSC, Credit and PAR) and IVR Handled Outage Calls	82.7%	82.7%	82.2%	84.2%	82.9%	73.6%	74.1%	52.1%	33.9%	46.6%	66.1%	68.2%	68.4%
22	Service Level (agent only)	81.0%	80.4%	78.9%	81.0%	77.9%	61.8%	62.8%	27.7%	21.1%	28.5%	59.7%	60.3%	59.4%
22	Average Speed of Answer - ASA (Agent only													
23	Residential, BSC, Credit and PAR)	16	17	19	17	17	49	28	290	811	670	113	66	151
				-			-							
	ASA Residential	15	15	19	19	18	51	26	323	991	773	122	70	175
	ASA BSC	23	42	33	28	18	47	34	63	90	129	65	75	54
	ASA Credit	18	19	17	7	10	31	45	57	92	234	58	28	38
	ASA PAR	17	14	14	12	14	18	53	60	36	24	23	23	24

Notes:

IVR handled calls are answered immediately with an average speed to answer calls calculated using 0 seconds and includes non-billing and non-outage IVR calls that did not route to an agent. These calls may have been offered messaging that can answer many upfront questions, including but not limited to billing credits, scam information, call before you dig information, the hold time length, or will direct the caller to other resources.

20 The service level formula is: (All Calls Answered by Agents within 20 seconds + All IVR Handled calls) / (All Calls Offered to Agents + All IVR Handled Calls)

21 The service level formula is: (All Calls Answered by Agents within 20 seconds + Outage Calls Handled by IVR) / (All Calls Offered to Agents + Outage Calls Handled by IVR)

Agent call volumes includes calls offered and handled at the Residential call centers (Amarillo, Centre Pointe and Sky Park), at the Business call center at Sky Park and Denver, at the Credit call centers at Amarillo, Centre Pointe and Sky Park.

Data on calls to agents is gathered from the phone switch (Avaya) based on skills.

Data on IVR calls is gathered from the IVR reporting tool (Voice Portal).

Xcel Energy Service Quality Report 2020 MN Rule 7826.2000 - Customer Complaint

Attachment L Page 1 of 16

			Minn	esota Pul Consu 121- St. Pau	blic Utilit mer Affa 7th Plac II, MN 55	ies Con irs Offic e East 101-214	nmission re 7							
7829.20000 REPORTING For the period of January (CUSTOMER COMPLAINTS 01, 2020 to December 31, 2020	0.000				N	lame of Utility: ddress:	Nor 311	thern States P 5 Centre Point	Power Compar te Drive, Rose	ny, a Minnesot eville, MN 5511	a Corporation	ro (202) 204 (2214
Filed in accordance with Doci	ket No. E,G002/CI-02-2034 & E,G002/M-1.	2-383				P	repared by:	Jei	i Eden, Custo	omer Advoc	ale Analysi, C	Justomer Ca	e (303) 294-2	2214
			Α.	The Numb	er of Com	plaints R	eceived							
Count of Incident ID	Мо	nth												
Customer Type	Source	1	2	3	4	5	6	7	8	9	10	11	12 Gra	nd Total
Commercial	BBB	0	0	0	0	0	1	0	0	0	0	0	0	1
	Commission	1	1	0	1	0	1	2	5	2	3	3	0	19
	Informational	0	0	0	0	0	0	0	0	1	0	0	0	1
		0	0	0	0	0	0	1	0	0	0	1	0	2
	OAG	0	0	0	0	0	0	0	0	0	1	0	0	1
	Officer	0	0	0	0	0	0	0	0	0	0	1	0	1
	Repeat Customer	0	0	1	0	0	0	0	0	0	0	0	0	1
Commercial Total		1	1	1	1	0	2	3	5	3	4	5	0	26
Government	Commission	0	0	0	1	0	0	0	0	0	0	0	0	1
Government Total		0	0	0	1	0	0	0	0	0	0	0	0	1
Residential	BBB	0	2	3	4	1	1	2	1	9	7	5	1	36
	Commission	15	20	23	13	11	16	14	15	27	27	18	9	208
	Commission/OAG	2	4	0	0	0	0	2	0	0	0	1	1	10
	Direct Customer Contact	0	2	0	0	0	0	0	0	0	0	0	0	2
	Informational	1	2	2	1	0	0	2	4	2	1	1	0	16
		3	2	9	5	6	4	3	5	4	13	3	1	58
	OAG	9	8	3	3	0	3	1	4	5	5	8	3	52
	OAG/Officer	0	0	0	1	0	0	0	0	0	0	0	0	1
	Officer	0	0	1	1	3	0	4	0	2	0	2	1	14
	Repeat Customer	0	0	2	0	1	0	0	0	0	0	0	0	3
	OAG/BBB	0	0	1	0	0	0	0	1	0	0	0	0	2
Residential Total		30	40	44	28	22	24	28	30	49	53	38	16	402
Industrial	Commission	0	0	0	0	0	0	0	0	1	0	0	0	1
Industrial Total		0	0	0	0	0	0	0	0	1	0	0	0	1
Grand Total		31	41	45	30	22	26	31	35	53	57	43	16	430