BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Beverly Jones Heydinger	Chair
Nancy Lange	Commissioner
Dan Lipschultz	Commissioner
John Tuma	Commissioner
Betsy Wergin	Commissioner

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

SERVICE DATE: October 23, 2015

DOCKET NO. E-002/M-15-324

In the Matter of the 2015 Annual Electric Service Quality Report (Report) submitted by Northern States Power Company, d/b/a Xcel Energy (Xcel)

The above entitled matter has been considered by the Commission and the following disposition made:

Accepted the Report and set Xcel's reliability goals for 2015 as provided in the following table:

		Department Recommended 2015 Goals
Metro East	**SAIDI**	**83.51**
	SAIFI	**0.91**
	CAIDI	**92.17**
Metro West	**SAIDI**	**97.13**
	SAIFI	**0.96**
	CAIDI	**100.75**
Northwest	**SAIDI**	**94.41**
	SAIFI	**0.84**
	CAIDI	**112.00**
Southeast	**SAIDI**	**86.31**
	SAIFI	**0.71**
	CAIDI	**121.42**

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 Commission agrees with and adopts the recommendations of the Department of Commerce, which are attached and hereby incorporated into the Order. This Order shall become effective immediately.

BY ORDER OF THE COMMISSION

Daniel P. Wolf
Executive Secretary

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MINNESOTA DEPARTMENT OF COMMERCE

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AN EQUAL OPPORTUNITY EMPLOYER

June 30, 2015

Daniel P. Wolf
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, Minnesota 55101-2147

RE: **Comments of the Minnesota Department of Commerce, Division of Energy Resources**
Docket No. E002/M-15-324

Dear Mr. Wolf:

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

> 2015 *Annual Electric Service Quality Report* (Report) submitted by Northern States Power Company, d/b/a Xcel Energy (Xcel or the Company).

The petition was filed on April 1, 2015 by:

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

The Department recommends that the Minnesota Public Utilities Commission (Commission) **accept Northern States Power Company's Report and set appropriate reliability goals for 2015 upon submission of additional information**. The Department is available to answer any questions that the Commission may have.

Sincerely,

/s/ SAMIR OUANES
Public Utilities Rates Analyst

SO/lt
Attachment

MINNESOTA DEPARTMENT OF COMMERCE

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

COMMENTS OF THE MINNESOTA DEPARTMENT OF COMMERCE DIVISION OF ENERGY RESOURCES

DOCKET NO. E002/M-15-324

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 December 12, 2014 Order in Docket No. E002/M-14-131 directed Northern States Power Company, a Minnesota corporation (Xcel or the Company) to:

> 3. 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;
> 4. 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;

6. consider other factors, in addition to historical data, on which to base its reliability indices for 2014 in an effort to demonstrate its commitment toward improving reliability performance; and
7. continue reporting of major service interruptions to the Commission's Consumer Affairs Office.

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, 2015, Xcel filed a petition (2015 Annual Report or Report) to comply with Minnesota Rules Chapter 7826 and the Commission's December 12, 2014 Order in Docket No. E002/M-14-131 (2014 Order), which approved Xcel's proposed 2014 reliability standards.

II. SUMMARY OF REPORT AND DEPARTMENT ANALYSIS

The Department reviewed Xcel's 2015 Annual Report 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 a summary of 2014 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 2014.

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

Table 1: Property Damage Reimbursement

	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[2]	92	$137,610.16

The Department notes that, from 2003 through 2006, property damage due to overhead conductors and overhead transformers generally resulted in the most frequent and the most costly property damage claims. From 2007 through 2011, abnormal voltage replaced overhead transformers as one of the top two most frequent and costly property damage

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

claims. In 2012, damage due to overhead conductors and overhead transformers were the two most costly property damage claims. In 2013, overhead conductors were still the most costly property damage source at roughly $63,000 or 34 percent of the total. Outages were the second most costly, at $54,000. This marks just the second time since 2003 that outages have represented one of the top two damage categories. In 2014, overhead conductors were still the most costly property damage source at roughly $53,000 or 39 percent of the total. Underground conductors were the second most costly, at $26,000. This marks just the second time since 2003 that underground conductors have represented one of the top two damage categories.

