COMMERCE DEPARTMENT

August 31, 2017

Daniel P. Wolf
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 280
St. Paul, Minnesota 55101-2147

RE: **Comments of the Minnesota Department of Commerce, Division of Energy Resources**
Docket No. E002/M-16-281; Docket No. E002/M-17-249

Dear Mr. Wolf:

Attached are the Comments of the Minnesota Department of Commerce, Division of Energy Resources (Department) in the following matter:

> 2016 and 2017 *Annual Electric Service Quality Reports* (Reports) submitted by Northern States Power Company, d/b/a Xcel Energy (Xcel or the Company).

The 2016 petition was filed on April 1, 2016 by:

> Bria Shea
> Regulatory Manager
> Xcel Energy
> 414 Nicollet Mall
> Minneapolis, Minnesota 55401

The 2017 petition was filed on March 31, 2017 by:

> Gail Baranko
> Manager, Regulatory Project Management
> Xcel Energy
> 414 Nicollet Mall
> Minneapolis, Minnesota 55401

The Department recommends that the Minnesota Public Utilities Commission (Commission) **accept Northern States Power Company's Reports upon submission of additional information**. **However, the Department will withhold its recommendation for setting appropriate reliability goals for 2017, pending Xcel's response to these Comments.**

The Department is available to answer any questions that the Commission may have.

Sincerely,

/s/ ANGELA BYRNE
Public Utilities Financial Analyst

AB/lt
Attachment

COMMERCE DEPARTMENT

Before the Minnesota Public Utilities Commission

Comments of the Minnesota Department of Commerce Division of Energy Resources

Docket Nos. E002/M-16-281 & E002/M-17-249

I. BACKGROUND

Minnesota Rules, Chapter 7826 were developed as a means for the Minnesota Public Utilities Commission (Commission) to establish safety, reliability and service quality standards for utilities "engaged in the retail distribution of electric service to the public" and to monitor their performance as measured against those standards. There are three main annual reporting requirements set forth in the rule. These are:

- the annual safety report (Minnesota Rules, part 7826.0400);
- the annual reliability report (Minnesota Rules, parts 7826.0500, subp. 1 and 7826.0600, subp. 1); and
- the annual service quality report (Minnesota Rules, part 7826.1300).

In addition to the rule requirements, the Commission's October 23, 2015 Order in Docket No. E002/M-15-324 directed Northern States Power Company, a Minnesota corporation (Xcel or the Company) to:

> …convene a stakeholder group of representative customer groups to discuss and identify new/additional metrics and appropriate standards to assess service quality. New metrics or standards may be identified from a number of sources, including but not limited to metrics and standards used or proposed in other states. In its April 1, 2016 service quality report, Xcel shall summarize the results of the stakeholder group discussions as well as its own review, and discuss the benefits and impacts of adding new metrics and standards.

The Division of Energy Resources of the Minnesota Department of Commerce (Department) notes that the Commission's June 5, 2009 Order in Docket No. E999/CI-08-948 (08-948 docket) contains the following order point:

> Beginning on April 1, 2010 and annually thereafter, utilities shall file reports on past, current, and planned smart grid projects, with a description of those projects, including: total costs, cost effectiveness, improved reliability, security, system performance, and societal benefit, with their electric service quality reports.

In its December 31, 2015 Order Closing Docket, the Commission stated:

> While these tools [the annual smart-grid reports and stakeholder workshops] have served their informational purpose well, the Commission believes that the time has come to close this docket [08-948 docket] and to consider, in a more focused way, how the Commission can most effectively facilitate the development of an integrated dynamic grid.

As a result, the regulated utilities are no longer required to file the smart grid reports in their service quality reports.

On April 1, 2016, Xcel filed a petition (2015 Report) to comply with Minnesota Rules Chapter 7826 and the Commission's October 23, 2015 Order in Docket No. E002/M-15-324 (2014 Order), which approved Xcel's proposed 2015 reliability standards.

On March 31, 2017, Xcel filed a petition (2016 Report) to comply with Minnesota Rules Chapter 7826.

II. SUMMARY OF REPORT AND DEPARTMENT ANALYSIS

The Department reviewed Xcel's 2015 and 2016 Annual Reports (Reports) to assess compliance with Minnesota Rules Chapter 7826 and the Commission's 2014 Order. The Department used information from past annual reports to facilitate identification of issues and trends regarding Xcel's performance.

A. ANNUAL SAFETY REPORT

The annual safety report consists of two parts:[1]

A. a summary of all reports filed with the United States Occupational Safety and Health Administration (OSHA) and the Occupational Safety and Health Division of the Minnesota Department of Labor and Industry (OSHD) during the calendar year; and

B. a description of all incidents during the calendar year in which an injury requiring medical attention or property damage resulting in compensation occurred as a result of downed wires or other electrical system failures and all remedial action taken as a result of any injuries or property damage described.

Xcel provided summaries of 2015 and 2016 data requested by the U.S. Department of Labor. This information reflects safety information on a random selection of the Company's plants and is therefore not necessarily comparable year to year.

Xcel reported no payments in compensation for injuries requiring medical attention resulting from downed wires or other electrical system failures in 2015 or 2016.

Table 1 summarizes Xcel's most recent and past reports regarding property damage claims. [2]

[1] Minnesota Rules, part 7826.0400, available at: https://www.revisor.mn.gov/rules/?id=7826.0400
[2] Department's calculations based on data provided in Attachment B of the Reports.

Table 1: Property Damage Reimbursement

Year	Claims	Total Amount Paid
2003	212	$255,164.74
2004	108	$105,016.97
2005	184	$202,574.46
2006	122	$111,378.90
2007	132	$203,633.50
2008	61	$210,770.02
2009	85	$163,760.17
2010	107	$147,886.24
2011	128	$356,107.39
2012	88	$135,836.53
2013	110	$184,083.70
2014	92	$137,610.16
2015	90	$185,584.32
2016	47	$111,289.98

The Department notes that, since 2003, property damage due to overhead conductors has been the most costly category for eight of the last 14 years. Claims paid in 2016 were the lowest they had been since 2006. Overall, the number of claims and the amounts paid have stayed within a relatively consistent range, and do not show any indication of systematic increases.

B. ANNUAL RELIABILITY REPORT

Minnesota Rules, part 7826.0500 requires each utility to file an annual report that includes the following information: [3]

1. reliability performance (subpart 1.A, 1.B and 1.C),
2. storm-normalization method (subpart 1.D),
3. action plan for remedying any failure to comply with reliability goals (subpart 1.E),
4. bulk power supply interruptions (subpart 1.F),
5. major service interruptions (subpart 1.G),
6. circuit interruption data (subpart 1.H),
7. known instances in which nominal voltages did not meet American National Standards Institute standards (subpart 1.I),
8. work center staffing levels (subpart 1.J), and
9. any other relevant information (subpart 1.K).

[3] Minnesota Rules, part 7826.0500, available at: https://www.revisor.mn.gov/rules/?id=7826.0500

1. Reliability Performance

In the respective reports, Xcel described the method it used to calculate reliability performance and provided a table showing its 2015 reliability performance in comparison with the goals the Commission set in Docket No. E002/M-15-324, and its 2016 reliability performance in comparison with Xcel's proposed 2016 goals. [4]

Table 2: Xcel's 2015/2016 Reliability Performance Compared with Goals[5]

		2015 Performance	2015 Goals	2016 Performance	2016 Proposed Goals
Metro East	SAIDI	**101.38**	83.51	84.89	86.13
	SAIFI	**0.92**	0.91	0.82	0.86
	CAIDI	**109.67**	92.17	**102.91**	100.01
Metro West	SAIDI	90.95	97.13	83.64	92.35
	SAIFI	0.84	0.96	0.82	0.89
	CAIDI	**108.44**	100.75	101.43	103.33
Northwest	SAIDI	75.27	94.41	**119.36**	92.66
	SAIFI	0.65	0.84	0.80	0.82
	CAIDI	**115.32**	112.00	**149.53**	113.15
Southeast[6]	SAIDI	82.96	86.31	**103.28**	94.14
	SAIFI	**0.72**	0.71	**0.81**	0.72
	CAIDI	115.64	121.42	126.85	130.78

The numbers in bold indicate performance that did not meet its respective goal. Xcel missed six of its twelve goals in 2015 and five of its twelve goals in 2016. The Department discusses these points further below under "Action Plan to Improve Reliability."