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).

1. Reliability Performance

Xcel described the method it used to calculate reliability performance and provided a table showing its 2014 reliability performance in comparison with the goals the Commission set in Docket No. E002/M-14-131.[4]

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

[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

Table 2: Xcel's 2014 Reliability Performance Compared with Goals[5]

		2014 Performance	2014 Goals
Metro East	SAIDI	79.73	82.41
	SAIFI	0.862	0.88
	CAIDI	92.46	93.72
Metro West	SAIDI	83.02	97.41
	SAIFI	0.84	0.95
	CAIDI	98.50	102.11
Northwest	SAIDI	82.80	90.27
	SAIFI	**0.82**	0.81
	CAIDI	101.02	111.7
Southeast	SAIDI	**129.20**	86.31
	SAIFI	**0.81**	0.71
	CAIDI	**158.78**	121.42

The numbers in bold indicate performance that did not meet goals. Xcel missed System Average Interruption Frequency Index (SAIFI) goals in two of its four work centers. The Northwest work center missed only the SAIFI goal; however the Southeast work center missed every goal in 2014. 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.

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. Xcel identifies "storm days" in the following manner: Using the previous five years of outage history for each region, Xcel:

- calculates the number of sustained outages per day;
- calculates the average number of sustained outages per day; and
- calculates 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.

[5] Source: table at page 7 of the Report.

3. Action Plan to Improve Reliability

The Company met and exceeded all its goals for the Metro East and Metro West work centers in 2014. Xcel fell short of its SAIFI goal for the Northwest work center by a small amount:[6]

> SAIFI for the Northwest work center region did not meet the threshold by 0.01 interruptions. This is extremely close to our goal considering that it is based on a five-year average. The 0.01 SAIFI is equivalent to approximately 1,200 customer interruptions. One mainline event would typically contribute more than that. However, we did closely examined [*sic*] the data and found that one transmission line event in June, which was caused by another utility, contributed 0.03 interruptions to the overall SAIFI, and was therefore not within our control. Both our SAIDI and CAIDI for the Northwest work center were within the standard for the year.

As a result, Xcel increased its achievement rate from 42 percent in 2012 and 2013 to 67 percent in 2014 (8 out of its 12 goals were achieved).

However, as discussed by Xcel, the Company did not meet any of its goals in its Southeast work center for a second year in a row:[7]

> Our SAIDI, SAIFI, and CAIDI performance in the Southeast work center did not meet the threshold by 42.9, 0.10, and 37.4 minutes, respectively. In 2014, we experienced several significant events, each of which substantially impacted the fact that we did not meet the metrics for this work center.
>
> In August, a Transformer failure at the Distribution Substation level contributed nearly 21 minutes to SAIDI, 0.03 interruptions to SAIFI, and 21 minutes to CAIDI. On December 15 and 16, icing and windy conditions contributed 12 minutes to SAIDI, 0.02 interruptions to SAIFI, and 11 minutes to CAIDI. In addition, four back-to-back days in June qualified for storm exclusion. The day before and the day after just missed meeting exclusion level, and instead contributed 8.5 minutes to SAIDI, 0.02 interruptions to SAIFI, and nearly 7 minutes to CAIDI. Because the storm day thresholds increased from 35 sustained outages per day to 41 sustained outages per day this year, these two days considered storm days in 2014 would have been storm exclusions in three out of the last five years,

[6] Source: Report at page 8.
[7] Source: Report at pp. 8-9.

> and only one outage shy of exclusion in the other two out of five years.
>
> ...The issue in the Southeast region is one of density and location of first responders. The Metro East and Metro West work centers have dense load and relatively short distances to reach each outage. The Northwest work center has most of the load in one load center – St. Cloud. The load in the Southeast region is distributed among four smaller load concentrations – Faribault, Mankato, Red Wing and Winona. The rest of the load in Southeast region is distributed across a large rural area. This makes it difficult to station first responders close to the outages all day, every day.

The Company's failure to meet any of its goals for the Southeast work center in 2014 is concerning for the following reason. As shown in the graphs below, this is at least the second consecutive year: (1) Xcel failed to meet any of its goals for the Southeast work center and (2) Xcel's trend of decreasing actual SAIDI and CAIDI performance (particularly CAIDI performance).

Figure 1: Southeast Historic SAIDI Performance

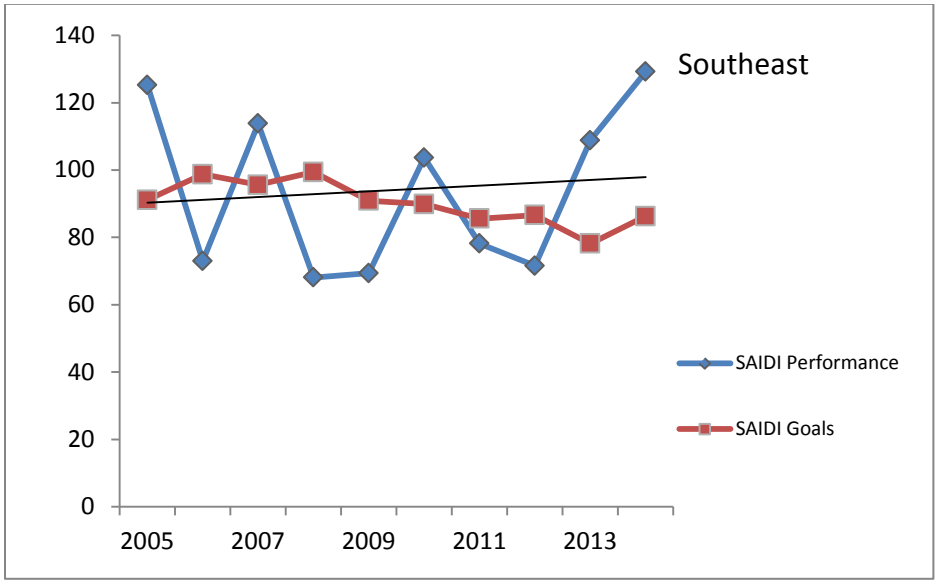


Figure 2: Southeast Historic SAIFI Performance

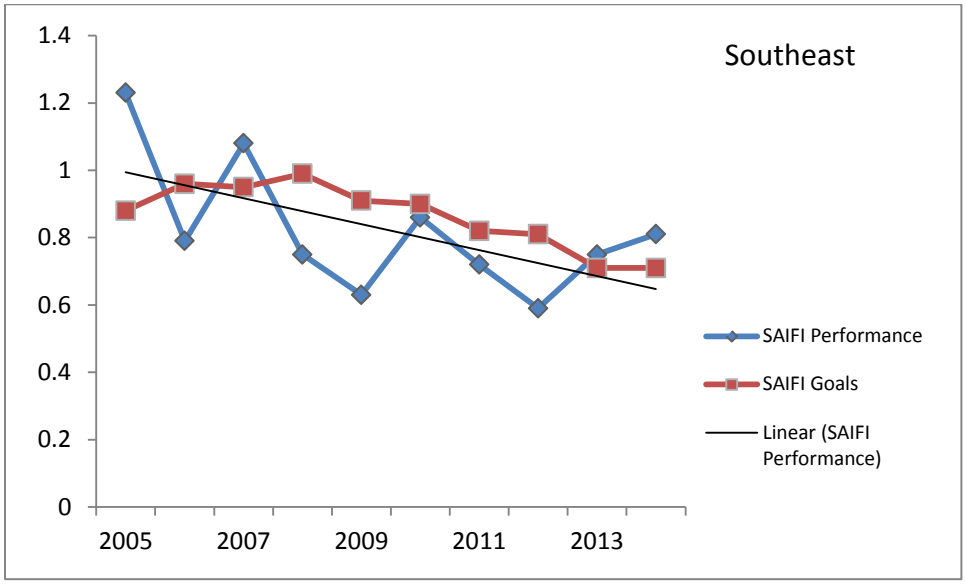
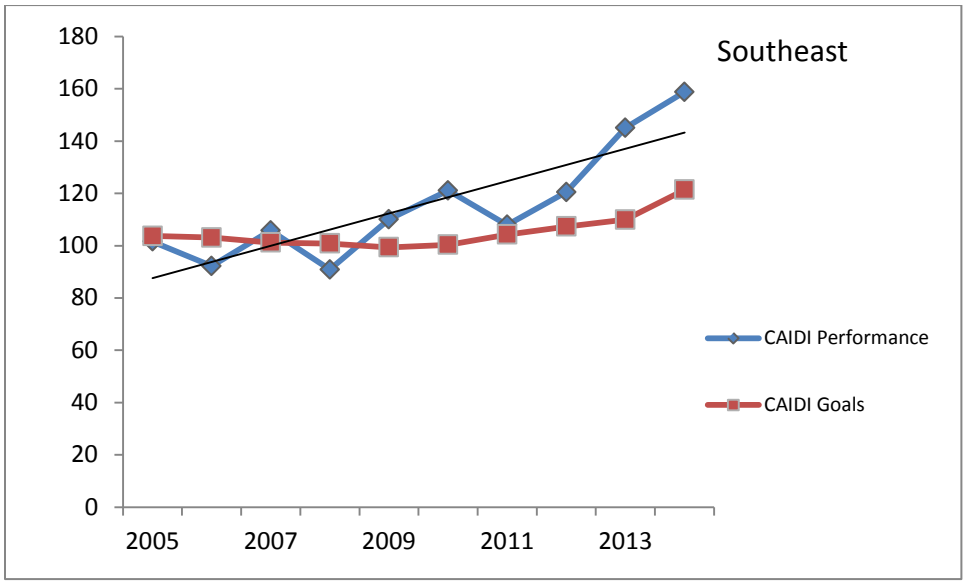


Figure 3: Southeast Historic CAIDI Performance



Xcel provided the following action plan for remedying any failure to comply with the reliability standards:[8]

> To address the large area of this work center, we continue to train additional personnel to perform specialized substation outage activities in order to reduce the travel time necessary for specialized personnel to reach substation outages. We believe

[8] Report at page 10.

> the additional training will eventually have a positive impact on our metrics. Other process improvements we have implemented to increase performance in the Southeast region include training all line personnel as part of the "restore before repair" initiative.
>
> 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 meeting 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 the Southeast work center, the relatively small number of customer [*sic*] in total can mean that one event can cause widely variable results.

The Department appreciates Xcel's description of the Southeast work center in terms of density, and agrees that the work center's characteristics may result in generally higher performance results. However, the declining trend in performance (rather than static or improving performance) remains concerning. Xcel's CAIDI reduction plan may need time to produce results. The Department will continue to closely monitor Xcel's performance in the Southeast work center for additional signs of declining performance.

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 2014. Xcel provided a table listing interruptions caused by transmission outages.[9] 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.

[9] Attachment C of the Report.

5. Major Service Interruptions

Xcel reported that, in 2014, there were 233 outages on its system that met the definition of "major service interruption." As required, the Company provided copies of the notifications sent to the Commission's Consumer Affairs Office (CAO) for these outages.[10] 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.[11]

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%

The Department notes the substantial decrease in the number of major service interruptions from 605 in 2013 to 233 in 2014. This would be due to fewer heavier storms in 2014.