The Department acknowledges Xcel's fulfillment of the requirements of Minnesota Rules, part 7826.0500, subparts 1.A, 1.B, and 1.C.

[4] The reliability indices (CAIDI, SAIDI and SAIFI) used in this section are defined under Minnesota Rules, part 7826.0200, subparts 4, 10 and 11, available at: https://www.revisor.mn.gov/rules/?id=7826.0200

[5] Table at page 6 of the Reports.

[6] Please note that the 2015 Goals for the Southeast work center do not match those reported by Xcel in its 2015 report. In Docket No. E002/15-324, the Commission adopted the Department's recommendation to set Xcel's 2015 goals in the Southeast work center to be the same as the 2014 goals.

2. Storm-Normalization Method

Xcel reported that its reliability data is normalized to account for major storms by removing outages that start on a storm day.
Using the previous five years of outage history for each region, Xcel identifies "storm days" by:

- calculating the number of sustained outages per day;
- calculating the average number of sustained outages per day; and
- calculating the standard deviation of the number of sustained outages per day. Xcel thus defines a "storm day" as any day meeting or exceeding the average number of outages per day plus three standard deviations.

The Department acknowledges Xcel's fulfillment of the requirements of Minnesota Rules, part 7826.0500, subp. 1.D.

3. Action Plan to Improve Reliability

As shown in Table 2 above, Xcel met and exceeded half of its goals for all work centers in 2015, however the Company missed all of its goals in the Metro East work center. In 2016, Xcel met seven of its twelve goals and met one or more goals in each work center. Additionally, performance in the Metro East work center improved significantly.

The Company's achievement rates for 2015 and 2016 were 50 percent and 58 percent, respectively. This is a decline from its 67 percent achievement rate in 2014 but an improvement over its 42 percent achievement rate in both 2012 and 2013.

At this time, it appears that Xcel's SAIDI and SAIFI performances are holding steady or trending toward improvement; however, there is a clear trend of a decline in CAIDI performance in all four work centers. Figures 1 through 4 below show CAIDI performance over the previous ten years for each of Xcel's work centers.[7]

[7] As a reminder, declining numbers indicate improving performance, while increasing numbers indicate declining performance.

Figure 1: Metro East Historic CAIDI Performance

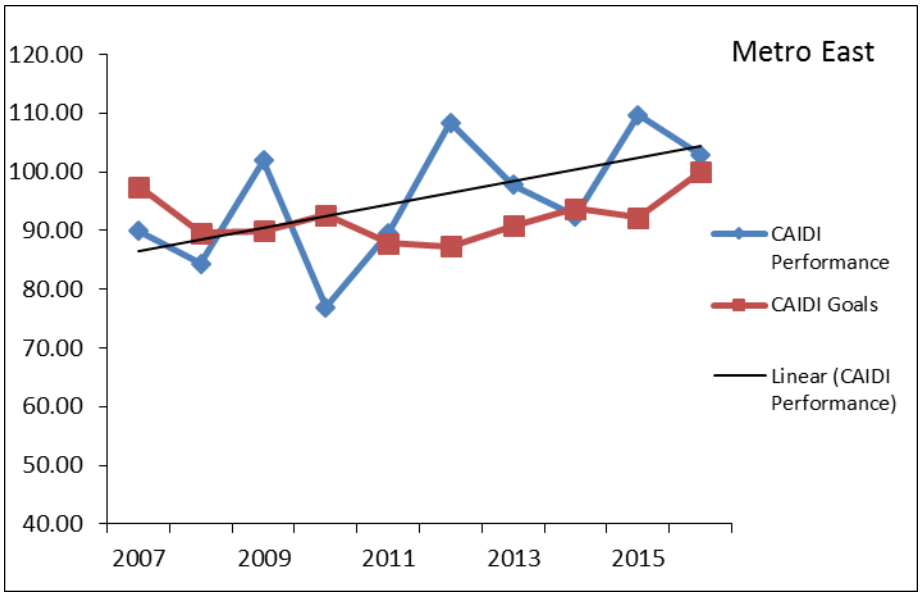


Figure 2: Metro West Historic CAIDI Performance

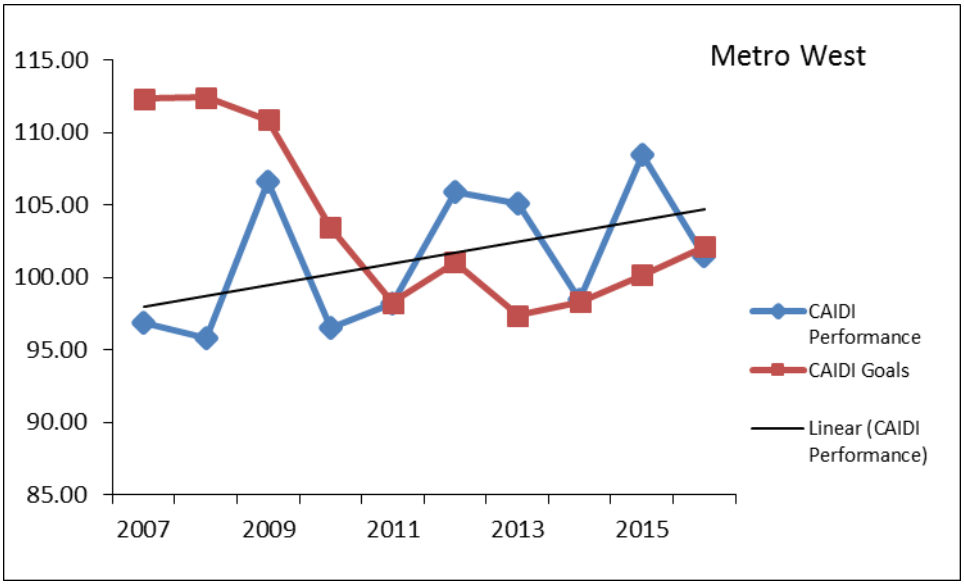


Figure 3: Northwest Historic CAIDI Performance

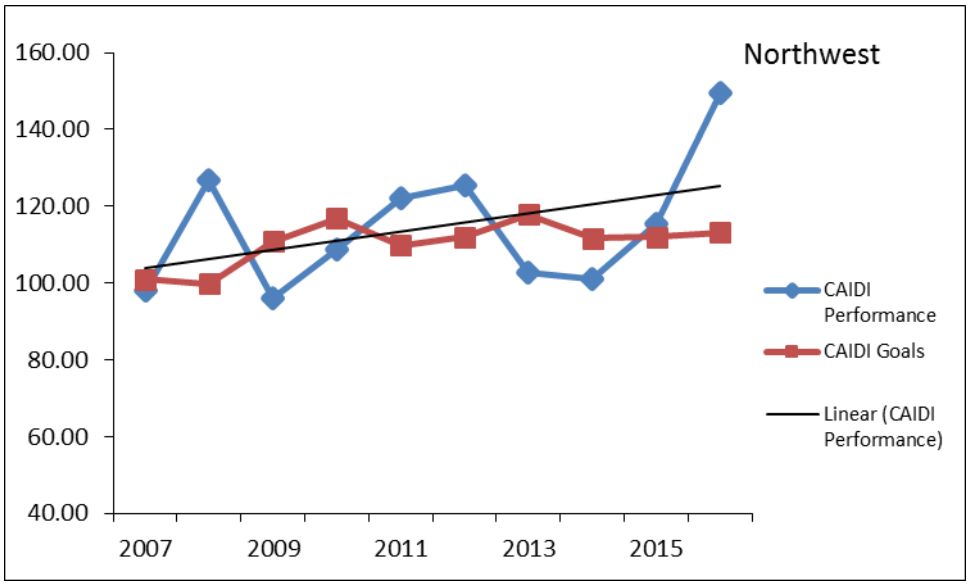
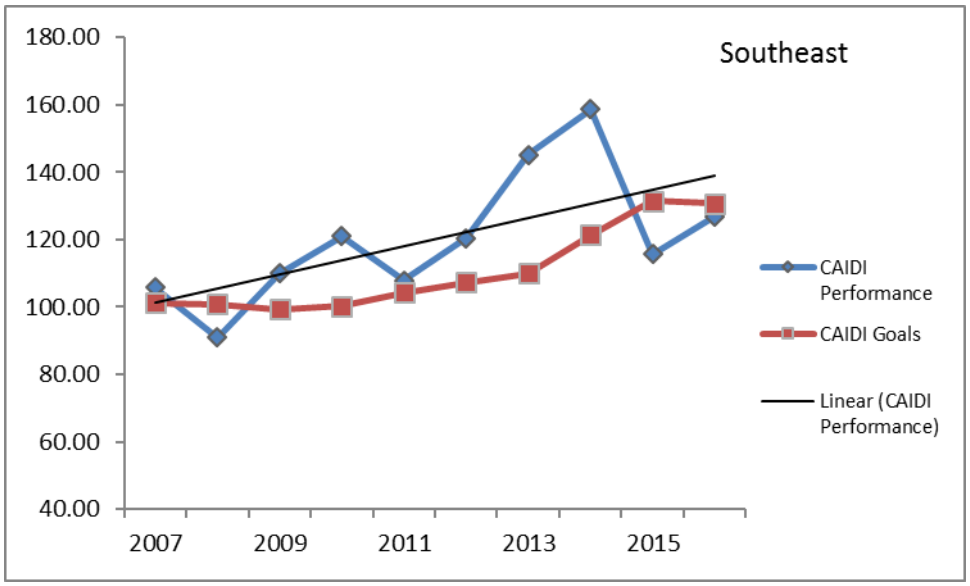


Figure 4: Southeast Historic CAIDI Performance



Evaluating this CAIDI trend against generally steady or improving SAIDI and SAIFI performance indicates that Xcel has reduced the number of overall outage minutes as well as the frequency of outages, but customers experiencing outages are without power for a longer period of time, on average. Improving SAIDI and SAIFI performances indicate improvement to the system as a

whole, but declining CAIDI indicates that the customers affected by outages are impacted more acutely.

Xcel has addressed its CAIDI performance over recent years in several previous dockets.

In its 2013 Annual Electric Service Quality Report (2013 Report), the Department requested that Xcel discuss its deteriorating CAIDI performance. In its Reply Comments,[8] the Company explained the creation of its CAIDI workgroup.

> We have formed a CAIDI improvement team made up of employees from the Engineering, Construction, Control Center and Trouble operations groups to examine causes and to develop solutions to improve CAIDI performance. The team began meeting monthly in the first quarter of 2014 and is developing a CAIDI reduction plan. We discuss some of the factors identified by the team which impact CAIDI improvement below.
>
> - Time Recording: When a crew has restored an outage, procedure dictates that they record the time at which the line was restored. However, the team discovered that crew-recorded data does not precisely match the actual times the meters were energized according to the recorded automated meter reading (AMR) data. Some crews were rounding the restore time to the quarter or half hour closest to the energize time which resulted in some outages appearing to last longer, adversely affecting CAIDI metrics. To reduce inaccurate time recording, we implemented a "Restore Time Campaign" in April 2014 for all field forces that record restore time data following an outage. We stress to these crews that every second counts; if they restore power at 10:12, they should record 10:12. Crews are now better trained to record the restore time before finishing other post-outage tasks, whereas before they sometimes recorded the all-tasks completion time instead of the power restored time. We can continue to monitor improvements in crew data recording by crosschecking AMR times against restore times and working directly with crews who are not recording the appropriate restore time.

[8] Docket No. E002/M-14-131, Xcel's Reply Comments, filed July 25, 2014.

An improvement in data collection can improve our CAIDI metrics.

- Restore before Repair: Over the past few years, we have not focused on making partial repairs to restore a portion of customers during an outage. The CAIDI improvement team identified that a stronger focus on this process could have a positive impact. In the "restore before repair" process, the Distribution Control Centers isolate the fault, restore as many customers as possible through switching, and then patrol the rest of the circuit to finish repairs for the remaining customers. For example, if a feeder locks out affecting 2,500 customers, we can use fault indication and other technology to isolate the fault and then instruct the troubleman to open a switch on either side of the fault and close switches to re-energize customers outside of the open switches. In this example, we restored 2,000 of the 2,500 customers quickly, but without this process, we would leave all 2,500 customers without power until we physically locate and repair the specific faulted section. With a renewed concentrated focus on restoring before repair, we should be able to make a positive impact on CAIDI performance.

- Staffing Levels: When our usual crews are at a scheduled appointment with a customer, they cannot always get to an outage immediately and still maintain our high level of customer service. A delay in reaching an outage results in lower CAIDI performance. As a result, we have started to use contractors for some appointments so that our workforce remains at a steady level to meet non-outage customer expectations, while current specialized crews are available to respond to outages in a more timely fashion. We expect this practice to support our efforts of reducing CAIDI metrics, especially in our work centers with a large service territory to cover.

…

While we are committed to improving CAIDI performance across our work centers, we note that our primary focus continues to be

> on maintaining consistent SAIDI levels, which in turn can result in a lack of improvement for our CAIDI metrics.

In its 2014 Annual Electric Service Quality Report (2014 Report), Xcel stated,[9]

> Our CAIDI improvement team, made up of employees from the Engineering, Construction, Control Center and Trouble operations groups, continues to examine causes and develop solutions to improve CAIDI performance in this and all work centers. The Team began meetings monthly in the first quarter of 2014 and developed a CAIDI reduction plan to address identified issues such as time recording, restoring power before fully repairing, and staffing levels. The Southeast work center was the only work center not to meet the CAIDI metric in 2014, so we believe that our improvement efforts are overall having a positive impact.