The percentage of unreported major interruptions increased from less than 1 percent in 2013 to 5 percent in 2014.

According to Xcel, eight of the eleven email notices not sent were for events during the heaviest storm months of June and July. Xcel justified the increase in unreported major interruptions as follows:[12]

> We note that during high volume outage times, it is possible the Control Center does not send an email for each and every outage event. Often during these high volume events, the Company's Customer Advocate Group works with the Control

[10] Attachment D of the Report.
[11] 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.
[12] Source: Report at 11.

> Center to obtain more general status updates in lieu of individual emails. These updates, which are also forwarded to the CAO, usually include information on communities affected, total customers out of service, and any available information on expected restoration times. If available, information is also provided regarding crews brought in from other areas to assist restoration during times of escalated operations.
>
> As with any process that involves human intervention, errors will occur, and notices may not be sent to the CAO. There are instances when the Control Center may not create a notice, or the Company's Customer Advocates do not forward a notice to the CAO.

The Department requests that the Company provide in *Reply Comments*, a discussion regarding process improvements it is taking to alleviate the number of notices not sent to the CAO as a result of human errors.

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 2014.

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 uses historical data to identify potential areas of concerns regarding any 2014 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[13] and in previous years (2010 and 2011) as a result of lightning issues.

The Department requests that Xcel provide further discussion regarding this recurring worst-performing feeder, and the likelihood of related issues occurring in the future. For the remaining feeders on the worst performing list, Xcel's 2015 Annual Report indicates 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 318 voltage investigations in 2014.[14] After investigation, approximately 38 percent of these instances were found to be caused by a specific voltage problem. 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.[15]

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 2014 staffing levels by work center. Table 4 contains the Company's staffing levels for the past ten years.

[13] See Attachment E of the Report, Page 1 of 4, line 2 of small table at the bottom of the page.
[14] Source: Report at 15.
[15] As shown in the table at 15, Xcel's acceptable voltage range is slightly more restrictive than ANSI Voltage Range B.

Table 4: Xcel's Historical Work Center Staffing Levels

	Metro East	Metro West	Northwest	Southeast	Other
2003	145	181	42	61	45
2004	138	170	39	63	44
2005	134	166	37	74	46
2006	135	187	35	63	51
2007	134	182	37	60	54
2008	136	183	37	65	57
2009	133	173	37	61	61
2010	139	189	32	64	46
2011	138	190	33	63	46
2012	134	190	34	58	44
2013	136	195	34	54	51
2014[16]	129	197	25	57	56

The Department notes that staffing levels in the Southeast work center have ranged from a high of 74 to a low of 54. Given Xcel's worsening CAIDI performance in the Southeast work center, the Department requests that Xcel address in *Reply Comments* whether the relatively low staffing level of 57 is sufficient to assure prompt service restoration to customers experiencing outages (which is what CAIDI measures).

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

C. PROPOSED RELIABILITY STANDARDS FOR 2015

Xcel proposes the following reliability goals for 2015:

[16] Source: Report at page 15.

Table 5: Xcel's Proposed 2015 Reliability Goals

		Proposed 2015 Goals
Metro East	SAIDI	83.51
	SAIFI	0.91
	CAIDI	92.17
Metro West	SAIDI	97.13
	SAIFI	0.96
	CAIDI	100.75
Northwest	SAIDI	94.41
	SAIFI	0.84
	CAIDI	112.00
Southeast	SAIDI	98.28
	SAIFI	0.75
	CAIDI	131.46

Xcel stated that these goals were calculated using the same methodology used to set the Company's 2014 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 concurs with Xcel's calculation of its proposed 2015 goals, with the exception of the Southeast work center. Given the issue with declining CAIDI performance discussed above, the Department recommends that the 2015 goals for the Southeast work center remain at the goal levels set for 2014, rather than at levels that appear to accept continuing CAIDI and SAIDI performance degradation. Therefore, the Department recommends that the Commission set the Southeast work center goals at SAIDI = 86.31, SAIFI = 0.71, and CAIDI = 121.42.