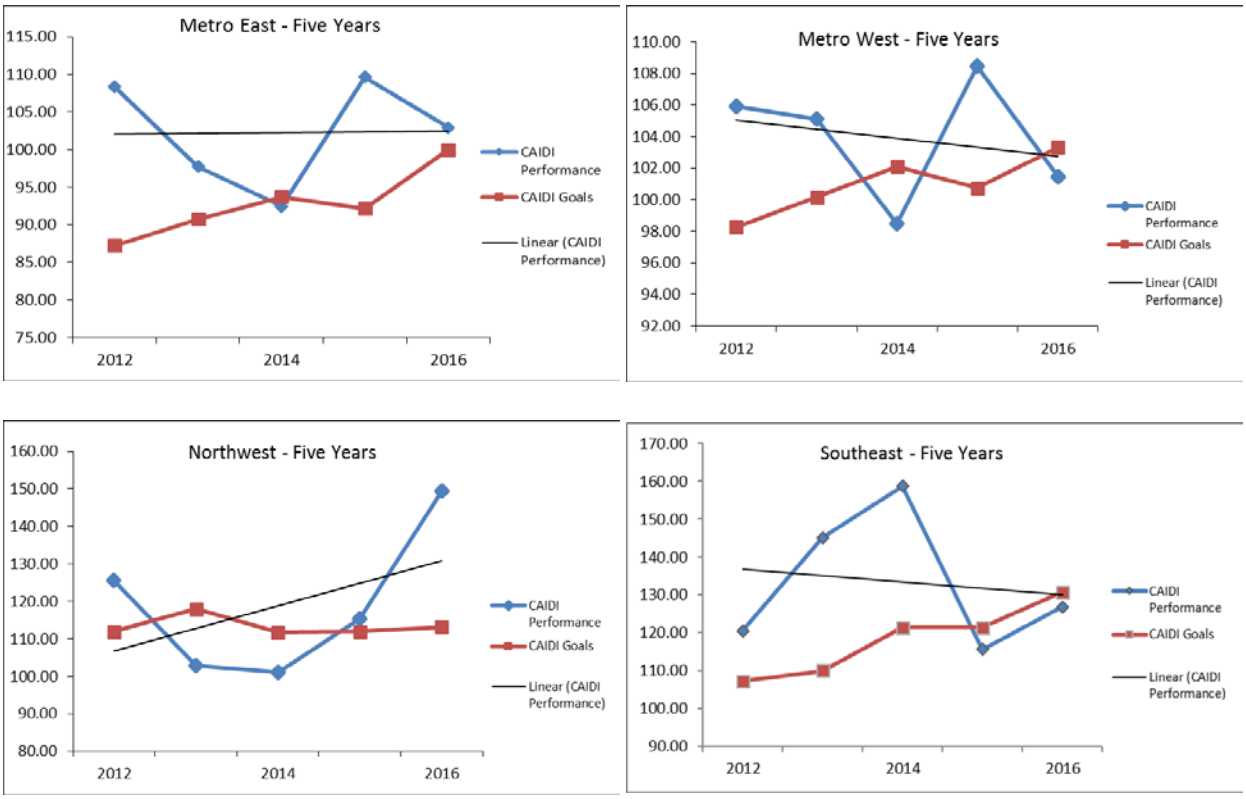
In its Reply Comments for its 2014 Report, Xcel stated,[10]

> As noted in our Reply Comments in Docket No. E002/M-14-131 and in our report in the present docket, we began to implement a CAIDI reduction plan in early 2014. We appreciate the Department's understanding that this plan may take time to produce results give that the plan is designed to cascade into the future. Many of the specific improvements we can implement today may only maintain performance at this time, rather than demonstrate concrete improvement reflected in the reliability metric results. We continue to implement processes to improve time recording, time management and training, to use contractors effectively, and to "restore before repair," which we believe will at a minimum help maintain CAIDI performance results. In order to see more immediate, real-time CAIDI improvement, we need to introduce new technology. By 2017, we should begin installing updated control center technology, so-called "system intelligence," that we expect will produce more immediate CAIDI improvement results.

In its 2015 and 2016 Reports, Xcel did not provide any specific narrative addressing CAIDI, but the initiatives described by Xcel in previous dockets as quoted above were reflected in Attachment M of both Reports.

[9] Docket No. E002/M-15-324, filed April 1, 2015, page 10.
[10] Docket No. E002/M-15-324, Xcel's Reply Comments filed July 13, 2015, pages 4-5.

The Department realizes that CAIDI can fluctuate in any given work center, due to extreme weather, accidents, and other events outside of the control of the Company. It can also be difficult to balance improvement in CAIDI with fluctuations in SAIDI and SAIFI performance. Since 2012, Xcel's CAIDI performance has remained steady or improved in three of its four work centers.



This gives the Department hope, that with more time, Xcel will improve its ten-year CAIDI performance trend.

In the meantime, the Department requests that Xcel provide a narrative in its Reply Comments, updating the above quoted information regarding its CAIDI improvement team, and other initiatives the Company has undertaken, or plans to undertake, to improve its CAIDI performance. Information regarding, but not limited to, available feedback on new training initiatives, percentage completion of equipment and/or technology installation, and estimated or general timelines for completion of any targeted projects or trainings, et cetera would help guide the Department's expectations in future Service Quality filings.

The Department acknowledges Xcel's fulfillment of the requirements of Minnesota Rules, part 7826.0500, subp. 1.E.

4. Bulk Power Supply Interruptions

Xcel reported that there were no generation outages on the Company's system that caused an interruption of service to firm electric customers in 2015 or 2016. Xcel provided a table listing interruptions caused by transmission outages.[11] The table identifies the transmission line, date, time, duration, reasons for the interruption, comments, and remedial steps taken or planned.

The Department acknowledges Xcel's fulfillment of the requirements of Minnesota Rules, part 7826.0500, subp. 1.F.

5. Major Service Interruptions

Xcel reported that, in 2015, there were 259 outages on its system that met the definition of "major service interruption." For 2016, Xcel reported 310 such outages. As required, the Company provided copies of the notifications sent to the Commission's Consumer Affairs Office (CAO) for these outages.[12] Xcel stated that it continues to monitor and improve its internal processes regarding outage notification to the CAO. The following table compiles the number of outages not reported to the CAO and the total number of major service interruptions reported by Xcel in recent years.[13]

[11] Attachment C of the Reports.
[12] Attachment D of the Reports.
[13] In its 2005 and 2006 Annual Reports (reflecting 2004 and 2005 performance), Xcel stated that there were instances in which the CAO may have been notified of a major service interruption, however, the Company was unable to provide a copy of the notification.

Table 3: Unreported Major Service Interruptions

	Unreported Major Service Interruptions	Number of Major Service Interruptions	Percent Unreported
2004	137	235	58%
2005	55	448	12%
2006	51	196	26%
2007	23	373	6%
2008	41	288	14%
2009	6	164	4%
2010	15	351	4%
2011	4	214	2%
2012	5	252	2%
2013	2	605	<1%
2014	11	233	5%
2015	27	259	10%
2016	12	310	4%

The percentage of unreported major interruptions increased to ten percent in 2015. According to Xcel, 22 of the 27 email notices not sent were for events during a single heavy storm on July 17-18, 2015. Xcel justified the increase in unreported major interruptions as follows:[14]

> For all of these missed notifications during the July 17-18 storm, we have identified that the outages were not reported by the control center via email to the Customer Advocates, so the Customer Advocates could not forward notifications to the CAO. During very large storm events when outages are so widespread, it can be difficult for the control center to quickly determine which individual feeders are out until the storm settles somewhat, especially for substations where there is no remote capability to determine whether or not the feeder breaker is out. For feeder and above events, our control center personnel have to manually enter information into the system to send a notification; it does not happen automatically at this time. Many of the July 17-18 outages were a result of trees on lines, and having trees on lines only complicates storm restoration. We are committed to providing notification for all qualifying outages, and will continue to monitor and improve our processes, as appropriate. We will review our training systems to further emphasize the importance of

[14] 2015 Report at 10.

> submitting outage notifications, and we would anticipate greater accuracy when additional remote capabilities are installed in the future.

The Department requests that the Company provide in Reply Comments, a discussion regarding the general timeline of installing remote reporting capabilities in its remaining Minnesota substations. This discussion need not include specific install dates for each substation, but rather a general idea of the time horizon the Company anticipates is needed to accomplish this goal.

Xcel reported that there were no major service interruptions in which ten percent or more of its Minnesota customers were without service for 24 hours or more in 2015 or 2016.

The Department acknowledges Xcel's fulfillment of the requirements of Minnesota Rules, part 7826.0500, subp. 1.G.

6. Worst Performing Circuit

Xcel defines poor performing feeders as those with a System Average Interruption Frequency Index (SAIFI) exceeding three times the average feeder SAIFI value for the Company's Minnesota system or a SAIDI exceeding four times the average feeder SAIDI value. For this purpose, SAIDI and SAIFI are based on non-storm-normalized data and do not include planned outages or outages caused by public damage. Poor performing circuits are identified in September (based on data from the previous September through August time period) so that Xcel can complete construction projects before the spring storm season.

Using this method, Xcel identified four to five poor performing feeders in each work center. Xcel also identified 25 feeders with the highest SAIDI (based on calendar year data, and including bulk power supply and planned outages) in each of its four work centers in compliance with the Commission's April 7, 2006 Order in Docket No. E002/M-05-551.

The Department used historical data to identify potential areas of concerns regarding any 2015 or 2016 feeders that are identified multiple times for similar reasons as a worst performing feeder.

The Department notes that one feeder in the Metro East work center was identified as worst performing in 2014, 2015, and 2016.[15] In its 2015 Report, Xcel stated,[16]

[15] See Attachment E of the Reports, Page 1 of 4.
[16] 2015 Report at 12.

> We note that there was one feeder on the Attachment E list in both 2014 and 2015. As mentioned above, this is not unusual or necessarily cause for concern. The feeder is located in our Metro East work center, on a tree-dense road and bluff area and as a result of repeated tree issues we have plans to underground the line in 2016 to prevent future outages.

The Department notes that this feeder was identified as one of the worst performing in 2016 due to a storm, possibly due to tree contact. The Department requests that Xcel provide further discussion regarding the progress of undergrounding this line, or whether other plans have been developed. For the remaining feeders on the worst performing list, Xcel's 2015 and 2016 Reports indicated that remedial actions were taken to improve the feeders' performance.

The Department acknowledges Xcel's fulfillment of the requirements of Minnesota Rules, part 7826.0500, subp. 1.H and of the Commission's April 7, 2006 Order.

7. Compliance with ANSI Voltage Standards

Xcel reported that it conducted 333 voltage investigations in 2015[17] and 360 in 2016.[18] After investigation, approximately 20 and 22 percent of these instances were found to be caused by a specific voltage problem, respectively. In cases where the Company finds that the voltage is not within the acceptable range, actions are taken such as swapping transformers, upgrading transformers, or checking capacitor banks.[19]

The Department acknowledges Xcel's fulfillment of the requirements of Minnesota Rules, part 7826.0500, subp. 1.I.

8. Work Center Staffing Levels

Xcel reported its 2015 and 2016 staffing levels by work center. Table 4 contains the Company's staffing levels for the past ten years.

[17] *Id*.
[18] 2016 Report at 12.
[19] As shown in Xcel's table at 12, Xcel's acceptable voltage range is slightly more restrictive than ANSI Voltage Range B.

Table 4: Xcel's Historical Work Center Staffing Levels[20]

	Metro East	Metro West	Northwest	Southeast	Other	Total
2007	134	182	37	60	54	467
2008	136	183	37	65	57	478
2009	133	173	37	61	61	465
2010	139	189	32	64	46	470
2011	138	190	33	63	46	470
2012	134	190	34	58	44	460
2013	136	195	34	54	51	470
2014	129	197	25	57	56	464
2015	132	201	35	55	54	477
2016	129	202	32	50	55	468

The Department notes that staffing levels declined by nine full-time equivalents (FTEs) overall in 2016. In its 2016 Report, Xcel stated that,[21]

> The main driver of the decrease was the result of an increased number of retirements during 2016 that will not impact day-to-day operations. We currently have several openings posted which will close the gap to bring the staffing level in line with the four-year average.

The Department acknowledges Xcel's fulfillment of the requirements of Minnesota Rules, part 7826.0500, subp. 1.J.

C. PROPOSED RELIABILITY STANDARDS FOR 2016 and 2017

Xcel proposed the following reliability goals for 2016 and 2017:

[20] Reports at page 13.
[21] 2016 Report at page 13.

Table 5: Xcel's Proposed 2016 and 2017 Reliability Goals

		Proposed 2016 Goals	Proposed 2017 Goals
Metro East	SAIDI	86.13	89.13
	SAIFI	0.86	0.87
	CAIDI	100.01	102.42
Metro West	SAIDI	92.35	92.06
	SAIFI	0.89	0.89
	CAIDI	103.33	103.98
Northwest	SAIDI	92.66	95.88
	SAIFI	0.82	0.81
	CAIDI	113.15	118.45
Southeast	SAIDI	94.14	99.16
	SAIFI	0.72	0.74
	CAIDI	130.78	134.40

Xcel stated that these goals were calculated using the same methodology used to set the Company's 2015 goals. That is, the SAIDI and SAIFI goals reflect the average of 5 years of actual performance, while the CAIDI goals reflect the mathematical relationship among the indices.

The Department notes that the Commission need not approve Xcel's proposed goals for 2016, since 2016 has already occurred. These goals are provided here in the interest of complete reporting and comparison purposes.

The Department will withhold its recommendation on appropriate goals for 2017, pending further information from Xcel as detailed above in Section II.B.3 and below in Section II.E.

D. ANNUAL SERVICE QUALITY REPORT

Minnesota Rules, part 7826.1300 requires each utility to file the following information on or before April 1 of each year:

- Meter Reading Performance (7826.1400);
- Involuntary Disconnection (7826.1500);
- Service Extension Request Response Time (7826.1600);
- Call Center Response Time (7826.1700);
- Emergency Medical Accounts Status (7826.1800);
- Customer Deposits (7826.1900); and

- Customer Complaints (7826.2000).

1. Meter Reading Performance

The following information is required for reporting on meter reading performance by customer class:

A. the number and percentage of customer meters read by utility personnel;
B. the number and percentage of customer meters self-read by customer;
C. the number and percentage of customer meters that have not been read by utility personnel for period of 6 to 12 months and for periods of longer than 12 months, and an explanation as to why they have not been read; and
D. data on monthly meter reading staffing levels by work center or geographical area.

An annual average of 98.07 percent of customer meters were read by utility personnel and 0.0008 percent were read by the customer in 2015. An annual average of 96.59 percent of customer meters were read by utility personnel and 0.0008 percent were read by the customer in 2016.[22]

Table 6 summarizes the number of meters not read by utility personnel for 6-12 months according to Xcel's past annual and supplemental reports.

[22] The Department's calculations are based on data provided in Tables A and B, Attachment F, page 1 of 7 of the Reports. On page 3 of the Department's *Comments* filed on July 27, 2012 in Docket No. G002/M-12-440, Xcel's 2012 Gas Service Quality Report, the Department requested that Xcel provide, in all future reports, the total number of meters to be read each month. The Department notes that the Company files combined electric and gas service quality metrics when appropriate (*e.g.*, for its meter reading statistics).

Table 6: Meters Not Read for 6-12 Months[23]

Year	Residential	Commercial	Industrial	Other	Total
2009	3,021	2,330	467	288	6,106
2010	3,506	1,076	338	100	5,020
2011	2,346	967	244	183	3,740
2012	3,967	1,232	248	106	5,553
2013	2,600	822	177	79	3,678
2014	5,237	1,178	260	123	6,798
2015	2,508	942	387	113	3,950
2016	2,268	772	167	75	3,282

Table 7 summarizes the number of meters not read by utility personnel for longer than 12 months according to Xcel's past annual and supplemental reports.