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 97.39 percent of customer meters were read by utility personnel and 0.0011 percent were read by the customer in 2014.[17]

The Department notes that Xcel's monthly meter reading data varies fairly significantly, with the lowest percentage of meters read by the Company occurring in February (91.49 percent) and the highest in March (99.80 percent).[18] While fluctuations in meter read percentages due to weather conditions may be expected, Xcel's high percentage of meter reads achieved in January 2014 (99.64 percent) does not appear to be weather related. This point was addressed by Xcel in its June 19, 2014 reply comments in Docket No. G002/M-14-367 regarding Xcel's 2013 Annual Natural Gas Service Quality Report as follows:

> We note that the monthly variances in meter reading data do not indicate a variable quality of service. Instead, the variances are a result of a 21-day read cycle for each billing month where all 21 days do not always coincide exactly with a calendar month. For example, there were only 19 working days in February [2013], and the meter readings from those 19 days are shown as occurring in the calendar month of February in Attachment B of our Petition. Additional readings for the February billing month were done on the last working days of January and the first working days of March [2013] to comprise the 21-day read cycle. When we remove multiple meter reads for a given meter from our calendar month report data, however, some of the reads for the February billing month are excluded from the January calendar month reads, and then are not included in February's calendar month either. Excluding multiple meter reads from the calendar month makes February's meters read percentage artificially low.

[17] Department's calculations based on data provided in Tables A and B, Attachment F, page 1 of 7 of the Report.
[18] Source: Table A, Attachment F, page 1 of 7 of the Report.

> The number of working days in a month, the number of weekends in a month, and the number of holidays in a month will thus impact the meters read percentage when excluding multiple meter reads from the data.

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. In 2014, Xcel attained those requirements in all months.

In its comments in Docket No. G002/M-12-440, the Department requested that Xcel provide, in all future reports, the total number of meters to be read each month by customer class.[19] Xcel achieved a monthly average of 97.39 percent of customer meters read in 2014.[20]

Table 6 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 6: Meters Not Read for Longer than 12 Months

Year	Residential	Commercial	Industrial	Other	Total
2006	3,745	1,551	402	292	5,990
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[21]	620	304	92	68	1,084

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

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

[19] 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 notes that the Company files combined electric and gas service quality metrics when appropriate (e.g. for its meter reading statistics).
[20] Department's calculations are based on data provided in Table A, Attachment F, page 1 of 7 of the 2015 Annual Report.
[21] Source: Table C-2, Attachment F, pp. 5-7 of 7 of the Report.

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, section 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 7 summarizes residential customer disconnection statistics reported by Xcel in its annual reports.

Table 7: Residential Customer Involuntary Disconnection Information

	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[22]	1,166,978	105,561	105,561	100%	25,532	10,283	1,250

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:

[22] Source: Attachment G of the Report.

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 313,958 customers requested service to a location previously served in 2014 and that such requests were responded to the next business day.[23] Xcel reported that 3,671 residential and 303 commercial customers requested service to a location not previously served by the Company in 2014.[24] The average interval between request/readiness date and installation date was 2.7 days for residential and 9.7 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 2014 appear to be relatively consistent with data from 2009 - 2013.

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 2014, an average of 89.45 percent of calls to the Company was answered within 20 seconds.[25]

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 was answered within 20 seconds.

The Department acknowledges that Xcel has fulfilled the requirements of Minnesota Rules, part 7826.1700 and, in 2014, complied with the standard set in Minnesota Rules, part 7826.1200.

[23] Source: Report at page 18.
[24] Source: Attachment H of the Report.
[25] Department's calculations are based on data provided in Attachment I, page 1 of 2 of the Report.