Table 7: Meters Not Read for Longer than 12 Months[24]

Year	Residential	Commercial	Industrial	Other	Total
2007	2,970	1,409	415	302	5,096
2008	3,604	1,776	440	263	6,083
2009	3,170	974	291	248	4,683
2010	1,149	366	263	71	1,849
2011	637	403	181	94	1,315
2012	661	450	112	89	1,312
2013	602	335	131	64	1,132
2014	620	304	92	68	1,084
2015	764	310	134	90	1,298
2016	551	240	109	63	963

The Department notes that, in general, Xcel has continued to reduce the total number of meters not read for longer than 12 months.

Minnesota Rules, part 7826.0900, subp. 1 requires that at least 90 percent of all meters be read during the months of April through November and at least 80 percent be read during the months of December through March. Xcel attained those requirements in all months of 2015 and 2016.

Additionally, on page 14 of its 2015 Report, Xcel stated,

[23] Table C-1, Attachment F, pp. 2-4 of 7 of the Reports.
[24] Table C-2, Attachment F, pp. 5-7 of 7 of the Reports.

> In this year's report, we have made a further reporting refinement to remove "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. Therefore, we feel that removing them from this report is appropriate. As a result, our total number of installed meters in 2015 is less than 2014. To put this issue in context, approximately 5,250 meters were removed from our 2015 count. We will use this methodology going forward.

The number of meters that Xcel stated it removed from its reporting is only three tenths of one percent of the overall number of meters installed and does not appear to significantly skew Xcel's reporting. The Department appreciates Xcel's effort to continually improve its meter reading reporting.

The Department acknowledges Xcel's fulfillment of the requirements of Minnesota Rules, part 7826.1400 and 7826.0900.

2. Involuntary Disconnections

The following information is required for reporting on involuntary disconnection of service by customer class and calendar month:

A. the number of customers who received disconnection notices;
B. the number of customers who sought cold weather rule (CWR) protection under Minnesota Statutes, sections 216B.096 and 216B.097, and the number who were granted cold weather rule protection;
C. the total number of customers whose service was disconnected involuntarily and the number of these customers restored to service within 24 hours; and
D. the number of disconnected customers restored to service by entering into a payment plan.

Table 8 summarizes residential customer disconnection statistics reported by Xcel in its annual Reports.

Table 8: Residential Customer Involuntary Disconnection Information[25]

	Customers Receiving Disconnect Notice	Customers Seeking CWR Protection	Customers Granted CWR Protection	% Granted	Customers Disconnected Involuntarily	Customers Restored within 24 Hours	Customers Restored by Entering Payment Plan
2003	516,982	19,745	19,199	97%	27,004	6,303	1,350
2004	562,455	27,128	26,736	99%	28,172	5,912	1,240
2005	459,824	42,099	40,549	96%	18,846	3,596	309
2006	603,679	21,537	20,234	94%	22,684	10,498	479
2007	895,152	16,848	15,746	93%	27,427	9,578	827
2008	1,175,953	86,092	86,092	100%	28,863	11,449	727
2009	1,186,057	140,862	140,862	100%	29,612	11,214	1,253
2010	1,218,073	173,440	173,440	100%	29,592	12,121	1,265
2011	1,282,576	188,091	188,271	100%	27,120	11,273	1,446
2012	1,207,842	279,713	279,713	100%	27,132	11,010	1,047
2013	1,217,049	126,477	126,477	100%	23,493	9,221	882
2014	1,166,978	105,561	105,561	100%	25,532	10,283	1,250
2015	1,042,775	151,956	151,956	100%	26,756	11,556	1,201
2016	870,665	130,052	130,052	100%	20,574	7,698	1,512

Xcel also reported information on commercial involuntary disconnections. The Department acknowledges Xcel's fulfillment of the requirements of Minnesota Rules, part 7826.1500.

3. Service Extension Requests

The following information is required for reporting on service extension request response times by customer class and calendar month:

A. 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; and
B. the number of customers requesting service 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.

Xcel stated that 315,642 customers requested service to a location previously served in 2015 and that such requests were responded to the next business day.[26] Xcel reported that 3,687

[25] Attachment G of the Reports.
[26] 2015 Report at page 16.

residential and 322 commercial customers requested service to a location not previously served by the Company in 2015.[27] The average interval between request/readiness date and installation date was 2.2 days for residential and 7.3 days for commercial customers.

For 2016, Xcel reported that 310,001 customers requested service to a location previously served.[28] Xcel reported that 4,083 residential and 317 commercial customers requested service to a location not previously served by the Company in 2016.[29] The average interval between request/readiness date and installation date was 2.4 days for residential and 7.1 days for commercial customers.

The Department looks for any trends in overall response times and inquires as needed. At this time, response times for residential and commercial customers in 2015 and 2016 appear to be relatively consistent with data from 2009 - 2014.

The Department acknowledges Xcel's fulfillment of the requirements of Minnesota Rules, part 7826.1600.

4. Call Center Response Time

The annual service quality report must include a detailed report on monthly call center response times, including calls to the business office and calls regarding service interruptions. Minnesota Rules, part 7826.1200 requires utilities to answer 80 percent of calls made to the business office during regular business hours and 80 percent of all outage calls within 20 seconds.

Xcel provided monthly call volume and response time information. In 2015, an average of 90.45 percent of calls to the Company were answered within 20 seconds. In 2016, an average of 88.82 percent of calls were answered within 20 seconds.[30]

The Company assumes that all calls handled by its Interactive Voice Response (IVR) system are answered within 20 seconds. For calls handled by Xcel's Agents, an average of 78 percent were answered within 20 seconds in 2015, and 75.6 percent were answered within 20 seconds in 2016.

[27] Attachment H of the 2015 Report.
[28] 2016 Report at page 16.
[29] Attachment H of the 2016 Report.
[30] Department's calculations are based on data provided in Attachment I, page 1 of 2 of the Reports.

The Department acknowledges that Xcel has fulfilled the requirements of Minnesota Rules, part 7826.1700 and, in 2015 and 2016, complied with the standard set in Minnesota Rules, part 7826.1200.

5. Emergency Medical Accounts

Reporting on emergency medical accounts must include the number of customers who requested medical account status under Minnesota Statutes, section 216B.098, subd. 5, the number of applications granted, the number of applications denied, and the reasons for each denial.

Xcel reported that 3,333 Minnesota customers requested Emergency Medical Account Status in 2015.[31] Approximately 76.7 percent of these customers were granted this status. In 2016, 3,427 Minnesota customers requested Emergency Medical Account status,[32] and approximately 79 percent of these customers were granted this status. The percentage of customers granted this account status increased from an average of approximately 50 percent from 2011-2014.

Additionally, the Department notes that applications for medical account status in 2015 and 2016 represent an approximate 90 percent increase over 2014 requests. Requests since 2008 have ranged from approximately 1,500 to 1,850 requests per year.[33] The Department appreciates that Xcel has been able to accommodate more customers' requests in number and proportion, but it is curious that there was such a dramatic increase in requests in 2015 and 2016. The Department requests that the Company discuss in Reply Comments:

- any insight it has as to the primary driver(s) of this increase;
- whether this seems to be a new normal or merely a temporary increase; and
- whether any operation and/or service challenges have been experienced or addressed as a result of more than doubling the number of emergency medical status accounts.

The Department acknowledges that Xcel has fulfilled the requirements of Minnesota Rules, part 7826.1800.

[31] Attachment G of the Reports.
[32] *Id.*
[33] The Department notes that Xcel filed a petition in Docket Nos. E002/GR-15-826 and E002/M-17-629 (dated August 21, 2017) to modify its electric Low-Income Energy Discount Program to expand bill payment assistance to low-income customers with chronic or severe medical conditions.

6. Customer Deposits

Reporting on customer deposits must include the number of customers who were required to make a deposit as a condition of receiving service.

Table 9 summarizes the number of accounts that Xcel has reported required deposits.

Table 9: Customer Deposits Required

	Number of Deposits
2003	884
2004	704
2005	1,181
2006	587
2007	821
2008	805
2009	798
2010	657
2011	655
2012	622
2013	652
2014	606
2015	561
2016	362

The Department acknowledges Xcel's fulfillment of the requirements of Minnesota Rules, part 7826.1900.

7. Customer Complaints

Reporting on customer complaints must include the following information by customer class and calendar month:

A. the number of complaints received;
B. the number and percentage of complaints alleging billing errors, inaccurate metering, wrongful disconnection, high bills, inadequate service, and the number involving service extension intervals, service restoration intervals, and any other identifiable subject matter involved in five percent or more of customer complaints;
C. the number and percentage of complaints resolved upon initial inquiry, within ten days, and longer than ten days;

D. the number and percentage of all complaints resolved by taking any of the following actions: (1) taking the action the customer requested; (2) taking an action the customer and the utility agree is an acceptable compromise; (3) providing the customer with information that demonstrates that the situation complained of is not reasonably within the control of the utility; or (4) refusing to take the action the customer requested; and
E. the number of complaints forwarded to the utility by the Commission's Consumer Affairs Office (CAO) for further investigation and action.

Xcel reported that 789 complaints were handled by the Company's Customer Advocate Group in 2015, 118 of which were forwarded by the CAO. In 2016, Xcel's Customer Advocate Group handled 547 complaints, 102 of which were forwarded by the CAO.[34] Data provided by the Company showed that 14.30 percent of complaints in 2015 and 16.30 percent in 2016 handled by Xcel's Customer Advocate Group were resolved upon inquiry.[35] The most frequent complaint category was "inadequate service." Xcel reported that 29.50 percent of these complaints in 2015 and 32.70 percent in 2016 were resolved by taking the action the customer requested.[36]

Xcel also received 797,237 complaints in 2015 and 736,308 in 2016 that were handled upon initial inquiry in the Company's Call Centers. Xcel reported that approximately 96 percent of these complaints were resolved by taking the action the customer requested in both 2015 and 2016. The complaint category with the largest volume of complaints for all customers was "billing errors." For all customers, "wrongful disconnect" and "inadequate service" were also of significant concern. "Service restoration" was significant for Commercial and Industrial customers.

Xcel's report on customer complaints includes the required information. Table 10 contains a limited summary of Xcel's customer complaint history as received through the Company's Customer Advocate Group.

[34] Attachment J of the Reports, pages 1 and 4 of 16.
[35] Attachment J of the Reports, page 3 of 16.
[36] Attachment J of the Reports, page 3 of 16.

Table 10: Selected Summary of Customer Complaints[37]

	Number of Complaints	Inadequate Service	Wrongful Disconnect	Billing Error	Resolved Upon Initial Inquiry	Took Action Customer Requested
2010	693	44.90%	21.90%	18.20%	17.00%	29.10%
2011	627	49.10%	17.20%	16.70%	13.20%	28.20%
2012	613	53.50%	19.70%	17.30%	18.60%	27.41%
2013	745	55.80%	15.60%	13.80%	18.90%	38.26%
2014	770	53.20%	19.70%	14.80%	16.80%	51.30%
2015	789	52.50%	23.40%	13.30%	14.30%	29.50%
2016	547	52.10%	19.00%	14.60%	16.30%	32.70%

The Department acknowledges Xcel's fulfillment of the requirements of Minnesota Rules, part 7826.2000.

E. COMPLIANCE WITH OCTOBER 23, 2015 ORDER

In its October 23, 2015 Order, the Commission,

> Required Xcel to convene a stakeholder group of representative customer groups to discuss and identify new/additional metrics and appropriate standards to assess service quality. New metrics or standards may be identified from a number of sources, including but not limited to metrics and standards used or proposed in other states. In its April 1, 2016 service quality report, Xcel shall summarize the results of the stakeholder group discussions as well as its own review, and discuss the benefits and impacts of adding new metrics and standards.

The Company summarized its extensive efforts in Attachments P and Q of its 2015 Report. Attachment Q provides a matrix of the current service quality reporting requirements, including previous Commission orders and its Service Quality Tariff. Attachment P included discussions on potential new metrics, existing customer research, research conducted specifically in response to the above order point, and national trends in utility metrics. Specifically,

[37] Attachment J of the Reports, page 2 of 16.

> In this report, we provide insights into the aspects of our service that are most important to our customers. To develop this report, we gathered customer insights from our existing market research, undertook additional customer research, and engaged in direct dialogue with customers and customer stakeholder groups to understand how they think about reliability. In addition to summarizing these insights, we compare the information we gathered to the service quality metrics we currently report to the Commission under the Minnesota Rules and our Tariff. Finally, we summarize trends and other industry insights into the aspects of utility service quality that are being measured in response to changes in the industry.
>
> While we do not propose any specific metrics in this report, we are open to working with stakeholders further.

Addressing the potential for new service quality metrics, Xcel emphasized measuring interruptions on a system-average rather than customer-average basis.

> The Commission currently measures the quality of electric utility service across a broad range of service categories including their responsiveness, reliability, safety, billing accuracy and customer protections. We believe that most relevant and immediate aspect of service quality to be implicated by increased system intelligence is reliability and grid resiliency. We are happy to begin this dialogue with this report, and look forward to further discussions and evaluating changes to the current service quality requirements in conjunction with specific grid modernization investments.
>
> With that said, we believe the essential function of the system will continue to be to provide reliable electric service to customers – and, as we discuss below, customers value reliable electric service above all else. To this end, we believe the Commission will want to continue to measure the frequency (System Average Interruption Frequency Index or SAIFI) and duration (System Average Interruption Duration Index or SAIDI) of customer interruptions on a system average basis. Measuring these interruptions on a *system*-average, rather than a *customer*-average basis is the industry standard and most appropriate measure of the overall reliability of the utility's electric service.

> However, the Commission may additionally be interested in understanding the frequency and duration trends of interruptions at a *customer* level. While system-average indices measure include customers who experienced sustained interruptions along with customers who experienced no interruptions, customer-based indices measure the experience of customers that experienced interruptions. The customer-level equivalents to the SAIFI and SAIDI system-level indices typically used in the industry are Customers Experiencing Multiple Interruptions (CEMI) and Customers Experiencing Lengthy Interruptions (CELI).
>
> In terms of benchmarking the reliability of the utility's service today, current year performance is measured against some variation of past performance. In the future, we believe the benchmark should be adjusted to account for the specific investments being made in the system that are expected to impact outage frequency and/or duration. Any adjustments to the indices will be specific to the particular investment(s) being made in the system, and should be examined in conjunction with specific system investment proposals.
>
> Finally, while we have relatively high customer satisfaction in the area of reliability currently, we acknowledge customers want more. *As we discuss below, customers put significant value on communication during outages, including accurate restoration estimates. We have a number of initiatives underway currently to improve our communications in this area, and expect that with time, experience, and increased grid intelligence we will make good strides in this area. We do not believe that this is ripe to become a service quality metric at this time due to the lack of data we currently have. However, we want the Commission to be aware that we are taking actions and are beginning to track results in this area. [emphasis added].* We discuss our current efforts around this aspect of service quality below.

Regarding its existing customer research:

> Our existing market research clearly conveys that all utility customers highly value digital interactions and utility

communications associated with electric service outages – and our customers are no exception. Today, we provide our customers with several tools to express their communication channel preferences, report electrical outages, and monitor our progress in restoring power. As we have discussed, we are using the information we are gleaning from customers to implement improvements to our service.