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 1,780 Minnesota customers requested Emergency Medical Account Status in 2014.[26] Approximately 57 percent of these customers were granted this status.

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

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

Table 8: Customer Deposits Required

	Number of Deposits Required
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

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:

[26] Source: Attachment G of the Report.

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 770 complaints were handled by the Company's Customer Advocate Group in 2014, 115 of which were forwarded by the CAO.[27] Data provided by the Company showed that 16.8 percent of complaints handled by Xcel's Customer Advocate Group were resolved upon inquiry.[28] The most frequent complaint category was "inadequate service." Xcel reported that 51.3 percent of these complaints in 2014 were resolved by taking the action the customer requested.[29]

Xcel also received 796,982 complaints in 2014 that were handled upon initial inquiry in the Company's Call Centers. Xcel reported that, in 2014, approximately 96 percent of these complaints were resolved by taking the action the customer requested. 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 9 contains a limited summary of Xcel's customer complaint history as received through the Company's Customer Advocate Group.

[27] Source: Attachment J of the Report, pages 1 and 4 of 16.
[28] Source: Attachment J of the Report, page 3 of 16.
[29] Source: Attachment J of the Report, page 3 of 16.

Table 9: Selected Summary of Customer Complaints

	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[30]	770	53.20%	19.70%	14.80%	16.80%	51.30%

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

E. COMPLIANCE WITH DECEMBER 12, 2014 ORDER

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.*

In Attachment M of the Report, Xcel provided a summary of its 2014 reliability results.

The Reliability Management Program (RMP) analyzes the causes for historical outages, and ranks the outage causes in a multi-year time period, in a descending order by the number of service interruptions greater than five minutes in length. Xcel stated[31] that the Company's current RMP investments are maintaining appropriate levels of overhead and underground system performance. Xcel additionally noted that a longer-term view of the health of the distribution system is important, and that it its taking actions to that end.

Xcel provided a summary of its 2014 reliability performance along with multi-year trend graphs and reliability cost matrices.

[30] Source: Attachment J of the Report, page 2 of 16.
[31] Attachment M of the Report, page 5 of 19.

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

Xcel provided a graph indicating the major causes of outages. The Company identified vegetation and tree contact as the primary cause of outages.[32] Additional outage causes for Xcel in 2013 included lighting and "intentional," with unknown causes also comprising a share. Vegetation and tree contact represented about 83 percent of outages, and when combined with the three aforementioned causes, more than 90 percent of causes of outages are represented.

6. *Consider other factors, in addition to historical data, on which to base its reliability indices for 2014 in an effort to demonstrate its commitment toward improving reliability performance.*

On page 21 of its 2015 report, Xcel provided discussion regarding three alternate methodologies for calculating its proposed 2015 standards.[33] The Company stated however, that after evaluation, the results of using alternate methodologies to calculate standards would result in figures largely similar to those calculated under the current five-year rolling average methodology. Xcel concluded that it was appropriate to use the five-year rolling average to calculate standards proposed for 2015.

Attachment L1 of the Report provided the analysis upon which Xcel based its decision for preserving the five-year rolling average calculation. The attachment analyzed what the 2014 targets would have been if calculated using four different methodologies: a five-year median, a five-year average removing the high low values (average method), the lowest value method and the Commission-approved five-year rolling average. None of the three alternative calculations yielded substantially different goal achievements for 2014 compared to the Commission-approved five-year rolling average, with the following two exceptions.

Using the five-year median or the average method to calculate the SAIFI goal in the Northwest work center would have resulted in Xcel meeting that goal, rather than failing to meet that goal as calculated using the Commission-approved methodology.

Using any of the three alternative methods to calculate the SAIFI goal in the Metro East work center would have resulted in Xcel not meeting that goal, rather than meeting that goal as calculated using the Commission-approved methodology.