One area in which we are currently focused is improving the customer experience related to outage restoration estimates. This is a complex issue that requires involvement of numerous areas across the organization to both examine the accuracy of our system-generated Estimated Restoration Times (ERTs) and convey the ERTs to customers using a method (i.e., text message, email, etc.) and providing them with the frequency that customers prefer.

Now, at the time a customer reports an outage, we provide an ERT which, because it is being provided immediately without the benefit of broader system impact information or insights from field crews, is generic. We adopted this practice, because customers want and expect a restoration estimate. We have learned, however, that ERTs that are not specific to an individual outage event are no longer satisfying to customers; customers expect the ERTs to be accurate within a tight timeframe of ± 20 minutes. Therefore, one of the initial changes we are considering is allowing our systems and work processes to play out for approximately 15-20 minutes after the outage is initially reported to allow for development of an informed and specific ERT. Therefore, instead of providing a generic estimate at the time of the customer's initial contact, we would instead offer the customer the option to receive an informed ERT in approximately 15-20 minutes via the communication channel they prefer (i.e., text, email, phone, etc.).

We are also working to improve the ERTs our Network Management System (NMS) calculates behind the scenes. Our NMS takes in all of the customer-reported outages and quickly correlates them to approximate the system device that has failed or the point on the system where the fault occurred, which we use to dispatch field crews. The NMS contains ERTs for the various system levels and devices, one component of which is travel time. One of our

> current efforts is to refine and differentiate travel times to be more specific to how we dispatch the work. For example, the travel time for a crew to get to a substation that is less than five miles from a field office will be less than the travel time for a substation that is 20 miles from a field office. Initially examining and updating the ERT components for the numerous system devices and levels is a significant undertaking that will also require ongoing refinement to fine-tune them to be as reasonably accurate as possible. Deployment of increased system intelligence on our distribution system will aid our efforts to provide our customers with more accurate ERTs.

In its Conclusion, Xcel stated,

> In summary, utilities have a long history of measuring performance in areas traditionally associated with electric service, including reliability, customer service and satisfaction, and employee public safety. We believe these areas will remain relevant and important indicators of our service to the Commission and our customers. Further, it appears in the emerging area of metrics linked to increased grid intelligence initiatives that standard reliability indices (*e.g.*, SAIDI, SAIFI, CAIDI) continue to be primary metrics; however, they include higher performance standards that are based on the expected benefits of specific grid investments. We acknowledge that the Commission may also want to monitor performance for an expanded set of outcomes that reflect emerging goals for utility service; those changes also should be examined as part of specific grid investment proposals.
>
> While there may be new metrics that could measure the success of grid modernization investments, we know from our customer research that our customers most value reliable electric service – and almost equally value communication about outages that impact them. Our customers are generally satisfied with their reliability; however, there is some desire for increased communication during an outage. Thus, if the Commission wishes to pursue new metrics associated with grid modernization further, we are happy to participate in that process. In the near-term, however, our research reveals that perhaps the greatest impact on customer satisfaction would be from improved outage

> communications, including more accurate restoration estimates. As noted above, we have begun tracking our results in this area and have a number of initiatives underway that we believe will improve satisfaction with our outage communication.

The Department agrees with Xcel's assessment about prioritizing improvement to its estimated restoration times (ERTs), including communication of those ERTs. Based on the volume and specificity of the feedback, it is clear that this is one of the highest priorities for Xcel customers. The Department also agrees with the Company that this work is not yet ready for a dedicated metric. However, the Department requests that Xcel provide a description of the data it is gathering related to improving ERTs in its Reply Comments. It would also be useful for Xcel to provide a summary of that data in future annual service quality reports to provide the Department, and ultimately the Commission, the opportunity to discuss and develop an appropriate metric.

Xcel did not specifically propose new metrics in its 2015 Report, but the Company did briefly discuss two customer-level metrics used by the Institute of Electrical and Electronics Engineers (IEEE): Customers Experiencing Multiple Interruptions (CEMI), and Customers Experiencing Lengthy Interruption Duration (CELID). CEMI indicates the ratio of individual customers experiencing *n* or more sustained interruptions to the total number of customers served. CELID indicates the ratio of individual customers that experience interruptions with durations longer than or equal to a given time. That time is either the duration of a single interruption(s) or the total amount of time that a customer has been interrupted during the reporting period.

In light of the issues regarding Xcel's CAIDI performance in recent years, the Department recommends that the Company propose specific CEMI and CELID metrics in its next annual service quality report. For example, an appropriate CEMI metric may be one that measures the ratio of customers experiencing 6 or more sustained interruptions, consistent with the threshold for customer outage credits issued pursuant to Section 6, Sheet No. 7.10 of Xcel's Minnesota Electric Rate Book. CEMI and CELID metrics appear to be an opportunity to add depth to evaluating Xcel's customer-level service. SAIDI and SAIFI give an appropriate system-wide picture to Xcel's service quality, but CAIDI seems to add less value in pinpointing customer-level service issues.

F. ADDITIONAL DATA PROVIDED BY XCEL

In previous dockets, the Commission ordered Xcel to provide the following:[38]

3. *Xcel shall 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 proactive management of the system as a whole, increased reliability, and active contingency planning.*

4. *Xcel shall incorporate into its next filing a summary table that allows the reader to more easily assess the overall reliability of the system and identify the main factors that affect reliability.*

5. *Report on the major causes of outages for major event days.*

While these reporting requirements were not specified by the Commission in the 2014 Order, Xcel provided the data and information relating to these past order point in Attachments M and N of its Reports.

The Department appreciates Xcel's continued effort to update this information in its Annual Service Quality Reports. While it is not required by the Commission, it furthered the Department's understanding of the 2015 and 2016 performance results.

III. CONCLUSIONS AND RECOMMENDATIONS

The Department recommends that the Commission accept Xcel's filing in fulfillment of the requirements of Minnesota Rules, Chapter 7826, and the Commission's October 23, 2015 Order in Docket No. E002/M-15-324 pending submission in Reply Comments of the following additional information:

1. a narrative updating information regarding its CAIDI improvement team, and other initiatives the Company has undertaken, or plans to undertake, to improve its CAIDI performance. Information regarding, but not limited to, available feedback on new training initiatives, percentage completion of equipment and/or technology installation, and estimated or general timelines for completion of any targeted projects or trainings, et cetera would help guide the Department's expectations in future Service Quality filings;

[38] See the Commission's Order, issued December 12, 2014 in Docket No. E002/M-14-131 for the most recent example.

2. a discussion regarding the general timeline of installing remote reporting capabilities in its remaining Minnesota substations;

3. further discussion regarding the progress of undergrounding of the above-identified, Metro East feeder line, or whether other plans have been developed;

4. a discussion regarding the increase in Emergency Medical Accounts, specifically,

    a. any insight it has as to the primary driver(s) of this increase;
    b. whether this seems to be a new normal or merely a temporary increase; and
    c. whether any operation and/or service challenges have been experienced or addressed as a result of more than doubling the number of emergency medical status accounts; and

5. a description of the data it is gathering related to improving estimated restoration times. It would also be useful for Xcel to provide a summary of that data in future annual service quality reports.

Additionally, the Department recommends that the Company propose specific CEMI and CELID metrics in its next annual service quality report.

Finally, the Department withholds its recommendations on setting 2017 reliability goals, pending evaluation of further information provided by Xcel in Reply Comments.

/lt

CERTIFICATE OF SERVICE

I, Sharon Ferguson, hereby certify that I have this day, served copies of the following document on the attached list of persons by electronic filing, certified mail, e-mail, or by depositing a true and correct copy thereof properly enveloped with postage paid in the United States Mail at St. Paul, Minnesota.

Minnesota Department of Commerce
Comments

Docket No. E002/M-16-281 and E002/M-17-249

Dated this 31st day of August 2017

/s/Sharon Ferguson

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