The Department agrees with Xcel's conclusions; however, an alternate goal calculation may be reasonable in instances in which a utility's performance trend is declining. For example, and as noted above, the Department concludes that maintaining goals at past levels may be appropriate to discourage further decline in service levels. The Department will continue to assess alternate calculation options if performance trends warrant further consideration.

[32] Attachment N of the Report, page 1 of 9.
[33] Numerical comparisons among the alternate methods were provided in Attachment L of Xcel's 2015 Report.

7. *Continue reporting major service interruptions to the Commission's Consumer Affairs Office.*

As discussed further above, the Department requests that the Company provide in *Reply Comments*, a discussion regarding process improvements it is taking to alleviate the number of notices not sent to the CAO as a result of human errors.

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 December 12, 2014 Order in Docket No. E002/M-14-131 pending submission in Reply Comments of the following additional information:

1. a discussion regarding process improvements it is taking to alleviate the number of notices not sent to the CAO as a result of human errors; and

2. a discussion regarding a recurring worst-performing feeder in the Metro East work center, and the likelihood of related issues occurring in the future; and

3. a discussion regarding the relatively low 2014 staffing level in the Metro Southeast work center and whether it is sufficient to assure prompt service restoration to customers experiencing outages

Finally, the Department recommends that the Commission set Xcel's reliability goals for 2015 as follows:

		Department Recommended 2015 Goals
Metro East	SAIDI	83.51 0.88
	SAIFI	0.91
	CAIDI	92.17
Metro West	SAIDI	97.13
	SAIFI	0.96
	CAIDI	100.75
Northwest	SAIDI	94.41
	SAIFI	0.84
	CAIDI	112.00
Southeast	SAIDI	86.31
	SAIFI	0.71
	CAIDI	121.42

/lt

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AN EQUAL OPPORTUNITY EMPLOYER

September 17, 2015

Daniel P. Wolf
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, Minnesota 55101-2147

RE: Response Comments of the Minnesota Department of Commerce,
Division of Energy Resources
Docket No. E002/M-15-324

Dear Mr. Wolf:

On April 1, 2015, Northern States Power Company, d/b/a Xcel Energy (Xcel or the Company) filed its *Electric Annual Service Quality Performance Report* (Report).

In its June 30, 2015 comments, the Division of Energy Resources of the Minnesota Department of Commerce (Department) recommended that the Minnesota Public Utilities Commission (Commission) accept the Report pending the submission of additional information and set Xcel's reliability goals for 2015 as provided in the table (Table) at page 23 of the Department's comments.

The Department apologizes for an inadvertently included number on the second row of the Table. There is only one number that is relevant to Metro East's SAIDI 2015 goal, 83.51. The number below the recommended 2015 goal, 0.88, should not have appeared in the Table.[1]

On July 13, 2015, Xcel completed the record as requested by the Department.

The Department appreciates Xcel's intention to maintain safe, reliable service for its customers and continued commitment to improve SAIDI, SAIFI, and CAIDI performance no matter which reliability metrics are approved by the Commission for 2015.[2]

Based on its review, the Department continues to recommend that the Commission accept the Report and set Xcel's reliability goals for 2015 as provided in the following table:

[1] Another typo occurred in Table 2 at page 5 of the Department's comments. There is only one number that is relevant to Metro East's SAIFI 2014 performance, 0.86. The number below, 2, should not have appeared in Table 2.
[2] Source: Xcel's July 13, 2015 Reply Comments at 4.

		Department Recommended 2015 Goals
Metro East	SAIDI	83.51
	SAIFI	0.91
	CAIDI	92.17
Metro West	SAIDI	97.13
	SAIFI	0.96
	CAIDI	100.75
Northwest	SAIDI	94.41
	SAIFI	0.84
	CAIDI	112.00
Southeast	SAIDI	86.31
	SAIFI	0.71
	CAIDI	121.42

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

Sincerely,

/s/ SAMIR OUANES
Public Utilities Rates Analyst

SO/ja